Ready For College 2009:
An Annual Report On New Mexico High School Graduates Who Take Remedial Classes In New Mexico Colleges And Universities

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Ready For College Reports On New Mexico High School Graduates Who Take Remedial Classes In New Mexico Colleges And Universities

- These reports:
  - Are a joint effort by OEA, HED, and PED and have been published in 2006, 2007 and 2008.
  - Provide detailed information about how many New Mexico high school graduates take remedial courses in New Mexico colleges and universities.
  - Offer longitudinal information that can be used by the Governor, the Legislature, educators and citizens in their efforts to improve New Mexico's education system.
  - Strengthen the capacity of the HED, PED and OEA to track students throughout the PreK-20 education system and report on their progress.
  - Support key policy initiatives including high school redesign, alignment of college and university placement tests, and increased communication among high schools, colleges, and universities.
  - Are to be used to explore the data questions and policy questions that need to be answered if New Mexico is to increase the number of students who graduate from high school ready to succeed in college.

The Limitations Of The “Ready For College” Reports

- These reports:
  - Are **limited** and only include data about those approximately 40% to 48% of high school graduates who attend New Mexico colleges and universities. We do not know about the preparation levels of those New Mexico students who attend college out of state or who choose to go into the military or other careers. Given the fact that high school graduates who come from other states and attend New Mexico’s colleges and universities have a significantly lower rate of remediation than do in-state high school graduates, it is likely that those New Mexico high school graduates who leave the state to attend colleges and universities are better prepared for college.
  - Are **limited** and do not include data about New Mexico’s high school graduates who attend Navajo Technical College, Diné College, Institute of American Indian Arts, or Southwestern Indian Polytechnic Institute.

New Mexico's Ready For College Reports

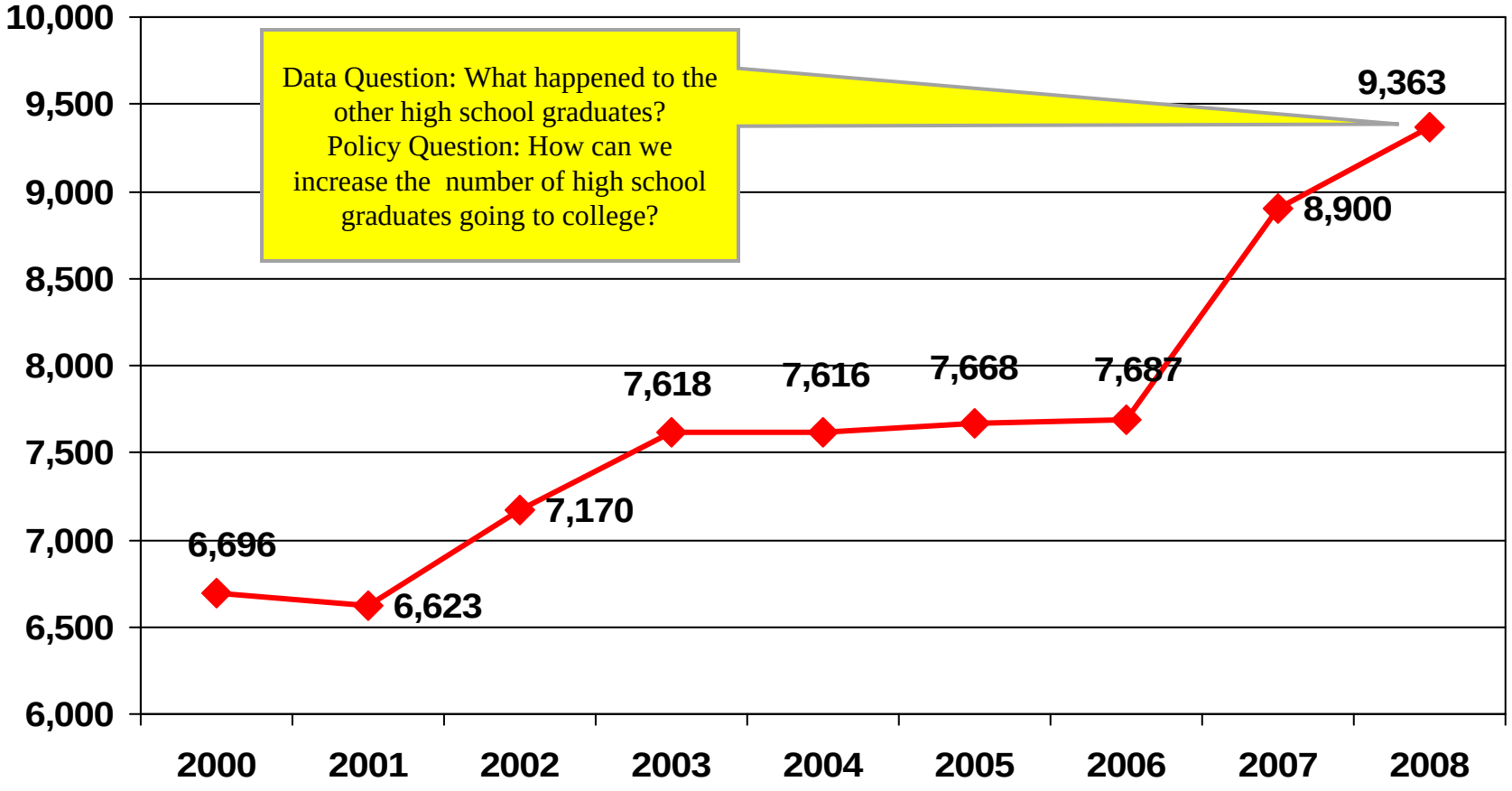
The Data Questions

- How many high school graduates take remedial courses in college?
- What is the relationship between high school performance and college readiness?
- What kinds of remedial courses do they take?
- What happens to college students who take remedial classes?
- Will the number of high school graduates/college freshman taking remedial courses decline as the Higher Education Department and the Public Education Department strengthen their alignment and as new legislation and policies are implemented?

The Policy And Political Questions

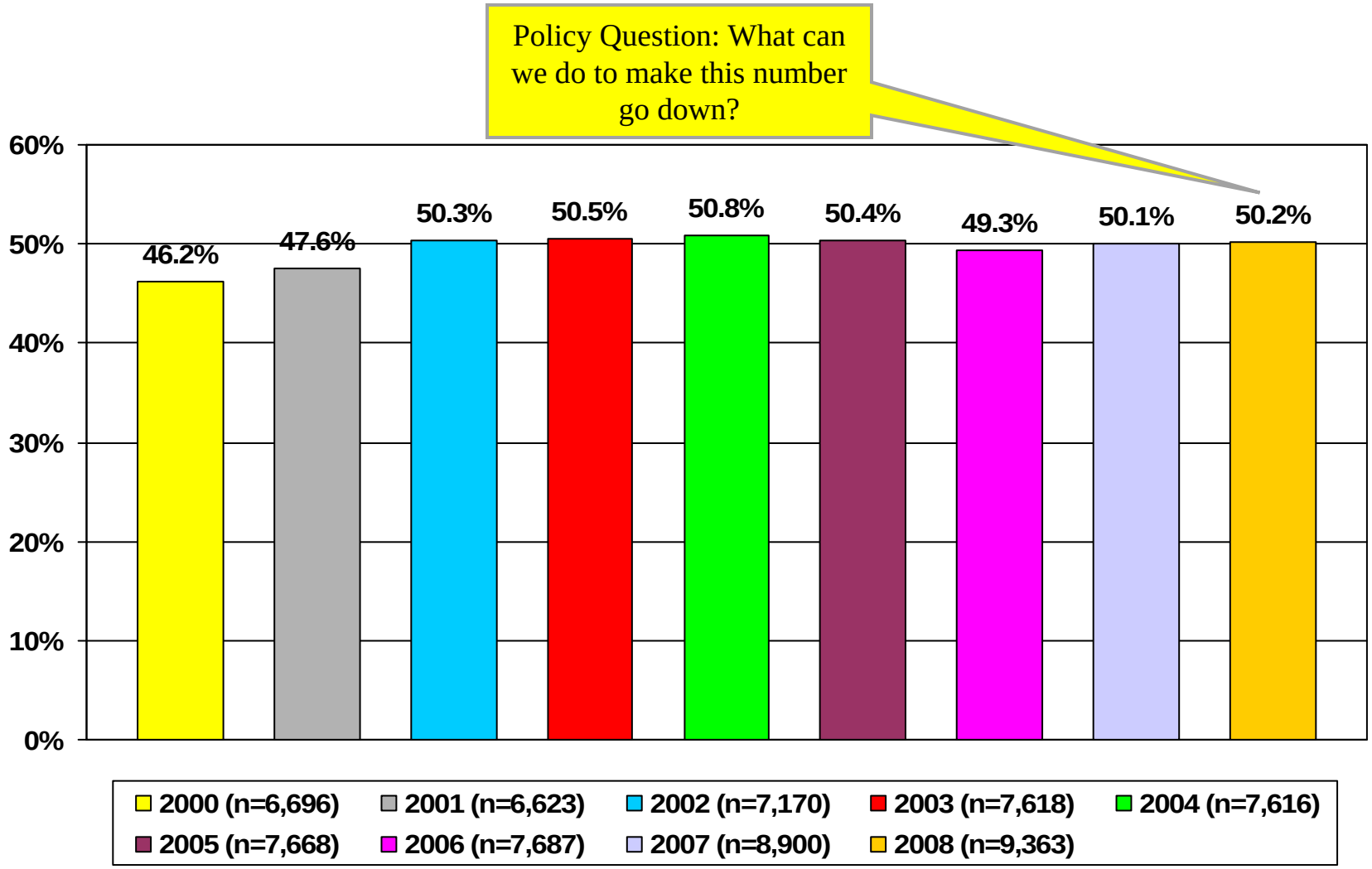
- What can be done at the middle and high school level to improve student readiness for college?
- What can be done at the college level to ensure that more students succeed in higher education?
- How much will these initiatives cost?
- Where will the funding come from?
- Who are the partners that can strengthen the cooperation between high schools and higher education?

Number Of New Mexico Public High School Graduates Who Attended College In New Mexico Included In The Study: 2000 - 2008



Note: Data does not include charter schools or alternative schools

Percent of New Mexico Public High School Graduates Who Took Remedial Classes In Math And/Or Reading In New Mexico Colleges: 2000-2008



Note: Data does not include charter schools or alternative schools

Several Of New Mexico's High School Redesign Initiatives Will Be Implemented In School Year 2009-2010

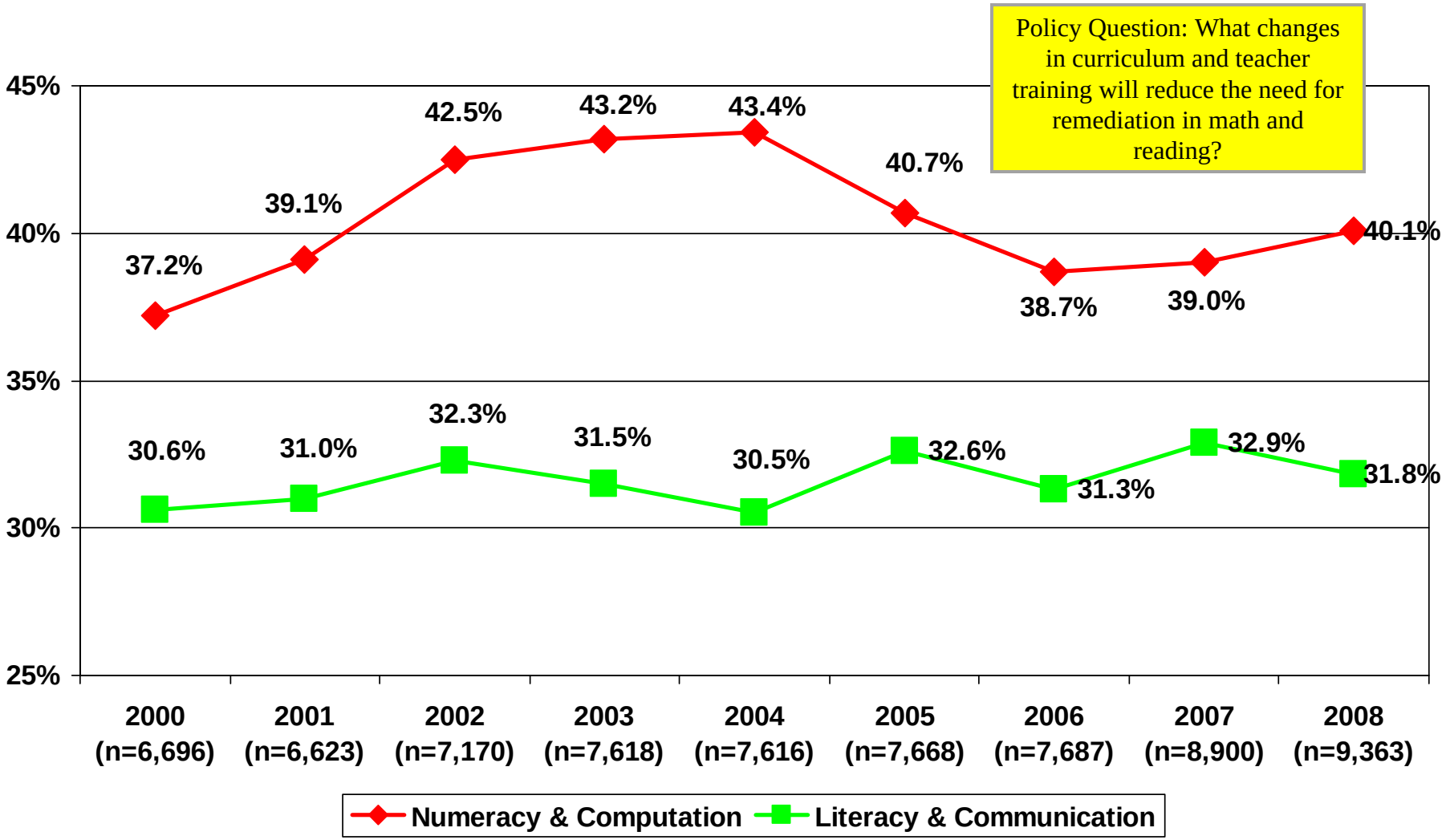
Adding an additional year of mathematics at the Algebra II level for all students entering the 9th grade in 2009-2010.

Eliminating the traditional 9th grade assessments and high school competency exam and replacing them with a set of exams that assess student readiness for high school, college, and the workplace.

Requiring all high schools to offer distance learning, dual credit courses and advanced placement courses in 2008-2009; and requiring all students entering the 9th grade in 2009-2010 to take at least one such course for graduation.

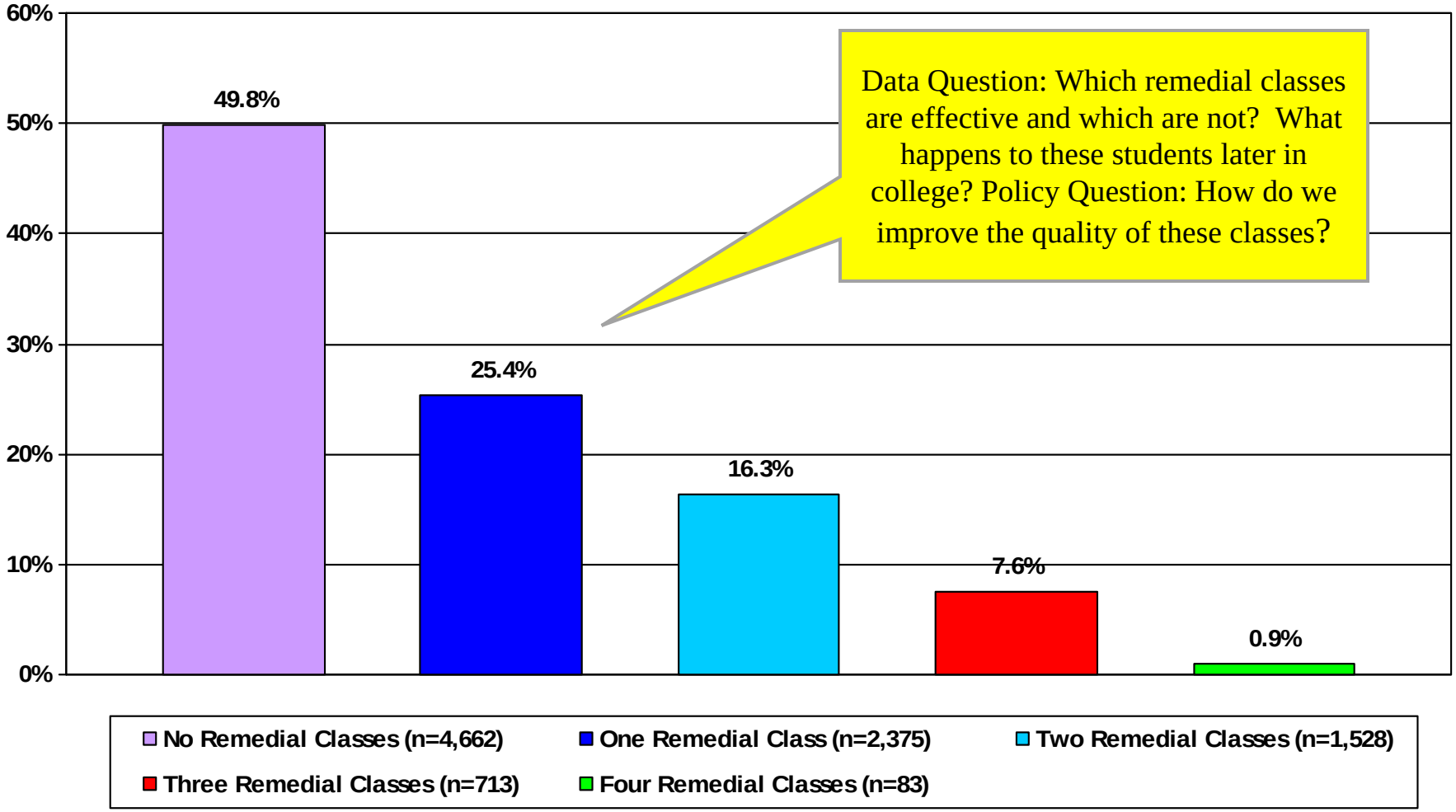
School Year (HS Grad in Spring; College Freshman in Fall)	**2007-08 (HS Grad 08 College Freshman in 08)**	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**
Ready For College Report	**2009**	**2010**	HS Freshman	HS Sophomore	HS Junior	HS Senior Graduate / College Freshman
% of HS Graduates Taking Remedial Courses	**50.2%**	**Available Summer 2010**				
Number of HS Graduates in Study	**9,363**	**Available Summer 2010**				

Percentages Of New Mexico Public High School Graduates Who Took Remedial Classes Only In Math Or Only In Reading: 2000-2008



Note: Data does not include charter schools or alternative schools

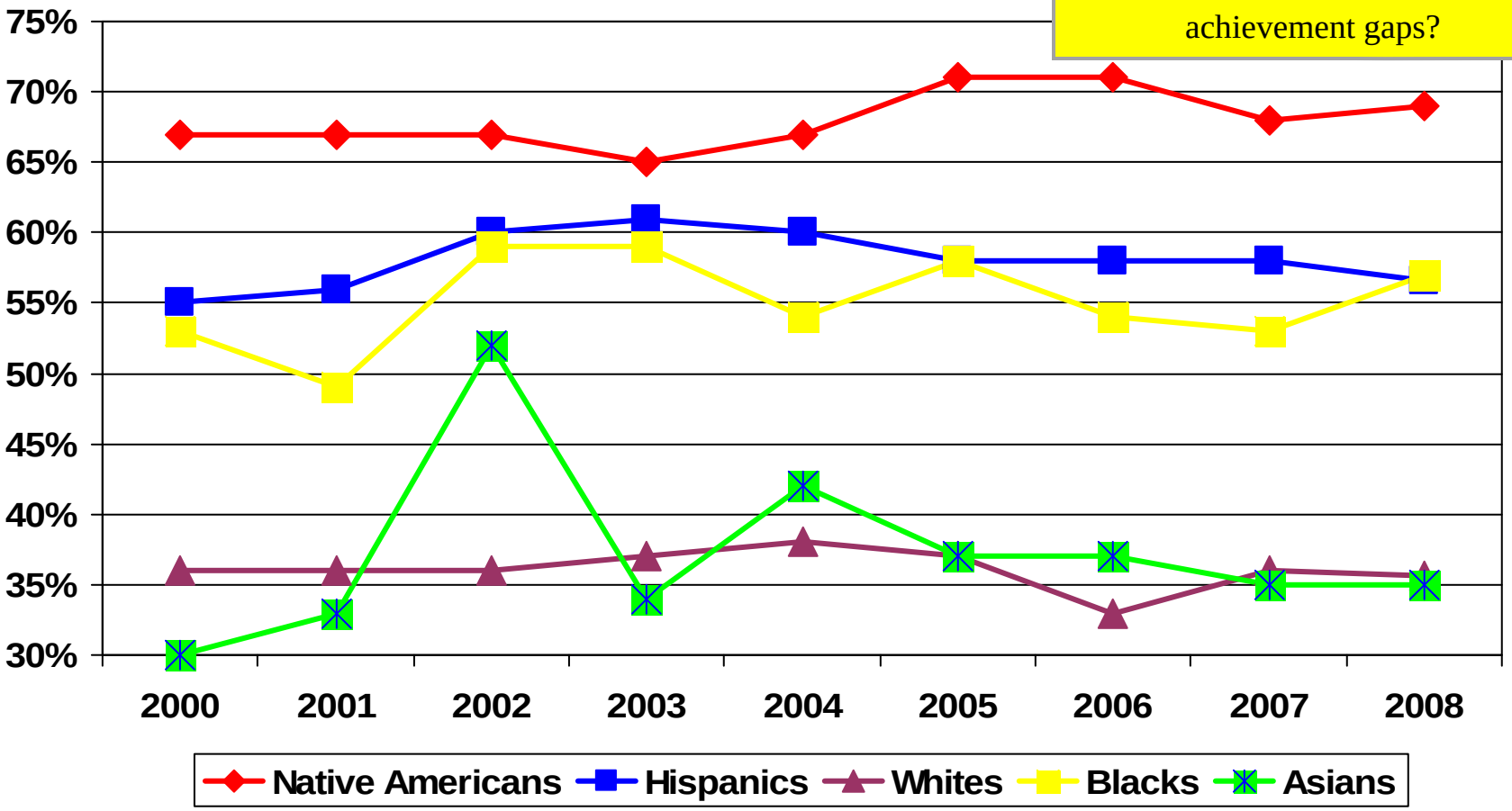
Percent of New Mexico Public High School Graduates Who Took Different Numbers Of Remedial Classes In New Mexico Colleges: 2008



Note: Data does not include charter schools or alternative schools

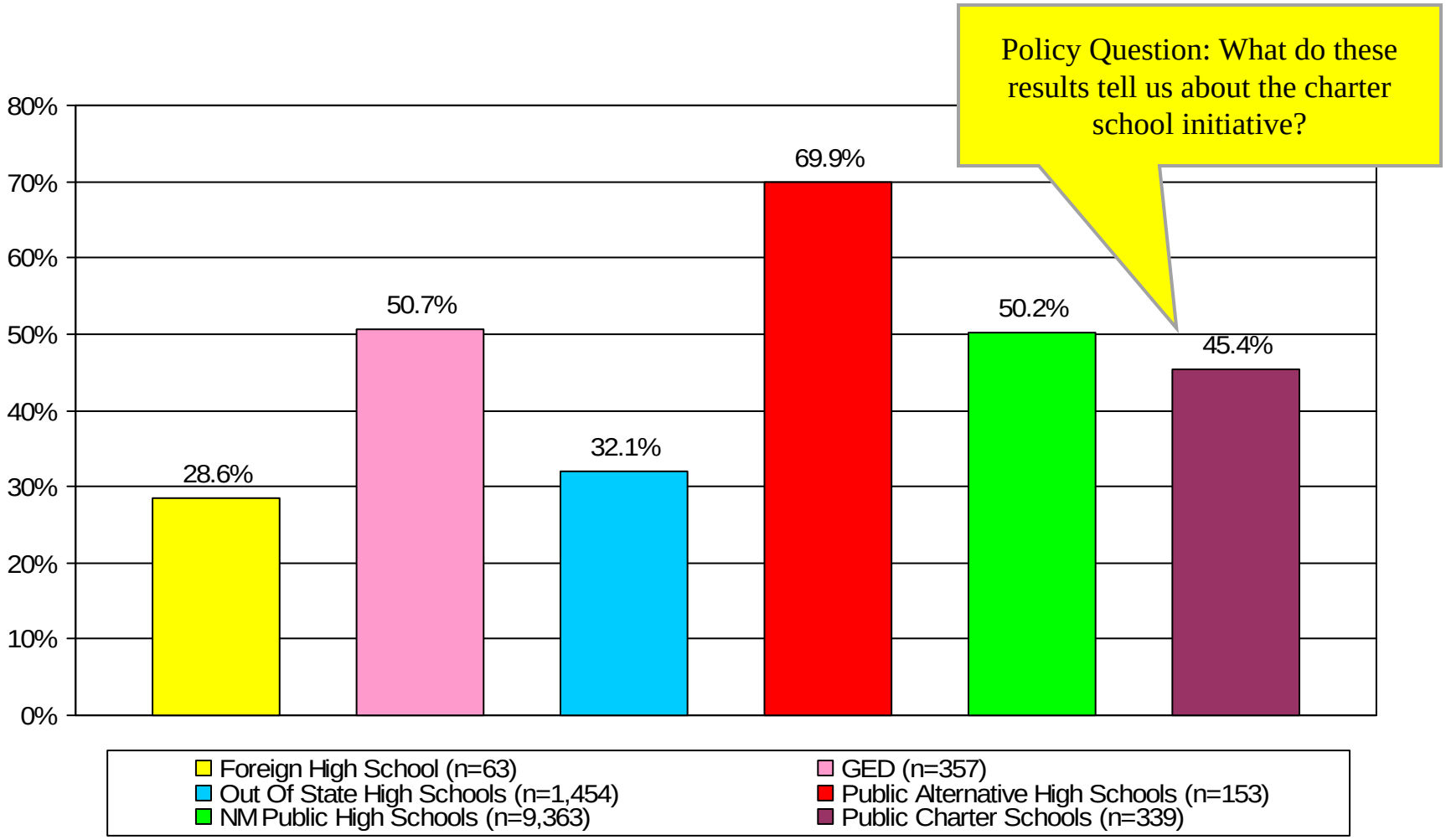
Percentage Of New Mexico Public High School Graduates Who Took Remedial Classes By Ethnicity: 2000 - 2008

Policy Question: How do we address the cultural and economic forces that lead to these achievement gaps?



Note: Data does not include charter schools or alternative schools

Percent of High School Graduates Who Took Remedial Classes In Math And/Or Reading In New Mexico Colleges By Type Of High School: 2008



Thinking About New Mexico's PreK-20 Education Pipeline

- Senate Bill 152: First Year Of College Outcomes Of New Mexico Public School Graduates
- The Relationship Between Assessments in High School and College
- New Mexico's Progress In Developing An Effective PreK-20 Data System

The Governor and The Legislature Have Given Us An Important Tool For Improving Readiness For College

SB 152: First Year Of College Outcomes Of New Mexico Public School Graduates – Annual Reports
Sponsored By Senator Cynthia Nava

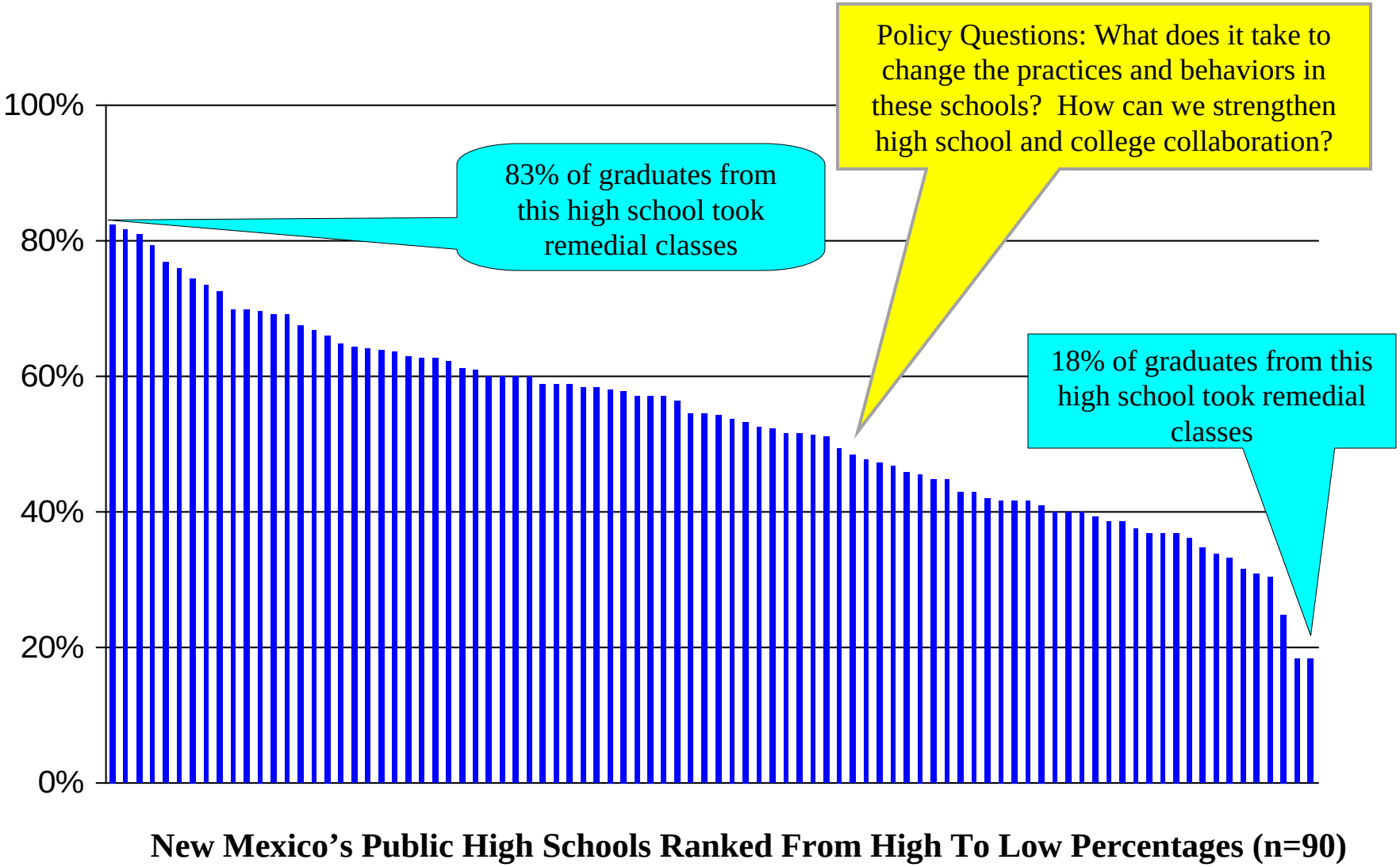
Senate Bill 152 – First Year Of College Outcomes Of New Mexico Public School Graduates

A. Upon request from a public high school or school district superintendent in New Mexico, a public post-secondary educational institution shall provide a report of students who enroll in the institution within three years of graduating from that high school or leaving that high school without enrolling in another high school or earning a general educational development certificate. Information in the reports may be used by the high schools and public post-secondary educational institutions to improve instruction, student preparation and advisement.

B. The higher education department, in consultation with the public education department and representatives of public high schools and public post-secondary educational institutions, shall prescribe the form of the reports. Reports shall not include any personally identifiable student information. The reports shall be designed to show advanced placement by subject, total credits earned, grade point averages, retention from fall to spring semester of the first year of college and frequency and patterns of remedial or development courses being taken.

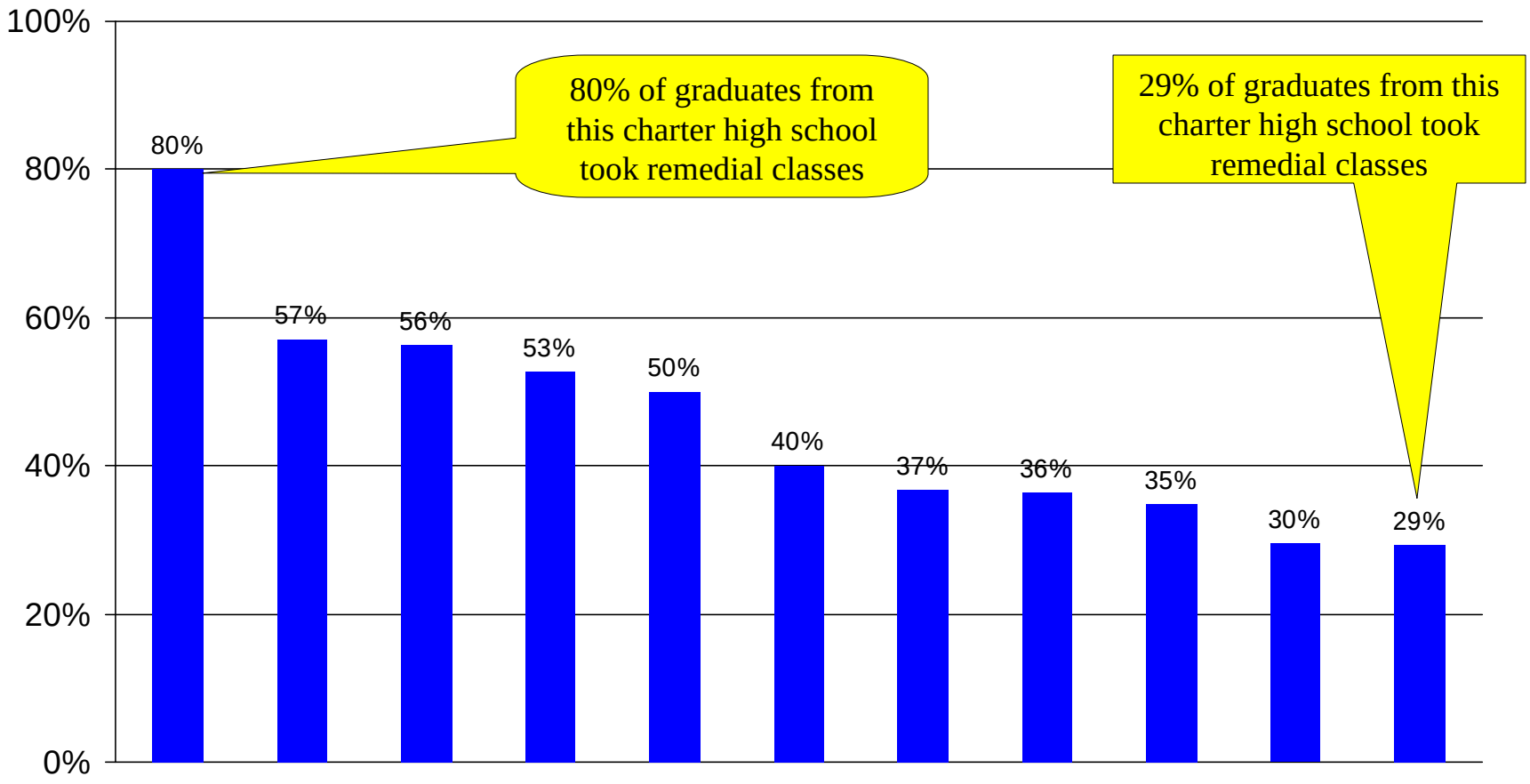
C. The higher education department shall be provided with copies of the reports.

Percent of Public High School Graduates Taking Remedial Math And/Or Reading Courses In College By High School: 2008



Note: Data does not include charter schools or alternative schools and public high schools with less than 10 students included in this study.

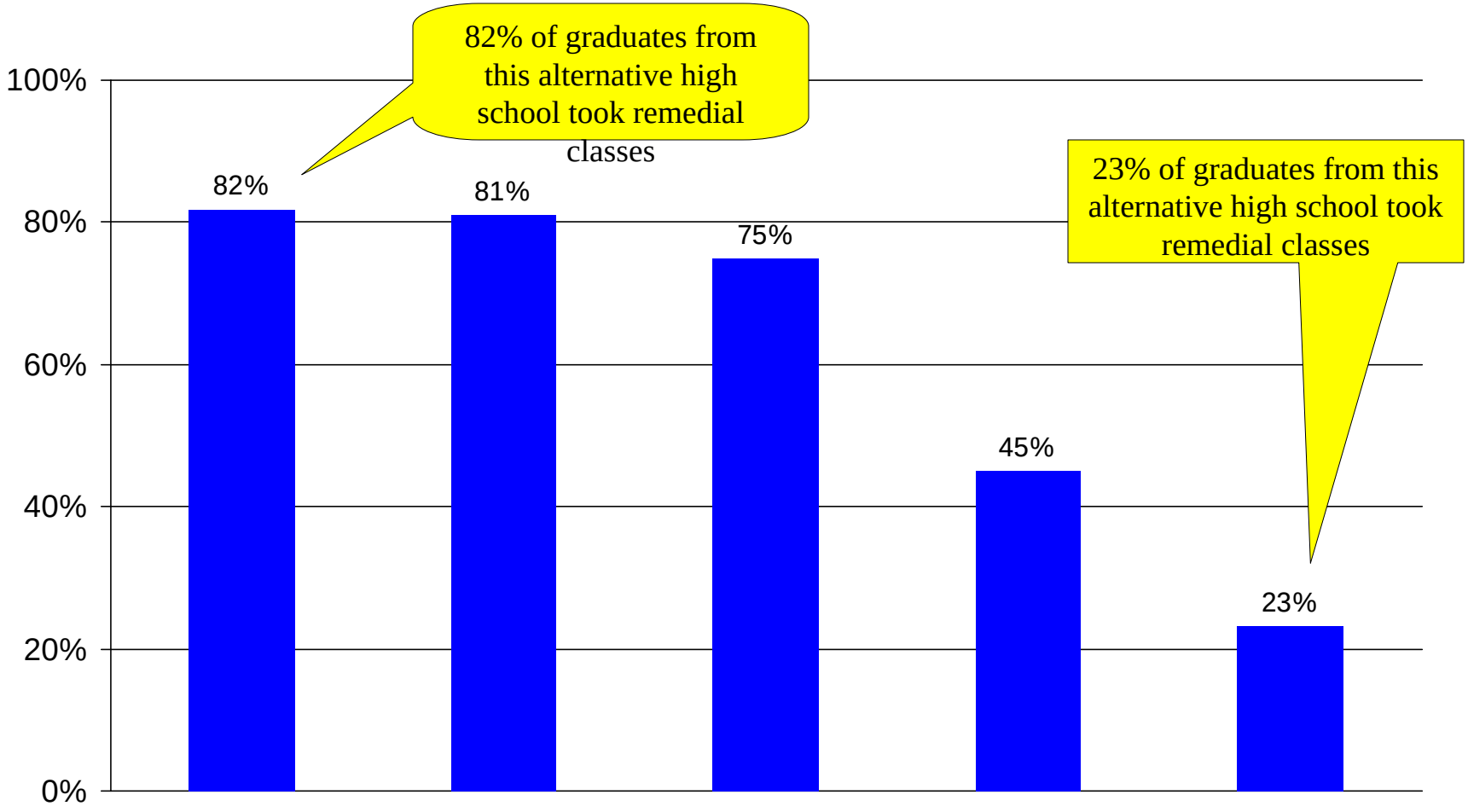
Percent of Public Charter High School Graduates Taking Remedial Math And/Or Reading Courses In College By High School: 2008



New Mexico's Public Charter High Schools Ranked From High To Low Percentages (n=12)

Note: Data does not include public high schools or alternative schools and public charter schools with less than 10 students included in this study.

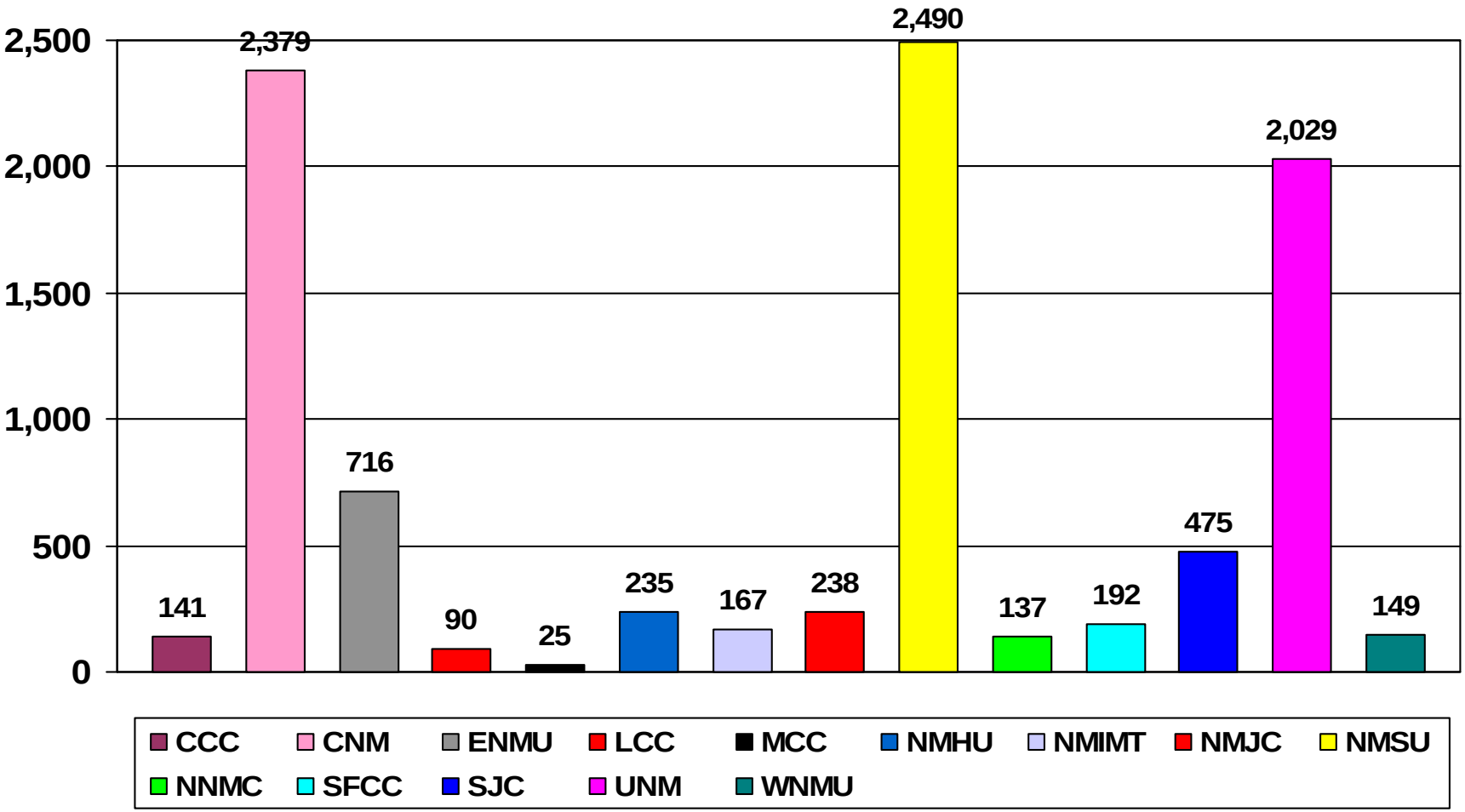
Percent of Public Alternative High School Graduates Taking Remedial Math And/Or Reading Courses In College By High School: 2008



New Mexico's Public Alternative High Schools Ranked From High To Low Percentages (n=5)

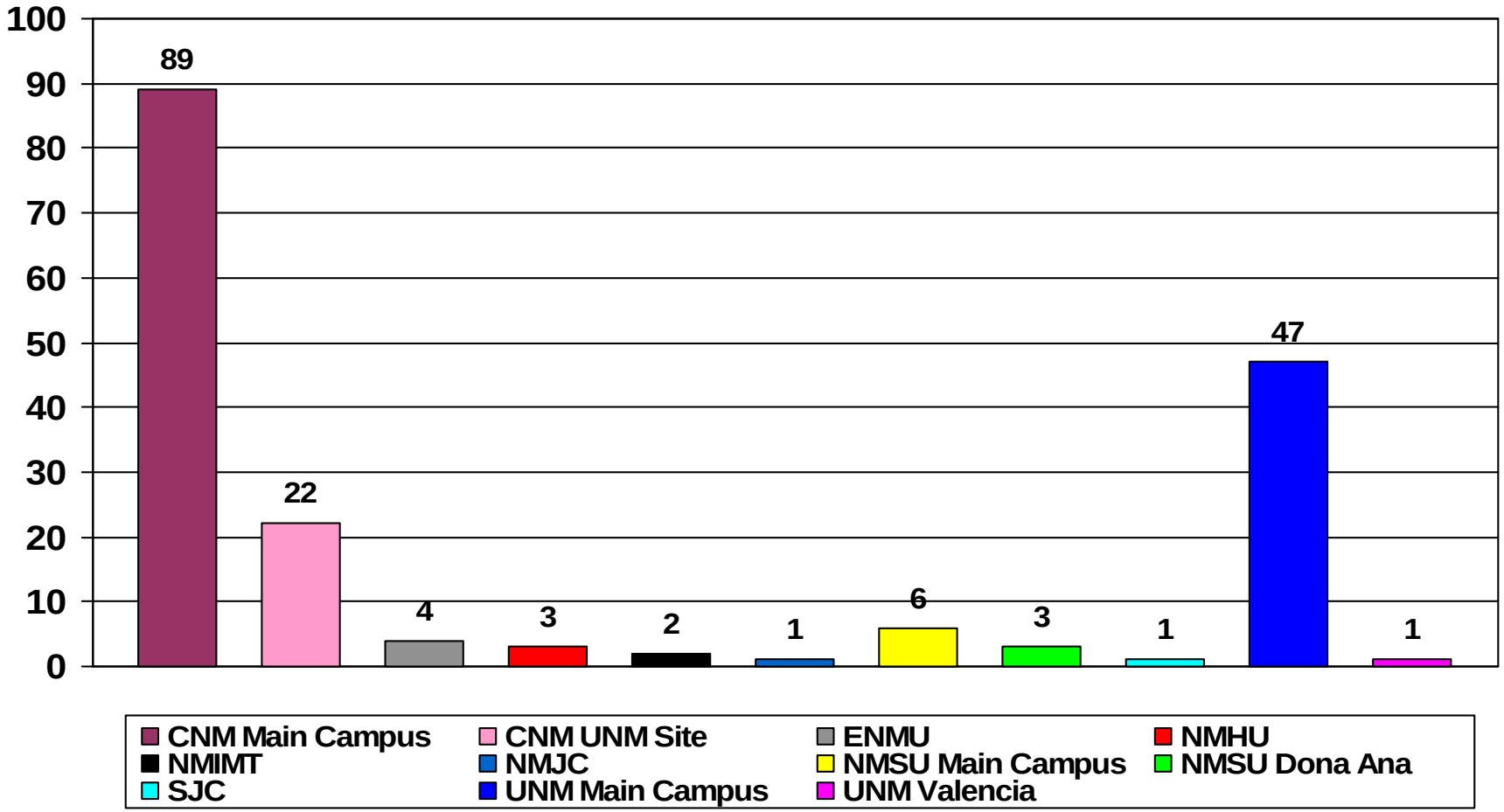
Note: Data does not include public high schools or charter schools and public alternative schools with less than 10 students included in this study.

New Mexico Public High School Graduates Attendance At New Mexico Colleges and Universities In Fall of 2008



Note: Data does not include charter schools or alternative schools

Example Report For An Individual New Mexico High School: College Attendance By High School (Fall 2008).



High Schools Interested In Obtaining Data For Their Schools Should Contact OEA at 505-476-1070

Exploring The Relationship Between Proficiency On The 11th Grade New Mexico Standards-Based Assessments (NMSBA) In Math And Reading And College Readiness

Data And Policy Questions To Consider:

- Does student performance on the NMSBA predict performance in college?
- Can public school teachers use the performance of their students on the NMSBA as one measure of how effectively they are preparing their students for success in college?
- Can students and parents have some confidence that performance on the NMSBA is related to student readiness for college?

The Relationship Between The New Mexico Standards-Based Assessment (NMSBA) And The Need For College Remediation

- The 2009 study of the relationship between the NMSBA and the need for remediation in college is a detailed study of the comparison between the NMSBA math and reading scores of over 6,883 public high school students who were 11th graders in 2006-2007 with the number of remedial courses those same students took in college as freshmen in fall of 2008.
- The results of this study indicate a strong relationship between how students perform on the 11th grade NMSBA and how many remedial courses they take two years later in college. The better students perform on the 11th grade assessment, the less likely they are to take remedial courses in college.
- The high school redesign initiatives passed in 2007 and 2008 included refining the ways students are assessed in high schools. The traditional 9th grade assessments and high school competency exam are scheduled to be replaced with a set of exams that assess student readiness for high school, college, and the workplace. Once these new assessments are in place, it will be important to conduct similar analyses to ensure strong alignment between how students are assessed in high schools and how they are assessed in higher education.

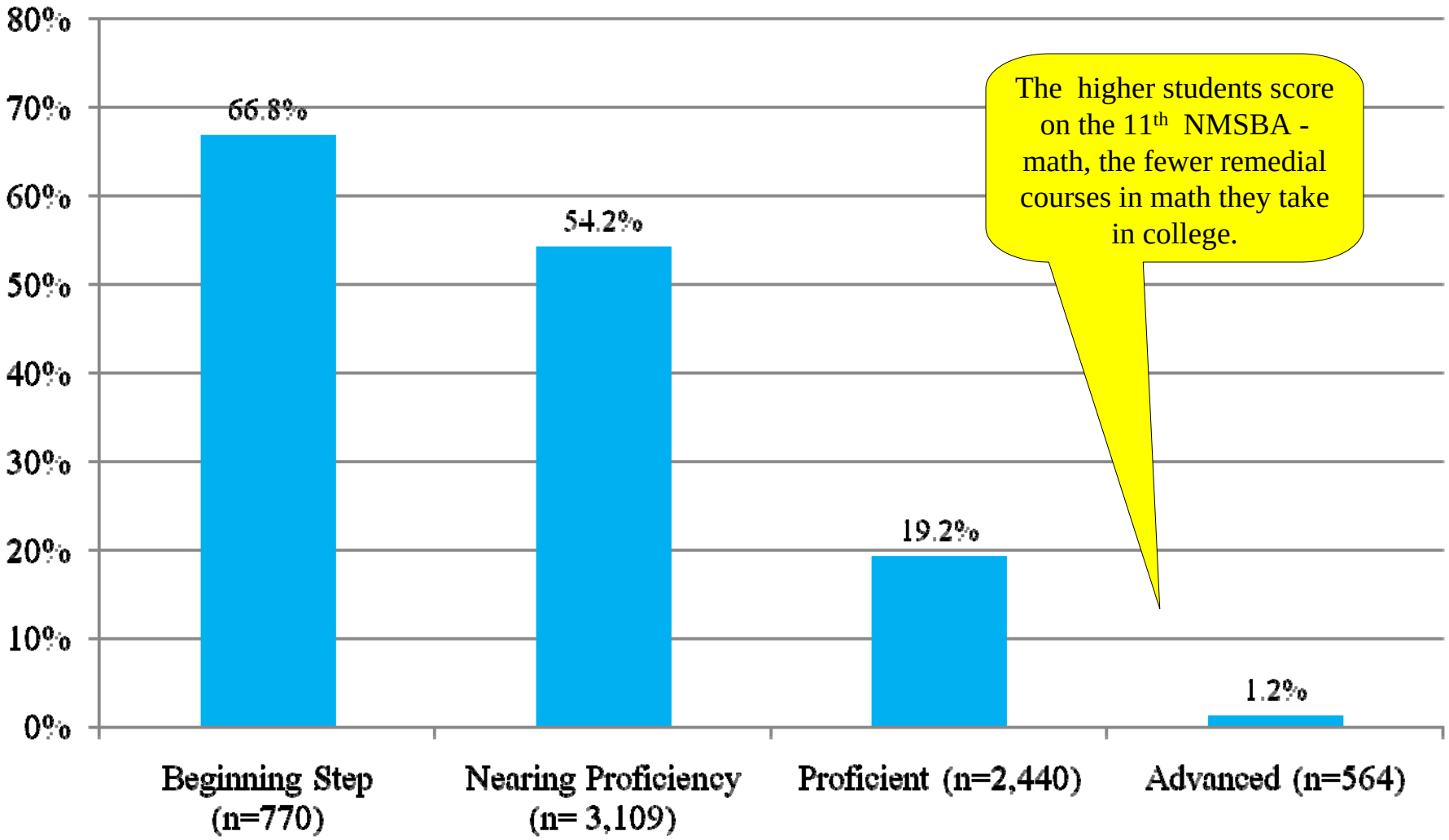
The Relationship Between NMSBA Scaled Scores and Number of Remedial Courses Taken in College

Descriptive Statistics	Mean	Std. Deviation	N
NMSBA Math Scaled Scores	592.11	28.79	6,883
NMSBA Reading Scaled Scores	628.34	31.51	6,883
Number Of Remedial Courses Taken In Reading	.38	.64	6,883
Number Of Remedial Courses Taken In Math	.42	.55	6,883

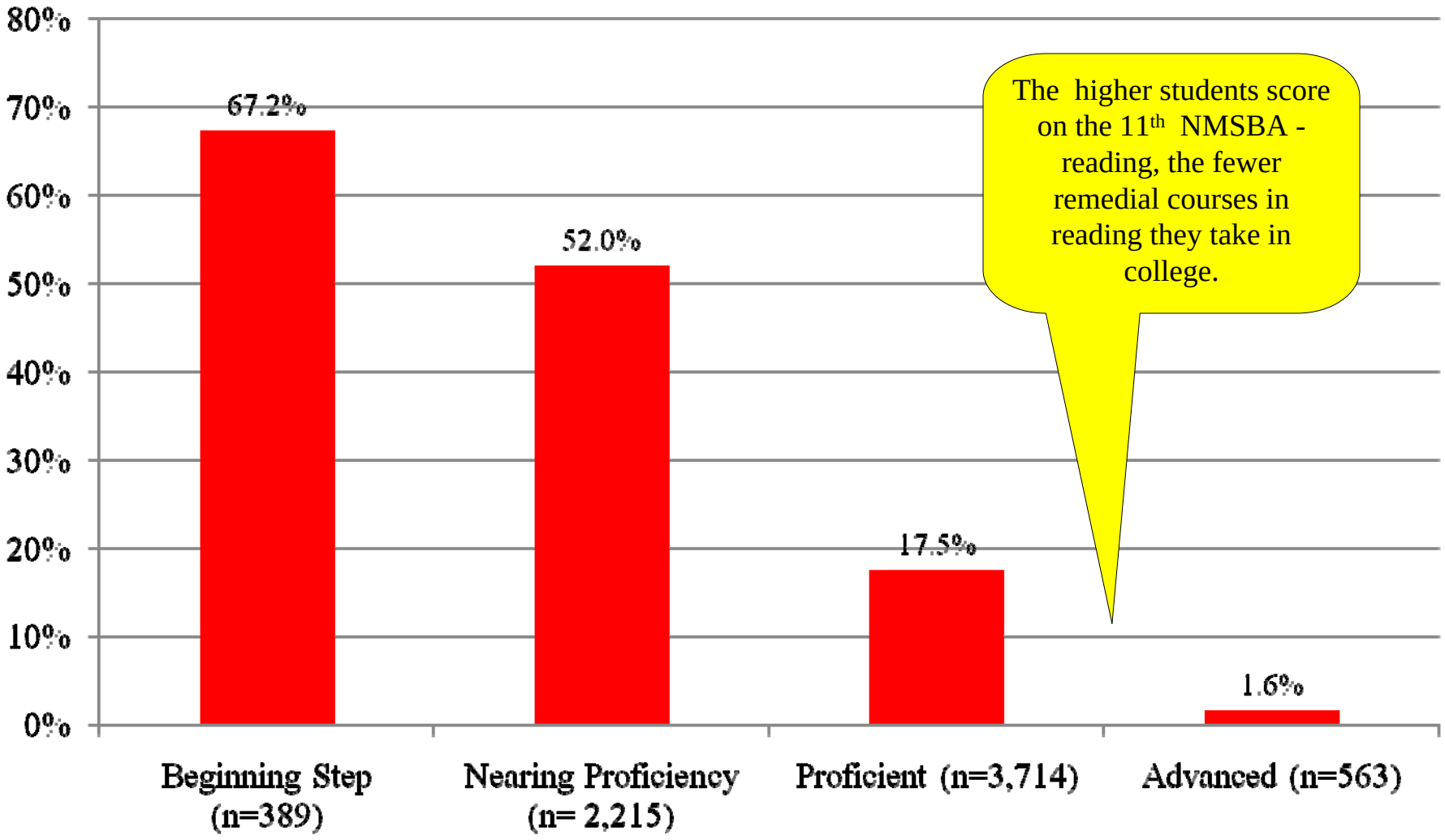
Correlations	Number of Remedial Courses Taken In Math	Number of Remedial Courses Taken In Reading
NMSBA Math Scaled Scores Significance N	-.425 .000 6,883	
NMSBA Reading Scaled Scores Significance N		-.440 .000 6,883

These significant correlations mean that public school students with higher scores on the NMSBA tended to take fewer remedial courses in college

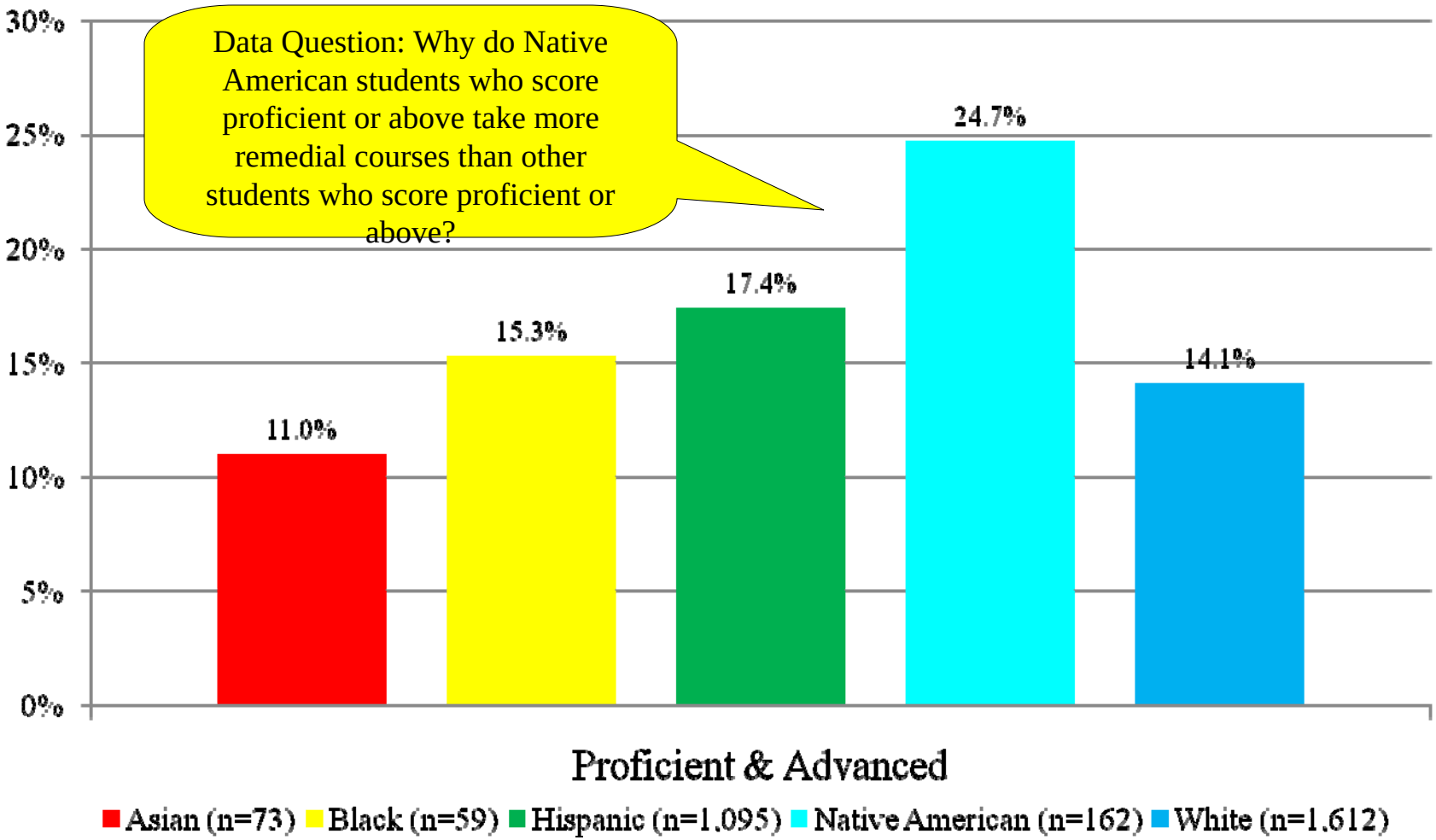
The Relationship Between Performance Level On The NMSBA And The Percentage Of Students Who Took Remedial Courses In Math In College



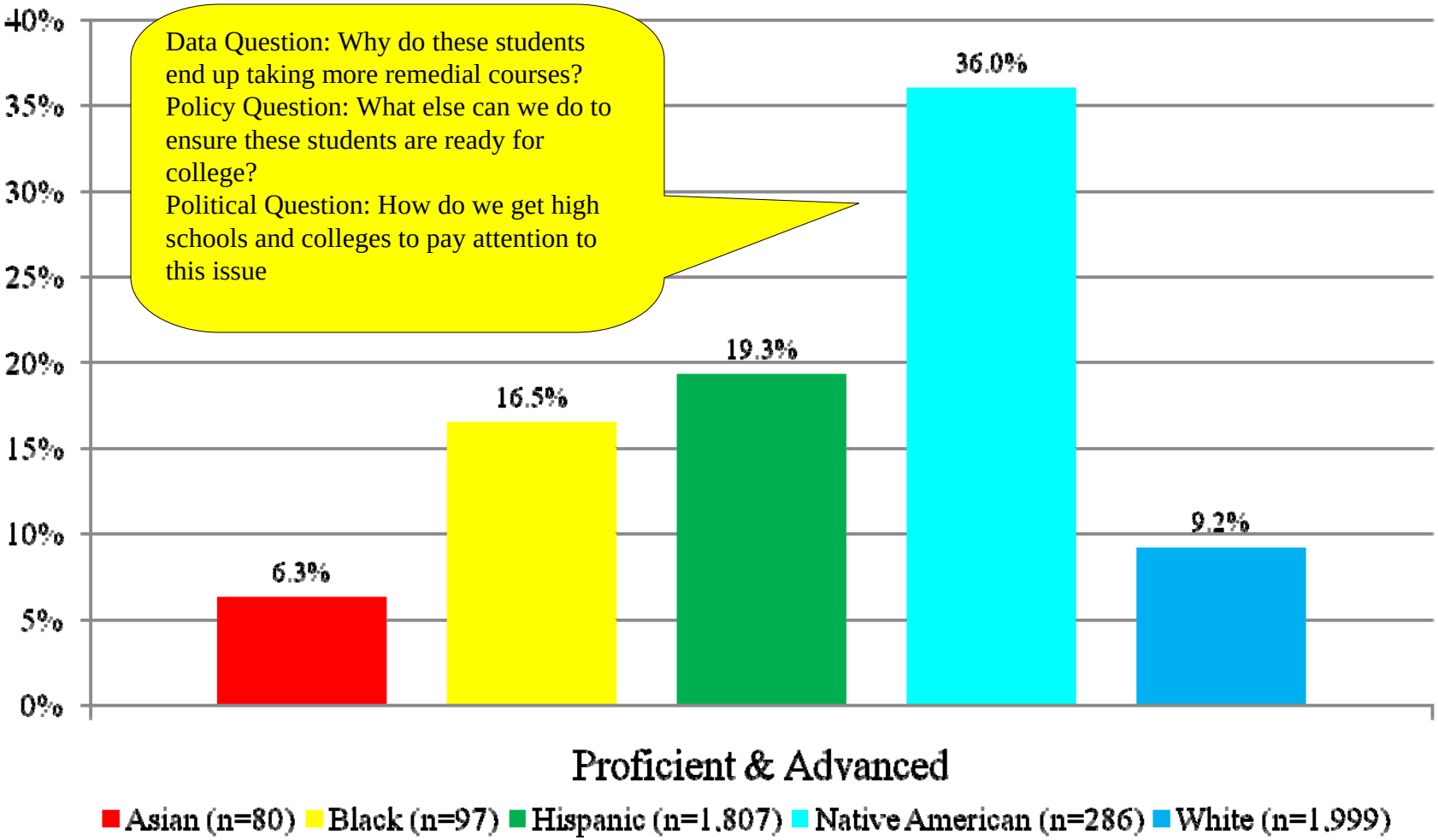
The Relationship Between Performance Level On The NMSBA And The Percentage Of Students Who Took Remedial Courses In Reading In College



The Percentage Of Students Who Scored Proficient Or Above On The 11th Grade NMSBA In Math And Took Remedial Courses In Math In College By Ethnicity



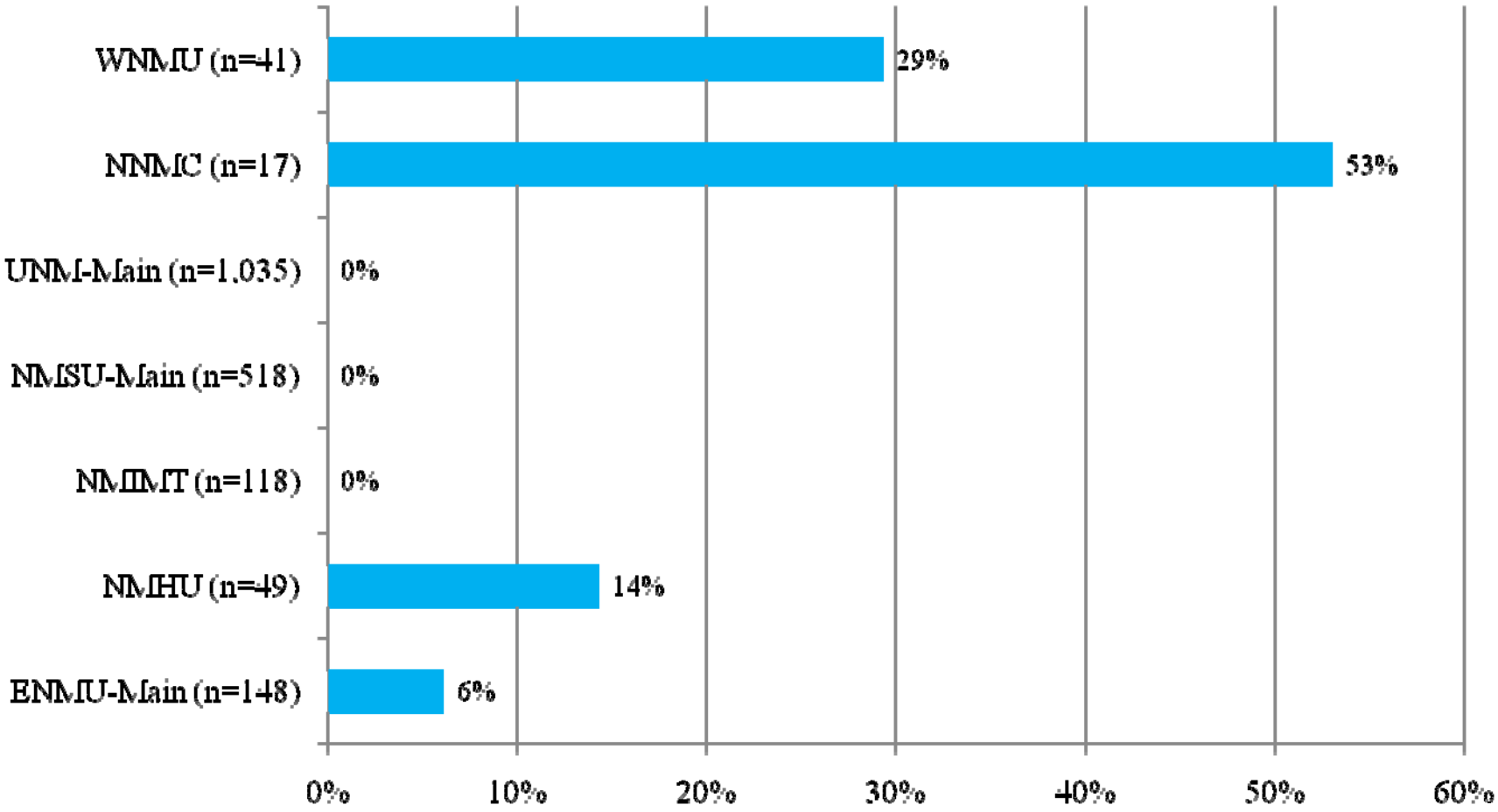
The Percentage Of Students Who Scored Proficient Or Above On The 11th Grade New Mexico Standards-Based Assessment In Reading And Took Remedial Courses In Reading In College Two Years Later By Ethnicity



The Next Set Of Analyses Examined How Remedial Rates For Students Who Scored Proficient Or Above On The 11th Grade SBA Varied By College

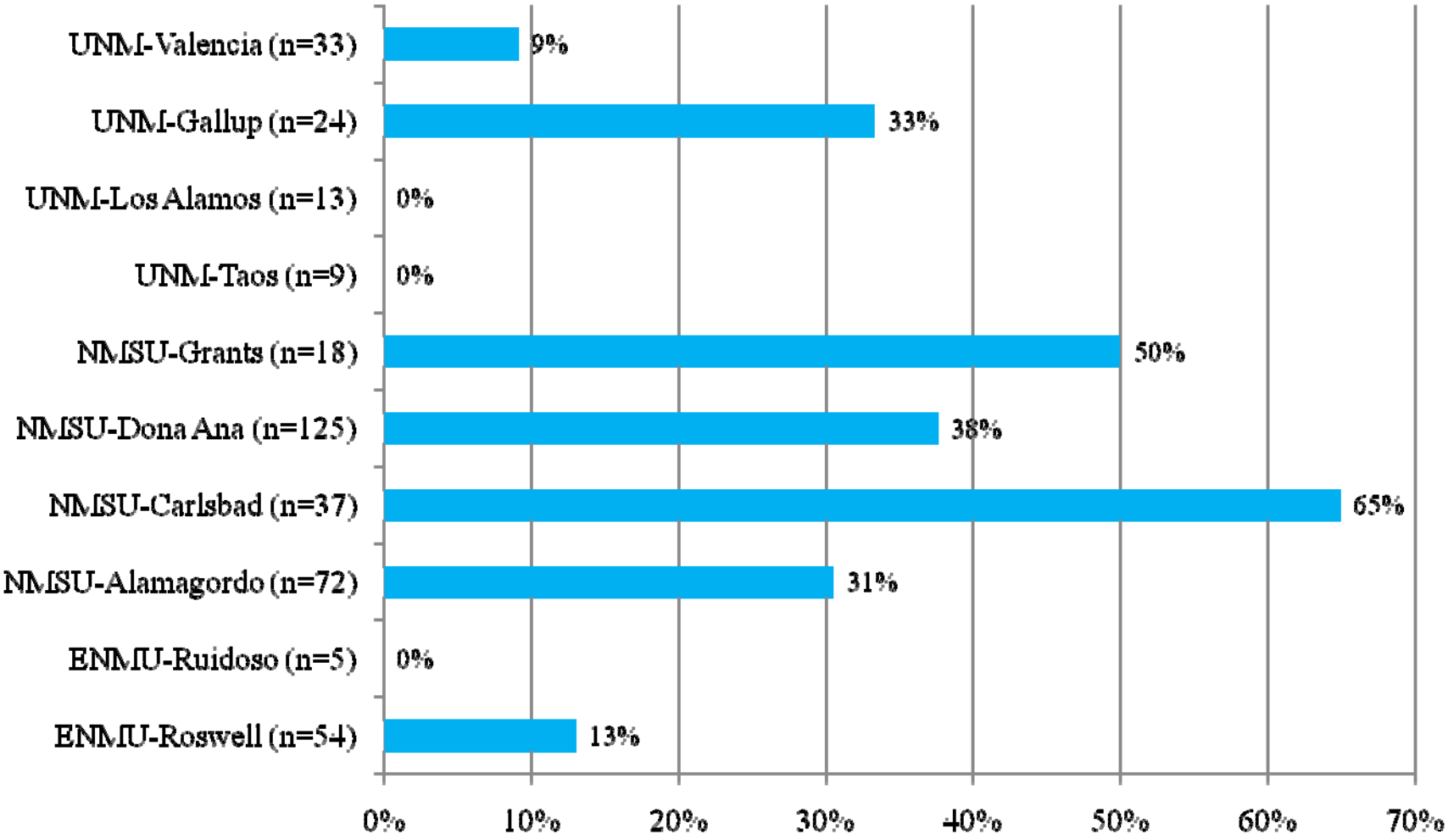
- It is important to note that colleges and universities handle student remediation differently.
  - NMAC 5.3.12.9 A(2) – Developmental credit: Developmental course credits are not eligible for funding credit at the doctoral institutions, nor for any degree or certification at any institution.
- The four year institutions often collaborate with two year colleges to provide developmental courses to those students who need remediation in math or reading.
- The following charts **DO NOT** assume that the 11th grade tests are correct and the college placement tests are wrong. The data do argue, however, that high schools and colleges need to have a clearer understanding of what the terms "proficient," "advanced," and "ready for college" means.
- These data also argue that we need a clearer understanding of how course taking patterns and other educational experiences, particularly in 12th grade, impact a student's readiness for college. Clearly, scores on an 11th grade assessment are only one sign of college readiness.

The Percentage Of Students Who Scored Proficient And Above On The 11th Grade NMSBA In Math And Who Took Remedial Courses In Math By 4-Year Colleges And Universities



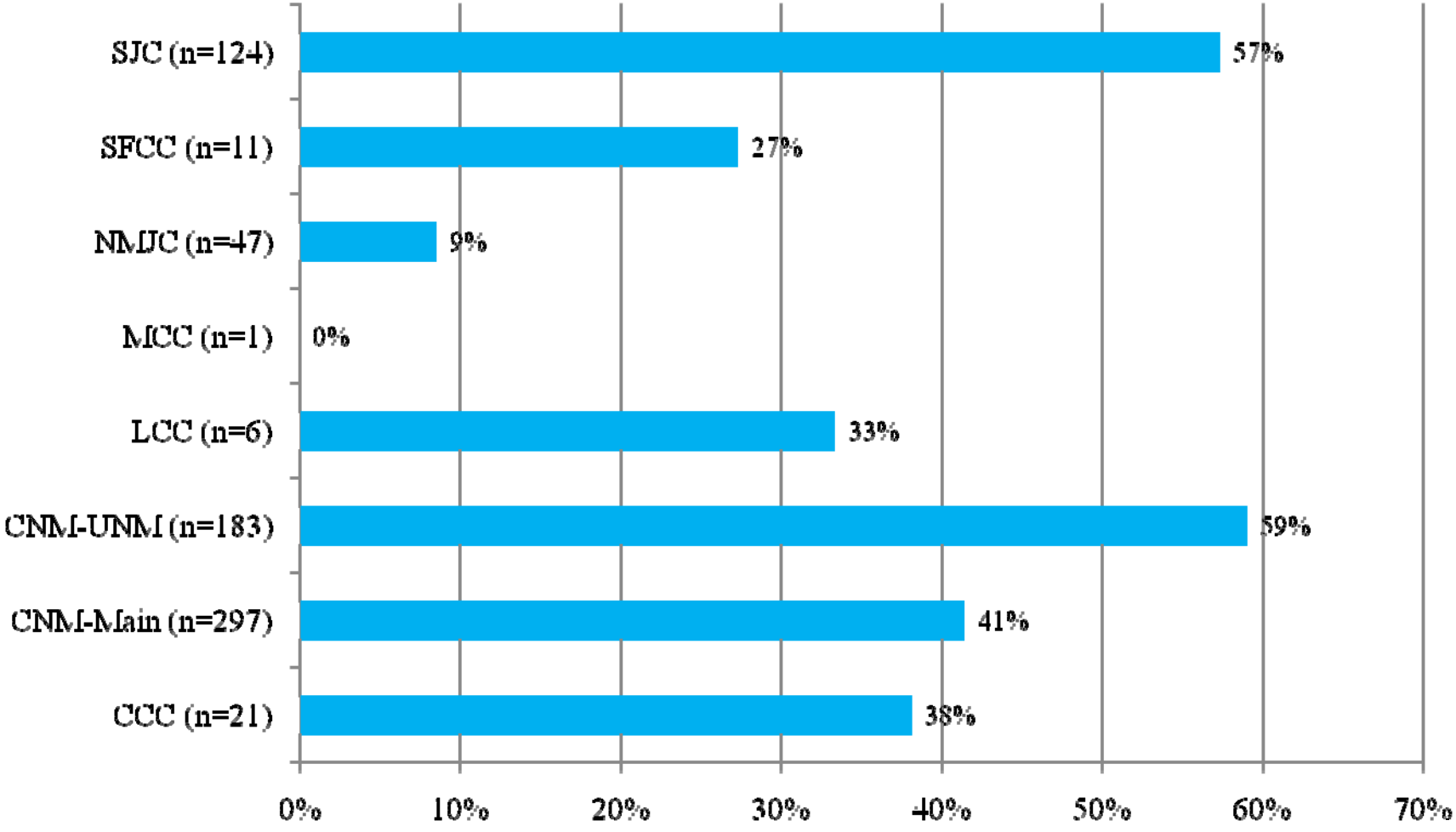
Note: Students may have attended several colleges during their first semester.
These data are based on the first institution they attended.

The Percentage Of Students Who Scored Proficient And Above On The 11th Grade NMSBA In Math And Who Took Remedial Courses In Math By 4-Year Branch Campuses



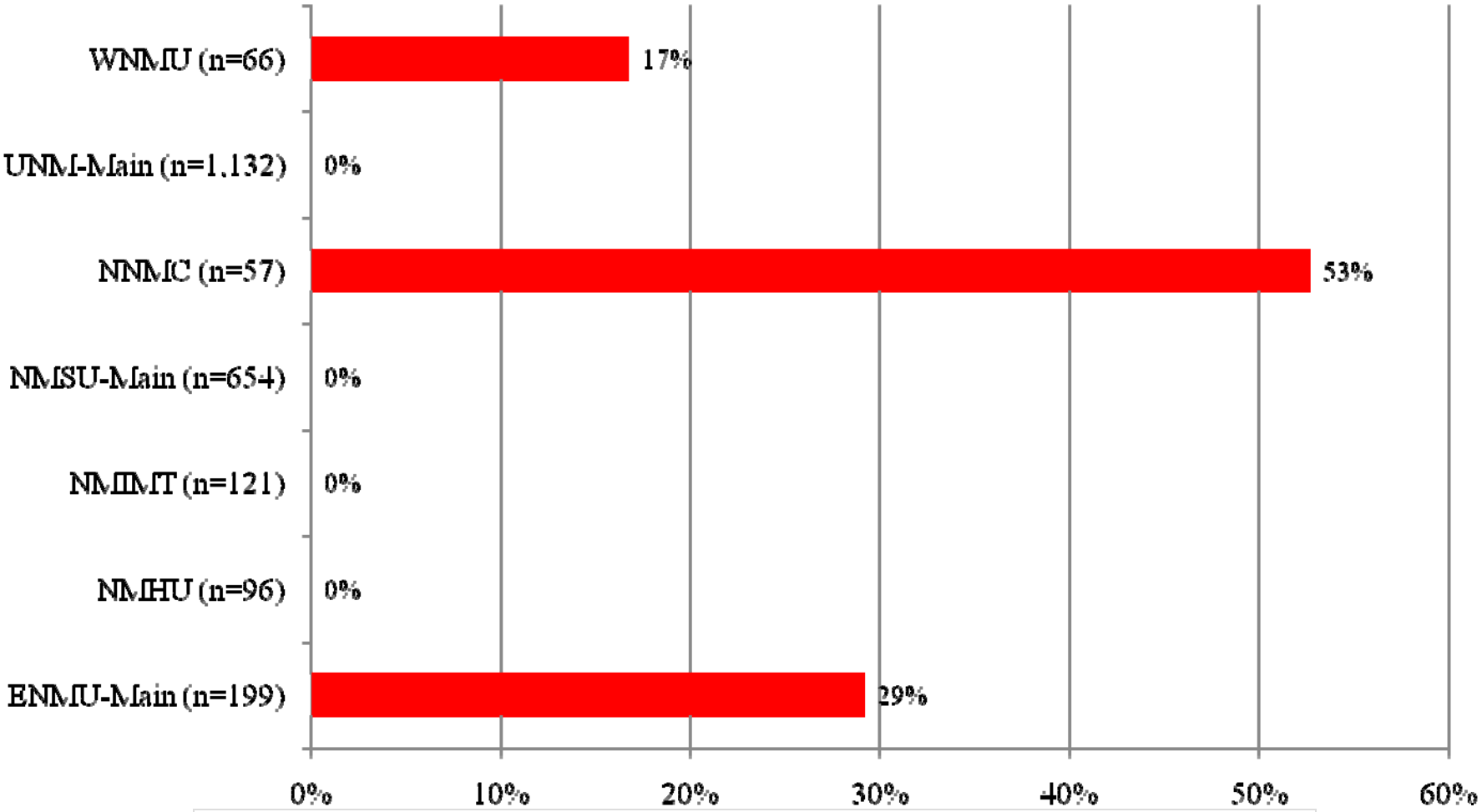
Note: Students may have attended several colleges during their first semester.
These data are based on the first institution they attended.

The Percentage Of Students Who Scored Proficient And Above On The 11th Grade NMSBA In Math And Who Took Remedial Courses In Math By Community College



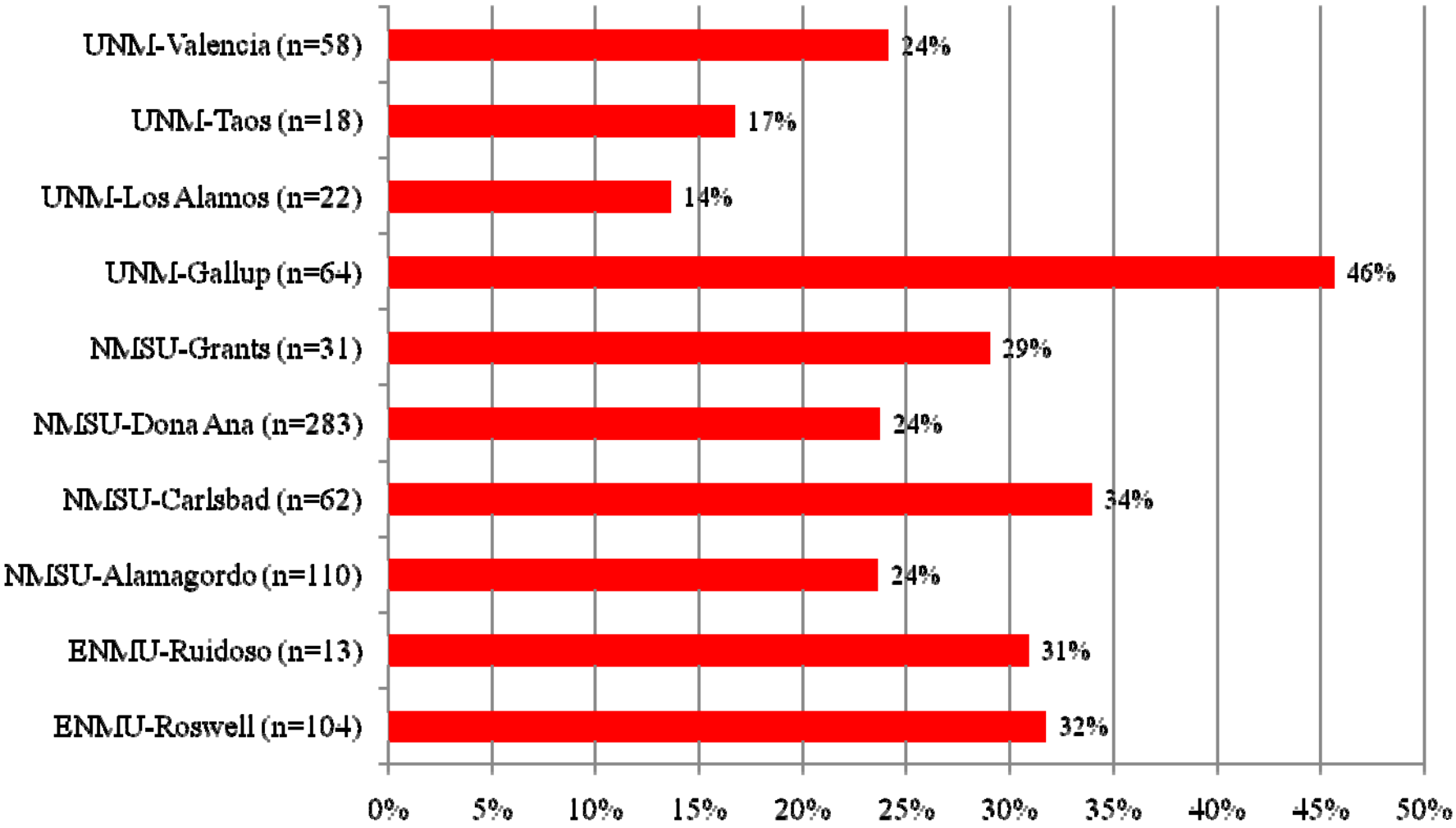
Note: Students may have attended several colleges during their first semester.
These data are based on the first institution they attended.

The Percentage Of Students Who Scored Proficient And Above On The 11th Grade NMSBA In Reading And Who Took Remedial Courses In Reading By 4 -Year Colleges and Universities



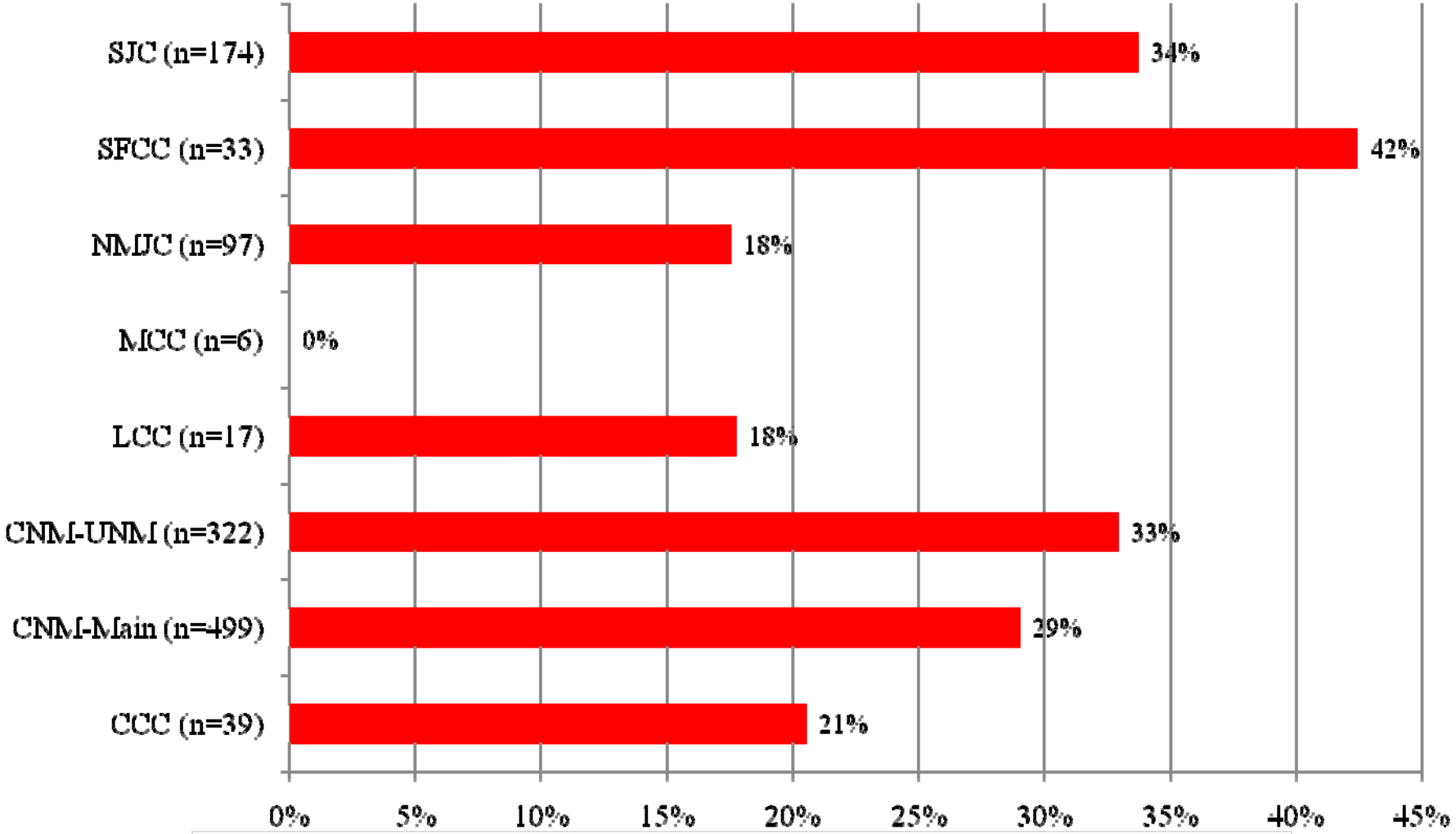
Note: Students may have attended several colleges during their first semester.
These data are based on the first institution they attended.

The Percentage Of Students Who Scored Proficient And Above On The 11th Grade NMSBA In Reading And Who Took Remedial Courses In Reading By 4-Year Branch Campuses



Note: Students may have attended several colleges during their first semester.
These data are based on the first institution they attended.

The Percentage Of Students Who Scored Proficient And Above On The 11th Grade NMSBA In Reading And Who Took Remedial Courses In Reading By Community College



Note: Students may have attended several colleges during their first semester.
These data are based on the first institution they attended.

The Relationship Between The New Mexico Standards Based Assessment (NMSBA) And The Need For College Remediation

- These analyses reveal that the relationship between students' performance on the 11th grade NMSBA and the number of remedial classes in math and reading they take in college is complex and impacted by factors including ethnicity and by college.
- These results do not mean that the SBA data is correct and remediation data is wrong, or visa versa. Rather, these results indicate that we need to study carefully how proficiency levels in high school assessments and cut scores in college assessments are determined, how they related to each other, and what they communicate to the students, parents, and educators who rely on them.

Potential Policy Recommendations For Aligning Assessments In High School and College

- Ensure that proficient and above on the NMSBA means prepared for college.
- Examine the impact of existing college placement policies on student success in college.
- Communicate college entry standards to high school students and related audiences.
- Enhance the capacity of data and performance measurement systems to track and analyze remedial education outcomes.
- Aligning assessments is not just about the cut score. It is really about developing a common understanding of what college readiness means.

Sources: *It's Not About The Cut Score: Redesigning Placement Assessment Policy To Improve Student Success.* Michael Collins, Achieving The Dream, Jobs For The Future, July 2008
Transforming Statewide High School Assessment Systems: A Guide For State Policymakers. Achieve, November 2008

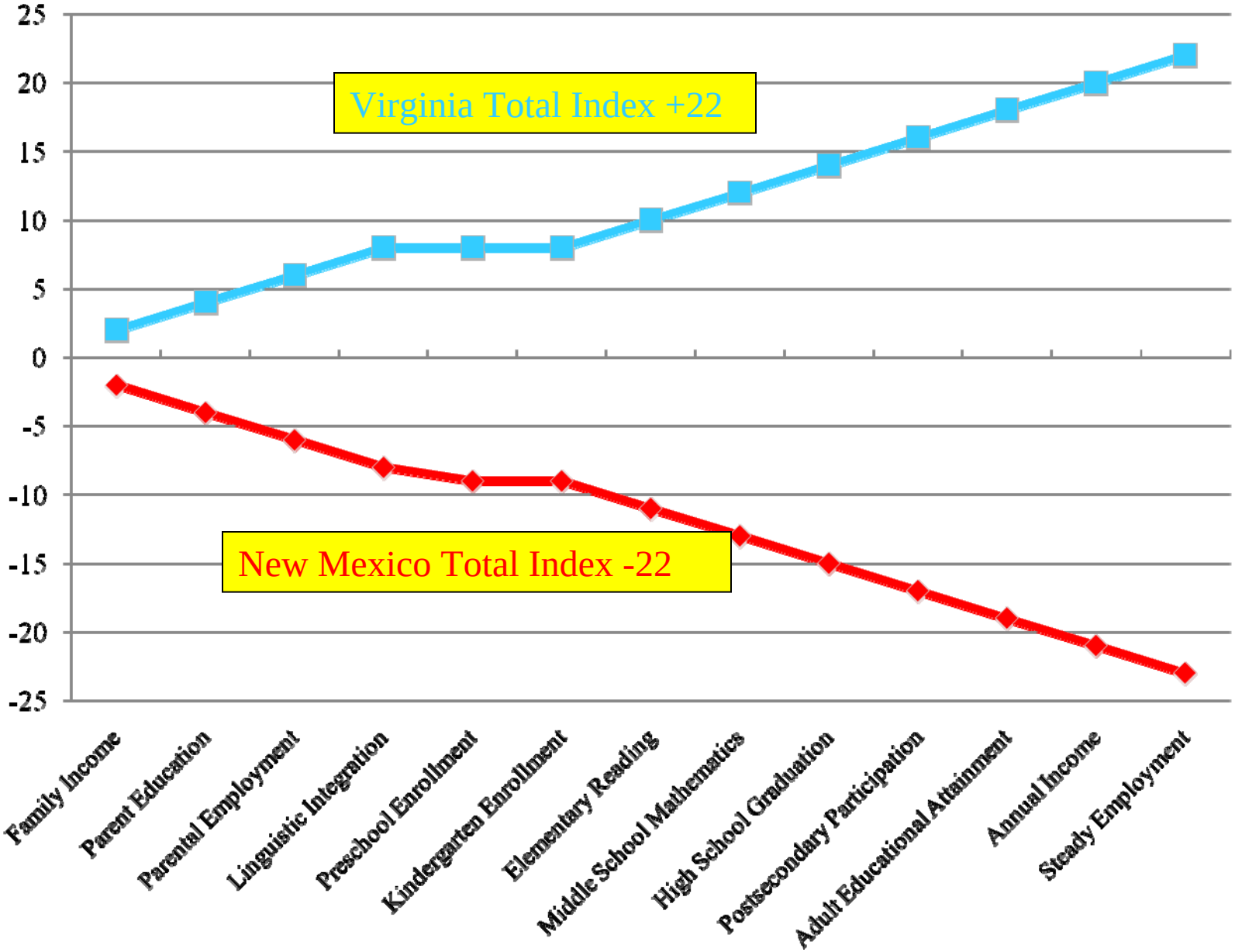
The Analyses Presented In The 2009 Ready For College Provide Examples Of How A Longitudinal Data System Can Help Us Improve The Transition Between High School And College.

These Analyses Also Illustrate Why New Mexico Needs An Effective Longitudinal Data System That Can Help Us Understand How Students Progress From Pre-Kindergarten Programs Through Public Education And On Into Higher Education And The Workforce

Why New Mexico Needs A PreK-20 Data System

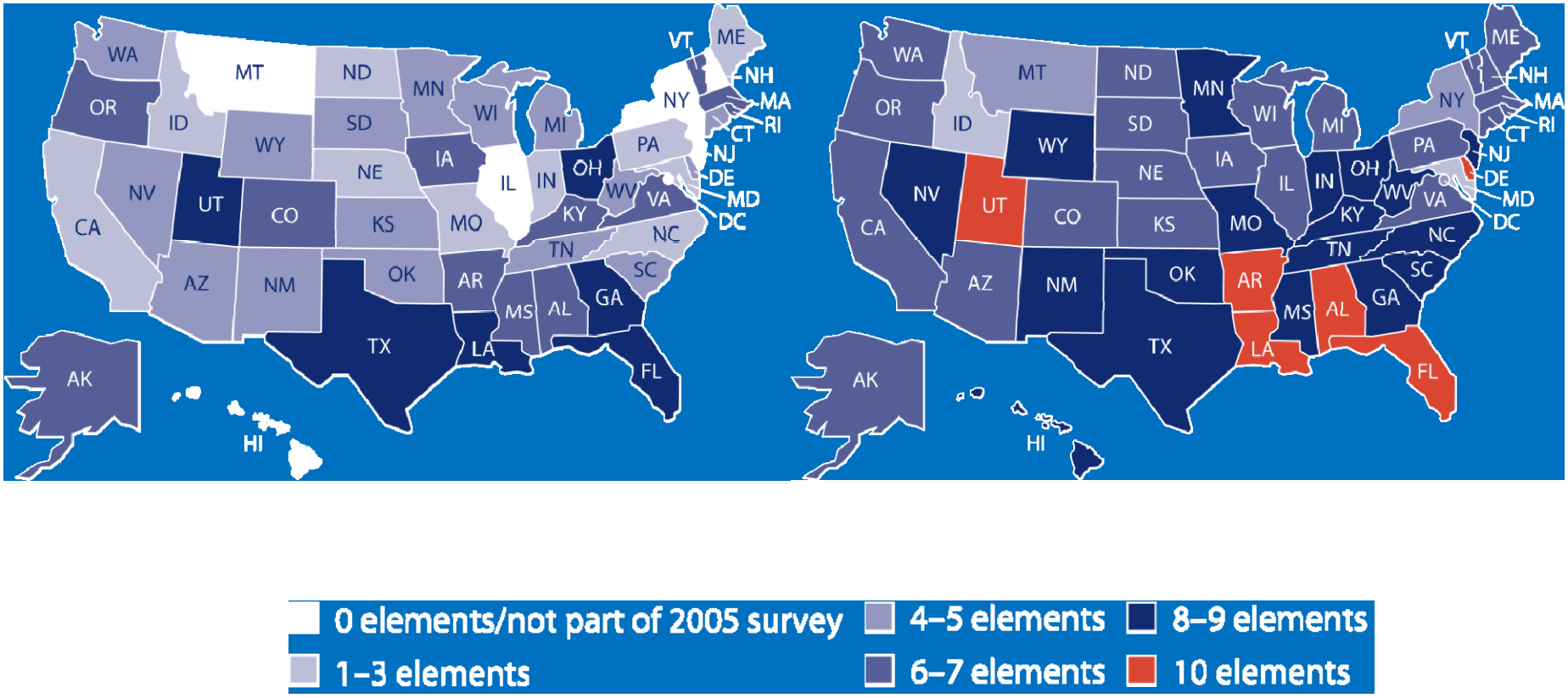
- The challenges New Mexico faces are systemic in nature.
- Identify ways to improve student success at every level of New Mexico education system from Pre-K through K-12 through postsecondary education and or the workforce.
- To provide teachers, principals and others with timely data that will help improve student achievement.
- Use the data in the system to improve the effectiveness and efficiency of New Mexico's efforts to improve its system of education.
- To comply with the federal America Competes Act and to meet the accountability requirements of the ARRA Funds.

Quality Counts: 2007 Chance For Success



What Is The Current Status Of New Mexico’s PreK-20 Data System

Data Quality Campaign Progress: 2005-2008



0 elements/not part of 2005 survey
1–3 elements
4–5 elements
6–7 elements
8–9 elements
10 elements

Source: Paige Kowalski, Data Quality Campaign

Data Quality 10 Essential Elements Of A Longitudinal Data System

(Source 2008 Data Quality Campaign and the National Center for Educational Achievement Survey)

Element	New Mexico
1.A unique statewide student identifier that connects student data across key databases across years.	Yes
2. Student-level enrollment, demographic and program participation information.	Yes
3. The ability to match individual students' test records from year to year to measure academic growth.	Yes
4. Information on untested students and the reasons they were not tested.	Yes
5. A teacher identifier system with the ability to match teachers to students.	Yes
6. Student-level transcript information, including information on courses completed and grades earned.	Yes
7. Student-level college readiness test scores.	No
8. Student-level graduation and dropout data.	Yes
9. The ability to match student records between the P-12 and higher education system.	Yes
10. A state data audit system assessing data quality, validity, and reliability.	Yes

Data Quality Campaign's 10 State Actions To Ensure Effective Data Use

(Source 2009 Data Quality)

1. Link state K-12 data systems with early learning, postsecondary education, workforce, social services and other critical state agency data systems.

2. Create stable, sustained support for robust state longitudinal data systems.

3. Develop governance structures to guide data collection, sharing and use.

4. Build state data repositories (e.g. data warehouses) that integrate student, staff, financial and facility data.

5. Implement systems to provide all stakeholders timely access to the information they need while protecting student privacy.

6. Create progress reports with individual student data that provide information educators, parents and students can use to improve student performance.

7. Create reports that include longitudinal statistics on school systems and groups of students to guide school-district- and state–level improvement efforts.

8. Develop a purposeful research agenda and collaborate with universities, researchers and intermediary groups to explore the data for useful information.

9. Implement policies and promote practices, including professional development and credentialing, to ensure that educators know how to access, analyze and use data appropriately.

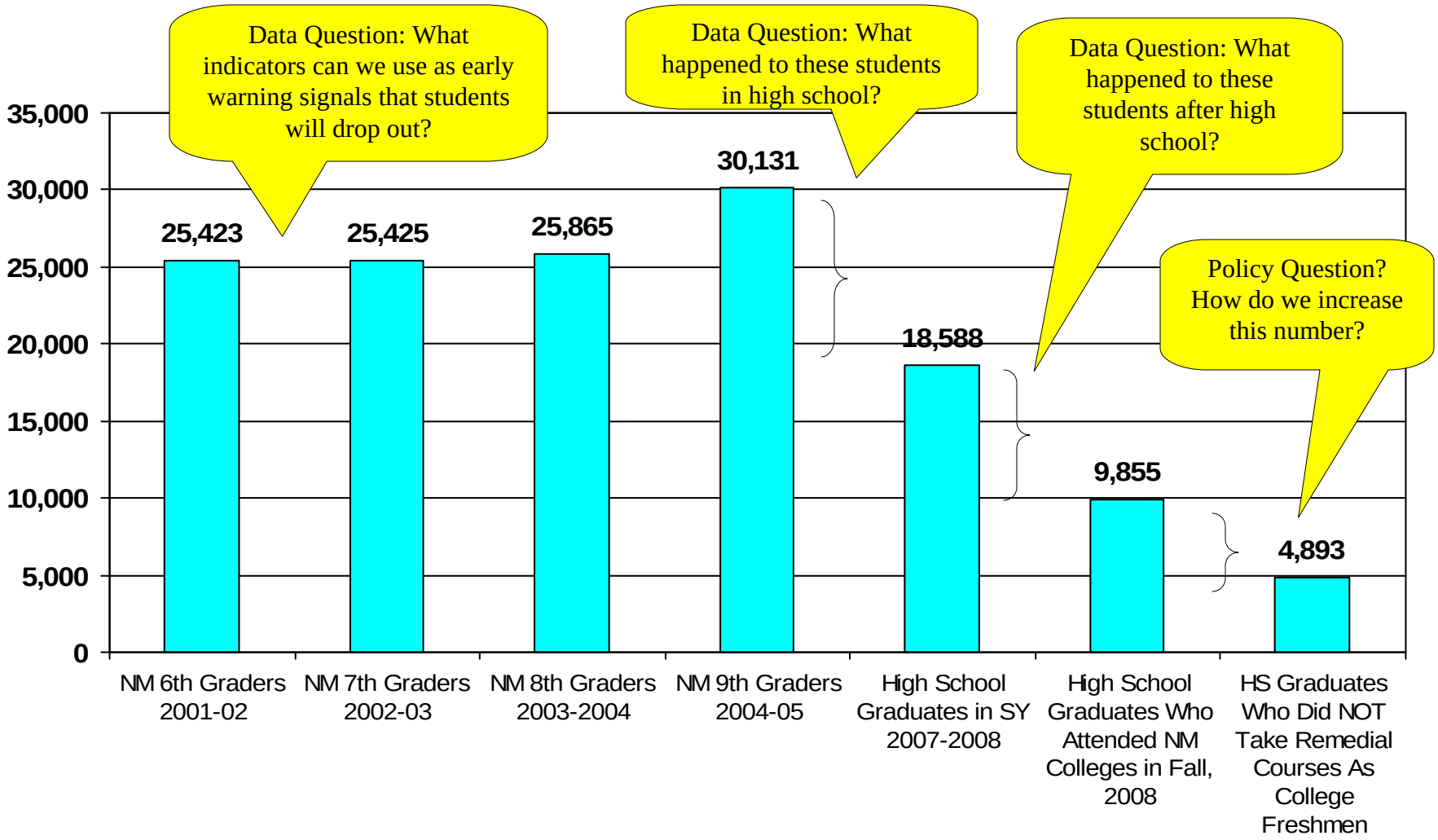
10. Promote strategies to raise awareness of available data and ensure that all key stakeholders, including state policy makers, know how to access, analyses and use the information.

A Sample Of New Mexico's Policy Questions

These are some of the questions that an effective PreK-20 data system can help answer:

- How do students enrolled in Pre-K programs and K-3Plus programs perform once they enter later grades?
- How do we increase the level of student performance for all students and close the achievement gap among students?
- How do we increase the number of students who graduate from high school?
- How do we ensure that students graduate from high school ready for college and the workforce?
- What are the long-term impacts of New Mexico's dual credit and advanced placement initiatives?
- How do we ensure that more students enter college and successfully complete programs and degrees?
- How do we strengthen the relationship between education and the economy?
- How do we use our financial and other resources most efficiently?
- How will we know if these efforts are successful?

How Many Students Who Enter Public High School As Sixth-Graders End Up Seven Years Later Ready For College? (Numbers of students who entered 6th grade in 2001-02 and entered college in fall of 2008)



Note: Data includes charter schools and alternative schools

What Are The ARRA Requirements For A P-20 Data System?

- ARRA Application (Part 2: Education Reform Assurances # 2): The State will establish a longitudinal data system that includes the elements described in section 6401(e)(2)(D) of the America Competes Act (20 U.S.C. 9871(e)(2)(D). (Improving Collection and Use of Data Assurance)
- Available Data for the Initial Baseline: In September 2008, the Data Quality Campaign and the National Center For Education Achievement conducted a survey that assessed the status of State educational data systems. (See http://www.dataqualitycampaign.org) The survey identified ten essential elements of a longitudinal data system. Five of the elements are aligned with the five statutory elements in the America Competes Act for "Preschool through grade 12 and postsecondary education (20 U.S.C. 9871(e)(2)(D)(i), and the remaining five elements are aligned with the five statutory elements for "Preschool through grade 12 education." (20 U.S.C. 9871(e)(2)(D)(ii). The Department will use the results of the survey to establish a State's initial baseline for improving the collection and use of data.

U.S. Education Department Preliminary Metrics For Evaluating States' Uses Of ARRA Funds

Better information to educators and the public, to address the individual needs of students and improve teacher performance. A state would report on the extent to which it has implemented a system to provide greater clarity to parents about the quality of their child's education. This system will enable educators to use real time information about the individual needs of students, move away from a one-size-fits-all approach to education, and improve their performance. In particular, a state would report:

- Progress towards implementing a statewide data system which included each of the 12 elements described in the America Competes Act, to track progress of individual students, from preschool through postsecondary education, and math students to individual teachers.
- Whether all teachers in mathematics and English Language Arts in tested grades receive timely data on the performance of their students and estimates of individual teacher impact on student achievement, in a manner that informs instruction and includes appropriate benchmarks.

America Competes Act (S 761)

1. A unique statewide student identifier that does not permit a student to be individually identified by users of the system; DQC element 1
2. Student-level enrollment, demographic, and program participation information; DQC element 2
3. Student-level information about the points at which students exit, transfer in, transfer out, drop out, or complete P-16 education programs; DQC element 8
4. The capacity to communicate with higher education data systems; DQC element 9, and
5. A State data audit system assessing data quality, validity, and reliability: DQC element 10
6. Yearly test records of individual students with respect to assessments under section 1111(b) of the Elementary and Secondary Education Act of 1965 (20 U.S.C. 6311(b)); DQC element 3
7. Information on students not tested by grade and subject; DQC element 4
8. A teacher identifier system with the ability to match teachers to students; DQC element 5
9. Student-level transcript information, including information on courses completed and grades earned; DQC element 6 , and
10. Student-level college readiness test scores; DQC element 7
11. Information regarding the extent to which students transition successfully from secondary school to postsecondary education, including whether students enroll in remedial coursework; DQC element 9(a), and
12. Other information determined necessary to address alignment and adequate preparation for success in postsecondary education. DQC element 9(b)

Governor Richardson's Executive Order 2009-019 Establishing The New Mexico Data Warehouse Council

- Identifies the membership, governance, and meeting schedule of the Council.
- Establishes an Advisory Panel to provide independent technical review of the technical feasibility of policies, proposals, and guidelines under consideration by the Council.
- Sets the Council's goals including:
  - Identify ways to improve student success at every level of New Mexico education system from Pre-K through K-12 through postsecondary education and/or the work force.
  - Provide teachers, principals, parents and others with timely data that will help improve student achievement at all levels of the education system.
  - Provide the Governor and other policy makers with data that can help improve the alignment, effectiveness and efficiency of the New Mexico PreK-20 education system.
- Identifies the Councils duties including establishing a longitudinal data system that meets the requirements of ARRA; submitting a data system proposal to the U.S Department of Education; developing management plans, interagency agreements, and strategic plans; remove barriers so that state agencies can produce timely and useable data reports; and report by December 31 of each year on the progress, status of the Council, and written reports available from the Council.

What Types Of Reports Should NM's P-20 Data System Produce?

Key Reports Proposed In New Mexico (These recommendations were proposed in SB581 introduced in the 2009 Legislative Session)

- Connect student records from pre-kindergarten through post-graduate education;
- Connect public school educator data to student data;
- Match individual public school students' test records from year to year to measure academic growth, including student-level college and career readiness test scores;
- Report the number and percentage of untested public school students by school district and by school and by major ethnic group, special education status, poverty status, and gender;
- Report high school longitudinal graduation and dropout data, including information that distinguishes between dropouts or students whose whereabouts are unknown and students who have transferred to other schools, including private schools or home schools, other school districts or other states;
- Provide post-secondary remediation data, including assessment scores on exams used to determine the need for remediation; provide post-secondary remedial course enrollment history, including the number and type of credit and noncredit remedial courses being taken;
- Report post-secondary retention data that indicate whether students are returning the second fall term after being enrolled as full-time first-time degree-seeking students;

Key Reports Proposed In New Mexico (SB 581)(continued)

- Report to New Mexico public high schools on their students who enroll in a public post-secondary educational institution within three years of graduating or leaving the high school regarding freshman-year outcomes;
- Provide post-secondary student completion status, including information that indicates if students are making annual progress toward their degrees;
- Include data regarding students who have earned a general educational development certificate in reporting post-secondary outcomes;
- Report data collected for the educator accountability reporting system;
- Report pre-kindergarten through postgraduate student-level enrollment data, demographic information and program participation information;
- Report pre-kindergarten through postgraduate student-level transcript information, including student-level transcript information, information on courses completed, grades earned and cumulative grade point average;
- Connect performance with financial information at all levels;
- Establish and maintain a state data audit system to assess the quality, validity and reliability of data;
- Provide any other student-level and educator data necessary to assess the performance of the pre-kindergarten through post-graduate system.

Trend Data For New Mexico's Public High Schools, Charter and Alternative High Schools Are Included In The Appendix

Please Note That Data For High Schools With Less Than 10 High School Graduates A Year Included In This Study Have Been Removed To Protect Student Confidentiality.

High Schools Interested In These Data May Contact The Office Of Education Accountability 505-476-1070

In Summary

- Half of New Mexico's high school graduates take remedial courses in math and/or reading when they get to college. This trend has not changed over the last seven years.
- New Mexico is implementing educational reforms aimed at ensuring that high school graduates are ready for college. These reforms will take time to implement and we need to monitor their effectiveness carefully.
- New Mexico has made progress in its capacity to use longitudinal data to examine high school graduates' readiness for college. However, more needs to be done to ensure that the state has an effective PreK-20 data system.

For More Information

- The Office Of Education Accountability, New Mexico Department of Finance and Administration
  - Telephone: 505-476-1070
  - http://education.nmdfa.state.nm.us
- New Mexico Higher Education Department
  - Telephone: 505-476-8400
  - http://www.hed.state.nm.us
- New Mexico Public Education Department
  - Telephone: 505-827-5661
  - http://www.ped.state.nm.us