Analysis Probes the Shape of the Teacher-Salary Schedule

By Stephen Sawchuk on September 6, 2012 10:27 PM

More school districts than previously thought are giving salary increases early on in a teacher's career, rather than the traditional "back-loaded" model, according to a new analysis of federal data published in Educational Policy.

The analysis adds to a generally thin and understudied research base on this aspect of teacher compensation, and its authors hope it will awaken additional interest in studying how the schedules impact the workforce and student achievement.

Teacher salary schedules, in general, reward teachers for longevity and for earning advanced credentials. Earlier studies of salary schedules in New York and North Carolina found heavily back-loaded salary schedules, meaning they tended to concentrate raises among veteran teachers, rather than those just beginning their careers.

A few years back, there was a brief period of policy interest in turning this pattern on its head, by "front-loading" salary schedules. Proponents argued it would better align compensation to research showing that teachers tend to improve most over their first three to five years on the job, and that it would also aid in teacher recruitment.

For all the policy interest in merit pay, there's been comparatively little research on the impact of the base-salary schedule on things like retention and student achievement. It's a curious oversight because, as the authors of this analysis note (and as I've also reported for Education Week), most existing performance-pay programs supplement, but don't replace, the traditional salary schedule. There are a few exceptions worth checking out, but they are by no means the norm.

Stepping into the void, authors Jason Grissom of Vanderbilt University's Peabody College and Katharine Strunk of the University of Southern California examined data from the 1999-2000 Schools and Staffing Survey, a nationally representative sample of schools.

They found that nearly half the districts in the SASS sample actually front-loaded their salaries; the other districts tended to back-load. But there's an important caveat: The average back-loading district provided 134 percent greater yearly returns to veteran than novice teachers, whereas the average front-loading district provided only 37 percent greater yearly returns to novices over veterans.

"The degree of front-loading doesn't look to be very big," Grissom said in an interview. "They tend to do it to a relatively small degree, and for the ones that back-load, the slope is
steeped."

That said, both the front- and back-loaded districts show a large degree of variance in the premiums they give out based on experience. And the authors also found that districts with collective bargaining seemed more likely to have back-loaded salary schedules.

**Student-Achievement Boost?**

The authors also attempted to determine whether the type of schedule had any relationship to student achievement. To do that, they matched the SASS data with aggregate student-achievement data collected by the American Institutes of Research. Availability of data slimmed the sample down to districts in 28 states. Controlling for differences in state cut scores, the authors found that having a front-loaded schedule was linked to a small, positive increase in the proportion of students who achieved the "proficient" bar on state reading and math tests.

Grissom acknowledged that this method of measuring change in scores is simplistic; it doesn't, for instance, look at individual student scores or use the sophisticated controls that researchers have adopted for "value added" metrics. And it's important to keep in mind that these findings are merely an association, not causal; it's not possible to conclude that moving from a back-loaded to a front-loaded schedule would improve achievement.

Still, "they seem to move together," Grissom said. "What I think it does is point to a pattern that's worth looking at with better data."