Summary

In Morton et al.'s paper, "A multi-state, student-level analysis of the effects of the four-day school week on student achievement and growth," the authors examine the adoption of four-day school weeks — which have become increasingly popular, especially in the post-COVID era, where schools find staffing increasingly difficult — and its effects on students' academic achievement, in order to provide proper evaluation of the policy. The NWEA Measure of Academic Progress Growth exams are administered every fall, winter, and spring, which Morton et al. cite as a superior way to measure the effect of the four-day week on gains, as opposed to annual spring exams (which are confounded by the effects of summer vacation). As a result, the authors use a two-way fixed effects difference-in-difference estimate to examine the effects of adoption of a four-day week, as well as examine whether the effects of a four-day school week on gains are even across rural vs. non-rural districts, as well as on the basis of grades and particular subgroups. They find that school enrollment did not change significantly as a result of adoption (removing a potential source of bias), and after accounting for grade-term, school, and student fixed effects, find a statistically significant drop in fall-to-spring gains in both reading and math as a result of adoption of the four-day week. The drop in fall-to-spring gains was higher in non-rural school districts (at a stronger statistical significance) than in rural districts. At the same time, the authors do qualify some of their results — it is possible that the four-day school week could allow for greater teacher retention (in which case, the positive effects of teacher retention could outweigh the negative effects on student achievement from lower instructional time), but such research has not been taken up yet.

Critique

My impression is that the paper is very comprehensive and takes a much more thorough look at the effects of the four-day work week than the previous papers it cites. Using a standardized exam that is administered throughout the year (as opposed to once in the spring or fall) allows for a better measure of the true effects that the length of school instruction has on student achievement. Additionally, assessing gains (as opposed to changes or levels) is a much more appropriate measure of the effects on student achievement, as the particular measure of gains assesses the same student at the same school in the same year — this purely isolates the effect of the instructional period length, rather than potentially catching factors that bias the perceived gains downward. In general, it's fair to say that this analysis should be trusted much more than previous estimates of effects of instructional length — however, at the same time, the authors do qualify some of their results