Time in school: How does the U.S. compare?

There is a perception among policymakers and the public that U.S. students spend less time in school than students in other countries. As U.S. Department of Education Secretary Arne Duncan stated at a recent Congressional hearing:

"Our students today are competing against children in India and China. Those students are going to school 25 to 30 percent longer than we are. Our students, I think, are at a competitive disadvantage. I think we're doing them a disservice."

But is perception reality? Do students in other countries spend more time in school than students here in the U.S.? Secretary Duncan provided data to back up his claims. But do those claims tell the whole story? This brief takes a closer look at the data to answer the question: Do U.S. students spend less time in school than students in other countries?

First we'll examine the specific claim that children in India and China spend 25 to 30 percent longer in school than students in the U.S. Then, we'll compare the amount of instructional time states require compared to what the rest of the world requires, including high-performing countries such as Korea, Finland, and Japan.

Are students in India and China required to go to school longer than U.S. students?

The answer appears to be no. According to data from the OECD and the World Data on Education, students in China and India are not required to spend more time in school than most U.S. students.

How do we know this? Since every state has its own time requirements for schools, it is difficult to compare the U.S. as a whole to other countries. (see box) However, time requirements typically do not vary dramatically from state to state. Most require between 175 and 180 days of school and/or between 900 and 1,000 hours of instructional time per year, depending on the grade level. Without the ability to compare instructional time as a whole for the U.S., we'll compare instructional time in China and India to 5 states that enroll a significant portion of U.S. students—California, Florida, New York, Texas, and Massachusetts.

It is also important to keep in mind that the time students spend in school varies by grade level. In most countries, younger children receive fewer instructional hours than students in higher grades. That is the case in India and China as well. In India, schools are open 200 days a year for grades 1-5, for a total of 800 instructional hours per year, compared to 220 days and 1,000 instructional hours in grades 6-8 (World Data on Education). This could be the source of Secretary Duncan's assertion: 220 days is nearly 25 percent more than the typical 180 days students attend school in the U.S.

But this does not mean they are receiving 25 percent more instruction because the total actual instructional hours are quite similar. For example, India's 800 instructional hours at the elementary school level is actually less than what is required at the elementary level in California (840 hours), Florida (900 hours in grades 4-6), New York (900 hours), Texas (1,260 hours[1]), and Massachusetts (900 hours). As a matter of fact, just 8 states[2] require fewer than 800 hours of instructional time. Even in most of those states, the reduced hours only apply to grades 1 through 3. Interestingly, fewer hours do not seem to relate to student performance. Elementary students in half of these states perform above the national average[3], while in the other half elementary students score below the national average.

The 1,000 instructional hours India requires in grades 6-8 (middle school) is similar to the requirement in most states. According to the Education Commission of the States

How Time Was Calculated

For this report, time measurements were based on the minimum number of hours of instruction per year (also known as compulsory hours) countries require their public schools to provide in a formal classroom setting. However, not all countries' statutes explicitly define what counts as instructional time. In general, they include actual instruction time, so lunch is typically not included. However, recess and transition time between classes are explicitly included in some statutes while excluded in others. While this report attempts to provide the best possible comparisons, the data should not be read as the exact number of hours of teaching students receive.

For most countries, the instructional hours were taken from the **OECD's Education at a Glance 2011 Table D1.1**. The OECD table did not provide instructional hours for the United States, since compulsory laws are set at the state level. Therefore, state-by-state data was taken from the **Education Commission of the States' (ECS) Number of Instructional Days/Hours in the School Year** (August 2011). For India and China, instructional hours were taken from the **World Data on Education Seventh Edition 2010-11**. These reports were used because they each based instructional time on the statutes that dictate the minimum number or hours/days of instruction schools are required to provide.

While these reports' numbers may not capture the precise amount of teaching students receive, they do provide the best apples-to-apples comparison of how much instructional time countries expect all of their students to receive.

TIMSS is one of the few reports that does compare countries' actual teaching time, even though it does not include all developed countries mentioned in this report.

To see how much math instruction U.S. students receive compared to other countries, check out **this data**.

(ECS), 35 states[4] require at least 990 hours of instruction at the middle school level, including Texas (1260 hours[5]), New York (990 hours) and Massachusetts (990 hours). Even though middle school students in India attend nearly 25 percent more days of school per year than U.S. students, they are not required to receive more hours of instruction.

Determining required school time in China is not so straightforward. The data is not clear about the number of days students in China attend school, as that varies by region. However, we used multiple sources to estimate the number of hours per year students in China attended school. According to the OECD, the number of weeks of instruction in China is 35 compared to the U.S.'s 36 weeks. Some Chinese students attend school six days a week, so even though the U.S. has more instructional weeks Chinese students could be attending school nearly 20 percent more days per year.

Students in China may attend more days of school each year, but the key question is, are they receiving more hours of instruction? To find the answer, we combined data from the World Data on Education-- which provided the number of courses per week schools are expected to offer—with data from OECD on weeks of instruction to determine total instructional hours per year. The data shows that Chinese students in primary grades (grades 1-5) take 34 courses per week at 45 minutes[6] apiece. This equates to nearly 900 hours of instruction per year, which is similar to or less than many U.S. states, including Florida, New York, Texas, and Massachusetts. At the middle school level (grades 6-8), Chinese students attend just under 1,000 hours of school per year, a figure similar to that of most U.S. states. Just as with India, the data shows that Chinese students are not required to receive 25 to 30 percent more in-school instruction per year than U.S. students.

Do other countries require more instructional hours for students than the U.S.?

China and India are important comparisons, but other countries could provide even greater insight into whether U.S. students are spending as much time in school, particularly countries that typically score high on international assessments, such as Korea, Japan, Finland, and Canada, as well as economic competitors such as England, France, Germany, and Italy. The data set that allows us to do this comes from the OECD. It does not include the number of school days, but looks directly at required instructional hours.

According to the OECD, the hours of compulsory instruction per year in these countries range from 608 hours in Finland (a top performer) to 926 hours in France (average) at the elementary level, compared to the over 900 hours required in California, New York, Texas, and Massachusetts. Of particular note, no state requires as few hours as Finland, even though Finland scores near the top of nearly every international assessment. As a matter of fact, Vermont – a high-performing state[7] -- requires the fewest number of hours (700 hours) for its elementary students (grades 1-2) than any other state, and it still requires more than Finland. Vermont's requirement is also more than the 612 hours high-achieving Korea requires of its early elementary students. Moreover, all but 5 states require more hours of instruction at the early elementary school level than the OECD countries[8] average of 759 hours.

At the middle school level, total hours of instruction range from 777 hours in Finland (a top performer) to 1001 in Italy (an average performer). Three of our 5 large states, New York (990 hours), Texas (1,260 hours), and Massachusetts (990 hours) would rank near the top of all industrialized nations in number of hours required. California and Florida would rank near the middle at 900 hours but still above the OECD average of 886 hours. It should be noted that even at the middle school level, countries like Japan and Korea require fewer hours (868 and 867 respectively) than most U.S. states. So by the 8th grade, students in most U.S. states have been required to receive more hours of instruction than students in most industrialized countries, including high-performing Finland, Japan, and Korea.

In most countries, there is a significant increase in the time students are required to be in school at the high school level. In the U.S., most states require the same number of hours in high school as in middle school. Just as they did at middle school level, Finland (856 hours) and Italy (1,089 hours) required the fewest and most hours of instruction respectively. Italy's 1,089 hours surpasses all but 2 out of our 5 selected states. Texas requires 1,260 hours of instruction at the high school level, while California requires 1,080 hours. Korea requires 1,020 hours of instruction at the high school level. Nearly half (22) the states require more instructional hours than Korea. Moreover, the vast majority of states (42) require more hours of instruction than the OECD average of 902 hours. Again, there's no evidence that students in other countries are required to receive more instruction than students in the United States.

Are U.S. students receiving less instruction?

The data clearly shows that most U.S. schools require at least as much or more instructional time as other countries, even high-performing countries like Finland, Japan, and Korea. It is important to keep in mind, however, that these comparisons are based on required minimums. It's possible that certain schools in these countries and states do provide more time for instruction. Furthermore, students in countries like China, India, Japan, and Korea have a tradition of receiving additional instruction through non-formal schooling such as tutoring and night schools, especially at the high school level, which could also have an impact.

However, the point should not be lost: the U.S. does not require schools to provide less instructional time than other countries.

Basing policy decisions on this false perception alone could be costly and provide no clear benefits. Providing extra time is only useful if that time is used wisely. As the Center's report Making Time found, the relationship between time and student learning is not about the amount of time spent in school. Rather, it is how effectively that time is used. And this report has also shown that there is no relationship between simply requiring more time and increased achievement. The data shows that a number of countries that require fewer hours of instruction outperform the U.S., while the U.S. performs as well as or better than some other countries that require more hours of instruction.

Providing additional time can be an effective tool for improving student outcomes, but how that time is used is most important. Before policymakers and education leaders decide to increase the time students spend in school, they should first consider these things from the Making Time report:

Determine how effectively school time is currently being used. For instance, states that are considering increasing instructional time should examine their academic standards along with all other requirements schools are expected to provide to determine whether they currently require enough school time to meet them.

Explore scheduling alternatives that use existing time. For example, school districts could consider implementing a year-round calendar with the standard 180 days as a way to offset summer learning loss.

If considering block scheduling, look at the research. Block scheduling is intended to increase time on task, but the research results are mixed, with the 4X4 block producing the least gains. However, block scheduling can also provide time for teachers' professional development or pull-out time for struggling students.

Low-cost options, like four-day weeks, can prove beneficial to achievement as well. The research isn't definitive, but some districts that have tried this are seeing unintended benefits in the form of higher test scores, decreased disciplinary problems, greater collaboration among teachers, and higher morale.

Logistics can be challenging, but are solvable. In considering any change to school schedules, the biggest hurdle will often be logistics. Cost and child care (for instance, in moving to a year-round schedule) can be two of the biggest hurdles. Look at school success stories like this one to see how some school districts addressed these concerns.

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[1]Includes recess and lunch
[2]Out of the 47 states that reported plus the District of Columbia (Alaska, Arizona, Florida, Illinois, Montana, & New Jersey)
[3]Based on 2011 NAEP 4th grade reading scale scores.
[4]Out of the 47 states that reported plus the District of Columbia
[5]Includes recess and lunch
[6]Each period is 45 minutes according to the World Data on Education, 7th edition- China
[7]According to National Assessment of Education Progress (NAEP)
[8]The average of all OECD countries with reported instructional time. The OECD average is an estimate of all industrialized countries.

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