

## Measuring Teacher Effectiveness in AISD

Educator Quality Research Series: Issue 1

September 8, 2010

#### Introduction

Although classroom observations and other qualitative measures certainly are critical to measurement of any teacher's effectiveness, student performance on standardized assessments can provide important information about teacher quality. For this reason, AISD staff have developed metrics that describe the extent to which each teacher's students have performed well on TAKS. These metrics have been used in research reported to the Board of Trustees via the annual Level Reports, which have described factors most related to student and teacher success in AISD. The graphic below describes the teachers for whom these metrics are available, and how they compare with the overall population of teachers in AISD.

## Profile of AISD Teachers, 2008-09

#### Characteristics

Masters/Ph.D.: 26% NBCT: 2% ACP: 16% 77% Female: Minority: 35% Novice teachers: 25% Avg yrs in AISD: 8 Avg yrs on campus: 5 Avg total yrs teaching: 11



## **All Teachers**

#### Characteristics

Masters/Ph.D.: 26% NBCT: 2% ACP: 17% 77% Female: Minority: 34% Novice teachers: 28% Avg yrs in AISD: 7 Avg yrs on campus: 5 Avg total yrs teaching: 10



**Teachers** 

# TAKS Area

Masters/Ph.D.: 26% NBCT: 3% ACP: 11% Female: 74% Minority: 26% Novice teachers: 18% Avg yrs in AISD: Avg yrs on campus: 6

Characteristics

TAKS Area Teachers with: -- TAKS data for 2007-08

-- TAKS data for 2008-09 -- Still in AISD in 2009-10

Avg total yrs teaching: 12

#### Effectiveness metrics

- 1. % Met Standard Grades 3-11
- 2. Student Growth --Reading and Math
  - Grades 4-11
  - --Science Grades 8, 10, 11

#### Effectiveness metrics

- 1. % Met Standard Grades 3-11
- 2. Student Growth
- --Reading and Math Grades 4-11
- 3. Longitudinal Student Growth
  - --Reading and Math Grades 4-11



#### **Quick Facts:**

AISD teachers with high classroom passing rates on TAKS in 2007-08 were at schools where the faculty had been together for longer.

AISD secondary teachers whose students made the most *growth* on TAKS from 2007-08 to 2008-09 were:

- More experienced in AISD
- At schools with less mobility, greater student attendance rates, and greater parent involvement
- At schools where students reported having high academic self-confidence and a positive behavioral environment
- At schools where the faculty had been together for a longer time

In addition, elementary teachers whose students made the most growth in both reading and math were:

- More satisfied with the behavior management on their campus
- More likely to believe they can help any child learn, regardless of challenges

Teachers with strong student growth for 2 consecutive years are more likely than their less successful peers to:

- Examine data in sophisticated ways and appreciate AIMS
- Find value in professional development outside of AISD
- Find value in their Professional **Learning Community**

Source. PEIMS and district NBCT and certification records.

NBCT=National Board Certified Teachers; ACP=Alternative Certification Program.

#### **Measuring Teacher Effectiveness Using Student Growth on TAKS**

The percentage of a teacher's students who meet the TAKS passing standard is an important metric of teacher effectiveness. However, high quality teachers facilitate improvement of all students, including those who begin the year far below passing and those who start well above.

To measure the effectiveness of a teacher with all students, AISD has developed an indicator of student growth based on a prediction equation used to determine whether students perform below, at, or above what is predicted based on their performance in the same subject the prior year.

#### Conclusion

Teacher effectiveness is critical to student success, and assessments of teacher effectiveness should inform staffing decisions, strategic planning, and resource allocation. However, teacher effectiveness is difficult to define, both conceptually and empirically. Teachers often are deemed effective when they promote learning, motivate their students to achieve, and instill knowledge, and also by the extent to which their students meet or exceed standardized test benchmarks. Whether any one aspect of teaching is more important than another may depend on the stakeholder, but education policies and school systems place a premium on test scores, and most of the research on teacher effectiveness follows suit.

## **Example Measures of Teacher Effectiveness**

Peer Review Classroom Observations



Student **Portfolios** 

Student Ratings



**Principal Appraisal** 

Student Standardized Test Performance

**Teacher** Training/ Qualifications

### 2008-09 Student Growth and **Teacher Certification**

- There were *no differences* in student growth in 2008-09 for ACP and traditionally certified teachers with more than 3 years of experience.
- Students of ACP novice teachers (including those enrolled in an alternative certification program) demonstrated less growth in science than students of traditionally certified novice teachers.
- Students of ACP novice teachers demonstrated greater growth in reading than students of traditionally certified novice teachers.
- Although there was a trend toward more student growth for NBCTs versus non-NBCTs in reading, math, and science, there were no significant differences in 2008-09; however, in 2008-09 there were only 26 NBCT TAKS area teachers in AISD, making significant differences hard to detect.

#### **About this Series**

This is the first in a series of briefs about educator quality in AISD. Forthcoming issues will focus on professional development, leadership development, novice teacher induction, and educator retention in AISD.

For more information about research on student growth, teacher effectiveness, teacher retention, and student achievement, please visit our reports web site:

http://www.austinisd.org/inside/accou ntability/evaluation/reports.phtml