Identifying Quality in (Some) Charter Schools Depends on the Definition: Learning From Accountability Data.

## Overview

The charter school movement is entering into its twentieth year in the United States. The first charter school law was enacted in Minnesota in 1991 (*Laws of Minnesota 1991*, chapter 265, article 9, section 3). While each state's charter laws vary, at the core of each is the desire to improve student achievement and provide parents and students public school choices. In one southwestern state, charter schools were authorized in 1994 in Title 15, Chapter 1, Article 8 as public schools established to provide a learning environment to improve student achievement and provide additional academic choices for parents and students. Despite the implicit purpose to improve student achievement, particularly to close achievement gaps between students of color and poverty and their white, affluent counterparts, research has yet to provide compelling evidence that schools have fulfilled their obligations to the communities they serve (Zimmer,R., Gill, B., Booker, K., Lavertu, S., Sass, T.R., and Witte, J. , 2009; Hoxby, C.M , 2004; Gleason, P., Clark, M., Tuttle, C. C., and Dwoyer, E. , 2010).

As no common definition of school quality exists, policy makers, parents, researchers and pundits are left to debate the availability, or lack thereof, quality schools, despite several accountability labels used to identify schools, i.e., Adequate Yearly Progress, A-F labels, Persistently Lowest Achieving, A+, etc. As researchers seek to evaluate the impact of charter schools, questions of quality cannot be underestimated. How do we define quality? How does this definition change based on context and other influences?

## Purpose

The amount of varying data available to the public regarding school performance can seem overwhelming. Yet policy makers assume that parents and concerned stakeholders can utilize this information to exercise their options for choice. Given the conflicting accountability results publicly reported, it is not surprising that a relatively modest amount of parents choose to enroll their children in charters. Statistics indicate that 2,056,996 million students in 2011-12 attend charter schools; however, according to data from the National Alliance for Public Charter Schools (www.publiccharters.org) that represents only 4.2 percent of all public school students. Despite the continued increase in the number of charter schools, charter schools only make up 5.8 percent of all public schools.

The purpose of this study was to evaluate charter school performance within the context of "quality" in one southwestern state using existing accountability data. The researcher determined the "elite" and "top" schools, district and charter, based on existing state level proficiency and student growth percentile data. These ratings were analyzed along with other state level measures of school accountability to determine correspondence between these designations. The researcher hypothesized that a more straight-forward measure of quality could be determined that would yield comparable results to more complex accountability models while at the same time provide valuable and easily interpretable information for stakeholders.

## Methodology

The researcher obtained student level assessment data from 2005 to 2011 for all test takers through an agreement with the Department of Education to conduct these analyses. These files contained student level scale scores and proficiency levels for all students tested in the state on the high stakes accountability assessment in grades 3-8 and 10 and the Stanford 10 in grades 2 and 9. Additional fields in the data file included school and district descriptors as well as student demographic data. These files were used in the calculation of passing rates and student growth percentiles. Additional accountability data were collected from the Department of Education indicating the school level accountability results (AYP and state A-F grades) as well as other school level data, i.e., Title I status, county, school type (elementary, K-12, high school or alternative), etc.

The researcher conducted analysis using data from more than 498,323 students in 1,849 schools. The analysis included elementary, high school, K-12 and alternative schools. The schools analyzed represented the entire state which included urban schools, suburban schools, and rural schools. The researcher calculated school level indicators of achievement: the percentage of students passing; designated as meeting or exceeding the standards on the state accountability assessments, in reading and math and median student growth percentiles in reading and math for all schools in the state. The analysis of student growth percentile data (the rate at which the average student learned at their schools compared to academic peers throughout the state) was conducted using the methodology and software developed by Damian Betebenner, an associate at the National Center for the Improvement of Educational Assessment (http://www.nciea.org/). Researchers utilized a SGP package for R which allows for the calculation of growth percentiles using student-level statewide accountability assessment results (Betebenner, 2009).

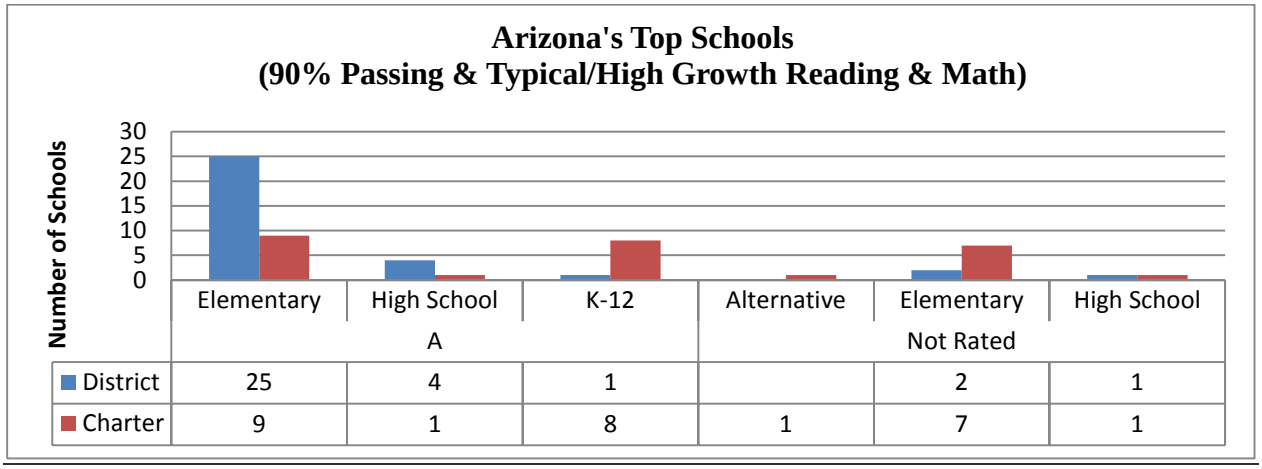
Indicators of student achievement were compiled along with other descriptive data about the school, including accountability data (NCLB and state letter grade), Title I status, accountability type (elementary, high school or alternative), and charter or district designation. The school letter grades were not utilized in the determination of quality for the purpose of this paper because not all schools received letter grades in 2011. The state produced only letter grades for two-thirds of the schools in the state, 1,501 schools out of more than 2,285. Alternative, small and K-2 schools were excluded despite having student achievement data available. However, all schools were analyzed in this study; therefore, data will be reported for schools with letter grades available and those schools that were “not rated”.

These data were used to determine the number of schools, both district and charter, that met two definitions of “quality”. The researcher conceptualized quality based on schools achieving a high standard of performance both on absolute measures of achievement (proficiency rates) as well as student growth (growth percentiles). Schools were identified as “elite” schools based on the following criteria: ninety percent passing in reading and math and median student growth percentile of 66 or higher. Schools were identified “top” schools based on the following criteria: ninety percent passing in reading and math and median student growth percentile of 34 or higher. These lists were disaggregated by A-F accountability letter grades, Title I status, county and other school variables.

## Results

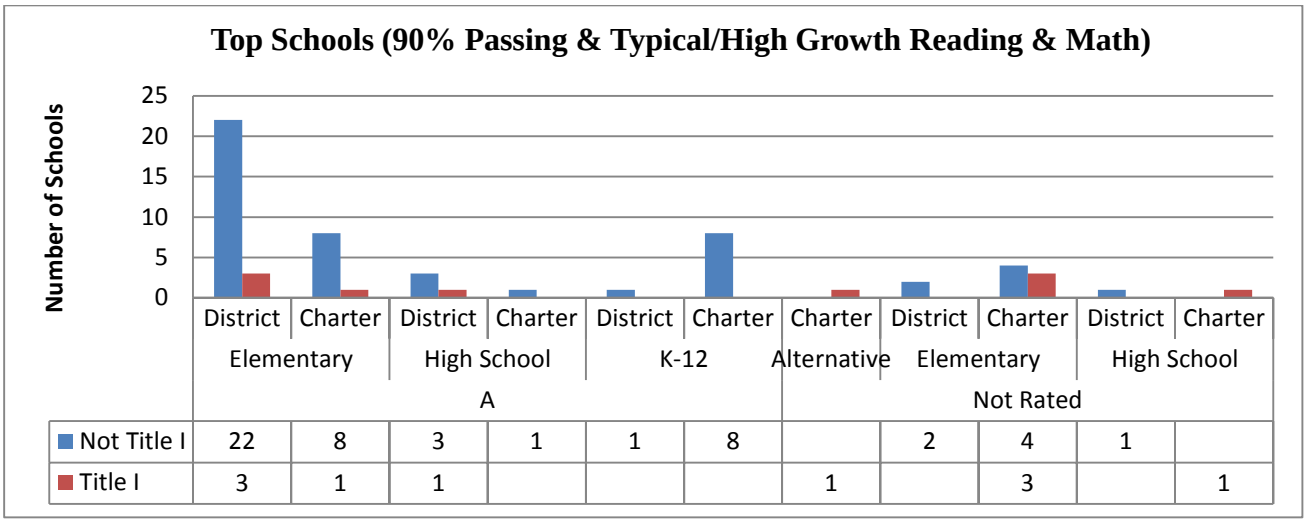
The first analysis of "top" schools yielded N=60 schools, 48 of which also received a state letter grade in 2011; all of these rated schools received an A letter grade. The results indicate a larger proportion of elementary schools, both district and charter, being identified as a "top" school in comparison to K-12 or high schools. Overall, more district schools are identified as "top" schools than charter schools, in particular those with accountability ratings. The remaining 12 schools were not evaluated by the state due to either their small size or alternative school status. Charter schools were more likely to have schools "not rated" receive the designation of "top" school (see Chart 1).

Chart 1. Top Schools by School Type & Grade Configuration



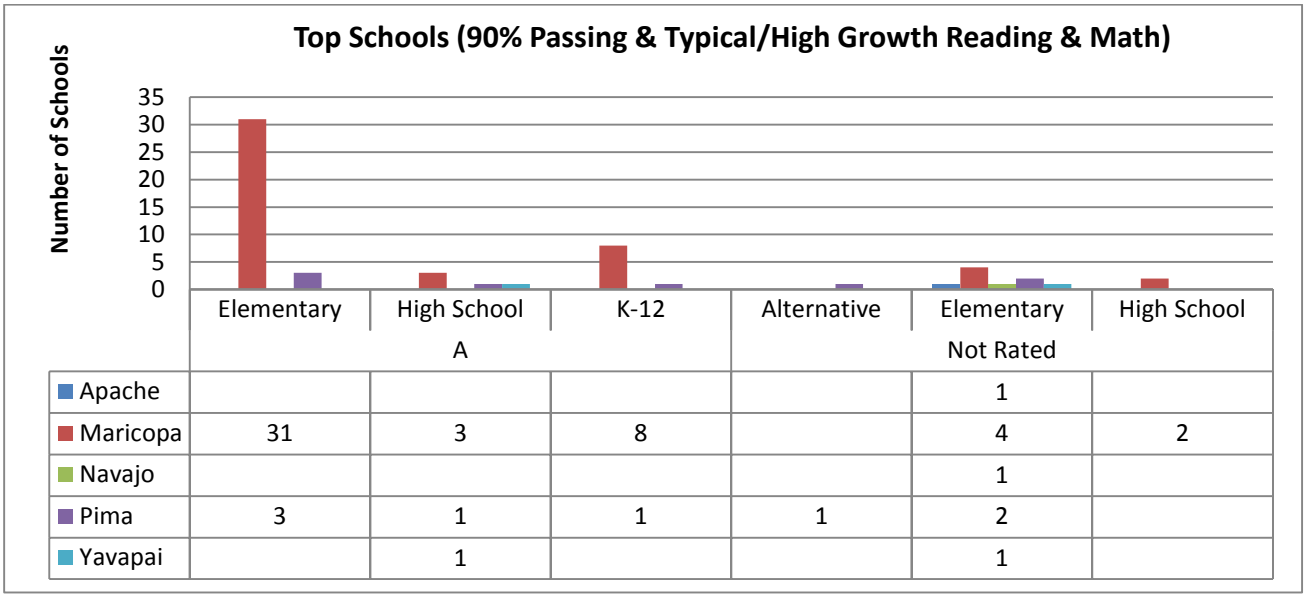

The results indicate that the majority of designated schools do not serve a high proportion of students of poverty, as indicated by Title I status. Of the 60 schools, only 10 were identified as Title I- the proxy measure for poverty. The Title I schools were equally distributed between the A grade and "not rated" groups (see Chart 2).

Chart 2. Top Schools by Title I Status, Grade Configuration and Letter Grade



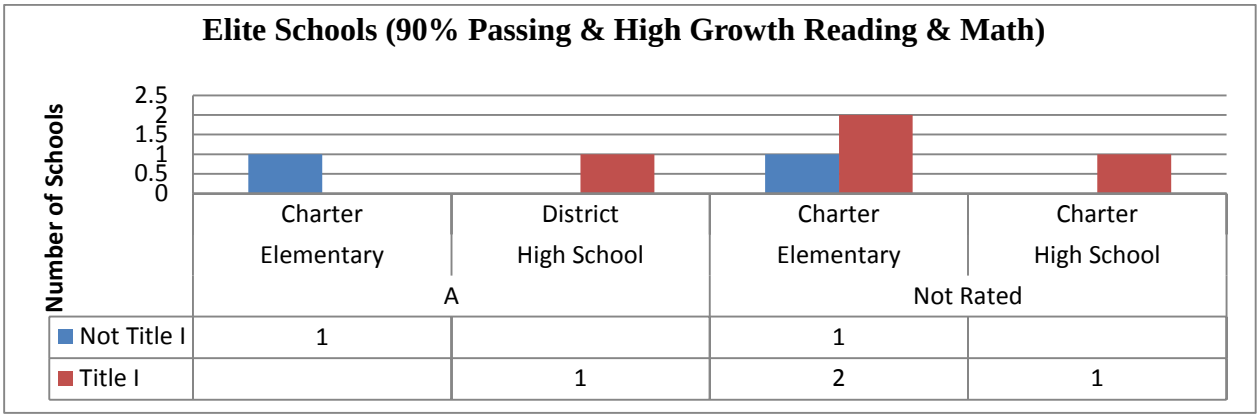
An analysis of the geographic distribution of these "top" schools by county was conducted. The 60 schools represented five of the fifteen counties; the largest two counties having the nearly all schools, N=56 (see Chart 3).

Chart 3. Top Schools by County




The analysis of "elite" schools was conducted as a subset of the "top" schools list. This analysis yielded N=6 schools, only 2 of which received a state letter grade in 2011; both of these schools received an A letter grade. The remaining 4 schools were not evaluated by the state due to either their small size or alternative school status. The results indicate that all of the not rated Elite schools were charter schools. Of the 6 schools, 4 were identified as Title I- the proxy measure for poverty; however, 3 schools were did not receive a letter grade in 2011 (see Chart 4). Not surprising, all 6 schools were located in the two largest counties.

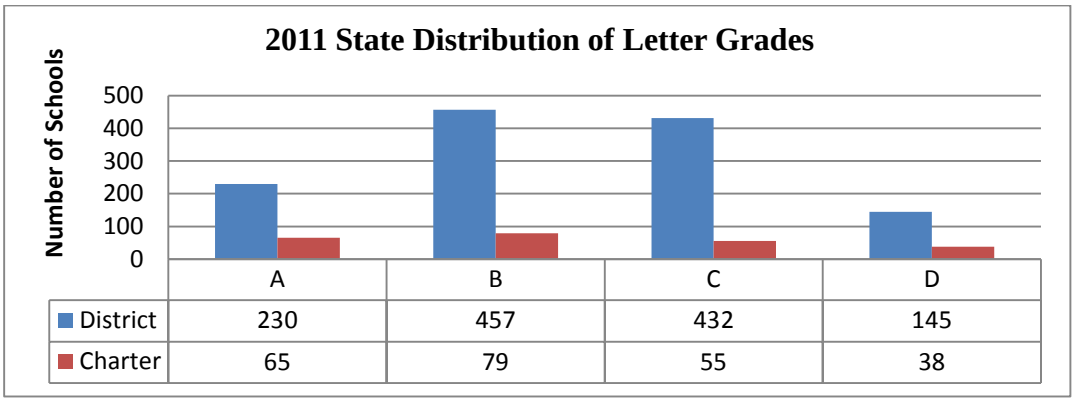
Chart 4. Elite Schools by Type and Letter Grade




These results were then compared to the distribution of letter grades published by the Department of Education (www.ade.az.gov). The summary of the 2011 letter grades indicate that, of the 1,501 schools evaluated, 295 were designated as "A" schools (see Chart 5). The

designation of an A is intended to indicate to the public a quality school. The Department of Education's letter grades, which don't include all schools with data, identified more than four times the number of schools as quality in comparison to even the less stringent definition used for this analysis.

Chart 5. Summary of 2011 A-F Letter Grades




| | A | B | C | D |
|---|---|---|---|---|
| District | 230 | 457 | 432 | 145 |
| Charter | 65 | 79 | 55 | 38 |

Results indicate that establishing definitions of quality based on both proficiency and growth measures yields comparable results to the state's more complicated A-F accountability model, in terms of the highest rating- A. The definitions used in this study for "elite" and "top" clearly represent a more rigorous evaluation of school performance as only A schools are identified in either of these two categories. The results are not surprising given that the A-F model utilizes these data in part to evaluate schools. However, given the complexity of the rules used in the A-F formula and that similar overall results are achieved by simpler analysis, raises questions about the utility of more complex accountability formulas.

## Significance

This study provides data for policy makers regarding the use of accountability data to determine and communicate school quality. Additionally, it supports the use of more clearly defined criteria for making these designations. In terms of evaluating the impact of charter schools, this study contributes to the field of research by presenting both a methodology for evaluating charter quality as well as an evaluation of one state's charter population.

While complex measures of school accountability are created to provide evidence of school quality, these measures are often confusing to the user, resulting in limited utility. Given that similar outcomes can be rendered using simpler data analysis and reporting, perhaps these methods should be considered as part of the overall communication strategy used by states and policy makers.

A critical question to consider is: whose definition of "quality" should we use? As seen in these analyses, establishing criteria to measure quality significantly impacts the number and types of schools identified. More rigorous definitions, as used in this study, will yield far fewer results than others that may be utilized. Given the consequential nature of these evaluations, political and practical pressures to use expanded or more generous definitions of school quality are likely to prevail. However, these results indicate that quality schools, at least in one state, are not well distributed and don't often serve students of poverty.

## References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