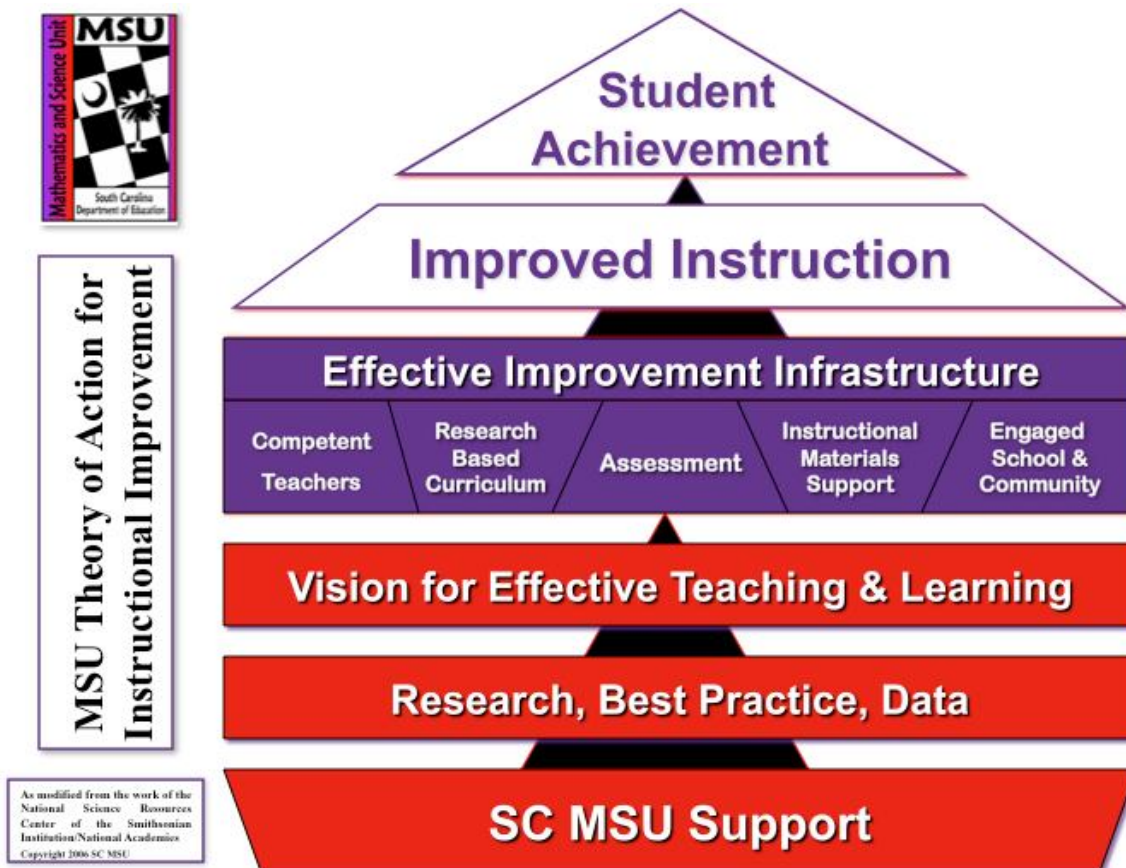


Overview

The work of the instructional coach is first and foremost directed at assisting teachers in increasing their capacity to improve instruction. This work is framed by what research and identified best practices tell us make for an effective improvement infrastructure. We anticipate increased student achievement as an intentional outcome of improved instruction. (See our Theory of Action for Instructional Improvement below). Instructional change takes time and we anticipate that the most compelling increases in student achievement will take place in the third year of the initiative and beyond.



Analysis of the iCoach initiative's impact on student achievement focuses on the percentage of students scoring Proficient/Advanced on the Palmetto Academic Challenge Test (PACT) in keeping with the US Department of Education's focus on student proficiency.

Impending changes in PACT beginning in 2009 will challenge us to continue our longitudinal impact study. Delays in the release of 2008 PACT data and school report cards have also impacted this analysis. As such, iCoach Cohort 1 will represent the "best we've got" longitudinal look at relationships between coaching and student achievement in middle schools.

Assertion #1 - Coaching will improve student achievement in individual schools.

Cohort 1 schools (n= 15) began with the initiative in 2006/07 and will complete their training at the end of 2008/09. Note that initially seven schools focused on math only, six on science only and two on both subject areas. (See School Baseline Data reports.)

Part A: One-Year Results

- *In 6 of 8 of our Cohort 1 science iCoach schools, student achievement, as measured by % of students scoring proficient or advanced on PACT, showed gains. Science achievement declined in one school and remained unchanged in the eighth school.*
- *In 2 of 9 of our Cohort 1 mathematics iCoach schools, student, as measured by % of students scoring proficient or advanced on PACT, showed gains. Math achievement remained unchanged in four schools and dropped in three schools.*

Achievement comparisons were made between 2005/06 and 2006/07 PACT data for the entire school. 2005/06 data represent student achievement in the year prior to coaching. 2006/07 data represent student achievement after nearly one full year of coaching.

The following formula was used to determine GAIN, LOSS or UNCHANGED status. These are trend data and are not meant to imply statistical significance:

- *If $PACT\ 2007 \geq PACT\ 2006 + .1 \times PACT\ 2006$, then Status = GAIN*
- *If $PACT\ 2007 \leq PACT\ 2006 - .1 \times PACT\ 2006$, then Status = LOSS*
- *If $PACT\ 2006 - .1 \times PACT\ 2006 < PACT\ 2007 < PACT\ 2006 + .1 \times PACT\ 2006$, then Status = UNCHANGED*

Part B: Preliminary Two-Year Results

- *In 7 of 8 of our science iCoach schools, student achievement, as measured by % of students scoring proficient or advanced on PACT, showed gains. Science achievement remained unchanged in the eighth school.*
- *In 4 of 9 of our mathematics iCoach schools, student achievement, as measured by % of students scoring proficient or advanced on PACT, showed gains. Math achievement remained unchanged in three schools and dropped in two schools*

Achievement comparisons were made between 2005/06 and 2007/08 PACT data for the entire school. 2005/06 data represent student achievement in the year prior to coaching. 2007/08 data represent student achievement after nearly two full years of coaching.

The following formula was used to determine GAIN, LOSS or UNCHANGED status. These are trend data and are not meant to imply statistical significance:

- *If PACT 2008 \geq PACT 2006 + .1xPACT 2006, then Status = GAIN*
- *If PACT 2008 \leq PACT 2006 - .1xPACT 2006, then Status = LOSS*
- *If PACT 2006 - .1xPACT 2006 < 2008 < PACT 2006 + .1xPACT 2006, then Status = UNCHANGED*

* 2007/08 PACT aggregated school data are not yet available as downloadable spreadsheets on the SC Department of Education website. 2007/08 school PACT data included for comparisons are preliminary estimates calculated from available grade-by-grade data.

Commentary

These data give us reason to be hopeful that coaching schools do see student achievement improvements. Even though student achievement is an indirect measure of the work of our coaches, their schools are trending toward ongoing increases in proficiency and beyond. While our schools showed improvement in not quite half (8/17) of our intended measures in their first year, they hit on nearly 65% (11/17) of these measures in the second year.

Assertion #2 - Student achievement will improve more rapidly in schools with a coach than in similar schools without.

Similar schools are defined by the SC Education Oversight Committee as having “a similar percentage of students eligible for Medicaid services and/or participating in free/reduced lunch programs.” (See <http://www.sceoc.com/glossaryofterms/>)

The identification of socio-economically similar schools allows for quasi-experimental analysis of the impact of coaching on student achievement.

Part A: One-Year Results

- *In 2 of 8 Cohort 1 science iCoach schools, rate of increase in student achievement, as measured by change in % of students scoring proficient or advanced on PACT, outpaced similar schools as identified by the SC Department of Education. Two iCoach science schools made equivalent gains to their similar schools counterparts while four were out paced.*
- *In 1 of 9 of our Cohort 1 mathematics iCoach schools, rate of increase in student achievement, as measured by change in % of students scoring proficient or advanced on PACT, outpaced similar schools as identified by the SC Department of Education. One iCoach school made equivalent gains to its similar schools counterparts while seven were outpaced. (Five of these outpaced schools declined more than their similar schools counterparts in % of students scoring proficient or advanced as compared to the previous year.)*

Part B: Preliminary Two-Year Results

Similar schools data are not yet available for 2007/08 PACT.

Commentary

If all things are equal, we assert that schools with coaching should see student achievement increase at a more rapid rate than schools without. Data, at least after a single year of coaching, do not support this assertion, however, the addition of an instructional coach is a big change within the culture of a school and effective coaching is a function of effective relationships between coach, principal and teachers. We expect this relationship building to take time and expect to see this assertion play out positively over the full extent of the coaching intervention.

It is also worth remembering that similar schools are not identified by name. As such we do not know what interventions are taking place in those schools or if any similar schools are actually others of our coaching schools.

We also believe that there may be a data entry error for the schools identified as similar to Forest Circle MS. These similar schools jumped from 15.5 to 35.8% proficient/advanced in math and from 11.6% to 38.8% in science. There are no comparable jumps in student achievement to be found anywhere in the data set, even among top scoring schools. (See Assertion #3)

Assertion #3 - Coaching will raise student achievement closer to the level of an identified set of high performing target schools.

Ten top performing middle schools were selected based on % of students scoring proficient and advanced on 2005/06 PACT mathematics and science.

- *ANDERSON 1 Powdersville Middle*
- *CHARLESTON Buist Academy*
- *CHARLESTON Charleston School of the Arts*
- *CHARLESTON Thomas C. Cario Middle*
- *DORCHESTER 2 R H Rollings Middle School*
- *GREENVILLE Langston Charter Middle School*
- *LEXINGTON 1 Lexington Middle*
- *LEXINGTON 5 CrossRoads Middle*
- *PICKENS R C Edwards Middle*
- *YORK 4 Gold Hill Middle*

These 10 schools will be referred to as the Gold Cohort schools.

Part A: One-Year Results

- *In 2005/06, Gold Cohort schools averaged 56.6% students scoring proficient and advanced in mathematics. The nine Cohort 1 mathematics iCoach schools averaged 32.8% for the same measure. Mathematics performance for both cohorts remained unchanged for 2006/07 with the Gold Cohort at 55.6% and iCoach Cohort 1 at 32.9%*
- *In 2005/06, Gold Cohort schools averaged 49.8% students scoring proficient and advanced in science. The eight Cohort 1 science iCoach schools averaged 27.6% for the same measure. Both cohorts demonstrated science performance gains in 2006/07. The Gold Cohort increased to 58.3% and iCoach Cohort 1 increased to 34.4%.*

The performance gap in mathematics and science, after a single year of coaching, remained unchanged between high performing target schools and coaching schools.

Part B: Preliminary Two-Year Results

- *Mathematics performance as measured by students scoring proficient and advanced for both cohorts remained unchanged for 2007/08 with the Gold Cohort at 56.6% and iCoach Cohort 1 at 34.7%.*
- *Both cohorts demonstrated science performance gains in students scoring proficient and advanced in 2007/08. The Gold Cohort increased to 60.7% and iCoach Cohort 1 increased to 37.4%.*

The performance gap in mathematics and science, after two years of coaching, remains unchanged between high performing target schools and coaching schools.

Commentary

The Gold Cohort schools are not similar to our Cohort 1 schools in many characteristics. Two are schools for the arts, one is a public charter school and one is a specialized International Baccalaureate academy. Eight of these 10 schools have higher percentages of students eligible for gifted and talented programs than eligible for free/reduced lunch. Free/reduced lunch eligibility ranges from 7.8% to 33.2% for Gold Cohort schools. The range for Cohort 1 schools is 11% to 86.2%. Only 3 of the 15 Cohort 1 schools have free/reduced lunch percentages lower than the highest school in the Gold Cohort.

While it is encouraging to be keeping up with the top performers, we'd rather be performing more like them. Key to the unlocking the potential for performing like top performers is raising teacher expertise, efficacy and expectations. iCoaches are charged with promoting the formation and function of professional learning communities in their schools. This effort began in earnest late in the second year of the intervention. We are moving professional learning community efforts forward in our storyline and are hopeful to see eventual reductions in this performance gap.