The Four-Day School Week: Impact on Student Academic Performance

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Although the four-day school week originated in 1936, it was not widely implemented until 1973 when there was a need to conserve energy and reduce operating costs. This study investigated how achievement tests scores of schools with a four-day school week compared with schools with a traditional five-day school week. The study focused on student performance in Colorado where 62 school districts operated a four-day school week. The results of the Colorado Student Assessment Program (CSAP) were utilized to examine student performance in reading, writing, and mathematics in grades 3 through 10. While the mean test scores for five-day week schools exceeded those of four-day week schools in 11 of the 12 test comparisons, the differences were slight, with only one area revealing a statistically significant difference. This study concludes that decisions to change to the four-day week should be for reasons other than student academic performance.

Key words: Four-day week; rural schools; flexible scheduling; school schedules; scheduling.

Johnson and Strange (2009) reported that 10,572,790 US public school students (19%) attend school in a rural school district. Howley, Theobald, and Howley (2005) claimed that the mainstream of society often believes that rural schools are, by their very nature, ineffective. Yet rural schools may be more innovative and creative than their suburban and urban counterparts. D'Amico and Nelson (2000) found that rural communities have a long tradition of pulling together to do whatever needs to be done to benefit students. Many times the innovations implemented in rural schools do not get a great deal of publicity.

One such innovation embraced primarily by rural schools is the four-day school week. Wilmoth (1995) studied 84 school districts on a four-day week, located in seven western states, and found that all but 13 districts identified themselves as rural. Furthermore, 73 of the 84 school districts had enrollments of less than 1,000 and 59 of the total had an enrollment under 500. The amount of time American public school students spend in school has been an issue of on-going discussion for decades dating back to the 1983 report, *A Nation at Risk* (Pischke, 2007). Supporters and critics of public education, including President Obama, are strong proponents of lengthening the school year and the school day of public schools to match what are seen as more effective programs within the international community, specifically Europe and Asia (Ellis, 1984; Koskie, 2009).

On the domestic front, the highly popular and widely touted Knowledge is Power Program (KIPP) (http://www.kipp.org) charter schools have implemented a school day that runs from 7:30 a.m. until 5:00 p.m. each day (Henig, 2008). This longer day is combined with a school year that requires students to attend every other Saturday and also for three weeks during the summer. Further research is required into the extent to which the increased student test scores observed in KIPP schools is due to the longer instruction time or to the culture of support and high expectations for academic achievement and behavior intrinsic to KIPP charter schools (Woodworth, David, Guha, Wang, & Lopez-Torkos, 2008). Cuban (2008) reported that there is little research to support that increasing the length of the day or the school year alone will produce any change in academic performance. According to Cuban, "In the past quarter century of tinkering with the school calendar, cultural changes, political decisions, or strong parental concerns trumped research every time" (p. 243). Although conventional wisdom might conclude that the more time a student spends in school the more the student will learn this conclusion may not be valid.

In an era marked by a drive to increase the number of days and the lengthen the school year, there is a group of primarily rural school districts in several states that are operating contrary to the trend by decreasing the number of days that students attend school, from the traditional five days per week model to a four-day school week (Yarbrough & Gilman, 2006). The focus of this study is on the educational impacts of the four-day school week to explore its impact on student achievement in rural schools.

Review of Literature

The motivation for implementing the four-day school week has been primarily to reduce operating costs. However, there are other positive factors that support a decision to implement the four-day week. Some school districts have found an improvement in attendance, both for students and staff, reduced student discipline

problems, and increased student participation in extra-curricular activities after implementing the four-day week. Once implemented, the 4 day format often proves to be extremely popular among students, parents, and staff. The review of the literature explores reasons for adopting a four-day school week and a variety of outcomes associated with that change.

History of the Four-day Week

The earliest four-day school week may have been implemented in the Madison Central School District, Madison, South Dakota in 1931 (Hunt, 1936). This unique program scheduled the required academic subjects for four days a week and extra-curricular activities on the fifth day. Although not exactly the format of the modern four-day schedule, it offered an alternative to the traditional model. In 1973, the Arab Oil Embargo caused many school districts throughout the northeastern US and across the nation to look at energy saving alternatives. Johnson (1977) reported that by switching to a four-day week, schools could save 20% on energy costs from savings in transportation and utilities. Stemmock (1975) claimed that the first four-day schedule to receive national recognition was Unity Elementary school in the Maine Administrative District # 3 in the early 1970's. It was reported that Unity saved $13,000 in operating costs in the first five months of implementation. Other districts in the Northeast experimented with a variety of schedules. Shrewsbury High School, Massachusetts, offered three alternative schedules to students including an extended day four-day schedule (Stemmock). The Cimarron School District in New Mexico also began the four-day week schedule in 1973 to save on energy costs (J. Gallegos, personal communication, July 14, 2009).

Financial Factors

Numerous factors have motivated school districts to change to a four-day school week. According to Smith (2009), the most prevalent factor motivating the implementation of the four-day week is the potential for financial savings. Proponents cite cost savings in transportation and utilities as the main advantage. The savings vary, however, depending on whether the school stays open on the fifth day for extracurricular activities, professional development, or tutoring. Most schools implementing the four-day week are small, rural school districts (Chmelynski, 2003). Findings of several studies (e.g. Achen, 2009; Chmelynski, 2003; Griffin, 2009; Shoemaker, 2002; Truesdale, 2009) indicated that cost savings necessitated by cuts to the annual budget were the major factor prompting the shift to the four-day week. The premise is that by operating a four-day week, a school district can save on utilities (e.g. heating buildings) and transportation (bussing).The MACCRAY Public schools in west-central Minnesota voted to switch to a four-day week for the 2008-09 school-year with the anticipation of saving 10% on transportation and operating costs. The actual savings in operating costs was 18%, an equivalent of over $186,000 (G. Sims, personal communication, January 25, 2011). Grau and Shaughnessy (1987) looked at 10 New Mexico school districts on a four-day week and found a cost savings of 10-25% on fuel, electricity, and transportation. Despite the motivation to reduce costs, the savings are often not as great as first anticipated (Yarbrough & Gillman, 2006). In 2003, the Webster County School District in Western Kentucky had to cut almost 20% from its budget in response to a fiscal crisis in the district. The district of 1,800 students responded by implementing a four-day school week. Over a three-year period Webster County School District realized annual savings of 2% ($200,000) by moving to the four-day week (Yarbrough & Gilman, 2006). In a similar initiative, Morrow County School District in Lexington, Oregon, saved an estimated $250,000 in a $14 million budget, a cost reduction of slightly less 2% (Chmelynski, 2003). The Custer School District in rural South Dakota implemented a four-day calendar in 1995 with the intent to reduce its budget by $70,000. However, the savings were lower than the estimated target (Durr, 2003). The Cunningham School District in Cunningham, Kansas, received approval to implement a four-day calendar for the 2009-10 school-year and anticipated a savings of $45,000 (1.4%) on its $3.2 million operating budget for busing, utilities, and some labor costs (Truesdale, 2009). Summing up, these previous studies indicate savings achieved with a four-day school week vary greatly by districts, depending on the fidelity with which they adhere to cost saving measures. If the school facilities are completely shut down on the non-school day the savings will be greater than if the buildings are open for meetings and student activities. The costs savings are therefore predicated on how highly controlled and diligent the cost cutting elements are implemented. While financial savings are the main factor motivating the initiation of the four-day week, other factors emerged that may be equally powerful in promoting a shift to, or maintaining the four-day week.

Improved Attendance, Discipline, and Participation

Several authors (e.g., Shank, 2009; Shoemaker, 2002; Smith, 2009; Truesdale, 2009) reported that student and staff absences were reduced as a result of the four-day week. The day that school was not in session allowed students and staff to make business or medical appointments that normally would have required them to miss school. This change resulted in a decline in the need for and overall cost of substitute teachers. The extra day also allowed more time for teachers to plan (Truesdale). Further benefits of the four-day week include a reduction

in reported student disciplinary incidents, and less weekly time spent commuting by both students and staff (Chemelynski, 2003). Moreover, participation in extra-curricular activities increased when the Custer School District in rural South Dakota implemented the four-day week (Durr, 2003). Midland High School in Midland, Louisiana, used Friday for mandatory three hour academic sessions for students with failing grades; disciplinary infractions could also result in students attending school on Friday to participate in an on-campus work program. These policies motivated students to work harder and engage more during the four-day week (Chmelynski, 2003).

Popularity

Initially, the concept of a four-day week may be viewed negatively. Based on a Gallup Poll, Ray (2003) found that only 25% of Americans supported the idea of a four-day week as a means of saving money, while 74% opposed it. Ray postulated that one reason that support was low among people with children in school as well as among individuals with no children in school may be due to lack of understanding as to how the shortened week actually works. A fear exists that although seat time may be the same, increasing the length of the school day may be unproductive. York (2009), a critic of the four-day week, stated:

> Because a four-day week means that at least one more hour, possibly one and a half, would be added to each of the four days school is in session, it's almost a given that this extra time will be wasted on "brain-dead" students and teachers. That is not an efficient approach to education. (p. 3)

Initial concerns about the operation and effectiveness of the four-day week must be addressed to insure opposition to the change does not inhibit implementation. A systematic change process that educates staff, parents and community about the structure and operation of the four-day week is vital to attain a high level of buy-in and to alleviate concerns. Richburg and Wood (1982) postulated that before implementing the four-day week there should be support from 90-95% of the teaching staff. They found that one year after the four-day week had been implemented, 95% of the teachers strongly favored the four-day schedule. A survey of parents prior to the 2008 implementation of the four-day week in Cunningham School District, Kansas, revealed a 5 to 1 ratio for support (Truesdale, 2009). This higher level of support was the result of a concerted effort on the part of the school leadership to inform the community of the benefits of the four-day week (Truesdale). In an interview with John Briley, Principal of Midland High School in Louisiana, Chmelynski (2003) noted that the students and parents were highly in favor of the four-day school week. Initially parents were concerned, but after one year of operation there was not a single complaint. Koki (1992) reported that schools implement a modified calendar or schedule to meet specific student needs and that although there is often initial resistance, parents and teachers are usually pleased with the results.

Implementation and Structure

According to an article in State Legislatures (Smith, 2009), 23 states and the District of Columbia currently prohibit schools or districts from having four-day school weeks because these states require a minimum number of instructional days per year, in most cases 180. Another 20 states give districts and schools the flexibility to move to a four-day week by measuring the instructional time requirements in hours rather than days.

When deciding on which day of the week to eliminate to implement the four-day week, the option is normally dropping Friday or Monday. Schank (2009), as well as Yarbrough and Gilman (2006), recommend that Monday be dropped because federal holidays or three-day weekends usually fall on Mondays and therefore reduce the need to add additional make-up days later in the year. On the other hand, eliminating Friday from the school week allows extra-curricular activities to take place without students missing school for distant athletic events (Richburg & Wood, 1982).

The implementation of the four-day week in Colorado originally scheduled four 7.5 hour days, which provided the weekly equivalent of a six-hour, five-day schedule. In fact, students on a four-day week may have more instructional minutes than students on a five-day week (Richburg & Sjogren, 1982). To ensure equivalency in instructional time, Richburg and Wood (1982) recommended that elementary schools on a four-day schedule should have 7 hours per day for 144 days giving an annual total of 1,008 hours. This contrasts to the five-day week schedule of 5.5 hours per day for 180 days, which provides 990 hours or the minimum required by Colorado state law for elementary schools. Four-day week secondary schools with 7.5 hours per day for 144 days provide 1,080 hours, which is the minimum required under Colorado state law for secondary schools (Dam, 2006).

Teachers and the Four-day Week

Yarbrough and Gilman (2006) found that teachers reported a lot of wasted time within the five-day school week, and that the four-day week forced them to focus on instruction to a much higher degree. The additional time devoted to planning and preparation that the four-day week provided helped them connect instruction and planning in a more effective manner. Additionally their approach to assigned homework was more focused and efficient (Yarbrough & Gilman). Durr (2003) found that

teachers reported covering more content during the four-day week than they covered under the traditional five-day week. Blankenship (1984) noted that teachers and students apply themselves more effectively when they have only four days. The increased focus may actually increase the time on task students spend on their class work. Although cost savings may be a major incentive for looking at a four-day week, Kimmet (1986) suggested that the demands on teachers to do extra duties in small schools made the four-day week an attractive alternative because the additional time made available would allow teachers to have valuable in-service time. To this end, Kimmet proposed a four-day week with an additional half day for students on Friday morning, and remaining time in the afternoon utilized for in-service training.

More critical than the length of the day or school year is how time is actually used in the classroom. Cuban (2008) pointed out the critical nature of time utilization:

> The crude policy solutions of more days in the year and longer school days do not even begin to touch the deepest truth that what has to improve is the quality of "academic learning time." If policy makers could open their ears and eyes to student and teacher perceptions of time, they would learn that the secular Holy Grail is decreasing interruption of instruction, encouraging richer intellectual and personal connections between teachers and students, and increasing classroom time for ambitious teaching and active, engaged learning. (p. 247)

The four-day week is popular with teachers and provides a high degree of flexibility; however, the quality of any program or schedule should be judged upon the degree to which the program is beneficial to achieving a higher level of student academic performance.

Educational Achievement and the Four-day Week

Although the potential for long term cost savings has been the major factor in the implementation of the four-day week, the most important question to be addressed is whether the four-day school week increases, decreases, or has a neutral impact on student achievement. Shoemaker (2002) stated that "Experts have documented increased attendance, improved morale, and fewer disciplinary problems in four-day schools. However, according to what little research has been done, the four-day week has no measurable effect on student achievement" (p. 9). According to Dam (2006), "The jury is out on the question of student performance. If performance is measured by standardized test scores, only one study has been completed comparing districts" (p. 8). Daly and Richburg (as cited by Dam) examined scores in five rural Colorado school districts on the Iowa Test of Basic Skills for a period of four consecutive years. They identified two cohorts of students (n=62 and n=45) and followed their scores for four years. The students were taught on a five-day week schedule for the first two years and then switched to a four-day week for the next two years. They found that the switch to the four-day week had no effect on student achievement. Other studies of limited scope point to an improvement in performance utilizing the four-day week. Yarbrough and Gilman (2006) examined the Comprehensive Test of Basic Skills (CTBS) scores in Webster County School District in Kentucky from Spring of 2002 and 2003, when the district was on a traditional five-day calendar, and in Spring 2004 and 2005 when the district utilized a four-day calendar. While grade 3 and grade 9 scores on reading, math and language increased in all areas, including Total Battery (a summary of all scores for reading, math, and language combined), it should be noted that test scores in the district had been on an upward trend before the four-day week was implemented. Yarbrough and Gilman concluded that while the four-day week may have had a positive impact on test scores, at the very least it did not negatively impact student performance. Chmelynski (2003) reported that at Merryville High School in Merryville, Louisiana, the ACT scores rose from an average of 18.7 during the four years before implementing the four-day week to an average of 20 since the implementation of the schedule. School officials also reported that grades had increased and the number of honor roll students had doubled in the junior and senior high school. Grau and Shaughnessy (1987), in a study of 7 New Mexico school districts with a four-day week, concluded that the academic performance of students on standardized achievements tests were comparable to the state averages and that the schools had a collective drop-out rate of only 3.3% compared to 8.1% for the rest of the state. They also observed that in 12 Colorado school districts operating a four-day week there were some gains and some losses in student standardized test scores, but no clear evidence that students on a four-day week performed better or worse than their five-day counterparts. In a study of the overall test score gains in 10 New Mexico school districts on the four-day week, McCoy (1983) reported that student achievement was not negatively affected and many school districts reported gains. Overall, students on the four-day week scored at least as well as students on a traditional five-day week. Wilmoth (1995) found that of 84 school districts surveyed, 68% of the school districts reported an increase in student performance while only 6% of the school districts reported a decrease in student standardized test performance. Richards (1990) compared nine rural school districts in New Mexico that had been on a four-day week for eight years with nine similar districts that utilized a traditional five-day week. Looking at CTBS total battery scores for grades five and eight for the eight year period, the four-day week students scored significantly higher ($p<.01$) than the five-day week students. When the scores were disaggregated by grade

and year, a slight significant difference ($p<.065$) favoring the four-day week was found.

In a larger review of the four and five-day week, Lefly and Penn (2009) compared 55 four-day week school districts in Colorado to similar five-day week districts. They concluded that overall, there appeared to be little difference in student performance based on the percentage of students who score at the proficient or advanced level. The results of this review on the impact of the four-day week on student performance appear to be limited in scope and not conclusive. The review conducted by Lefly and Penn utilized a larger population; however, since it was a technical review, the methodology was not defined and the level of statistical significance was not reported.

This study attempts to examine in a more rigorous and comprehensive manner the impact of the four-day week on student academic performance in Colorado.

Methods

The study used a matched pair design to compare Colorado districts with four-day and five-day schedules. Districts were matched based on similar enrollments and socioeconomic status, and compared on student achievement test scores. Test scores included reading, writing, and mathematics, and a composite score of all three areas known as Total Battery, at elementary, middle, and high school levels. District achievement data were retrieved from the Colorado Department of Education website (CDE, 2009).

Sample

Colorado began providing waivers that allowed school districts to utilize a four-day week in 1980. Currently in Colorado, 62 out of a total of 178 school districts are on the four-day school week. Although these 62 districts make up approximately 34% of the school districts, their combined enrollment is only 2.7% of the state's total enrollment, which reflects the rural nature of the four-day school week phenomenon (Dam, 2006). The initial sample for this study consisted of the 62 districts in Colorado with a four-day school week, along with 62 matched districts with a five-day school week. Matching was based on K-12 enrollments and the district percentage of students eligible for free and reduced lunch (FRL %). The distribution of enrollments was positively skewed, and so before matching, we transformed the enrollment variable by adding 50, then taking the natural logarithm. This transformation made the distribution of enrollments nearly normal. Substantively, this approach matched two districts based on the ratio of their enrollments rather than on the difference in their enrollments. For example, the difference between districts of size 200 and 300 is greater than the difference between districts of size 2200 and 2300. The distribution of FRL% satisfied a test of normality, and so no transformation was necessary. The total student enrollment of the five-day week schools and four-day week schools respectively was 19,931 and 17.911.

To match the districts, the FRL% and the transformed enrollments were converted to *z* scores for each district, and the proximity measure for any two districts was calculated as the sum of the absolute values of the differences on the two pairs of *z* scores. Pairing was by a best-match approach, starting with pairing the four-day district with the closest matching five-day district and continuing until no remaining matches were within 1 standard deviation on the proximity measure. As not every district had a match satisfying this criterion, this approach gave 45 matched pairs of districts for comparison of overall student achievement. When examining scores for reading, writing and mathematics, the pairings were reduced at the middle and high school levels because of a lack of reportable scores due to small school size. Overall, districts that could not satisfy the match requirement were excluded from this study, which accounts for the reduced the sample size from 62 matched school districts to 45.

Variables

The independent variable was the district schedule, that is, a four or five day week. Outcome variables for each district were the total percent of students classified as proficient or higher on the criterion-referenced examination scores for 2008 at the elementary, middle grades, and high school levels for all subject areas as posted on the *District and School Performance Reports* from the Colorado Department of Education website (CDE, 2009).

Analysis

Three paired sample *t* tests compared the mean scores for elementary, middle, and high school levels for all subject areas combined, then nine additional tests compared the scores separately for Reading, Writing, and Mathematics (Table 1.). Tests were conducted at the .05 level of significance.

Results

For the combined analysis the mean levels of overall achievement were not significantly different between four-day districts and the matched five-day districts at any of the three school levels (Table 1). At each level, the five-day districts had slightly higher test scores than the matched four-day districts, with the greatest difference for elementary level students. For the separate analysis by level and subject area, Writing scores were significantly higher for elementary students in five-day schools (M =

60.44) than those in matched four-day schools (M = 54.57, $t(44) = 2.44$, $p = .02$, $d = .53$). The other comparisons found no statistically significant differences, although 8 of the 9 tests found higher scores for the matched schools with a five-day school week.

Table 1
Comparison of Mean Achievement Levels for Four- and Five-Day Districts

Subject	Level	*N*	Schedule	*M* ± *SD*	*t*	*df*	*p*	*d*
Combined								
	Elementary	45	5-day	67.86 ± 9.98	1.97	44	.06	0.43
		45	4-day	63.60 ± 9.87				
	Middle	45	5-day	56.36 ± 11.21	0.68	44	.50	0.11
		45	4-day	55.19 ± 9.52				
	High	45	5-day	51.05 ± 10.55	0.89	44	.38	0.16
		45	4-day	49.38 ± 10.15				
Reading								
	Elementary	45	5-day	75.31 ± 10.10	1.36	44	.18	0.31
		45	4-day	72.09 ± 10.46				
	Middle	38	5-day	69.71 ± 12.12	0.74	37	.47	0.15
		38	4-day	68.06 ± 9.64				
	High	40	5-day	70.83 ± 11.16	-0.16	39	.87	-0.03
		40	4-day	71.15 ± 10.34				
Writing								
	Elementary	45	5-day	60.44 ± 11.69	2.37*	44	.022	0.53
		45	4-day	54.57 ± 10.56				
	Middle	38	5-day	57.56 ± 13.76	0.24	37	.81	0.04
		38	4-day	57.00 ± 11.12				
	High	40	5-day	49.63 ± 13.90	0.09	39	.93	0.02
		40	4-day	49.40 ± 13.01				
Mathematics								
	Elementary	45	5-day	72.70 ± 9.88	1.20	44	.24	0.27
		45	4-day	69.89 ± 11.07				
	Middle	40	5-day	47.61 ± 12.60	1.05	39	.30	0.20
		40	4-day	45.41 ± 9.59				
	High	43	5-day	32.88 ± 10.19	1.46	42	.15	0.26
		43	4-day	30.07 ±11.69				

* $p < .05$

Discussion

In one of the first major reform reports, A Nation at Risk (National Commission on Excellence in Education, 1983), lengthening the school day and school year was discussed as a way to reform American education. The report noted that students in other industrialized nations had a longer school year and a longer school day than students in the United States. The report concluded that "school districts and legislatures should strongly consider 7-hour school days, as well as a 200- to 220 day school year" (p. 126). Given the interest in lengthening the school day and year provided by A Nation at Risk, the idea that a school district could reduce the number of school days in a calendar year would appear to contradict the recommended approach.

The initiation and institution of the four-day school week originally occurred out of a need by school districts to reduce expenditures for operations and transportation. Once in place, additional benefits were discovered that made the option highly popular with parents and teachers. However, despite the potential cost savings and popularity, there was little evidence regarding student academic performance as a result of reducing to a four-day week calendar.

This study focused on student academic performance in reading, writing, and mathematics at the elementary, middle and high school levels to investigate if a four-day school week affected student performance. The results revealed no statistically significant difference in overall student academic performance between students on a four-day week and students on a five-day week, with the exception of writing at the elementary school level. However, there were differences in performance that should be reviewed.

Although almost all the test score differences were not statistically significant, at the elementary, middle, and high school levels, mean scores of students on the five-day week were slightly higher in 11 out of 12 areas than their counterparts on the four-day week. Standard deviations of mean test scores for five-day week students were also greater than their 4-day week counterparts in almost all areas, reflecting a greater variation in performance.

The mean scores for the elementary level were noteworthy in that the difference in the mean score was the largest of the three levels and was close (.06) to reaching the .05 level of significance set for this study. Although the mean scores favor the five-day week at the middle and secondary level, the levels of significance do not come close to the .05 level. It would appear that whatever factors might have impacted the elementary level, there is a moderating effect when students reach the middle and high school levels.

The technical report conducted by Lefly and Penn (2009), also on students in Colorado, used a different year of test scores, and although they did not report methodology, including how schools were paired or the level of statistical significance used, they came to a similar conclusion as this study. While they reported some minor variations among schools of different sizes, overall they found little difference in student achievement or achievement gains between four-day and five-day schools.

Limitations and Future Study

This study took a broad look at the four-day week and its impact on student academic performance. Since there was only one previous reasonably large scale study in this area, this examination was important to determine if there was a statistically significant difference on student performance between the four-day and five day week school calendar. However, there is a need now to explore in greater depth the various nuances that are inherent within the four-day week.

The four-day week began primarily as a means to save money on transportation and operations by closing down the school one day each week. However, some school districts chose to continue to operate during the fifth day with remedial and enrichment programs. Further examination is needed to determine if a difference in student academic performance exists among school districts based on the way the fifth day is utilized.

For this study, the data were not disaggregated by traditional subpopulations such as ethnicity, English language learners, and students with individualized educational plans. Due to the small size of the schools and districts in this study, the schools did not have subpopulations large enough to make a valid statistical comparison for these subpopulations. The extension of this study to these subpopulations would be of future interest.

Conclusion

The study examined the impact on student performance of a four-day week and five-day week schedule. Although the total number of days in a school year is reduced in the four-day week, the total number of minutes per day is increased so that the students are attending school for the same amount of total time as students who attend on the five-day week. The question addressed by this study is; do students on the four-day week perform academically as well as students on the traditional five-day week? The evidence in this study was that the five-day schools did slightly better than the four-day schools, with 11 of 12 achievement results favoring five-day schools, and one statistically significant finding of higher elementary writing scores for five-day schools.

From a policy perspective, a decision to change to a four-day school week should be made on the basis of cost

savings or stakeholder preference rather than to increase test scores. Conversely, it does not appear that concern over student academic performance should be used as a reason not to implement a four-day school week.

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