

Instructional Time in Elementary Schools

A Closer Look at Changes for Specific Subjects

A report in the series From the Capital to the Classroom: Year

of the No Child Left Behind Act

Center on Education Policy
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Key Findings

As part of an ongoing study of the impact of the No Child Left Behind Act (NCLB), the Center on Education Policy (CEP) conducted a deeper analysis of 2006-07 survey data first reported in July 2007 on the amount of instructional time devoted to specific subjects. Here is what we learned about the magnitude of changes in instructional time in elementary schools from districts that reported increases or decreases in time for certain subjects since NCLB took effect in 2002:

- The shifts in instructional time toward English language arts (ELA) and mathematics and away from other subjects were relatively large in a majority of school districts that made these types of increases and decreases. Districts that increased instructional time for ELA and/or math did so by 43%, on average. Districts that also reduced instructional time in other subjects reported total reductions of 32%, on average.
- Eight out of ten districts that reported increasing time for ELA did so by at least 75 minutes per week, and more than half (54%) did so by 150 minutes or more per week. Among districts that reported adding time for math, 63% added at least 75 minutes per week, and 19% added 150 minutes or more per week.
- Most districts that increased time for ELA or math also reported substantial cuts in time for other subjects or periods, including social studies, science, art and music, physical education, recess, or lunch.
- Among the districts that reported both increasing time for ELA or math and reducing time in other subjects, 72% indicated that they reduced time by a total of at least 75 minutes per week for one or more of these other subjects. For example, more than half (53%) of these districts cut instructional time by at least 75 minutes per week in social studies, and the same percentage (53%) cut time by at least 75 minutes per week in science.

CEP's Previous Findings about Instructional Time

This publication takes a closer look at the shifts in instructional time for various elementary school subjects first reported by the Center on Education Policy in July 2007 (see *Choices, Changes, and Challenges: Curriculum and Instruction in the NCLB Era*, available at www.cep-dc.org). Among other findings, our 2007 report concluded that since school year 2001-02, when NCLB was enacted, 62% of all school districts had increased the amount of time spent in elementary schools on English language arts (ELA)¹ and/or math, while 44% of all districts had increased time for ELA and/or math while also cutting time for elementary school science, social studies, art and music, physical education, lunch, or recess. Among the school districts that reported increases, the average increase amounted to 141 extra minutes per week (or an average of 28 minutes per day) in ELA, and 89 extra minutes per week (or about 18 minutes per day) in math. **Table 1**, which is a revised version of a table published in the 2007 report, displays these increases and decreases by subject.

This follow-up report takes a closer look at the extent of these shifts in instructional time. Like the 2007 report, it is based on CEP's nationally representative survey of 349 responding school districts conducted between November 2006 and February 2007.

Table 1. Changes in Instructional Time in Elementary Schools Since 2001-02

Subject or Period	Percentage of All Districts That Increased Time	Percentage of All Districts That Decreased Time	Average Increase (Minutes per Week)	Average Decrease (Minutes per Week)
English language arts	58%		141	
Mathematics	45%		89	
Social studies		36%		76
Science		28%		75
Art and music		16%		57
Recess		20%		50
Physical education		9%		40
Lunch		5%		*

Table reads: Thirty-six percent of school districts in CEP's nationally representative survey reported that since 2001-02 (the year NCLB took effect), they have decreased instructional time for social studies at the elementary level. Districts that have decreased time for social studies have done so by an average of 76 minutes per week.

Note: This table includes data that have been revised since CEP's July 2007 report on curriculum and instruction in the NCLB era.

* Sample size was too small to allow reporting of data on minutes per week.

Source: Center on Education Policy, February 2007, *District Survey*, item 19 (revised tables IT-2A, IT-16, & IT-17).

¹ The CEP school district survey used the term "reading/language arts" at the elementary school level and "English language arts" at the middle and high school levels, but for consistency with the July 2007 report, this report uses the term "English language arts."

Three points should be emphasized about the data that follow.

- First, because of the timing of the survey, the information about post-NCLB uses of instructional time represents information reported by districts for school year 2006-07 rather than for the current school year.
- Second, unless otherwise noted, the percentages below are not percentages of *all* school districts, but rather of those districts that reported increases or decreases in instructional time as explained in the specific section.
- Third, the method used to calculate the percentages reported in the tables that follow was chosen to best characterize the experience of the typical school district in each of the samples under discussion. The percentages were calculated by first computing a percentage increase or decrease for each district in the sample and then by computing a weighted average of those district-level percentages.

More detailed information about research methods can be found at www.cep-dc.org in the Methodology link accompanying this report.

Changes in Instructional Time for Elementary School Subjects

Districts that reported an increase in instructional time for elementary school English language arts spent an average of 378 minutes per week on this subject before NCLB was enacted, as shown in **table 2**. At the time of our survey in 2006-07, these districts were spending an average of 520 minutes per week on ELA. This post-NCLB number represents an average increase of 141 minutes per week, or a gain of 47% in the average district. Districts that reported increasing time for elementary math added an average of 89 minutes

Table 2. Changes Since 2001-02 in Instructional Time for Elementary School English Language Arts and Math in Districts Reporting Increases

Of those districts reporting an increase in instructional time . . .

Subject	Average Total Instructional Time Pre-NCLB (Minutes per Week)	Average Total Instructional Time Post-NCLB (Minutes per Week)	Average Increase (Minutes per Week)	Average Increase as a Percentage of Total Instructional Time
English language arts	378	520	141	47%
Mathematics	264	352	89	37%
Either/both subject(s)	513	699	186	43%

Table reads: Among districts reporting increases in instructional time, the average total instructional time for ELA before NCLB was 378 minutes per week, compared with 520 minutes per week after NCLB. The average increase for ELA was 141 minutes per week, or a 47% increase over the pre-NCLB level.

Note: The final column shows the percentage increase in instructional time in the average district. Percentages were first calculated for each district in the sample, then weighted and averaged across districts to generate the numbers reported here. More information about the calculations presented in this table can be found at www.cep-dc.org in the Methodology link accompanying this report.

Source: Center on Education Policy, February 2007, District Survey, items 18 & 19 (table IT-18A).

per week, a 37% gain. Because districts could report adding time for reading only, for math only, or for both subjects, table 2 also includes a third row, labeled “either/both subject(s),” that shows the combined increases from school districts in all three categories.

Among districts reporting decreases in instructional time, we further analyzed the amount of decrease in the subjects or periods listed in our survey, which included social studies, science, art and music, physical education, recess, or lunch. **Table 3** shows the specific amounts of time cut from various subjects in districts that reported decreases. For example, districts that cut instructional time for social studies did so by an average of 76 minutes per week—a 32% decrease from the pre-NCLB time allotment. As the table shows, instructional time was also reduced by more than 30% in science, art and music, and physical education, and by 28% in recess, among districts reporting decreases in those subjects.

Some of the districts that we surveyed reduced instructional time for just one listed subject, while others cut time from multiple subjects. To better convey the extent of the reductions, the last row of table 3 shows the average combined decreases in time for one or more of the listed subjects, among districts that reported decreases and also increased time for ELA or math. In these districts, the combined reductions averaged 145 minutes per week, or a 32% decrease from pre-NCLB time allotments.

Table 3. Changes Since 2001-02 in Instructional Time for Various Elementary School Subjects in Districts Reporting Decreases

Of those districts reporting an increase in instructional time for ELA and/or math AND a decrease in instructional time for one or more of the subjects listed . . .

Subject or Period	Average Total Instructional Time Pre-NCLB (Minutes per Week)	Average Total Instructional Time Post-NCLB (Minutes per Week)	Average Decrease (Minutes per Week)	Average Decrease as a Percentage of Total Instructional Time
Social studies	239	164	76	32%
Science	226	152	75	33%
Art and music	154	100	57	35%
Physical education	115	75	40	35%
Recess	184	144	50	28%
Lunch	*	*	*	*
One or more subjects listed	461	318	145	32%

Table reads: Among districts reporting an increase in instructional time for ELA and/or math and decreases for various subjects, the average total instructional time for social studies before NCLB was 239 minutes per week, compared with 164 minutes per week after NCLB. The average decrease for social studies was 76 minutes per week, or a 32% loss of time from the pre-NCLB level.

* Sample size was too small to allow reporting of data on minutes per week.

Note: More information about the calculations presented in this table can be found at www.cep-dc.org in the Methodology link accompanying this report.

Source: Center on Education Policy, February 2007, District Survey, items 18 & 19 (table IT-18B).

Magnitude of Changes

We also took a closer look at the magnitude of the increases in time for elementary ELA and math instruction and the decreases for other subjects.

As shown in **table 4**, more than half (54%) of the districts that reported increasing time for English language arts since 2001-02 did so by 150 minutes or more per week. This is a substantial gain, amounting to at least 30 extra minutes per day for ELA in elementary schools. Another 26% of the districts with increases for ELA added 75 to 149 minutes per week. Thus, 80% of the districts that reported adding time for ELA did so by at least 75 minutes per week. Just 11% of these districts added fewer than 50 minutes per week for ELA.

Table 4. Magnitude of Increases Since 2001-02 in Instructional Time for Elementary School English Language Arts and Math

Of those districts reporting an increase in instructional time . . .

Subject	Fewer than 25 Minutes per Week	25-49 Minutes per Week	50-74 Minutes per Week	75-149 Minutes per Week	150 Minutes per Week or More
English language arts	4%	7%	9%	26%	54%
Mathematics	6%	6%	24%	44%	19%
Either/both subject(s)	3%	7%	5%	18%	67%

Table reads: Four percent of districts that reported they had increased instructional time in English language arts since school year 2001-02 did so by fewer than 25 minutes per week.

Note: Rows do not add up to 100% due to rounding.

Source: Center on Education Policy, February 2007, District Survey, item 19 (table IT-19A).

In math, 19% of the districts that reported increasing time for this subject since 2001-02 did so by 150 minutes per week or more; another 44% added 75 to 149 minutes per week. Altogether, nearly two-thirds (63%) of the districts that increased time for math added at least 75 minutes per week, or about 15 minutes per day. A much smaller percentage, 12%, added fewer than 50 minutes per week for math.

As shown in **table 5**, 46% of the districts that reported cutting instructional time for one or more subjects made combined reductions of 150 minutes or more per week, or about 30 minutes per day. Another 26% of the districts reporting cuts reduced time for one or more of these subjects by 75-149 minutes per week. Altogether, 72% of the districts that reported cuts in instructional time made reductions of 75 minutes or more per week, or about 15 minutes per day.

For readers interested in more detailed background data, tables A and B in the appendix show the share of districts—out of the universe of districts reporting changes in instructional time—that increased or decreased instructional time for a given subject by a particular percentage, such as the share increasing time for ELA by 50% or more.

Table 5. Magnitude of Decreases Since 2001-02 in Instructional Time for Various Elementary School Subjects

Of those districts reporting an increase in instructional time for ELA and/or math AND a decrease in instructional time for one or more of the subjects listed . . .

Subject or Period	Fewer than 25 Minutes per Week	25-49 Minutes per Week	50-74 Minutes per Week	75-149 Minutes per Week	150 Minutes per Week or More
Social studies	2%	19%	26%	39%	14%
Science	3%	15%	29%	42%	11%
Art and music	18%	24%	27%	28%	3%
Physical education	27%	46%	8%	20%	0%
Lunch	27%	23%	33%	17%	0%
Recess	20%	19%	31%	30%	< 1%
Combined decrease in one or more subjects listed	2%	10%	16%	26%	46%

Table reads: Two percent of districts that reported they had decreased instructional time in one or more of the subjects listed and increased time for ELA and/or math since school year 2001-02 reduced time for social studies by fewer than 25 minutes per week.

Note: Rows do not add up to 100% due to rounding.

Source: Center on Education Policy, February 2007, District Survey, item 19 (table IT-19B).

Conclusion

Taken together, tables 1 through 5 indicate that since NCLB took effect, relatively large shifts have occurred at the elementary level in the amount of instructional time allotted for various subjects in a large number of districts. Forty-four percent of all districts nationwide have added time for English language arts and/or math, at the expense of social studies, science, art and music, physical education, recess, or lunch. Where these changes have occurred, the magnitude is large, typically amounting to cuts in other subjects of 75 minutes per week or more.

Appendix

Percentage of Districts Reporting Various Degrees of Changes in Total Instructional Time

Tables A and B display the share of districts—out of the universe of districts reporting increases or decreases in instructional time—that changed instructional time for a given subject by a particular percentage. For example, table A indicates that 40% of the total number of districts reporting increases in instructional time in ELA boosted the amount of time for this subject by 50% or more, while 30% of these districts increased ELA time by 25-49%, and so on. A final column in tables A and B shows the average increase or decrease as a percentage of total instructional time across all such districts for the subjects displayed.

Table A. Degree of Increase in Instructional Time Since 2001-02 for English Language Arts and Math in Elementary Schools

Of districts reporting an increase in total instructional time, the percentage that reported the following degrees of increase . . .

Subject	50% or More Increase	25-49% Increase	10-24% Increase	Less than 10% Increase	Average Increase as a Percentage of Total Instruction Time
ELA	40%	30%	22%	9%	47%
Mathematics	36%	34%	19%	11%	37%
Either/both subject(s)	34%	36%	20%	9%	43%

Table reads: Among districts that reported an increase in instructional time since 2001-02, 40% reported increasing total instructional time for ELA by 50% or more over pre-NCLB levels. On average, total instructional time for ELA increased by 47%.

Note: Across each row, the numbers in the first four columns do not total 100% due to rounding.

Source: Center on Education Policy, February 2007, District Survey, items 18 & 19 (tables IT-18A & IT-20A).

Table B. Degree of Decrease in Instructional Time Since 2001-02 for Various Subjects in Elementary Schools

Of those districts reporting an increase in instructional time for ELA and/or math AND a decrease in time for one or more listed subjects, the percentage that reported the following degrees of decrease in total instructional time. . .

Subject or Period	50% or More Decrease	25-49% Decrease	10-24% Decrease	Less than 10% Decrease	Average Decrease as a Percentage of Total Instruction Time
Social studies	15%	63%	19%	3%	32%
Science	16%	66%	13%	4%	33%
Art and music	23%	47%	29%	1%	35%
Physical education	22%	58%	11%	9%	35%
Recess	13%	36%	46%	5%	28%
Lunch	*	*	*	*	*
One or more subjects listed	11%	64%	23%	2%	32%

Table reads: Among districts that reported a decrease in instructional time since 2001-02, 15% reported decreasing total instructional time for social studies by 50% or more below pre-NCLB levels. On average, total instructional time for social studies decreased by 32%.

Note: Across each row, the numbers in the first four columns do not total 100% due to rounding.

* Sample size was too small to allow for reporting of data.

Source: Center on Education Policy, February 2007, District Survey, items 18 & 19 (tables IT-18B & IT-20B).

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Center on Education Policy
1001 Connecticut Avenue, NW, Suite 522
Washington, D.C. 20036

tel: 202.822.8065
fax: 202.822.6008

e: cep-dc@cep-dc.org
w: www.cep-dc.org

www.cep-dc.org