

### **Year Two Evaluation of the Achievement Challenge Pilot Project in the Little Rock Public School District**

**By:**

**Gary Ritter, Marc Holley, Nate Jensen, Brent Riffel,  
Marcus Winters, Joshua Barnett, and Jay Greene**

**January 22, 2008**

This report describes the results of an evaluation of the Achievement Challenge Pilot Project (ACPP), a teacher merit pay program in the Little Rock School District which offered substantial year-end bonuses to teachers based on student improvement on standardized tests. The primary focus of this evaluation is the impact of the program on student achievement. We also assess the program's impact on teacher perceptions, attitudes, and behaviors.

Supporters of merit pay in education argue that it encourages teachers to be more innovative, to work harder, and to be more satisfied with their salaries. Supporters believe these changes will result in improved student achievement on standardized tests. Opponents argue that such programs increase negative competition among teachers, negatively affect the school environment, and encourage teachers to neglect low-performing students. Opponents fear that these disadvantages will lead to declining student achievement on standardized tests. Despite the passionate arguments made by supporters and opponents, little is known about the actual impacts of merit pay programs on students or teachers because rigorous evaluations are rare.

To determine whether the ACPP led to improvements in student test scores, we analyzed student data from standardized tests for students in all Little Rock elementary schools from 2004-05 to 2006-07. Next, we examined data from teacher surveys, which were administered to nearly 400 teachers to evaluate the impacts of merit pay on teacher attitudes and school climate. Finally, we conducted a series of interviews with teachers in the five ACPP schools.

The year two evaluation follows-up on our previous year one evaluation, which was based on data from two ACPP schools. The year one evaluation was conducted in the Fall of 2006 and results were released in January 2007. In the year one ACPP evaluation, we found that standardized test scores in math improved in ACPP schools, and that teachers were modestly supportive of the program.

The year two evaluation of the ACPP improves upon the year one evaluation in several ways. In particular, the introduction of the ACPP in three new schools in 2006-07 increased the sample of students and teachers exposed to the program. Additionally, utilizing the Iowa Test of Basic Skills in the 2004-05 school year allowed for three years of consistent student achievement data in three key subject areas – math, language, and reading. According to Gary Ritter, who directed the evaluation, *“our two years of analysis of test data in ACPP schools in Little Rock reveal consistent findings: students of teachers who are eligible for performance bonuses enjoy academic benefits. Further, many of the criticisms of merit pay programs simply have not proven true in Little Rock.”*

The following key findings emerged:

1. Based on the student achievement comparisons, students in the three schools where the ACPP began operation in 2006-07 showed an improvement in achievement in multiple subject areas.
  - a. In math, students whose teachers were eligible for bonuses outperformed students in schools whose teachers were not eligible by 3.52 normal curve equivalent (NCE) points. This differential gain represents a program impact of nearly seven percentile points.
  - b. In language, students whose teachers were eligible for bonuses outperformed students whose teachers were not eligible by 4.56 NCE points. This differential gain represents a program impact of nearly nine percentile points.
  - c. In reading, students whose teachers were eligible for bonuses outperformed students whose teachers were not eligible by 3.29 NCE points. This differential gain represents a program impact of nearly six percentile points.
  
2. Based on the surveys of nearly 400 Little Rock elementary school teachers and on interviews with faculty in ACPP schools, teachers have mixed feelings about the program.
  - a. The data do not indicate that ACPP teachers, in general, are more innovative or work harder, despite the fact that these are two oft-cited potential benefits of merit pay plans. However, teachers in schools that have participated for multiple years in the ACPP reported being more satisfied with their salaries than their peers in first-year ACPP schools and in comparable nonparticipating schools.
  - b. The data do not indicate that ACPP teachers experience divisive competition, suffer from a negative work environment, or shy away from working with low-performing students – despite the fact that these are three oft-cited potential problems inherent in merit pay plans.
  - c. Teachers in the three schools implementing merit pay for the first time in 2006-07 highlight some problems with the implementation of the program, which resulted in teacher discontent and decreased program support.
  - d. ACPP teachers, however, did report being more effective teachers than comparison teachers in non-ACPP schools.

Contact:

Gary Ritter, Ph.D., Associate Professor  
Department of Education Reform  
University of Arkansas  
212 Graduate Education Building  
Fayetteville, AR 72701  
Phone: (479) 575-3773  
Fax: (479) 575-3196  
E-mail: garyr@uark.edu