

Days of Learning in CREDO's Research

CREDO uses advanced technology and sophisticated statistical tools to measure students, schools and the education landscape. While these tools create precise and reliable answers, they are presented in technical terms that are not user-friendly to a general audience. To translate the technical results into terms that are accessible to non-technical audiences, CREDO developed Days of Learning.

Here is how we do that:

- 1 Think about the students in your state's public schools. For many of their years of schooling, they take achievement tests to measure what they know at the end of the school year. We can identify the average score for each test each year.
- 2 Imagine a student who scores exactly at the average in one year, say 4th grade, and then in the following year, scores exactly at the average again on the 5th-grade test. The amount of year-to-year learning for that student show us what the average learning is for all the students who took both tests.
- 3 We do that calculation for every grade the state tests: 4th to 5th, 5th to 6th, and so on.
- 4 CREDO uses those annual measures of average learning to represent a typical year of learning, and equates that to a typical 180-day school year. We say that the student in our example has gained 180 days of learning.
- 5 If a student makes more progress than the average student, we take the amount of extra achievement and translate it into 180-days of learning plus "X" extra days. We are creating a measure of student learning as if the student went to school for 180 days plus X days. The size of "X" depends on how much more the student learns than the average student — if it's a lot more, then "X" will be a large number, and if it's a small amount more, "X" will be a small number.
- 6 The same is true for students who do not learn as much as the average student. Instead of adding to the 180-days-of-learning average, we subtract from that base to reflect the smaller-than-average advances that those students realize. In these cases, the difference leads to numbers such a "165 days of learning" or "152 days of learning". Against the average standard of 180 days, these smaller days show that students learned as if they had only attended school for 180 days minus X days during the school year.

