

## Preliminary Report: The Impact of Student Teachers on Teacher Value-Added Reporting

### Introduction

**Does the presence of student-teachers affect the value-added report of the licensed teacher?** In recent years, teacher value-added reports have increasingly become part of high-stakes policies, such as evaluation and merit-pay. Understanding the impact, if any, of a student-teacher on the licensed teacher's value-added report is of interest to teachers, administrators and policymakers. In 2012, SAS worked with the Tennessee Higher Education Commission, the Tennessee Department of Education and ten Tennessee school systems to assess this question through a pilot study.

**Based on the preliminary results of this pilot study, student-teachers have very little impact on the value-added report of licensed teachers.** The study compared teacher value-added reports for teachers who did have a student-teacher in the classroom to their reports when these same teachers did not have a student-teacher in the classroom. For most teachers, there was not a statistically significant difference in the licensed teacher's value-added report between the two settings. However, some of the evidence indicates that lower-performing teachers' value-added reporting was somewhat lower in certain subjects when these licensed teachers had a student-teacher in the classroom.

**While further analysis is required to draw more definite conclusions, these preliminary results are informative and merit additional exploration.**

### Data and Analysis

Ten school systems in Tennessee sent SAS the list of licensed teachers who supervised a student teacher and the academic school year in which that supervision took place. These systems represented both county and city districts. For the purposes of the analysis, the data were restricted to those teachers who supervised a student teacher in at least one of the three academic school years ending in the spring of 2009, 2010 or 2011 but who also did not supervise a student teacher in at least one other of those same three academic school years when they received a value-added measure.

**In the pilot study, each teacher was able to serve as his or her own control in evaluating the impact of supervising a student teacher on the value-added estimates.** More specifically, the analysis compared adjacent years for the student teacher supervision categories when possible. For example, if a teacher supervised a student teacher in the 2011 and 2010 academic school years but not in the 2009 academic school year, then the value-added result from 2010 would be compared to the value-added result from 2009. If another teacher supervised a student teacher during 2010 but not in 2009 or 2011, then the data for 2010 were compared to 2011 since the value for 2011 is more recent. If a teacher supervised a student teacher in 2011 but not in 2009 and the 2010 data were missing, then the data for 2009 and 2011 were compared. The final sample contains 607 pairs of value-added assessments controlling for teacher, subject and grade.

The pilot study focused on two types of comparisons:

- **Is there any difference in value-added estimates of the licensed teachers *with or without* student teachers?** More specifically, within each system, the average value-added estimate was computed for teachers who supervised student teachers and for those same teachers when they did not supervise student teachers. The average value-added estimate across all systems also was computed. In some systems, there

is a positive net gain associated with supervising student teachers versus not supervising student teachers. However, in other systems, the net gain is negative. **Across all systems, supervising a student teacher appears to have very little impact on the value-added estimate.**

- **Is there is a differential impact of supervising student teaching relative to how *effective* the licensed teacher, on average, has been in the classroom.** Teachers with a history of low performance had lower teacher value-added measures when supervising student teachers, particularly in Mathematics and Science. **For teachers classified as average or high performing teachers, there was no significant difference in their value-added measures when comparing across supervision status.**

### **Initial Conclusions of Pilot Study**

**For most grades and subjects, supervising student teachers had no significant difference in terms of teacher effectiveness, particularly for teachers who are considered average or high performing.** However, the initial findings do suggest that that low performing teachers might have a small negative impact in their effectiveness in Mathematics and Science when supervising student teachers as compared to not supervising. This finding has potential implications for the assignment of student-teachers to licensed teachers.