



WHAT CAN RESEARCH TELL US ABOUT THE PAY PLAN THAT LED TO THE PICKET LINE?



© O'Dea at Wikimedia Commons, CC BY-SA 4.0

In recent weeks, Denver Public Schools' pay-for-performance plan burst into the spotlight as a key bone of contention in the district's first teacher strike in 25 years. The strike ended February 14 after three days. But the performance plan remains in effect, **albeit in modified form**. In a recent article in *Chalkbeat Colorado*, Melanie Asmar traces the long history of ProComp, which was one of the first performance pay programs to be adopted by a large U.S. school district.

As Asmar explains, ProComp **started** in 1999 as a pilot program that paid teachers bonuses when their students met performance goals. Funded by a tax increase approved by Denver voters in 2005, the initial plan attracted union support. In fact, the Denver Classroom Teachers Association played a key role in designing that system, in which teachers could earn permanent raises and bonuses for meeting such objectives as increasing student achievement or teaching in high-poverty schools. Fifty-nine percent of union members voted in favor of the plan when it was first expanded from a pilot to a districtwide offering.

Under then-Superintendent Michael Bennet, who is now a U.S. Senator from Colorado, ProComp changed considerably in 2008. One-time bonuses increased, but permanent raises for veteran teachers decreased. Although the union agreed to the changes, criticisms abounded. These criticisms played a prominent role in the recent teachers' strike.

The Center for Assessment, Design, Research and Evaluation (CADRE) at the University of Colorado Boulder (CU) has conducted multiple studies of ProComp. Contributors from CU include assistant professor Allison Atteberry, professor Derek Briggs (a National Education Policy Center Fellow); CADRE associate director Elena Diaz-Bilello; and doctoral students Charles Bibilos, Sarah LaCour and Michael Turner. NEPC Fellow Andrew Maul, an assistant professor at the University of California at Santa Barbara, also assisted with the studies. Each study had different sets of authors, different research questions, and different methods. Below, we draw upon their work, as well as more recent work conducted by Atteberry, to examine what their research can tell us about some of the criticisms of ProComp that played a part in the recent strike.

Teachers' Criticism: ProComp causes salaries to vary a great deal from one year to the next, making it difficult for teachers to predict how much they will earn in a given year.

Research: A 2018 journal manuscript by Atteberry and LaCour, currently under peer review, states, "the median teacher experienced a standard deviation of approximately \$2,300 in their ProComp payments across school years. This suggests a fair degree of instability in payments from one year to the next. Some of these fluctuations likely arise because this PFP system has so many different incentives, some of which are linked to noisy measures."

Teachers' Criticism: In general, ProComp has made it more difficult for Denver to retain teachers.

Research: It's complicated but this is probably not the case. Prior to the full-scale adoption of the system, Denver's teacher retention rates were declining while the state's were increasing. During the initial years, when ProComp was still being rolled out, retention rates flattened out in Denver and also in the state as a whole. One research objective in Atteberry's manuscript was to isolate the causal effect of the ProComp policy on overall teacher retention rates. Taking into account the trends in retention for Denver Public Schools both pre- and post-ProComp, as well as those same trends for similar Colorado districts, she did not find evidence that the pay system had an effect on Denver's overall retention rate. Between 2009 and 2015, teacher retention declined in Denver, but this decline generally occurred in similar districts statewide, suggesting that this is not an effect of ProComp. It is also worth noting that compensation systems like ProComp doesn't necessarily aim to improve overall retention. Rather, the objective is to retain teachers who earn incentives at higher rates than teachers who do not earn incentives.

Teachers' Criticism: ProComp makes it difficult to keep quality teachers in the classroom.

Research: The retention rate in Denver has fallen more slowly for teachers whose students experienced the highest rate of growth in test scores. Their retention rate has declined about half as fast as the rate for teachers whose students saw lower test score growth. Before ProComp, there was no difference. But, of course, teacher quality is very difficult to measure, and it involves much more than students' test scores. And many teachers were necessarily excluded from that analysis because they did not work in grade levels or subjects eligible for state assessments.

Teachers' Criticism: Retention fell as the result of annual salary variability caused by

ProComp.

Research: The researchers did not find a correlation between annual salary variability and a teacher's likelihood of being retained.

Teachers' Criticism: ProComp is too complicated.

Research: Among 47 participants in eight focus groups conducted in 2013, 40 percent indicated that ProComp was hard to understand. Forty-five percent said they had trouble getting accurate, updated information on the system. A recent [article](#) from Jeff Bryant in the Progressive includes an example of a pay stub from 2016.

Teachers' Criticism: ProComp is unfair.

Research: Fairness is obviously in the eye of the beholder. However, more than three quarters of the 2013 focus group participants perceived that ProComp awards were unfairly allocated because some people were ineligible for some rewards. About a third said the awards were "manipulable" or "cheatable."

NEPC Resources on Teacher Employment and Retention

This newsletter is made possible in part by support provided by the Great Lakes Center for Education Research and Practice: <http://www.greatlakescenter.org>

The National Education Policy Center (NEPC), housed at the University of Colorado Boulder School of Education, produces and disseminates high-quality, peer-reviewed research to inform education policy discussions. Visit us at: <http://nepc.colorado.edu>