Using Equity Focused Data to Close the Opportunity Gap

Prepared for
The Strive Network National Convening
September 27, 2013

Viola Florez
Interim Dean
College of Education
University of New Mexico

Angelo Gonzales
Executive Director
Mission: Graduate

Beata Thorstensen
Director of Data & Analysis
UNM Center for Education Policy Research

Marjori Krebs
Associate Professor
College of Education
University of New Mexico

Peter Winograd
Director
UNM Center for Education Policy Research

What is Mission: Graduate?

Mission: Graduate is a cradle-to-career education partnership in Central New Mexico, which includes the counties of Bernalillo, Sandoval, Torrance, and Valencia.

- These four counties are home to 218,422 children under 18 years of age, or 42% of all children and youth living in New Mexico in 2010.
- The region is also home to 887,077 people of all age groups, which is about 43% of New Mexico’s total population.

Our Goal
60,000 New College Degrees and Credentials by 2020
The “Achievement Gap” is One of Our Greatest Challenges

Percentage of Students Proficient or Advanced in Math, By Grade Level and Subgroup

Albuquerque Public Schools

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Caucasian</th>
<th>Hispanic</th>
<th>American Indian</th>
<th>African American</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Grade</td>
<td>50%</td>
<td>40%</td>
<td>10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td>60%</td>
<td>50%</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td>70%</td>
<td>60%</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rio Rancho Public Schools

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Caucasian</th>
<th>Hispanic</th>
<th>American Indian</th>
<th>African American</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>3rd Grade</td>
<td>60%</td>
<td>50%</td>
<td>20%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8th Grade</td>
<td>70%</td>
<td>60%</td>
<td>30%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11th Grade</td>
<td>80%</td>
<td>70%</td>
<td>40%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Standards Based Assessment, 2011-2012, NM Public Education Department.

High School Graduation Rates Are Too Low for All Students

Four-Year High School Graduation Rate, All Students, By School District

Districts in red have graduation rates less than 70%.

Districts in orange have graduation rates between 70% and 80%.

Source: NM Public Education Department, 4-Year Cohort High School Graduation Rate, Class of 2012.
The Gaps Persist Into Higher Education

Central New Mexico Community College
Success Rate (%), 2004-2008 Cohorts,
By Race and Ethnicity

Fall 2004 | Fall 2005 | Fall 2006 | Fall 2007 | Fall 2008
---|---|---|---|---
Asian | 45.1% | 45.9% | 45.7% | 45.8%
Black, non-Hispanic | 35.9% | 35.7% | 35.7% | 34.8%
Hispanic | 32.8% | 32.8% | 32.8% | 32.8%
Native American | -- | -- | -- | --
White, non-Hispanic | -- | -- | -- | --

Source: OMNI, Office of Planning and Institutional Effectiveness. The success rate measures each cohort of new students taking one or more credit hours who are successful after three years. Success is defined as earning a degree, earning a certificate, or transferring.

University of New Mexico-Main Campus
Six-Year Graduation Rate (%), By Race and Ethnicity

1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005
---|---|---|---|---|---|---
Asian | 54.8% | 54.8% | 54.8% | 54.8% | 54.8% | 54.8% | 54.8%
White | 49.2% | 49.2% | 49.2% | 49.2% | 49.2% | 49.2% | 49.2%
Hispanic | 41.6% | 41.6% | 41.6% | 41.6% | 41.6% | 41.6% | 41.6%
Black | 37.0% | 37.0% | 37.0% | 37.0% | 37.0% | 37.0% | 37.0%
American Indian | 22.1% | 22.1% | 22.1% | 22.1% | 22.1% | 22.1% | 22.1%

Source: UNM, Office of Institutional Research, OIR Freshman Cohort Tracking Report, Fall 2011. The six-year graduation rate is the percentage of first-time, full-time, degree-seeking students who enroll at UNM in the given year and graduate with a Bachelor's degree or PharmD degree, or who are employed in the fourth fall of the PharmD Program within six years.
LITERATURE REVIEW

“While some young Americans—most of them white and affluent—are getting a truly world-class education, those who attend schools in high poverty neighborhoods are getting an education that more closely approximate school in developing nations.”
—The Equity and Excellence Commission Report

Addressing the equity issue is key to the competitiveness of the future labor force of the United States.

OUR APPROACH

Mission: Graduate has chosen to address the Opportunity Gap rather than the Achievement Gap

Why?

This perspective puts the responsibility to provide adequate structures and systems on the ADULTS to for student achievement, rather than on our children.
LITERATURE REVIEW

Opportunities to Close the Opportunity Gap

1. Address Individual Needs of Students

2. Provide Rich, Engaging In-School and Out-of-School Learning Opportunities and Resources

3. Build on the Cultural and Linguistic Backgrounds of Students

4. Provide Stable and Diverse Communities

(National Education Policy Center)

About the Student Success Roadmap

• The Goal of Mission: Graduate is to produce 60,000 new postsecondary degrees and credentials in Central New Mexico by 2020.

• To achieve this Goal, we will work toward the following Results:
  1. Children and youth excel and succeed from early childhood through high school;
  2. Youth and adults graduate with a postsecondary degree or credential;
  3. Graduates enter a career of their choosing in Central New Mexico; and
  4. All members of the community work to close the opportunity gap.

Note: Following the conventions of Results-Based Accountability (RBA), a result is defined as “a condition of well-being for children, adults, families, or communities,” and an indicator is a “measure that helps quantify the achievement of a result.”
About the Student Success Roadmap, Cont’d

- To measure these results, we will track three types of **Indicators**:
  - **Outcome Indicators**: Observed or measured outcomes directly tied to the results;
  - **Contributing Indicators**: Observed or measured factors that contribute to the improvement of each outcome indicator.

- The following Student Success Roadmap depicts the results and indicators, from cradle to career, that we will use to assess the impact of *Mission: Graduate* toward meeting our goal.

- Each indicator will be disaggregated to the extent possible to track outcomes by race and ethnicity, gender, and other subpopulations.

---

**Note**: Following the conventions of Results Based Accountability (RBA), a Result is defined as “a condition of well-being for children, adults, families, or communities,” and an Indicator is a “measure that helps quantify the achievement of a result.”
## Outcome Indicators

<table>
<thead>
<tr>
<th>Result</th>
<th>General Outcome Indicator</th>
<th>Detailed Outcome Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Excel and succeed from early childhood through high school</td>
<td>A. Kindergarten readiness</td>
<td>% of children who are ready for Kindergarten, by district</td>
</tr>
<tr>
<td></td>
<td>B. 3rd grade literacy</td>
<td>% of children proficient or advanced in 3rd grade reading, by district</td>
</tr>
<tr>
<td></td>
<td>C. 8th grade math proficiency</td>
<td>% of youth proficient or advanced in 8th grade math, by district</td>
</tr>
<tr>
<td></td>
<td>D. High school graduation</td>
<td>% of students who graduate from high school in 4 years and 5 years, by district</td>
</tr>
<tr>
<td>2. Graduate with a post-secondary degree or credential</td>
<td>A. College enrollment</td>
<td>% of high school graduates who enroll in postsecondary education at any time the year after graduation</td>
</tr>
<tr>
<td></td>
<td>B. College retention</td>
<td>% of first-time, full-time college students who enroll in the fall semester after their first year</td>
</tr>
<tr>
<td></td>
<td>C. Certificate or degree attainment</td>
<td>i. % of students who attain a certificate, associate’s, bachelor’s, or graduate degree annually</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. % of first-time, full-time students who attain a certificate within 2 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. % of first-time, full-time students who attain an associate’s degree within 3 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iv. % of first-time, full-time students who attain a bachelor’s degree within 6 years</td>
</tr>
<tr>
<td></td>
<td></td>
<td>v. Highest level of education completed, ages 25-64</td>
</tr>
<tr>
<td>3. Enter a career of one’s choosing in Central NM</td>
<td>A. Employment in a high-wage job in Bernalillo, Sandoval, Torrance, or Valencia County</td>
<td>i. % of job openings in central New Mexico that require post secondary education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Median family income, by county</td>
</tr>
<tr>
<td>4. Close the opportunity gap</td>
<td>A. Opportunity gap</td>
<td>Highest level of education completed, ages 25-64, by race and ethnicity</td>
</tr>
</tbody>
</table>

### Contributing Indicators Related to Closing the Opportunity Gap

<table>
<thead>
<tr>
<th>Result</th>
<th>General Contributing Indicator</th>
<th>Detailed Contributing Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Close the opportunity gap</td>
<td>A. Access to and participation in high-quality early care and education programs</td>
<td>i. % of children enrolled in Early Head Start, Head Start, and pre-Kindergarten, by county</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Ratio of children enrolled in 4-5 star child care centers to those enrolled in 1-3 star &amp; registered centers, by county</td>
</tr>
<tr>
<td></td>
<td>B. Access to and participation in high-quality afterschool, summer learning, and extracurricular activities</td>
<td>i. % of middle and high school students involved in group activities outside of school and home, by county</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. % of middle and high school students involved in extracurricular activities, by county</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. % and type of no-cost programs available by district and county</td>
</tr>
<tr>
<td></td>
<td>C. Access to and utilization of health and social services</td>
<td>i. Proportion of students that received health and wellness services, by school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Ratio of health and wellness staff (available to work with all students) to student enrollment, by school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Amount (rate) of health and wellness services, by school</td>
</tr>
<tr>
<td></td>
<td>D. Access to and participation in college preparatory courses</td>
<td>i. % of high school students enrolled in Honors, Advanced Placement, International Baccalaureate, and college dual enrollment courses, by school</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. % and type of Honors, Advanced Placement, and International Baccalaureate courses offered, by school</td>
</tr>
<tr>
<td></td>
<td>E. Access to and participation in college courses in high school</td>
<td>% of high school students enrolled in college dual enrollment courses, by school</td>
</tr>
<tr>
<td></td>
<td>E. Support from caring adults</td>
<td>% of students who report having caring adults in their lives, including parents, teachers, and other adults outside of school or home.</td>
</tr>
<tr>
<td>F. Access to and utilization of high-quality language support services</td>
<td>i. Ratio of bilingual and TESOL-endorsed teachers to the number of enrolled English Language Learners</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. % of English Language Learners served and successful (needs refinement)</td>
</tr>
<tr>
<td>G. Access to and utilization of financial support services in higher education</td>
<td>i. Child care (to be developed)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>ii. Transportation (to be developed)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>iii. Asset development and management (to be developed)</td>
</tr>
</tbody>
</table>
MAPPING OPPORTUNITY

We Also Believe That Geospatial Mapping Is A Powerful Tool For Helping Our Community Understand The Opportunity Gap And Why It Must Be Addressed

- **Description:** Making the data accessible to all audiences
  - Revealing geographic disparities

- **Analysis:** Making sense of the data
  - Identifying gaps in resources
  - Conducting disparate impact analyses
  - Measuring impact
  - Mapping assets

- **Action:** Using data for change
  - Providing a basis for advocacy
  - Strengthening public engagement
  - Supporting collective impact
DESCRIPTION

Revealing Geographic Disparities

A Child’s Chances For Success Impact The Generations That Follow For Better Or Worse

Early Foundations
- Family income
- Parental education
- Parental employment
- Linguistic integration

School Years
- Preschool enrollment
- Kindergarten enrollment
- 4th grade reading
- 8th grade mathematics
- High school graduation
- Young adult [18-24] education

Adult Outcomes
- Adult educational attainment
- Annual income
- Steady employment

The Impact Of Disparities Lasts A Lifetime

Adverse Childhood Experiences (ACE) Study

Data and Statistics

Prevalence of Individual Adverse Childhood Experiences

New Mexico Counties
Albuquerque And Local Communities
With Census Tracts

Albuquerque Neighborhoods: The Soul Of Our City
Percent of Individuals Who Speak a Language Other Than English at Home, Bernalillo County

Speak a Language Other Than English at Home

- 7% - 16.7%
- 16.8% - 25%
- 25.1% - 37.4%
- 37.5% - 53.1%
- 53.2% - 89%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates 2007 - 2011

Individuals Living Below 200 Percent of Poverty Level with Less than High School Education

All Individuals Below 200 Percent of Poverty Level

- 85 - 624
- 625 - 1256
- 1257 - 1946
- 1947 - 3059
- 3060 - 4950

Less than High School Graduate

- 0 - 184
- 185 - 397
- 398 - 650
- 651 - 1047
- 1048 - 1682

Source: U.S. Census Bureau American Community Survey 5-Year Estimates 2007 - 2011
Percentage of Individuals Living Below Poverty Level with Less than High School Education

Percentage with No High School Diploma
- 0% - 5%
- 5.1% - 10%
- 10.1% - 20%
- 20.1% - 34.1%

Source: U.S. Census Bureau American Community Survey 5-Year Estimates 2007 - 2011

Percentage of Single Female Householders with No Husband Present Living Below Federal Poverty Level

Source: U.S. Census Bureau American Community Survey 5-Year Estimates 2007 - 2011; Table Table 87002_160, Single Female Householder Living Below Poverty Level
Measures Of Risk And Resiliency:
Sexual Coercion Among High School Students, 2011

Percent of students who reported having been physically forced to have sex during the last 12 months.

- 4.3% - 6.1%
- 6.2% - 7.7%
- 7.8% - 9.9%
- 10% - 12.9%
- 13% - 17.3%

Source: New Mexico Youth Risk and Resiliency Survey, New Mexico Departments of Health and Public Education and U.S. Centers for Disease Control and Prevention, 2013. Students were asked, “During the past 12 months, have you ever been physically forced to have sexual intercourse?” The percentage reported here reflects respondents who answered, “Yes.” NOTE: Moderately low reliability for Otero, Roosevelt, Socorro, and Sierra Counties. unreliable data for Chaves County, and very low reliability for Otero and Sandoval Counties.

Youth Suicide Rate, 15-19 Years Of Age, By County

Counties shaded green have rates below the national average of 7.6. Counties shaded orange have rates above the national average but below the state average of 18.29. Counties shaded red have rates above both the state and national averages.

Source: New Death Certificate Database, Bureau of Vital Records and Health Statistics, New Mexico Department of Health. The suicide rate for each county is averaged over the time period 1999 to 2010 and includes all New Mexico residents, ages 15-19. The national average is based on data from the Centers for Disease Control and Prevention over the time period 1999 to 2007 and includes all youth, ages 15-19.
Life Expectancy By Census Tract, Bernalillo County, NM (2001-2005)

This powerful map by the Joint Center For Political and Economic Studies shows that life expectancy can vary by 28 years depending on where one lives in Bernalillo County.

Percentage of Individuals 25 and Older With a Bachelor’s Degree or Higher, Bernalillo County

Percent of Individuals With a Bachelor's Degree or Higher
- 0% - 20.9%
- 21% - 39.2%
- 39.3% - 100%

ANALYSIS

Making Sense Of The Data

Identifying Gaps In Resources
Percentage Of High School Students Who Have Had Sexual Intercourse

Source: New Mexico Youth Risk and Resiliency Survey, 2009. New Mexico: Department of Health and Public Education and U.S. Centers for Disease Control and Prevention (CDC). Students were asked, "During your life, with how many people have you had sexual intercourse?" The percentage reported here reflects respondents who answered one or more people.

Teen Birth Rate, Ages 15-19

The data point in each census tract represents the number of live births to teen women per 1000 teen women, over the period 2001-2005.

For example, the census tract in the center with a teen birth rate of 106.4 means that there were 106 live births to teen women for every 1000 teen women who live in the census tract.

Source: New Mexico Community Data Collaborative. The rates shown here reflects the average number of children per 1000 women born to teen mothers (ages 13-19) between 2001 and 2005. Rates are reported by census tract; high school boundaries are overlaid to provide perspective. In 2005, the statewide teen birth rate was 62 per 1000, and the nationwide rate was 46 per 1000 (Kids Count Data Center, http://datacenter.kidscount.org).
Capacity Of 4- And 5-Star Licensed Child Care Centers

Number of Hispanic Children Under Age 5
- 4 - 85
- 86 - 185
- 186 - 325
- 326 - 525
- 526 - 761

Number of Multi-Generationa l Households in PUMA
- 945 - 1039
- 1040 - 1586
- 1587 - 2171
- 2172 - 2769
- 2770 - 4055

Percentage of Pop. Under 5 Years
- 0.7 - 4.4%
- 4.4 - 5.9%
- 5.9 - 6.5%
- 6.5 - 10.1%
- 10.1 - 15.6%

Above national average

Source: New Mexico Community Data Collaborative, December 2010. Enrollment data are reported by program sites.

Community Assets: Multi-Generational Households

Number of Hispanic Children Under Age 5
- 4 - 85
- 86 - 185
- 186 - 325
- 326 - 525
- 526 - 761

Source: American Community Survey Public Use Microdata Sample, 2011. Multi-generational households include households with at least 3 generations living in the same dwelling.
Child Maltreatment Risk Factors And Opportunity Mapping In Bernalillo County

The CDC has identified several factors related to high risk for child maltreatment. The following maps show areas where risks for these factors are lower and higher in Bernalillo County. The goal is to introduce a possible technique for identifying neighborhoods that may benefit from resources.

- The best opportunity for children to grow up without becoming victims of maltreatment include:
  - Having parents with higher education levels;
  - Living in a household with 2 parents;
  - Living in a household with income above poverty level;
  - Living in a household with fewer dependent children;
  - Living in neighborhoods with low unemployment;
  - Living in neighborhoods where people have lived at least a year in the same house;
  - Living in neighborhoods with a lower density of alcohol outlets.

Where are these areas in Bernalillo County?

Source: [http://www.cdc.gov/violenceprevention/childmaltreatment/riskprotectivefactors.htm](http://www.cdc.gov/violenceprevention/childmaltreatment/riskprotectivefactors.htm)
Individual Child Maltreatment Risk Mitigation Factors

- Education Greater Than AA Degree
- Few Single Parent Households
- Few Families Living Under Poverty Level
- Low Residential Mobility
- Low Unemployment
- Smaller Family Size
- Few Alcohol Licenses

Source: Unemployment, family size, single parent household, household mobility, family poverty model input layers from the U.S. Census Bureau, 2010 Decennial Census, census tract level. Alcohol license data from New Mexico Community Data Collaborative, compiled by New Mexico Department of Health.

Opportunity For A Safe Childhood

Based on the CDC factors, tracts with a higher score have fewer child maltreatment indicators.

Opportunity Score

- High
- Moderately high
- Average
- Moderately low
- Low

Source: Unemployment, family size, single parent household, household mobility, family poverty model input layers from the U.S. Census Bureau, 2010 Decennial Census, census tract level. Alcohol license data from New Mexico Community Data Collaborative, compiled by New Mexico Department of Health.
Using The Maps To Address Issues Of Community Equity: Where Are The Hispanic Children In Relation To Opportunity?

This map clearly shows the concentration of Hispanic children under the age of 5 in lower opportunity areas.

Opportunity Score
- High
- Moderately high
- Average
- Moderately low
- Low

Number of Hispanic Children Under Age 5
- 4 - 85
- 86 - 185
- 186 - 325
- 326 - 525
- 526 - 761

Source: Unemployment, family size, single parent household, household mobility, family poverty model input layers from the U.S. Census Bureau, 2020 Decennial Census, census tract level. Alcohol license data from New Mexico Community Data Collaborative, compiled by New Mexico Department of Health.

Disparate Impact
Percentage of APS Caucasian & Hispanic Students Enrolled in Advanced Placement Courses by High School, 2009-2010

Race And Ethnicity Had A Disparate Impact On UNM Freshman Students Who Took Remedial Courses

Participation in Out-of-School Activities, New Mexico High School Students, 2011

“Outside home and school, I am a part of group activities”

Source: New Mexico Department of Health, New Mexico Youth Risk and Resiliency Survey, 2011.

Participation in Extra-Curricular Activities, New Mexico High School Students, 2011

“At school I am involved in sports, clubs, or other extra-curricular activities”

Source: New Mexico Department of Health, New Mexico Youth Risk and Resiliency Survey, 2011.
New Mexico High Schools
Selected Risk Factors By Participation in Out-of-School Activities

Source: Green D., Pelfiares L., and FitzGerald C. 2012. New Mexico Youth Risk & Resilience Survey: High School Survey Results 2011. Epidemiology and Response Division, New Mexico Department of Health, School and Family Support Bureau, New Mexico Public Education Department, and University of New Mexico Prevention Research Center.

Mapping Assets
20 census tracts in 8 counties have populations in which greater than 75% speak a language other than English at home.

Those counties are:
1. Doña Ana (7)
2. Sandoval (4)
3. McKinley (2)
4. Bernalillo (2)
5. San Juan (2)
6. Otero (1)
7. Rio Arriba (1)
8. Socorro (1)

One of the most striking disparities in New Mexico is the difference between the academic proficiency levels of students who are English Language Learners (ELL) and other students.

The ability to speak more than one language is a unique New Mexican asset to be cultivated.

Human Capital Development in the Paso del Norte Region

“...ability to fuel local growth by cultivating relevant skills is the best guarantee that the region will thrive in the future. A region that wants to be globally competitive needs to have a highly skilled workforce and knowledge-based economy in order to break out of the low wage equilibrium. The Paso del Norte Region needs to improve the educational attainment levels and widen access to higher education ...” (p. 17, The Paso Del Norte Region, Mexico and the United States. OECD, 2010)

For More Information

Viola Florez
v.florez@unm.edu

Angelo J. Gonzales
angelo@missiongraduatennm.org

Marjori Krebs
mkrebs@unm.edu

Beata Thorstensen
beata.thorstensen@nmsli.org

Peter Winograd
peterwin@unm.edu

http://MissionGraduateNM.org