



# INFORMATION CAPSULE

## Research Services

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### Comparison of Instructional Time in Key Subject Areas at the Elementary Grade Levels

#### At a Glance

Research indicates that added instructional time results in higher levels of student performance. This Information Capsule summarizes the instructional time provided in key subject areas in Miami-Dade County Public Schools and several large school districts across the United States.

Research has tended to focus on the quality of instruction provided to students, as opposed to the amount of instructional time that is allotted to particular subject areas. However, studies have confirmed that instructional time is one of the ingredients that is essential to student learning. For example, a study conducted by Blank in 2012 found a link between the amount of science instruction fourth grade students received and their 2009 NAEP Science scores. Findings indicated that the NAEP scores of students in states that spent less time on science instruction were approximately 12 points lower than the NAEP scores of students in states that dedicated more time to science instruction. It should be noted that more instructional time may have been only one of the factors that contributed to differences in students' performance. Other factors, such as teaching practices, teacher preparation, and curriculum, may have also been responsible for higher or lower test scores.

Following is a summary of the amount of instructional time provided in Miami-Dade County Public Schools and several large school districts across the U.S. in key subjects. Results from the 2012 National Survey of Science and Math Education, as detailed in Banilower and colleagues' 2013 report, are also provided.

**English/Language Arts (ELA)** - M-DCPS is on par with the national average, based on the results of the 2012 National Survey of Science and Math Education, in the number of minutes of ELA instruction provided to students. M-DCPS, Broward County Public Schools, and Houston Independent School District all recommend 90 minutes of ELA instruction per day. Chicago Public Schools recommends more minutes of ELA instruction per day and the New York City Department of Education recommends less.

- M-DCPS - 90 minutes daily, uninterrupted block (mandated by state legislation).
- New York City Department of Education - 60 minutes daily at grades K-2; 75 minutes daily at grades 3-5.
- Broward County Public Schools - 90 minutes daily, uninterrupted block (mandated by state legislation).
- Chicago Public Schools - 120 minutes daily.
- Houston Independent School District - 90 minutes daily.

- U.S. average - 2012 National Survey of Science and Math Education - 89 minutes daily at grades K-3; 83 minutes daily at grades 4-6.

**Mathematics** - M-DCPS is on par with the national average, based on the results of the 2012 National Survey of Science and Math Education, in the number of minutes of math instruction provided to students. M-DCPS and Broward County Public Schools both recommend 60 minutes of math instruction per day. The New York City Department of Education and Chicago Public Schools also recommend 60 minutes per day at the lower elementary grades, but more minutes of instruction at the higher elementary grades. Houston Independent School District recommends more daily mathematics instruction than M-DCPS.

- M-DCPS - 60 minutes daily.
- New York City Department of Education - 60 minutes daily at grades K-2; 75 minutes daily at grades 3-5.
- Broward County Public Schools - 60 minutes daily (grades K-5).
- Chicago Public Schools - 60 minutes daily at grades 1-2; 80 minutes daily at grades 3-5.
- Houston Independent School District - 30 minutes daily at kindergarten, or 135 minutes weekly; 90 minutes daily at grades 1-5.
- U.S. average - 2012 National Survey of Science and Math Education - 54 minutes daily at grades K-3; 61 minutes daily at grades 4-6.

**Science** – Compared to the results of the 2012 National Survey of Science and Math Education, the amount of science instruction provided in M-DCPS is below average at the lower elementary grades and about average at the higher elementary grades. Broward County Public Schools (K-5) and M-DCPS (grades 2-5) both recommend that students receive 150 minutes of science instruction per week. Other districts, including the New York City Department of Education (grades 3-5), Chicago Public Schools (grades 3-5), and Houston Independent School District (K-5), recommend that students receive more minutes of science instruction than M-DCPS.

- M-DCPS - 60 minutes per week at grades K-1; 150 minutes per week at grades 2-5.
- New York City Department of Education - 135 minutes per week (3 45-minute classes) at grades K-2; 180 minutes per week (4 45-minute classes) at grades 3-5.
- Broward County Public Schools - 150 minutes per week (grades K-5).
- Chicago Public Schools - 40 minutes daily at grades 1-2; 60 minutes daily at grades 3-5.
- Houston Independent School District - 45 minutes daily (grades K-5).
- U.S. average - 2012 National Survey of Science and Math Education - 19 minutes daily at grades K-3; 24 minutes daily at grades 4-6.

**Social Studies** - Compared to the results of the 2012 National Survey of Science and Math Education, the amount of social studies instruction provided in M-DCPS is slightly below average at the lower elementary grades and slightly above average at the higher elementary grades. M-DCPS recommends that students receive 120 minutes of social studies instruction per week at grades 2-5. Broward County Public Schools recommends 150 minutes of instruction per week at grades K-5. The New York City Department of Education and Chicago Public Schools recommend more minutes of social studies instruction (grades 3-5) than M-DCPS, while Houston Independent School District recommends less minutes (grades K-5).

- M-DCPS - 60 minutes per week at grades K-1; 120 minutes per week at grades 2-5.
- New York City Department of Education - 135 minutes per week (3 45-minute classes) at grades K-2; 180 minutes per week (4 45-minute classes) at grades 3-5.
- Broward County Public Schools - 150 minutes per week at grades K-5.
- Chicago Public Schools - 30 minutes daily at grades 1-2; 40 minutes daily at grades 3-5.
- Houston Independent School District - equivalent of 45 minutes every other day at grades K-5.
- U.S. average - 2012 National Survey of Science and Math Education - 16 minutes daily at grades K-3; 21 minutes daily at grades 4-6.

**Physical Education** – M-DCPS and Broward County Public Schools provide more time for students to participate in Physical Education than the New York City Department of Education, Chicago Public Schools, and Houston Independent School District.

- M-DCPS - 150 minutes each week with at least 30 consecutive minutes on any day during which PE instruction is conducted (mandated by state legislation).
- New York City Department of Education - 5 days a week (120 minutes per week) at grades K-3; 3 times a week at grades 4 and 5 (120 minutes per week) (mandated by the State Education Department).
- Broward County Public Schools - 150 minutes each week with at least 30 consecutive minutes on any day during which PE instruction is conducted (mandated by state legislation).
- Chicago Public Schools - arts education, PE, and Intervention/Acceleration combined - 140 minutes a week at grades 1-2; 90 minutes at grades 3-5.
- Houston Independent School District - at least 30 minutes daily or 135 minutes weekly at grades K-5 (mandated by state legislation).

**Recess** – Little info regarding recess times in school districts is available online. M-DCPS recommends 20 minutes twice a week or 15 minutes three times a week for students in Pre-K through grade 5. There is no required recess in Broward County Public Schools. A push to mandate recess in the State of Florida failed in the State Legislature this year. Chicago Public Schools provides elementary students with 45 minutes for lunch and recess combined (previously, students were given 20 minutes for lunch). Houston Independent School District strongly recommends that students in PreK through grade 5 receive 30 minutes of recess per day.

- M-DCPS - 20 minutes twice a week or 15 minutes 3 times a week at grades PreK-5.
- Broward County Public Schools – recess is not required; it is up to principals to decide if, when, and for how long recess will be provided to students.
- Chicago Public Schools - 45 minutes for recess and lunch.
- Houston Independent School District – 30 minutes daily at grades PreK-5.

### Summary

Studies have found a link between increased instructional time and higher levels of student academic achievement. This Information Capsule provided a summary of the amount of instructional time provided in key subject areas in M-DCPS and several large school districts across the U.S. In English/language arts and mathematics, the amount of instructional time recommended by M-DCPS is similar to the average number of instructional minutes provided

nationwide. M-DCPS and national averages are also similar in science and social studies, with M-DCPS tending to provide fewer instructional minutes at the lower elementary grade levels and more instructional minutes at the middle and higher elementary grade levels in both subjects. The number of instructional minutes recommended by school districts across the U.S. varies, depending upon the subject area and the particular school district.

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