Cost Effectiveness of the 12th Grade in New Mexico

A Joint Study –
Legislative Finance Committee
Center for Education Policy & Research, University of New Mexico

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Joint Study: Legislative Finance Committee & Center for Education Policy & Research

EXECUTIVE SUMMARY

In FY11, New Mexico's public school funding formula allocated $457.8 million for over 96 thousand students in 9th through 12th grade statewide. Funding generated by these students amounted to about 20 percent of total formula funding. Approximately 67 percent of the class of 2010 graduated in four years. Almost 70 percent of New Mexico high school graduates go on to college. However, about half of the students attending in-state require remediation. In response to historically low student achievement and high dropout and remediation rates, the Legislature passed a number of high school "redesign" measures intended to improve accountability and academic rigor to better prepare students for college and the workplace.

The cost-effectiveness of the 12th grade has been the subject of policy discussions during recent years. In FY11, the funding formula allocated $96.6 million for approximately 20,400 12th graders. Enrollment in the 12th grade is the lowest of all grades, but has increased about nine percent from FY05 to FY11, or about 1000 students. In New Mexico little is known about how well this transition period is used to prepare students for college or the work place and even if students participate in 12th grade full-time.

Legislative Finance Committee staff conducted this joint study with the Center for Education Policy Research at the University of New Mexico (CEPR) to evaluate the 12th grade, including student course taking patterns, enrollment status (full-time/part-time), allocation of formula funding and spending, and impact on college readiness. A representative sample of ten high schools was selected for study, accounting for over 15 percent of all 12th graders statewide in FY10.

Overall, the variability of graduation requirements, high school class configurations, enrollment, costs, and data quality is remarkable for the sample schools. A significant number of minority students did not meet the state graduation requirements but were still awarded a high school diploma. Many schools require students to earn more credits to graduate than the state requirement (23). On average, students earn credits in excess of state and local requirements, but the resulting impact on student preparation remains unclear and requires further study. A significant disconnect still exists between high school and college curriculums despite efforts to improve articulation between the two systems.

The cost of educating a 12th grade student generally costs less than the amount of revenue generated under the funding formula. Between 7 and 58 percent of 12th grade students at the sample high schools were taking less than a full-time course load. Delivering fewer credits to 12th graders decreases costs to high schools. High school spending per student, and per credit, varied widely due to school and class sizes difference, course schedules and labor costs. The state lacks a uniform standard for how to classify a student in 12th grade and whether that student qualifies for funding if they are not enrolled full-time.

In FY11, the funding formula allocated $96.6 million based on enrollment of about 20,400 12th graders.

Enrollment in the 12th grade is the lowest of all grades statewide. By comparison, the 9th grade consistently has the highest enrollment of all grades, averaging over 29 thousand students between FY05 and FY11. Kindergarten enrollment has now reached about as many students (25 thousand). Other grades (1-8) average about 25 thousand students.

High schools retain more students in school, which has helped boost 12th grade enrollment. Statewide 12th grade enrollment has increased from 19,387 in FY05 to 21,088 in FY11, or about nine percent. Enrollment increased over 1,000 students, or about five percent, between FY10 and FY11 alone. A contributing factor is the improved enrollment patterns of cohorts of students. The attrition rates of enrolled 9th graders in FY05-FY08 show improvement. For example, 9th grade enrollment in FY05 was about 29,500 and four years later this cohort of students' enrollment was about 19,700, or about a 67 percent retention rate from 9 through 12th grade. This retention rate has improved over time to 72 percent for the class of 2011. These changes are consistent with the state improving its graduation rates as well. Statewide graduation rates increased from 60 to 67 percent between the class of 2008 and 2010. However, student achievement needs improvement statewide. The percentage of 11th graders proficient and above in math improved from 30 to 37 percent between FY05 and FY10. Reading scores decreased from 58 to 55 percent during the same time period. A summary of NMSBA scores for each of the high schools in the study can be found in Appendix A.

High schools and the 12th grade have received increased attention by policy makers both nationally and in New Mexico.

Policy makers have focused efforts within the past decade on improving unacceptably low graduation rates, while also increasing the rigor and relevance of curriculum in an effort to better prepare students for careers and college. According to a U.S. Department of Education high school transcript study, in 2009, graduates earned more credits and had 420 hours more of instruction than students in 1990. A greater percentage of students had completed more challenging curriculum levels as well.

However, according to the National Conference of State Legislatures, if the current national dropout patterns continue "more than 12 million students will drop out of school during the next decade at a cost to the nation of more than $3 trillion." In response, national policy efforts have sought to "redesign" high school, including designing curriculum options and pathways that keep students engaged. These can include online learning, career and vocational education, and concurrent enrollment in college courses (dual credit) among others. As the use of dual credit and college preparatory curriculum increases, the line between high school and college becomes increasingly blurry.

New Mexico implemented a series of high school reforms beginning in 2007. These legislative initiatives included: increased graduation requirements, expanded required course offerings, changed graduation assessments, additional minimum instructional areas, and changes to compulsory school attendance. These reforms are not only focused on completion, but just as importantly include better preparation for careers and college.

Since implementation of the Legislative Lottery Scholarship, New Mexico has been a leader nationally in the percentage of its high school graduates entering college. While almost 70 percent of New Mexico's high school graduates go on to college, about half that attend in-state institutions end up needing remedial courses. Since 2002, the LFC and Legislative Education Study Committee (LESC) have raised concerns over the high rate of remedial coursework required of college freshman. Remedial coursework is one indicator of lack of preparation and too often leads to high college dropout rates.

The 12th grade has also received additional policy attention. The 12th grade is a transitional year between high school and post-secondary education or the workplace. Little is known in New Mexico about how well this transition period is used to prepare students and whether students participate in 12th grade full-time. While the 12th grade can be helpful for students to get a head start on college, educators also view it as an opportunity to catch up.

Joint Evaluation of the 12th Grade: Objectives and Methodology.

LFC and CEPR, in consultation with LESC staff and the Public Education Department (PED) developed this study's objectives and methodology. The objectives of the study include:

- Assess 12th grade student course taking patterns and enrollment status (full-time/part-time), including their impact on college readiness; and
- Review the allocation of formula funding and costs for the 12th grade.

Some information necessary to conduct the study was available only at local school districts. As a result, a representative sample of high schools was selected for inclusion in the study: Belen, Clovis, Española, Gallup, Highlands (Albuquerque Public Schools [APS]), La Cueva (APS), Oñate (Las Cruces), Rio Grande (APS), Rio Rancho, and Silver City. Over 4,300 students were included in this sample, 3,000 of which were included in the 4-year cohort transcript review. The sample methodology is included in Appendix B as well as descriptive statistics about the student population and transcript review.

In addition, superintendents and principals and other staff within the selected districts and schools were surveyed. Site visits and phone calls were conducted to follow-up on survey questions.

Data from the Higher Education Department was not available at the time of this publication. As a result, CEPR will issue a forthcoming report in 2011 on the impact of 12th grade course taking patterns on college readiness.

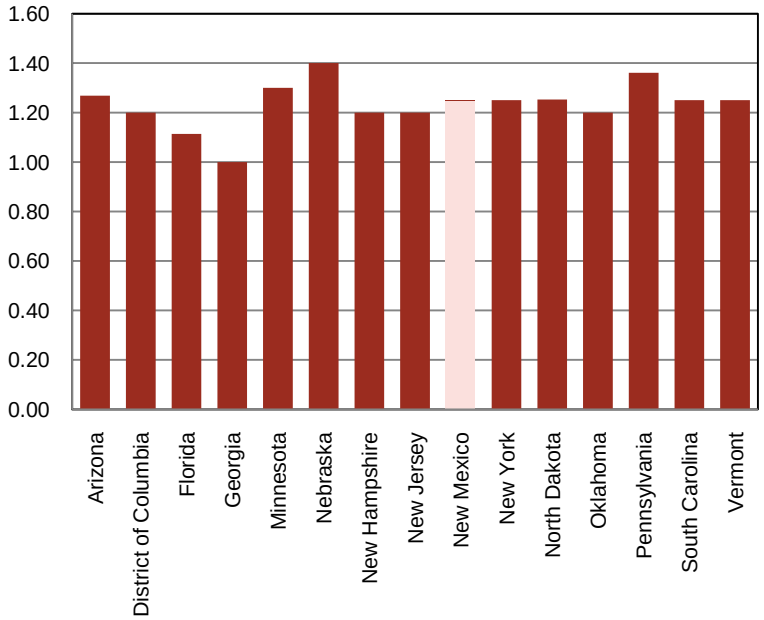
The 12th grade funding formula weight appears reasonable compared to other states, but clearer standards are necessary to define student membership and account for dual credit.

New Mexico's funding formula provides a weighted factor of 1.25 per student in grades 7-12. Other grade weights range from 1.045 for grades 4-6 to 1.18 for grades 2-3. Kindergarten has the highest weight of 1.44. These weights are intended to recognize the variable costs of delivering education to students in various class and school settings.

New Mexico's funding formula allocates additional resources for upper grades, including 12th grade, is consistent with other states. A study of public education funding formulas for 41 states was conducted by the Education Commission of the States (ECS). There are four primary methods used among states to allocate public education funds, which include: foundation/base formula; modified foundation/base formula; teacher allocation; and dollar funding per student. Appendix C includes additional information on each type of formula as well as state by state comparisons.

The study showed that 15 states designated fluctuating weighted values for different grade levels within their public education funding formula similar to New Mexico (foundation/base). Among these states, four exceeded the weighted factor that New Mexico designates for the 12th grade, and five assign the same weight as New Mexico for 12th grade.

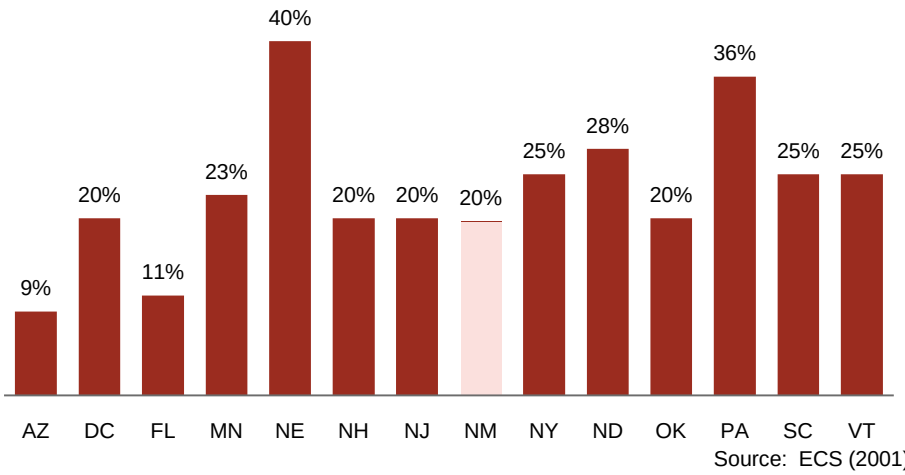
Chart 1. Funding Formula Comparison - 12th Grade Weighted Value



Source: ECS (2001)

New Mexico does not provide substantially more funding than the lowest funded grade compared to other similar states' funding formulas. New Mexico's formula allocates 20 percent more than the next lowest grade; only two states have a narrower gap. Charts 1 and 2 illustrate the weighted value for the 12th grade among those 15 states and the difference between the 12th grade and the lowest weighted grade.

Chart 2. Percent Difference Between 12th Grade Weight & Lowest Grade Weight



Source: ECS (2001)

The state provides full funding for students that do not attend full-time; students in the 12th grade can and do attend part-time because they do not need the credits to graduate or are participating in dual credit. According to the Public School Finance Act, to qualify for funding a student must be enrolled at a minimum of one half of the course requirements approved by PED (Section 22-8-2(M) NMSA 1978). This definition has not been clarified in administrative rule and raises public policy questions on why a part-time student should generate full-time funding and should be revisited. Students in the 12th grade are the most likely group of students to not need to be at school a full day in order to complete their high school graduation requirements. Separately, LFC has found that students in home and family school arrangements also attend regular public schools on a part-time basis, but generate full funding for school districts.

The state lacks a uniform standard for determining whether a student is a 12th grader. The statute does not define enrollment requirements for each grade, thus leaving the classification to districts to define. District and school definitions varied widely. For example, within this study's sample high schools, a 12th grader is a student with:

- 17 credits
- 18 or more credits at the beginning of the school year
- 20 credits at the beginning of the school year, and 24 credits at mid-semester
- 21 credits
- 21 or more credits
- 28 credits completed, or
- a student who has passed English 11.

The state lacks a clear and uniform definition of a maximum age limitation, which could result in duplication between adult basic education and K-12. The program cost for each school district and charter school is largely based on student "membership" or MEM, which is the total enrollment of qualified students on the current roll of a class or school on a specified day (Section 22-8-2 (M) NMSA 1978). According to state law, "qualified students" are public school students who have not graduated from high school and have not reached the student's

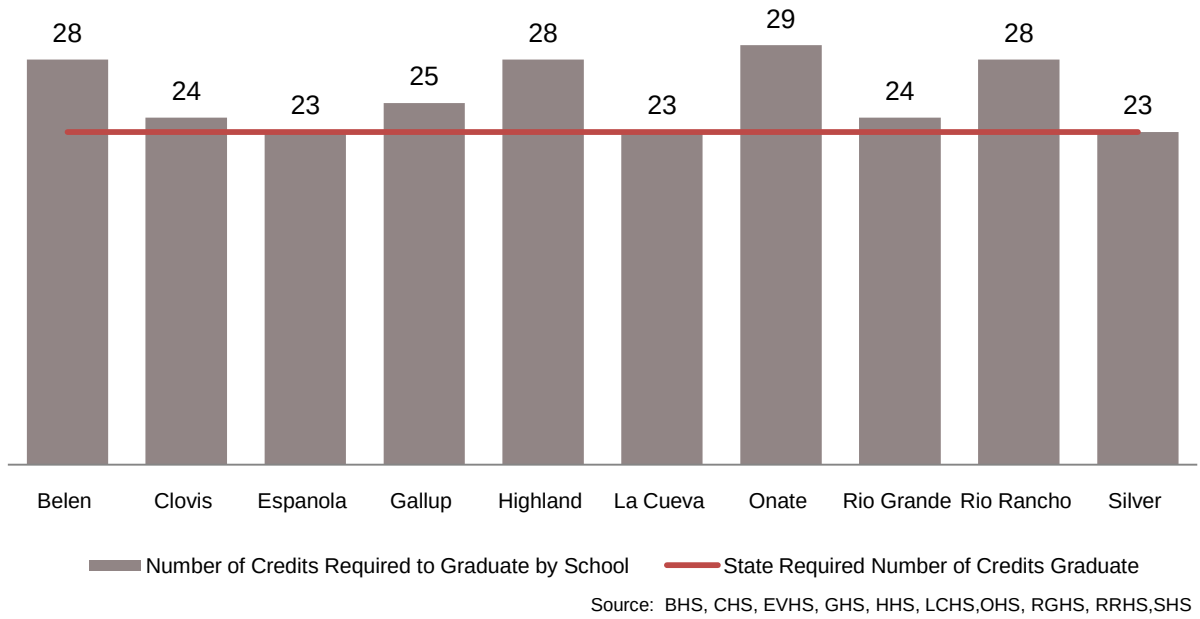
twenty-second birthday on the first day of the school year and are receiving special education services pursuant to rules of the department. PED has interpreted the definition of a "qualified student" to permit regular education students beyond what is generally considered to be a "child of school age" to qualify for public education funding. For example, the Gordon Bernall Charter School, which is designed specifically to accommodate incarcerated adult students, receives formula funding for adult students between 18 and 70 years old.

Many students graduate with credits in excess of state requirements due to local requirements and high school design.

Graduation requirements and high school design vary across districts and schools, creating opportunities and complicated challenges. Seven of the ten high schools reviewed require credits in excess of the state minimum of 23, as shown in Chart 3. The three high schools in Albuquerque each have different credit requirements which may complicate graduation for students that transfer within the district. APS is in the process of standardizing these requirements.

Reasons for variation of credit requirements were based, in part, on different school schedules. High schools offered students the possibility of earning between six and eight credits per school year. As a result, schools that can deliver more credits per year had higher credit requirements.

Chart 3. Credits Required to Graduate 2010
State & High School



Source: BHS, CHS, EVHS, GHS, HHS, LCHS,OHS, RGHS, RRHS,SHS

Three different schedules were used by the ten high schools: block, hybrid (modified block) and traditional. Defining whether a student is full- or part-time based on the number of credits (classes) they are enrolled will vary by school, as shown in Table 1.

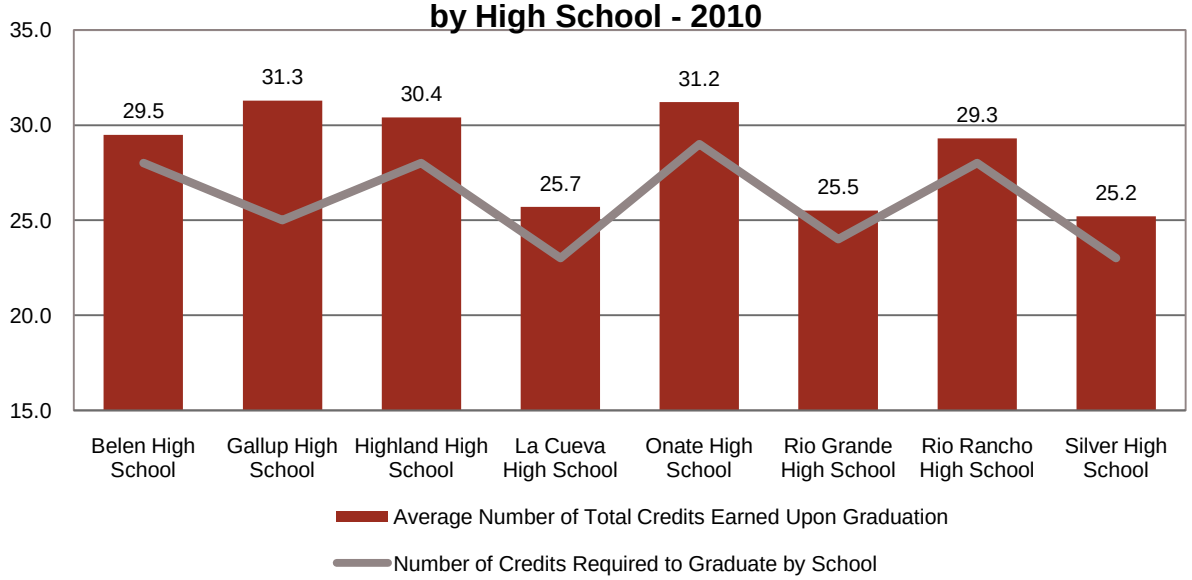
Table 1. High School Course Schedules

School	Schedule	Description	Course Completion	Credits Possible/ Year	Credits Required to Graduate
Belen High School	Block	4 courses/semester (90 minutes)	1 Semester	8	28
Clovis High School	Traditional	6 courses/semester (45 minutes)	2 Semesters	6	24
Española Valley High School	Block	4 courses/semester (90 minutes)	1 Semester	8	23
Gallup High School	Traditional	6 courses/semester (45 minutes)	2 Semesters	6	25
Highland High School	Hybrid (Modified Block)	6 courses/semester (90 minutes) & 1 course/semester (45 minutes)	2 Semesters	7	28
La Cueva High School	Hybrid (Modified Block)	6 courses/semester (90 minutes) & 1 course/semester (45 minutes)	2 Semesters	7	23
Oñate High School	Block	4 courses/semester (90 minutes)	1 Semester	8	29
Rio Grande High School	Hybrid (Modified Block)	6 courses/semester (90 minutes) & 1 course/semester (45 minutes)	2 Semesters	7	24
Rio Rancho High School	Traditional	6 courses/semester (45 minutes)	2 Semesters	6	28
Silver High School	Traditional	6 courses/semester (45 minutes)	2 Semesters	6	23

On average, students at sample high schools earned between 25 to 31 credits or about 10 to 36 percent more than state graduation requirements. In most cases students earned credits not only in excess of state requirements, but also district or school requirements. For example, Oñate requires 29 credits to graduate, more than any other school in the sample and six more than the state. On average students graduated from Oñate with over 31 credits. Silver City high school requires the state minimum 23 credits and students on average graduated with little over 25 credits. Only students that attended all four years at the high school and were not D-level special education were included in this transcript review.

Requiring or allowing students to take significantly more credits than required may not be cost effective if additional credits do not to lead to better outcomes, including on-time or early post-secondary degree completion. The type of additional classes students take may be as, or more, important as the amount. Data from the Higher Education Department was not available during this study to fully assess whether the additional credits in fact led to better first year outcomes at institutions of higher education. This information will be forthcoming later in 2011.

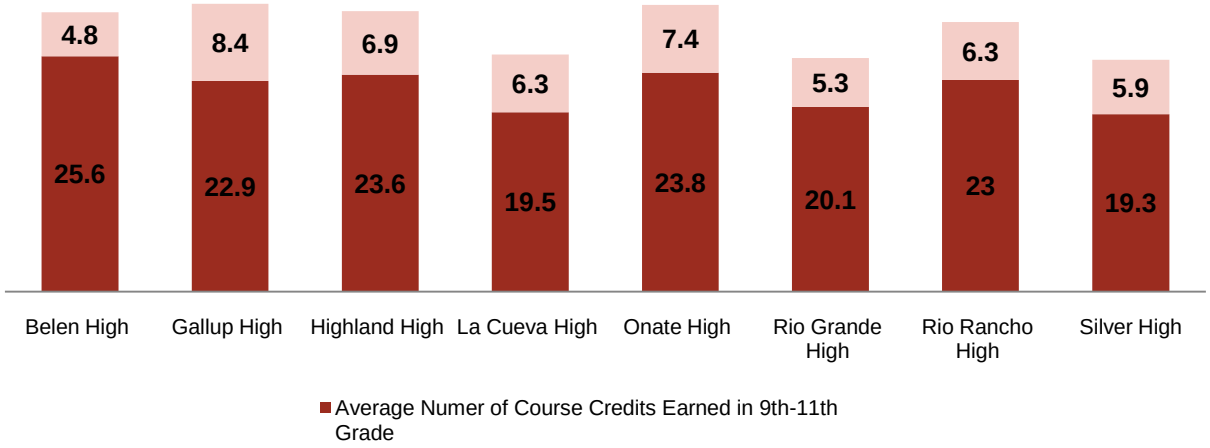
Chart 4. Average Credits Earned and Required by High School - 2010



Source: BHS, CHS, EVHS, GHS, HHS, LCHS,OHS, RGHS, RRHS,SHS.
Note: Clovis High School did not provide the data. The quality of data from Espanola was unreliable.

Students appear to earn a disproportionate share of their credits before entering the 12th grade, which indicates students need few credits to graduate their senior year. For example, students at Belen earned about 16 percent of their total credits during the 12th grade. Other schools where students earned less than 25 percent of total credits in the 12th grade included Silver City (23 percent), Highland (23 percent), Rio Rancho (22 percent), and Rio Grande (21 percent).

Chart 5. Average Number of Credits Earned in 9-11th Grade & 12th Grade

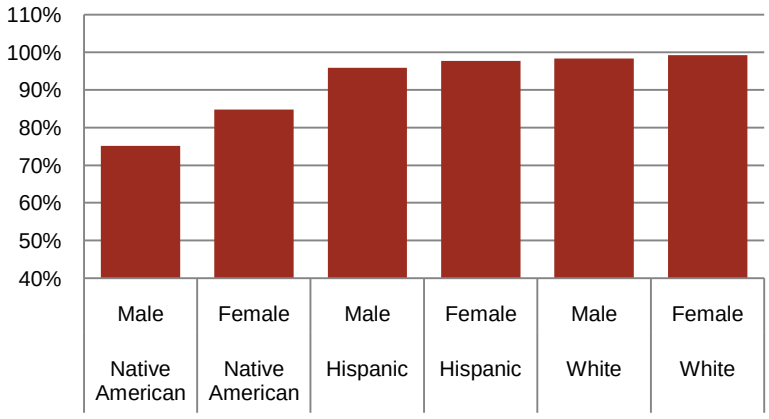


Source: BHS, CHS, EVHS, GHS, HHS, LCHS,OHS, RGHS, RRHS,SHS.
Note: Clovis High School did not provide the data. The quality of data from Espanola was unreliable.

A significant number of students, primarily Native American and Hispanic, did not meet state graduation requirements but still received a regular high school diploma.

Of the 3,046 students included in the transcript review, 379 (12%) did not fully meet all of the state graduation requirements. The state requires students to earn 23 credits in certain subjects. For example, students graduating in SY10 were required to earn four credits in English, three in Math and three in Science among others. However, based on the data reported by districts not all students met these graduation requirements but were still awarded a standard diploma. For example, in Gallup less than 75 percent of students earned the required number of math credits, 77 percent earned the required science credits, and about 91 percent earned the required number of English courses. Many of these students are Native American. Hispanic students were less likely to earn all required credits as well. For example, 6 percent of Hispanic males did not meet the math state requirements. Chart 6 shows the percentage of students meeting graduation requirements for math.

Chart 6. Percentage of Students Meeting Graduation Requirements in Math



Source: BHS, CHS, EVHS, GHS, HHS, LCHS,OHS, RGHS, RRHS,SHS

Table 2. Percentage (Number) of Students NOT MEETING State Graduation Requirements But Earning a High School Diploma

School	Number of Graduates (N)	23 Total Units	4 Units English	3 Units Math	3 Units Science	3 Units Social Science
Belen High School	237	0.0%	0.0%	0.0%	0.0%	0.0%
Gallup High School	308	.3% (1)	8.8% (27)	22.1% (68)	2.6% (8)	1.6% (5)
Highland High School	191	0.0%	1% (2)	1% (2)	0.0%	.5% (1)
La Cueva High School	354	0.0%	0.0%	5.9% 21)	0.0%	0.6% (21)
Oñate High School	370	0.0%	7.8% 29)	5.7% 21)	6.8% (25)	14.1% (52)
Rio Grande High School	196	0.0%	1% (2)	1% (2)	0.5%(1)	0.0%
Rio Rancho High School	737	0.0%	0.8% (6)	0.8% (6)	0.4% (3)	0.3%(2)
Silver High School	129	0.0%	0.0%	0.0%	0.0%	0.0%

Source: CEPR Transcript Review of District Submitted Data.
Clovis did not provide data and Española data quality too poor for publication.

Many 12th graders did not attend school full-time depending on the high school; participation in dual credit courses was not the primary factor.

Between 46 and 95 percent of students were taking a full course load their senior year at the sample high schools, including dual credit courses. A full course load is the equivalent to the number of classes a student could take in a regular school day given a high school's schedule configuration. The impact of dual credit on enrollment status in high school appears minimal according to data submitted by districts.

Again, depending on the high schools' schedule (block, traditional, etc.) a student could earn between six and eight credits a year. As a result, many students did not need to take a full course load their senior year to graduate. This factor ranked the highest among surveyed principals as a reason for 12th graders taking less than a full course load. The table below shows a breakdown of student enrollment status by school.

Table 3. Percent of Students NOT Enrolled Full-Time - FY10

School	N	Full-Time	Including Dual-Credit	Excluding Dual-Credit
Belen High School	237	8 courses	54% (128)	58% (137)
Española Valley High School	139	8 courses	90% (125)	**
Gallup High School	308	5+ courses	5% (15)	10% (31)
Highland High School	191	7 courses	7% (13)	7% (13)
La Cueva High School	354	7 courses	29% (103)	30% (106)
Oñate High School	370	8 courses	52% (192)	**
Rio Grande High School	196	7 courses	41% (80)	42% (82)
Rio Rancho High School	737	7 courses	11% (81)	**

Source: CEPR Transcript Review.
Data Notes: **Data Unusable; Data for Clovis was Not Provided;
Data for Silver City was Unusable; Data for Española is inconclusive.

Core subjects made up the bulk of courses taken by 12th graders, but more information is needed on the impact on college readiness.

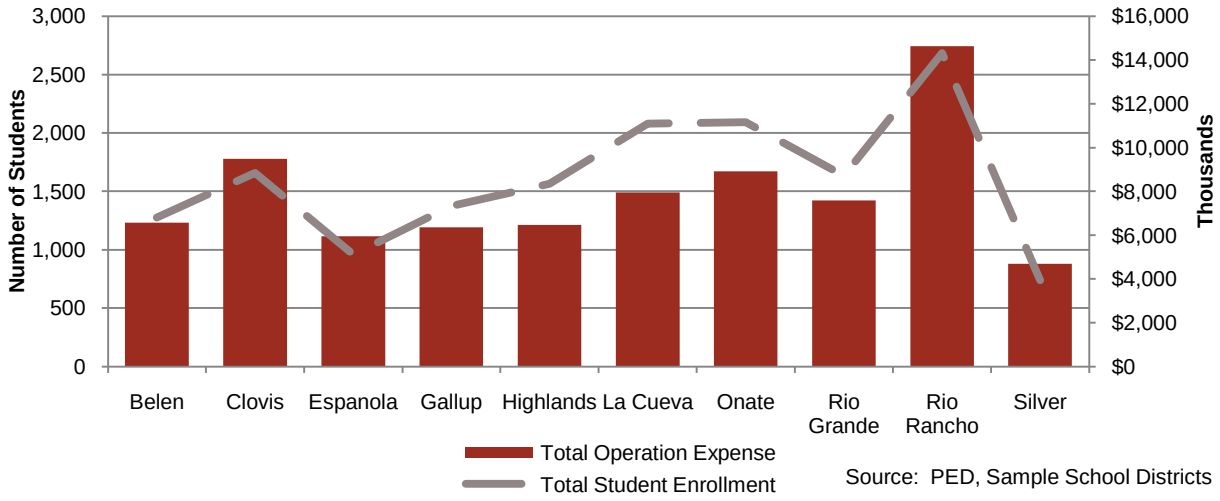
About 96 percent of 12th graders were enrolled in English and social studies courses, and 73 percent in math. Only half of students were enrolled in science courses. The highest enrollment in elective courses was 70 percent in "career and college preparation" courses. More analysis is needed to link the types of courses taken during the 12th grade and their impact on college remediation rates. This portion of the study will be completed later in 2011 by CEPR after examining data from the Higher Education Department.

The per-student and per-credit hour costs are inconsistent across schools, ranging from $3,800 - $6,300 per student and $585 to over $1,200 per credit.

The total operational spending for the sample high schools in FY10 ranged from $4.7 million at Silver City to over $14.6 million at the largest high school, Rio Rancho. Operational spending for FY10 includes revenue from the state funding formula, as well as federal funds that were used in the funding formula that year. The figures used in this analysis exclude special revenue funds, such as grants and activities funds, and capital outlay.

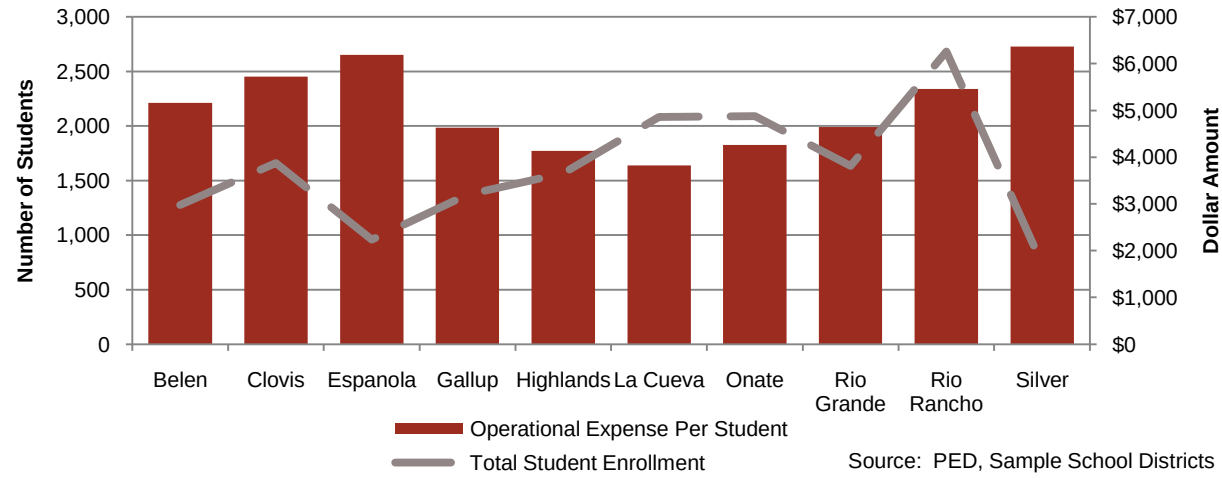
The size of a high school's student enrollment impacts per student funding amounts. For example, Silver City and Española have the smallest student enrollment of the sample and the highest per student spending levels. These schools cannot spread as many costs, such as administration, across many students as can larger schools such as Oñate or Rio Rancho. In some cases, smaller class sizes can drive up per student costs because the school will have to deliver a basic complement of class sections.

Chart 7. Operational Spending by High School - FY10



Source: PED, Sample School Districts

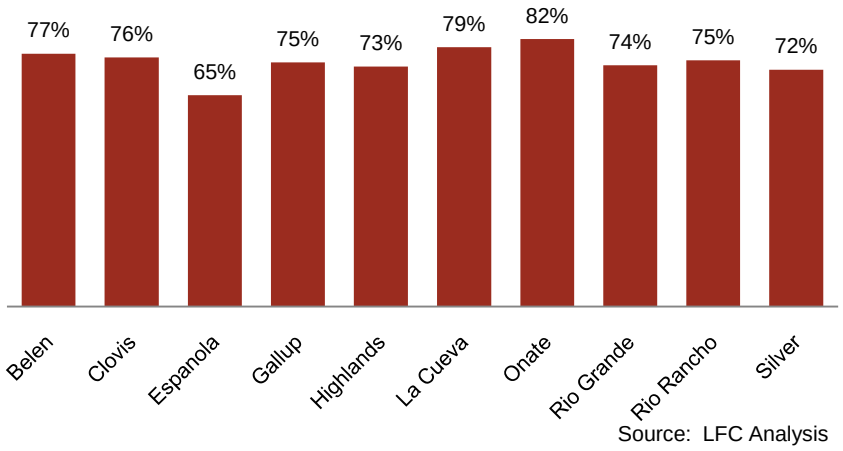
Chart 8. Operational Cost Per Student - FY10



Source: PED, Sample School Districts

Spending on instruction varied across schools, with Oñate dedicating the highest proportion of its operational spending, 82 percent, towards the classroom. By contrast, Española spent 65 percent on instruction. The school spent about $2.9 million on instructional salaries and about $1 million on non-instructional salaries, such as school administration.

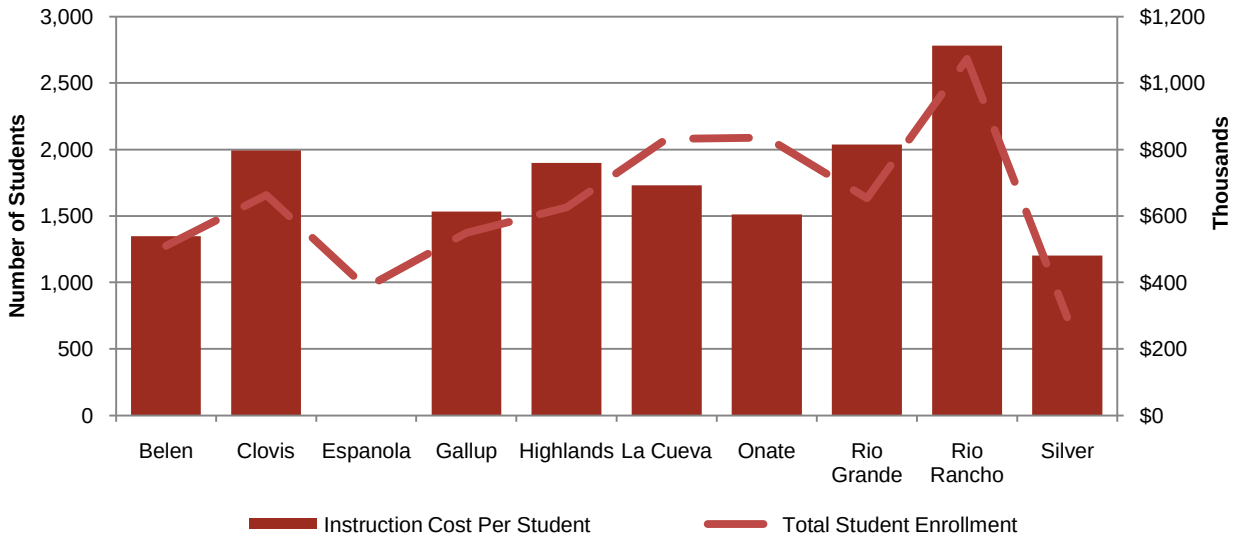
Chart 9. Percent of School Spending on Instruction - FY10



Source: LFC Analysis

Some schools' administrative expenses exceeded others, despite similar enrollment. For example, Clovis and Rio Grande each spent almost $800 thousand on school administration and have enrollment of about 1,650 students. Oñate and La Cueva each have over 2,000 students and spent $600 thousand and $692 thousand, respectively. Rio Rancho with an enrollment of 2,700 students spent over $1.1 million on school administration and a total of over $3.6 million on non-instructional expenses.

Chart 10. School Administration Spending - FY10



Source: PED, Sample School Districts. Espanola's non-instructional costs were available in aggregate, but not by function.

The funding formula generates more estimated revenue for the 12th grade than schools spend to deliver services.

The sample high schools spent almost $16.9 million on delivering services to 12th graders in FY10. The schools generated an estimated $18.6 million in formula funding, assuming the most conservative estimate of only 1.25 units per student. Districts have central administrative costs ranging from four to eight percent. Adjusting formula revenue for these administrative costs still results in net gain to districts of over $820 thousand from the 12th grade, or about five percent. Some districts spent more on the 12th grade than the estimated revenue generated after adjusting for central administrative costs. For example, Rio Rancho spent an estimated $424 thousand more than was generated in revenue. However, the three schools in Albuquerque and Oñate in Las Cruces generated an estimated 17 percent gain in revenue from the 12th grade.

However, 12th grade and other high school students conceivably generate additional units, though not as many as other students, for factors such as special education and at-risk. In addition, districts generate additional funding for size adjustments and teacher training & experience index, among others that further boost per student funding across grades. Sample districts generated between 42 and almost 70 percent more in units per MEM than the high school weight of 1.25. For example, Albuquerque generated 1.88 units per MEM district-wide, which are 0.63 units per MEM higher than the high school weight of 1.25. Assuming 12th graders and high school students generate 75 percent of the district unit per MEM average it would result in an estimated net gain of over $2.7 million for 12th grade and over $2 million for all of high school.

Table 4. Funding Formula Generated Dollars and Cost Per Student

School	12th Grade Estimated Formula Revenue		Cost of 12th Grade	Net Gain (Loss)	
	Low*	High*		Low*	High*
Belen	$1,210,122	$1,335,975	$1,100,277	$109,845	$235,697
Clovis	$2,489,069	$2,728,019	$2,705,703	($216,634)	$22,316
Española	$877,753	$1,039,260	$906,323	($28,570)	$132,937
Gallup	$2,071,380	$2,270,232	$2,040,756	$30,624	$229,476
Highlands	$1,226,333	$1,373,493	$1,023,310	$203,023	$350,183
La Cueva	$2,002,176	$2,242,437	$1,439,183	$562,993	$803,254
Oñate	$1,967,858	$2,219,744	$1,598,561	$369,298	$621,184
Rio Grande	$1,572,163	$1,760,823	$1,198,797	$373,366	$562,025
Rio Rancho	$3,664,731	$3,899,274	$4,089,690	($424,959)	($190,416)
Silver	$628,169	$748,777	$786,725	($158,557)	($37,948)
Total	$17,709,754	$19,618,034	$16,889,326	$820,428	$2,728,708

Source: LFC Analysis. *Low assumes only 1.25 units/MEM and High assumes 75% of district average units/MEM. All revenue reduced to account for district administration.

Table 5. Funding Formula Generated Dollars and Cost Per High School

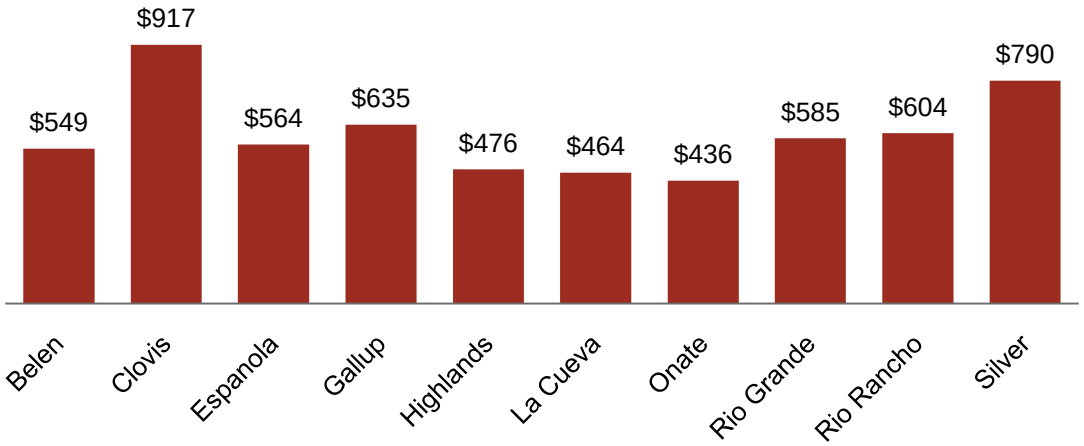
School	High School - Estimated Formula Revenue		Total Cost of High School	Net Gain (Loss)	
	Low*	High*		Low*	High*
Belen	$5,562,200	$6,140,669	$6,580,614	($1,018,414)	($439,945)
Clovis	$7,544,563	$8,268,841	$9,488,831	($1,944,268)	($1,219,990)
Española	$4,277,376	$5,064,413	$5,938,872	($1,661,496)	($874,459)
Gallup	$6,182,619	$6,776,150	$6,348,942	($166,323)	$427,209
Highlands	$7,125,926	$7,981,038	$6,471,432	$654,494	$1,509,605
La Cueva	$9,464,832	$10,600,612	$7,951,860	$1,512,972	$2,648,752
Oñate	$9,614,000	$10,844,592	$8,906,135	$707,865	$1,938,457
Rio Grande	$7,430,803	$8,322,500	$7,580,963	($150,160)	$741,536
Rio Rancho	$11,952,147	$12,717,084	$14,631,094	($2,678,947)	($1,914,009)
Silver	$3,320,963	$3,958,587	$4,691,919	($1,370,956)	($733,332)
Total	$72,475,430	$80,674,487	$78,590,662	($6,115,233)	$2,083,824

Source: LFC Analysis. *Low assumes only 1.25 units/MEM and High assumes 75% of district average units/MEM. All revenue reduced to account for district administration.

Revenue generated from the funding formula is non-categorical and districts have wide discretion on how to allocate resources internally. This analysis does not assume that districts must spend, dollar for dollar, revenue generated for each grade or component of the funding formula on that grade. Revenue generated in excess of costs, such as for the 12th grade, can be used on other priorities in the district, such as extended learning time for grades K-3. In other cases, districts appear to invest resources from elsewhere to subsidize the cost of high school.

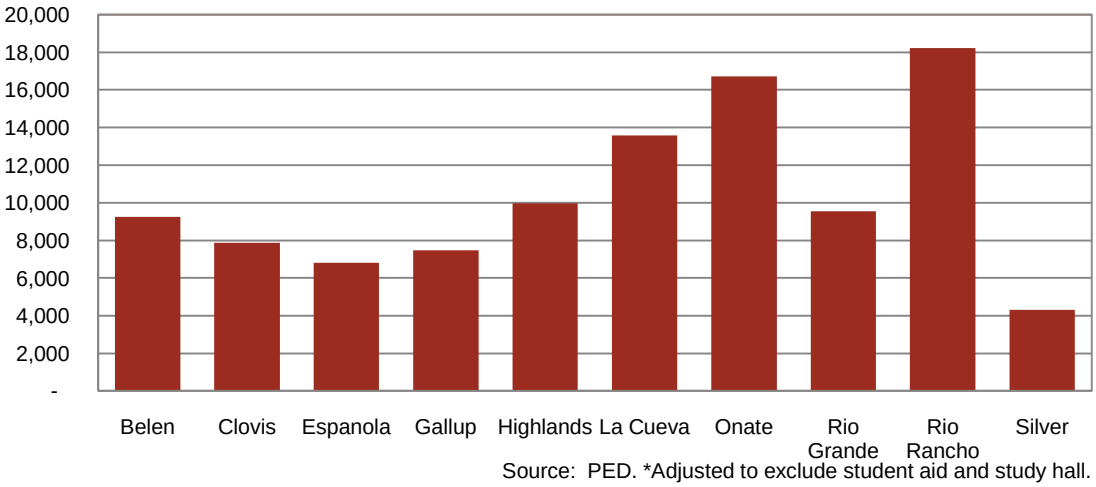
Generally, 12th graders do not have isolated costs associated solely with the 12th grade. Few course sections, and a small number of teachers, are solely dedicated to 12th graders based on data reported to PED. Only 59 teachers, or 6 percent, of the 1,057 teachers at the sample high schools had more than 80 percent of their students enrolled in the 12th grade. As a result, instructional costs per credit can be assumed to be evenly distributed across grades. Some of the variance in instructional cost per credit shown below can be attributed to differences in teacher labor costs and size of the school. However, some schools, like Oñate, appear extremely efficient because of how the school's schedule is configured. Oñate, through its block schedule of four classes per semester, can produce eight credits per student per year and in FY10 produced an estimated 16 thousand. At their maximum, other schools can only produce seven credits per year and become even less efficient if students do not take a full course load the entire year.

Chart 11. Estimated Instructional Cost Per Credit - FY10



Source: PED. *Adjusted to exclude student aid and study hall.

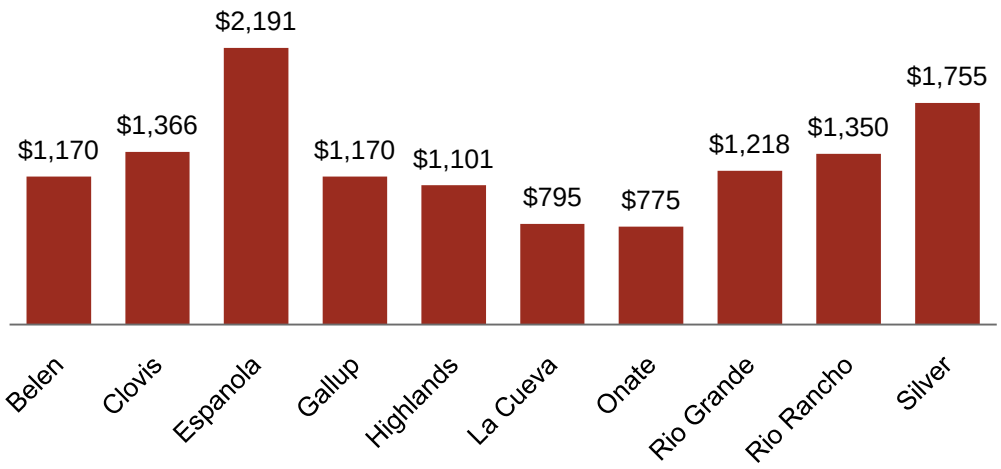
Chart 12. Number of Student Credit Hours - FY10*



Source: PED. *Adjusted to exclude student aid and study hall.

Based on survey and interview data, non-instructional costs at high schools, such as principal and counselor salaries and utility costs can be evenly attributed on a per-student basis. For example, many of the schools had evenly divided their counselors across the student population.

Chart 13. Non-Instructional Cost Per Student - FY10



Source: BHS, CHS, EVHS, GHS, HHS, LCHS, OHS, RGHS, RRHS, SHS

The wide variation in the quality of data and management systems negatively impacts planning and results-oriented accountability.

The completeness, quality and format of the transcript data received varied considerably among districts. Transcript evaluations are done by non-instructional staff: counselors, assistant principals, the principal and the registrar. counselors spend more than 50 percent of their time reviewing student transcripts, particularly with 11th and 12th grade students. Reviews are most often done on paper and then entered electronically. The interviews indicated that graduate transcript evaluation processes are time consuming and labor-intensive. Principals and counselors felt the time spent on transcript evaluations prevented them from being able to respond to students' socio-emotional needs and career preparation adequately. The district with the most accurate graduate transcripts for FY10 met individually with each junior and senior student and their families once to twice each year for 15-30 minutes.

The quality of data systems, data collection and information technology expertise varies by school district, making it difficult to conduct comparative analyses across high schools and districts. The majority of districts in this study reported changing their data systems in the last three years. Data systems include School Max, PowerSchool, and Genesis. The lack of uniformity of the data made it challenging to conduct analyses of the number of students meeting graduation requirements and course-taking patterns.

PED currently collects enrollment data and teacher/class load data. However, PED does not collect information regarding required credits earned by students across their high school career or even during individual years. This allows a significant percentage of students to unknowingly graduate and receive a diploma without the required credits in certain content areas. In addition, the state is not in a position to easily monitor whether student enrollment complies with state law.

Legislature

State law should be amended to define student membership and qualified students as students attending full-time or the entire school day. For high school students no more than one class period should be empty. In addition, state law should be clarified to establish a maximum age limit for public schools to claim funding for students in K-12. The LFC-LESC Joint Evaluation of the funding formula should fully research and recommend the specific statutory language for consideration by the Legislature.

Future LFC program evaluations should assess the costs and benefits of dual-credit policies. Both public schools and institutions of higher education receive funding for students enrolled in dual credit courses. Educators that participated in the study strongly recommend that dual credit be expanded to all districts and high school students through streamlined enrollment. As dual credit enrollment increases the impact of this double-funding is likely to grow. As such, an assessment of the full costs and benefits is warranted sooner than later.

Public Education Department

PED, as part of its ongoing oversight of public schools, should conduct focused monitoring of high schools to ensure students granted a diploma meet the number of state required credits.

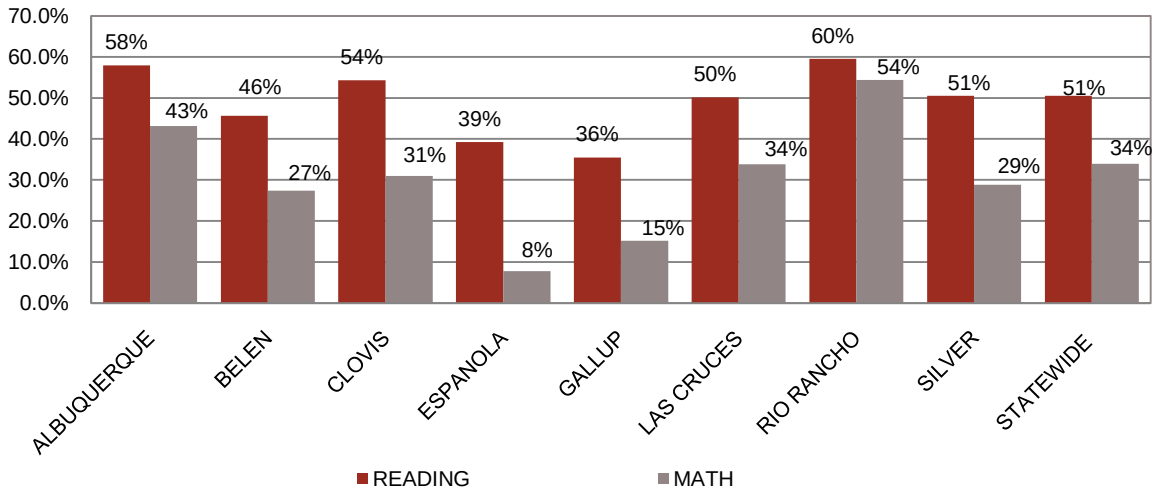
PED should work to ensure districts have the capacity to gather accurate data on high school students and that district personnel are also trained to use this information to improve the education of students and ensure added accountability for the state, including counselors and principals. Improved use of transcript data while students are in school can help ensure that all students receive a rigorous high school education. PED, as appropriate, should work with districts to align electronic systems to reduce the workload associated with transcript reviews and student schedules, such as cooperative purchasing or migrating to common data systems.

PED and HED should ensure that the work of Education Data System Council created in statute [Section 22-1-11, NMSA 1978] proceeds quickly so policy makers and citizens can better understand the impact of high school curriculum on college and career achievement.

PED and HED should ensure that the freshman year outcome reports from institutions of higher education are implemented and provided to high schools. Additional efforts should be made to improve the communication and collaboration between high schools and higher education.

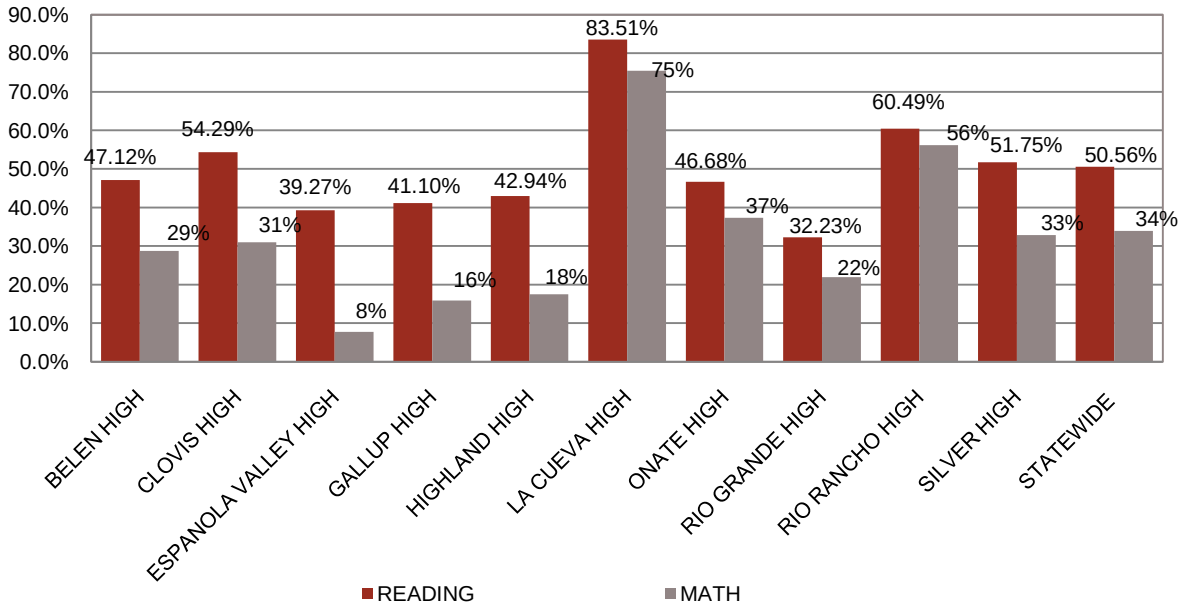
Student Performance and Graduation Rates

NMSBA PERCENT PROFICIENT AND ABOVE BY DISTRICT (SY2008-09)



Source: PED

NMSBA PERCENT PROFICIENT AND ABOVE BY HIGH SCHOOL (SY2008-09)



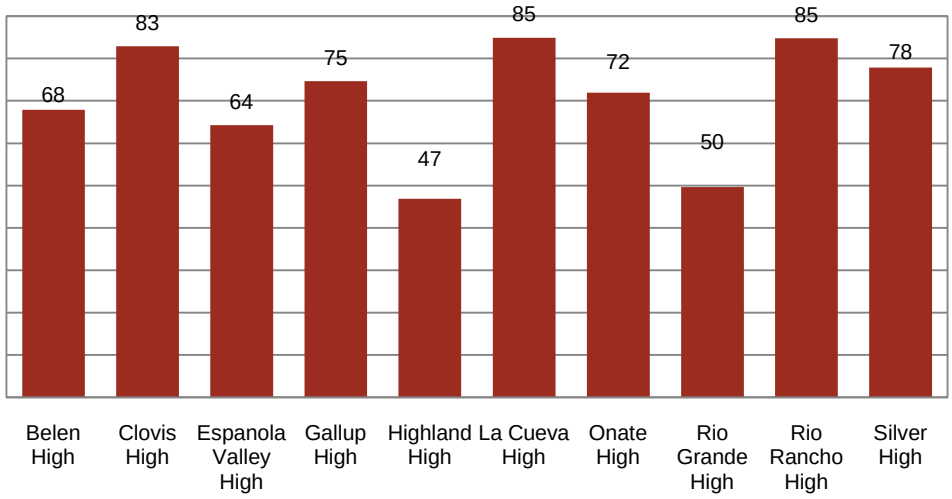
Source: PED

Graduation Rates

School	FY08 (%)	FY09 (%)	FY10 (%)
Belen High	69.9	63.7	67.9
Clovis High	79.1	74.3	82.9
Española Valley High	50.9	64.7	64.3
Gallup High	65.5	70.1	74.6
Highland High	49.4	49.7	46.9
La Cueva High	87.9	85.6	84.9
Oñate High	52.5	64.7	71.9
Rio Grande High	52	55.2	49.6
Rio Rancho High	88.5	82.3	84.8
Silver High	75.4	71.2	77.9

Source: PED

Graduation Rate By High School
Class of 2010 4-Year Cohort



Source: PED

Methodology for Selecting Sample Schools

The evaluation team conducted a random sample resulting in the selection of eight school districts. Included in the sample were the following districts:

1. Belen Consolidated Schools
2. Española Public School
3. Rio Rancho Public Schools
4. Gallup-McKinley City Schools
5. Clovis Municipal Schools
6. Las Cruces Public Schools
7. Albuquerque Public Schools
8. Silver Consolidated Schools

Original High School Sample Size

School	Student Sample Size (4,304)
Belen High	298
Clovis High	405
Española Valley High	207
Gallup	471
Highland High	354
La Cueva High	474
Oñate High	614
Rio Grande High	409
Rio Rancho High	903
Silver High	169

New Mexico has 89 school districts with approximately 20,000 12th grade students. In order to incorporate a representative sample of 12th grade students in the study, a judgmental sample was conducted for the high school selection process. A total of 10 high schools were selected based on population and region. Transcript data for School Year 2009-10 from 4,306 12th graders in ten participating high schools was evaluated. This represents approximately 22 percent of the 19,799 students who were in the 12th grade in 2009-2010.

A sub-sample representing a 4-year student cohort of 3,046 students was analyzed in depth for this study. This group of students attended all four years at the high school, graduated with a regular diploma, and did not participate in special education level D services. Additional demographic information is included below.

High School Student Sub-Sample Demographics

Gender	Number	Percentage
Male	2120	49.2
Female	2186	50.8
Ethnicity	**Number**	**Percentage**
Native American	488	11.3%
Asian	108	2.5%
Black	170	3.9%
Hispanic	1838	42.7%
Caucasian	1702	39.5%
English Language Learner Status	**Number**	**Percentage**
ELL	238	5.5%
Non-ELL	4068	94.5%
Special Education Status	**Number**	**Percentage**
SPED	544	12.6%
Non-SPED	3797	87.3%
Special Education Level	**Number**	**Percentage**
Level A	168	30.9%
Level B	170	31.3%
Level C	89	16.4%
Level D	117	21.5%
Class of 2010 Student Status	**Number**	**Percentage**
Received a High School Diploma	3264	75.8%
Standard Certificate of Completion	345	8.0%
Withdrew to Take GED	39	0.9%
Dropped Out	43	1.0%
Other	615	14.3%

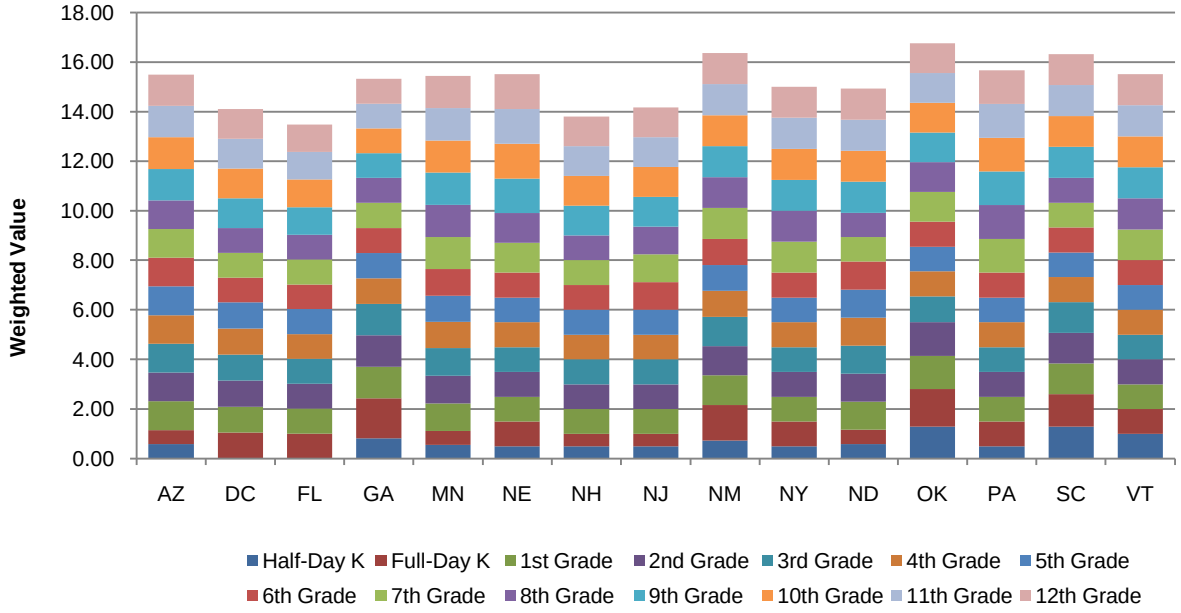
State Funding Formula Comparison

There are four primary methods used among states to allocate public education funds, which include:

1. Foundation/Base Formula – The formula provides base funding for all students and includes additional weighted variables that are based on additional educational needs of students (i.e. English Language Learners etc.). New Mexico is one of the states that uses this formula and according to the organization of Education Commission of the States (ECS), twenty-four other states and the District of Columbia also use this method to allocate public education funding.
2. Modified Foundation/Base Formula – Under this method, the foundation/base funding varies by school district throughout the states. The twelve states that currently use this formula have unique methods of applying the formula. The states using this method include Arkansas, California, Michigan, Mississippi, Missouri, Montana, Nebraska, Nevada, New York, Oregon, Virginia and Wisconsin.
3. Teacher Allocation – In this formula the education staff (i.e. teachers, administrative and support staff) are funded based on student enrollment. Currently, there are seven states that use this method for funding education, those states are Alabama, Georgia, Idaho, North Carolina, Tennessee, Washington and West Virginia.
4. Dollar Funding Per Student – This method of funding provides an exact dollar amount per student based on educational need that is specifically outlined in legislation; the two states that use this method are Massachusetts and Wyoming. (The remaining four states use a combination of the four methods; the states are Delaware, Hawaii, Pennsylvania and Rhode Island.)

A study of public education funding formulas for 41 states was conducted by ECS. The study showed that 15 states designated fluctuating weighted values for different grade levels within their public education funding formula. New Mexico assigned its second highest grade weight to grades 7-12, the weighted value was 1.25. Among the 15 states that assigned fluctuating weights to different grades, there were 4 states that exceeded the weighted value that New Mexico designates for the 12th grade and 5 states that assign the same weight as New Mexico for 12th grade. The weight distribution among these same 15 states for all other grade levels varies at different degrees and is displayed in the chart below.

Funding Formula Weights by Grade Among Peer States



Source: ECS 2005

Joint Study Team Members

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Acknowledgements

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