

OPPORTUNITY AND EQUITY INDEX

A New Analytically Calculated Method to Derive School At-Risk Levels Using The Martinez–Yazzie Ruling Components

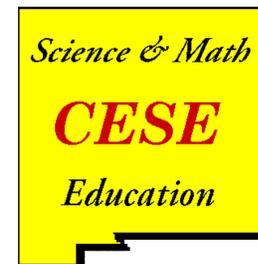


The best ideas. Shared.

CYPRESS TREE NEW MEXICO

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What Is This About?

In 2018, the New Mexico First Judicial District Court ruled in favor for Martinez, et al. and Yazzie et al. as plaintiffs in a suit against the State of New Mexico. The court's historic decision:

- Set the demographic parameters for “at-risk students”
- ordered the state to “allocate sufficient funding...”
- “...revise the formula for distributing funds [equitably] to school districts.”

Since the court decision was proclaimed, there has been no mechanism created to ***specifically*** comply with the details of the order. While there have been efforts to increase funding through the “at-risk” formula since the decision, these blanket increases fail to equitably distribute funding that targets the “at-risk” students identified in the lawsuit.

Defining a Fully Inclusive, Objectively Derived, New Index

These are categorical differences used by the state to calculate the current at-risk funding index, those identified by the Martinez-Yazzie ruling, and those used in the newly proposed **“Opportunity and Equity Index.”**

Current NM At-risk Factors	Martinez-Yazzie Court Identified At-Risk Factors	Opportunity and Equity Index At-Risk Factors
Title 1 (Used to Determine Poverty)	Economically Disadvantaged	Economically Disadvantaged
English Language Learners	English Language Learners	English Language Learners
Mobility	Native American	Cultural & Linguistic Access Factor*
	Children with Disabilities	Children with Disabilities
		Mobility

* Demographic subgroups that demonstrate significant achievement gaps

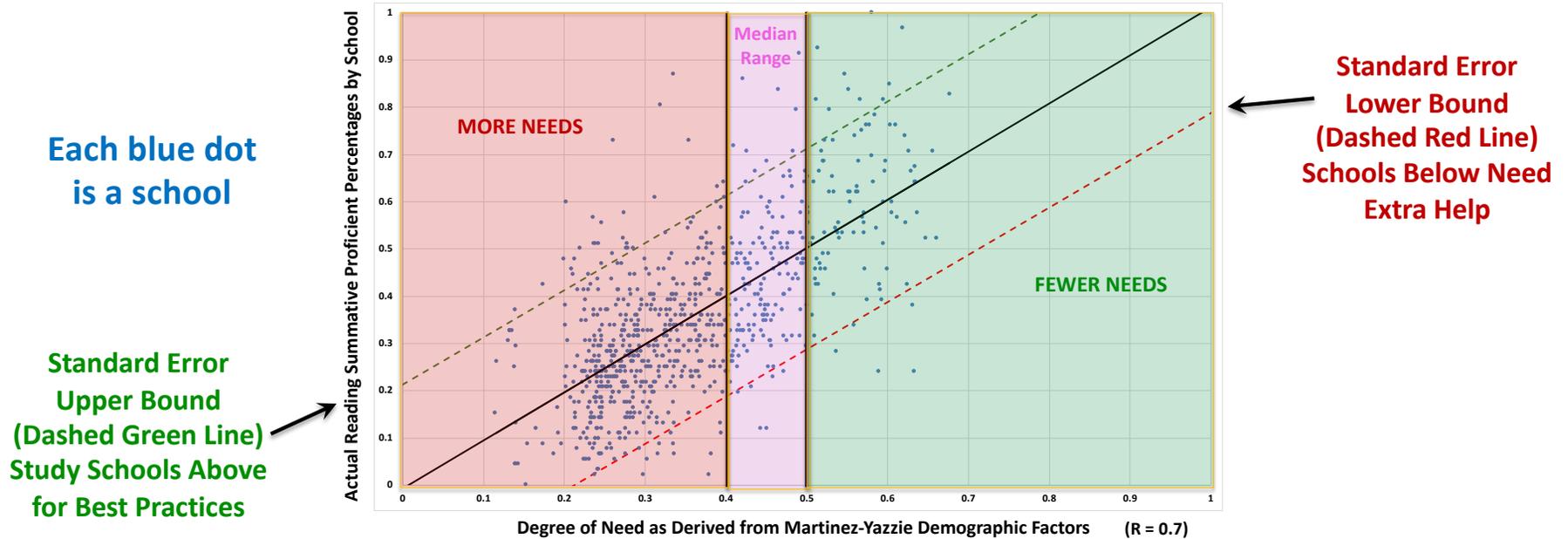
How Was the Opportunity and Equity Index (OEI) Created?

Cypress Tree NM (CTNM), in partnership with the Coalition for Excellence in Science and Math Education (CESE), has created an objective, analytically based method of quantifying the at-risk populations defined in the Martinez-Yazzie lawsuit and correlates those factors to academic achievement on a school-by-school basis.

- The OEI is derived by calculating the optimum correlation factors (coefficients) between the demographic factors specifically identified by the Martinez-Yazzie lawsuit with measured student academic performance.
- This is calculated using well established mathematical methods and uses all the publicly available demographic data collected and reported by the NM Public Education Department in accordance with New Mexico and Federal law.
- In this new index, current demographic data are used to produce rank order results for every public school in the state of NM.
- This stratified list provides a better basis for more equitable educational resource distribution by school – not just by district.

As a result, this tool aligns with the lawsuit outcome and provides a more objective method of identifying and quantifying equity needs in order to divert resources accordingly.

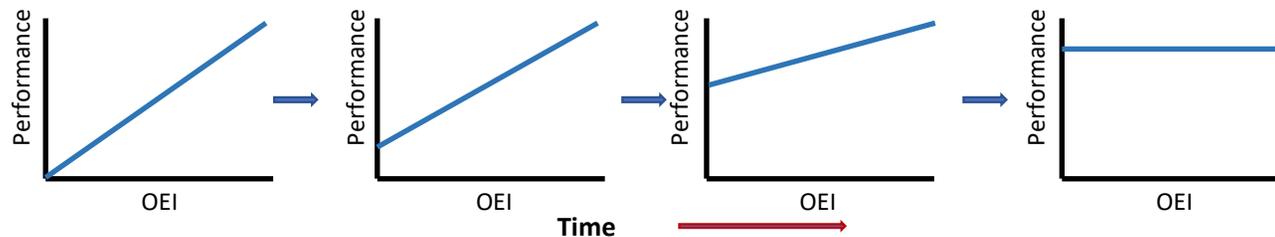
A Visual Representation



- Y-axis: Actual reading summative scores by school
- X-axis: School need based on the Opportunity and Equity Index (OEI)
- The schools in the light red shaded area (left rectangle) are the high-needs schools. The schools in the pink shaded area (center) are borderline, and the schools in the green shaded area (right) have fewer at-risk needs.

The Hope

- ✓ **The goal of using this index is to create a more equitable distribution of resources for those school populations with the highest need as identified in the Martinez-Yazzie lawsuit.**
- ✓ **Applied correctly, it is hoped that the OEI provides the ability for each school to create the educational systems that most benefit their unique student population(s).**



The Accountability

- Using the OEI creates an accountability metric whereby schools are fairly measured within the parameters of their demographic peer-schools.
- The OEI provides a means to identify schools that are outperforming their expectations (schools above the dashed lines) to study for best practices.
- Similarly, the OEI identifies schools significantly underperforming.

The OEI provides an objective metric for assigning resources and performing assessments of their impacts, not just a subjective assignment of points.

ADDENDA

Why Do We Use These Demographic Factors?

Source: SY 2018/2019 PED Assessment Data (Webfiles-2019-Proficiencies-All-by-State-by-District-by-School.xlsx)

		ELA	Math	Science	Performance Gap (Percentage Proficient Compared to Caucasians)			
State Percentage of Students		Proficient & Above %	Proficient & Above %	Proficient & Above %	ELA	Math	Science	Achievement Gap Yes or No
295,171	Total Students	34%	20%	35%				
48.9%	Female	39%	20%	34%				
51.1%	Male	29%	21%	37%				
23.3%	Caucasian	48%	34%	57%	0.0%	0.0%	0.0%	
3.7%	African American	30%	15%	31%	-37.5%	-55.9%	-45.6%	Yes
58.8%	Hispanic	30%	16%	30%	-37.5%	-52.9%	-47.4%	Yes
2.2%	Asian	52%	42%	54%	8.3%	23.5%	-5.3%	No
12.0%	American Indian	25%	12%	20%	-47.9%	-64.7%	-64.9%	Yes
74.0%	Economically Disadvantaged	28%	15%	28%	-41.7%	-55.9%	-50.9%	Yes
15.3%	Students with Disabilities	12%	8%	14%	-75.0%	-76.5%	-75.4%	Yes
16.8%	English Language learners	15%	8%	12%	-68.8%	-76.5%	-78.9%	Yes
0.3%	Migrant	23%	13%	23%	-52.1%	-61.8%	-59.6%	Inconsistent Tracking
2.6%	Homeless	18%	9%	18%	-62.5%	-73.5%	-68.4%	Inconsistent Tracking
1.1%	Military	51%	39%	61%	6.3%	14.7%	7.0%	Inconsistent Tracking
0.7%	Foster	22%	12%	23%	-54.2%	-64.7%	-59.6%	Inconsistent Tracking

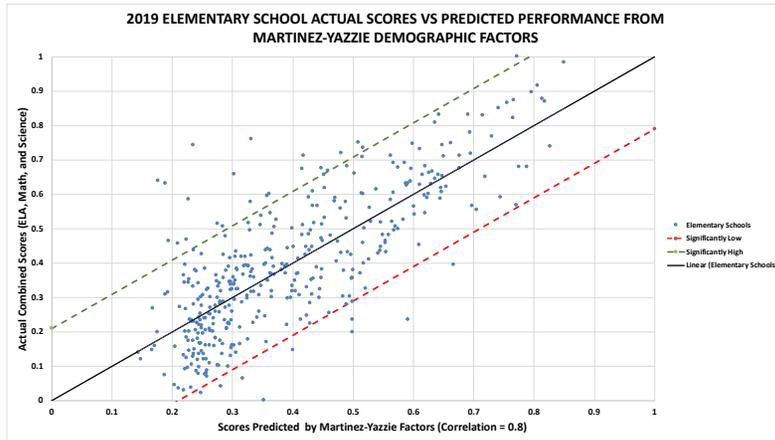
Because they are the best indicators of where equitable resources are needed*

* We include mobility, tracked but not published by the PED, because it also correlates with student performance.

ADDENDA (Concluded)

Final OEI Calculations Should be Similar to These:

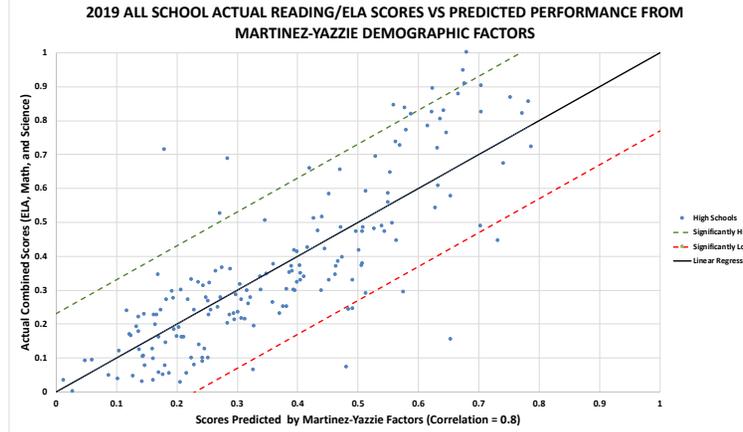
**Grades K-5
(Plus Overlap*
Schools)**



**Grades 6-8 (Plus
Overlap*
Schools)**



- **Breaking these out by grade ranges using all tested subjects, as shown, provides more accurate OEI numbers**
- **The demographic factors have varying weightings for different grade ranges**
- **These graphs are close approximations, given that smaller school data are often masked as per FERPA requirements**
- **The PED has all these data to use**
- **We anticipate correlations (R-values) at 0.8 to 0.9 if calculated by grade range**



**HS PSAT & SAT Mapped Proficiency Percentages
Going Forward
(These are 2019 Data from TAMELA Results-
Plus Overlap* Schools)**

*** For our purposes, “overlap schools” are those that teach grade ranges overlapping the traditional ES, MS, and HS**