Student Achievement and Graduation Rates in Nevada

Urgent Need for Faster Improvement

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The Center for Education Policy Studies (CEPS) is a research center of the University of Nevada, Las Vegas designed to address important education policy issues that contribute to the improvement of schools in the State of Nevada.
Executive Summary

The nationwide drumbeat for education reform, begun in the 1980s, has gained volume with each passing year as alarm has grown over low student test scores and their implications for 21st century workforce demands. In the intensified push for change, state and federal policymakers sent a clear ultimatum: reform or face sanctions. The response was a sweeping movement across the states to shift from a focus on ensuring schools’ compliance with rules and statutes to holding schools accountable for student results.

Nevada joined this movement in 1989 with its first accountability legislation. The developmental process that followed led to the 1997 passage of a comprehensive school reform package known as the Nevada Education Reform Act (NERA). NERA had several key objectives for the state’s public school system, including strengthening the school accountability program and establishing high statewide standards under which progress in academic subjects would be assessed through a statewide testing system.

During the 2003 legislative session, the state pushed for more reform, adopting laws to bring Nevada into compliance with the federal No Child Left Behind Act (NCLB), which had been enacted the previous year.

As state education policy and local district reform initiatives continue to evolve, this report examines how Nevada’s students are faring, in terms of achievement and graduation rates. As background, it first describes the Nevada education context, dominated for years by the nation’s fastest rate of enrollment growth, especially in Clark County (Las Vegas), home to 70 percent of the state’s students. Within this context, it then looks at the status of state and local education reform activities as they have evolved over the past 15 years.

Our review of the state’s student achievement and graduation rate data leads to several findings:

**On achievement.** Despite some recent gains among the state’s high school students, achievement remains low, ranking Nevada near the bottom among U.S. states. Moreover, as in other states, a significant racial/ethnic and socioeconomic achievement gap persists.

**On the graduation rate.** Although wide variations exist across districts, Nevada’s overall graduation rate is one of the nation’s lowest. Here, too, the racial/ethnic and socioeconomic achievement gap is evident.

The report concludes that, despite a number of sound policies and high-quality initiatives within the state, Nevada’s student results highlight an urgent need to galvanize attention, energy, and resources around upgrading the state’s education system. Excellent reforms have been put in place but are not fully implemented; critical gaps exist, and a cohesive whole is lacking. Notably missing is the financial commitment needed to support and sustain not only the individual initiatives already underway but also efforts toward comprehensive reform.
A number of actions are needed to enact the pre-kindergarten through postsecondary reforms crucial for the future of Nevada and its children. This report endorses and expands upon the collaboratively generated recommendations of the Nevada Department of Education's 2004 State Improvement Plan as follows:

++ Make education a state priority.

The state’s policy approach tends to be piecemeal rather than comprehensive, resulting in episodic rather than systemic progress. Efforts tend to be underfunded or inconsistently funded over time. The problem is that education is not an ongoing state priority. One remedy, now lacking, would be the driving force of a statewide activist group that engages the public around education urgencies and advocates for an unrelenting focus on improvement.

++ Develop a comprehensive system for the preparation, induction, and professional development of teachers, with particular emphasis on strategies for teaching English learners.

In light of its teacher-hiring pace, growing student diversity, low achievement, and academic performance disparities among different student groups, Nevada needs to ensure that more of its teachers are well qualified. This requires building on pieces already in place to create a career-long system of teacher development aligned with state improvement goals.

++ Use consistent and relevant data to drive improvement and evaluate progress.

Data need to be methodically and consistently collected and made transparent to all, even when what they reveal is painful or politically difficult. Nevada has made great strides at the state and local levels in developing data systems. Cohesive, statewide planning and development of such systems should continue.

++ Identify and incorporate research-based strategies to improve performance and reduce achievement gaps.

Key strategies include setting specific, data-driven goals; a central emphasis on teaching programs and practices that stress rigor, reduction of dropouts, and parental involvement; continual monitoring and measuring of results; and an ongoing process of intervening and adjusting to improve results.

++ Implement a statewide high school initiative.

Nevada’s low graduation rate, racial/ethnic and socioeconomic gaps in achievement and graduation rates, and low college-going rates warrant a particular focus on high school. A high school initiative should include attention to effective dropout-prevention programs and should explore partnerships with higher education, and community and business leaders.
Focus comprehensively on early childhood.

Research and experience in other states suggest that given Nevada’s growing numbers of poor, minority, and limited-English-proficient children, efforts to improve early literacy would profit from being embedded in a comprehensive approach to early care and education from birth to age 8. Nevada has already taken steps toward such a prevention strategy and should continue to develop a system of research-based programs in infant-toddler care, preschool, full-day kindergarten, and early literacy that could be phased in over time.

Provide the resources and support needed to do the job.

Nevada ranks 47th in the nation in per-pupil operational funding. Low-level investment is especially a problem for an education system trying to manage explosive enrollment growth in addition to the expensive challenges of teaching surging numbers of English learners. Fully implementing this set of initiatives, bringing them to fruition, and sustaining them requires a commitment not just of energy but of dollars. The public needs to be engaged in addressing and resolving the question: what resources, spent in what ways, will enable the state to reach its education achievement goals?
Introduction

Because NCLB now requires states to begin publishing graduation and achievement rates, WestEd is developing a series of papers reporting on the status and progress of these indicators in the four western states that it directly serves. This Nevada report is part of that series. The goal is to provide an accurate and contextualized look at a state’s education picture, one that will help enable its Department of Education and key stakeholders to engage in informed dialogue around key issues, challenges, and solutions.

The report begins with an overview of conditions that affect Nevada education and key challenges created by those conditions. It then describes a number of state and local reform activities designed to address these challenges. Within this context, findings on student achievement and graduation rates are presented — both for students overall and for different racial, ethnic, and socioeconomic groups. Finally, the report discusses implications for state policy.
Context

EDUCATION CONTEXT IN NEVADA: STATE OF CONTRASTS

Some describe Nevada’s education landscape as bi-modal, with two urban school districts — Clark County (Las Vegas) and Washoe County (Reno) — and 15 rural districts dotted across the state’s vast, often remote expanses. But noting considerable differences between the two urban districts, others find it more accurate to speak of a trinity: Clark, with 70 percent of students; Washoe, with 16 percent; and the rest of the districts, with 14 percent. Regardless of how it’s framed, the picture is dominated by two realities: explosive enrollment growth in the urban districts and the overwhelming presence of Clark County.

Challenge: Burgeoning enrollment numbers in the urban counties encompass multiple student needs, particularly related to poverty and limited English proficiency.

Nevada’s school enrollment grew 188 percent between 1970 and 2000 — the largest jump in the nation. Student population growth averaged 5 to 7 percent annually (nearly four times the national average) for some 15 years. The pace has slowed slightly, but demographers expect that Nevada will continue to lead the nation in enrollment growth for the next decade.

Statewide enrollment growth notwithstanding, local contrasts are marked. Clark County has experienced stunning increases, while some rural districts are losing enrollment. Since passage of the Nevada Education Reform Act in 1997, Clark County’s enrollment has jumped from 190,822 to 283,245, making it the nation’s fifth largest district. Washoe County’s growth during that same period, while slow compared to Clark County’s, has also been rapid. The district has gone from 51,205 students to 63,698.

This mushrooming student population is also increasingly diverse — ethnically, racially, and socioeconomically. Some 49 percent of current students are white and 51 percent are of color, with Hispanic students the fastest-growing group. Hispanics now constitute approximately 32 percent of the overall Nevada school population, up from 26 percent in 2001-02, and the number of Hispanic students in Clark County has increased by over 75 percent in the past five years.
Many new students are immigrants, and the number of English learners has been skyrocketing — from 14,296 in 1994 to 65,372 in 2004. A prediction of 75,000 by 2005 appears to be on target. Although 65 different languages are spoken by Nevada students, 92 percent of English learners are Spanish speakers, and their numbers are growing at the rate of about 20 percent a year. The challenge of ensuring that these children learn and achieve well is compounded by the reality that many immigrant families are poor.

This is not the case with all newcomers who, as a group, represent a striking socioeconomic mix. One in five people moving into Las Vegas has a 6th grade education or less and comes seeking one of the area’s plentiful low-skill jobs. In fact, among all major U.S. metropolitan areas, Las Vegas ranks last in residents’ educational attainment. Yet, at the same time, the city ranks high nationally as a “brain gain magnet,” benefiting from the migration of middle-income college graduates from California with its increasingly unaffordable housing.

Throughout Nevada, K-12 students reflect this mix. Nonetheless, the number of the state’s students living in poverty is on the upswing. A recent report from the Nevada Department of Education singled out 3rd graders to underscore the level of the problem: the portion of 3rd grade students eligible for free or reduced price lunch expanded from about 33 percent in 2002 to 43 percent in 2004. Nearly half of the eligible students were Hispanic, and close to a quarter of all 3rd grade African American and white students also qualified. While a number of schools serve mostly affluent students, others reflect concentrations of poverty.
Many impoverished students are children of the working poor. Nevada has low unemployment and the fastest job creation rate in the nation. But while unionized jobs on the Las Vegas Strip pay a decent salary, nearly 60 percent of Nevada’s jobs pay less than a living wage for a three-person family. And of the fastest growing occupations in 2000 — largely service jobs — 87 percent did not pay a living wage. (Some predict that even those with union jobs may find their lifestyles somewhat diminished due to a 2004 upsurge in home prices in Las Vegas, where affordable housing has long been a draw.)

Families cope through such means as working more than one job, foregoing health insurance, and cutting corners on child care, which in Nevada often costs more annually than twice the tuition at the state’s universities. The clear consensus of a broad range of child-focused research is that unmet medical needs and long hours in low-quality child care (that does not support children’s emotional, social, and cognitive needs) result in many children beginning school already lagging behind their more-advantaged peers in multiple ways. Some families also move from apartment to apartment in search of lower rent, contributing to a high level of student transiency in the schools, which in turn translates to educational disruptions.

The number of English learners has skyrocketed from 14,296 in 1994 to an estimated 75,000 in 2005.

More students are living in poverty.

Nearly 60 percent of Nevada’s jobs pay less than a living wage for a three-person family.
Challenge: Rapidly increasing enrollment requires massive efforts to find and keep high-quality teachers.

Record-breaking enrollment growth translates to an enormous and ongoing need to recruit and hire teachers. Clark County alone hires some 1,500 to 2,000 teachers each year. The number of licensed education personnel in Nevada has increased from approximately 19,600 in 1998-99 to 23,600 in 2003-04. Nevada itself only prepares about a third of its annual new hires. The rest are recruited from across the country, predominantly by Clark County. As is the case in other states, Nevada has particular shortages in hard-to-staff schools and subject areas (notably mathematics and science) and special education, as well as insufficient numbers of teachers prepared to serve English learners.

A “highly qualified teacher” in Nevada holds a degree in the subject he or she teaches and has passed a subject-area test. Though Nevada does not offer waivers (as defined by the federal government under NCLB) and prospective teachers must first complete an approved teacher-education program (including student teaching), a high percentage of core subjects were not being taught by “highly qualified teachers” in 2003-04. Among high-poverty schools, this was true for 47 percent of core subject classes in Clark County, 16 percent of core classes in Washoe County, and for 8 percent of core classes in other counties.

Most of the state’s teacher recruits are new to the profession and many administrators have relatively little classroom experience, having been moved quickly into administration due to districts’ enrollment growth. Over 44 percent of the state’s licensed education personnel have five or fewer years of prior experience in Nevada. In Clark County, which hires by far the bulk of the state’s new teachers, the recruitment task is compounded by attrition: approximately 22 percent of teachers hired within the last five years have since resigned from the district.

Challenge: Escalating numbers require rapid construction of new school facilities.

Given its exploding school enrollments, Nevada has done an extraordinary job of meeting the demand, mastering the art of building schools quickly. Clark County alone opens a new school roughly every 38 days. Logistics aside, a major challenge is finding adequate funding. In Nevada, the state does not provide money for facilities; in general, new schools are built with funding from local bonds. Given tight dollars, Clark County administrators have felt compelled to gain economies of scale by building very large schools. Its high schools have 3,000 or more students, middle schools top 1,500, and elementary schools have 1,000 or more — sizes that challenge the possibility of maintaining a personalized learning environment. Though school-size research is not conclusive, a number of studies find a correlation between smaller size and higher achievement for poor and minority students. (See also “state education investment,” below.)
The pace of school construction triggers additional problems for Clark County by exacerbating the already difficult issue of student transiency. Incessant building means a continual reshuffling: each time a new school opens, groups of students have to be reassigned from their old schools in order to balance out the numbers. These realities add to the challenges teachers face and can be particularly daunting for the many who are classroom novices.

Facility problems take a different form in Nevada’s rural districts where the major problem tends to be lack of bonding capacity. In many instances, the local economy simply cannot support facility funding. In addition, the need to build new rural schools stems more from the age of existing facilities than enrollment growth. Nevada’s rural district achievement levels nonetheless tend to be higher than those of their urban counterparts.

**Challenge:** The state’s labor market creates disincentives for some students to stay in school.

The gaming industry has been Nevada’s economic engine, generating the service jobs that have lured so many into the state. However, easy job availability for those with low skills also entices some students to drop out of high school and may help explain why Nevada ranks near the bottom nationally in numbers of state students who go on to postsecondary education. According to the National Center for Public Policy and Higher Education, “the likelihood of Nevada 9th graders enrolling in college within four years is very low,” since Nevada is one of the lowest performing states in terms of young people earning a high school credential and since, compared with other states, relatively few high school graduates enroll in college.29 On a positive note, a study by Achieve, Inc. reports that the percentage of students enrolling in college immediately after high school improved from 33 percent in 1992 to 40 percent in 2002.30 And, according to the College Board, Nevada was one of six states whose percentage of SAT test takers grew by at least 5 percent between 2003 and 2004. In 2004, 6,972 Nevada students took the exam, up from 6,514 in 2003.31

The state is heavily dependent on tax revenues from casinos, whose receipts have been declining on a per-capita and per-visitor basis since the mid-1990s.32 Thus, despite Nevada’s currently booming economy, activity is mounting to further diversify the state’s industrial base. The incentive is growing particularly in Washoe County, where competition from California’s tribal casinos has lately contributed to reduced gaming revenues.33 Mindful of the state’s heavy reliance on gaming and concerned about increasing competition from legalized gambling worldwide (as well as the threat of terrorism that hangs over travel), a number of civic leaders want to broaden the state’s employment base. Initiatives are underway to expand high-skill job development in areas such as alternative energy, environmental science, entertainment technology, and life sciences.34 But such efforts will require a well-educated workforce, which in turn requires a strong education system, including opportunities and incentives for students to go on to higher education.
A recent report from the Washington-based Corporation for Enterprise Development (CED) underscores a sense of precariousness about Nevada’s economy.\textsuperscript{35} Despite the state’s clearly vibrant current economy, the report gives Nevada a “D” in business vitality. By the CED’s definition of vitality, Nevada ranks low because it has the nation’s highest number of business closings, ranks 50\textsuperscript{th} among the states in industrial diversity, has low job growth tied to new businesses, and has few technology jobs. Moreover, the report gives Nevada an “F” in development capacity, in part because of low investment in education, low student achievement, and poor levels of high school and college graduation.

\textbf{Challenge: State education investment is low, and particularly low relative to need.}

School funding has been a point of contention among different constituencies in the state. In a fiscally conservative state where tax levels are low relative to income,\textsuperscript{36} education funding has not kept pace with needs. Depending on the data source and formula used, Nevada’s per-student investment in school operations is anywhere from $1,000 to $1,500 below the national average,\textsuperscript{37} and Nevada ranks 47\textsuperscript{th} among the states in per-pupil operational funding.\textsuperscript{38}

Critics of increased spending point out that when capital expenditures are included, the state’s rank for per-pupil spending rises to 29\textsuperscript{th},\textsuperscript{39} which is not surprising given the pace of school construction, especially in Clark County. But this level of construction is driven by the necessity to house the enormous numbers of students streaming into the state, and the construction costs are picked up locally. The operational funding for teaching and learning continues to be the key question, especially because so many of the new students have expensive needs related to poverty and English language development.

Overall, the state of Nevada is characterized by low levels of service provision, consistent underestimation of revenues, and — given the absence of a state income tax — over-reliance on its two primary sources of revenue: sales and gaming taxes.\textsuperscript{40} Because of this over-reliance, state revenues are highly vulnerable to changes in economic conditions. And analysts report that the existing tax structure is unable to support the fast-growing population’s need for schools and other social services.\textsuperscript{41} In the face of pressing education needs, the legislature in 2003 passed a package of tax increases, largely to support school operations. Since then, an anti-tax group tried, but failed, to get enough signatures on a petition to recall the governor.\textsuperscript{42}

In 2004 a state economic boom generated higher-than-expected tax revenues, prompting some to call for a tax rebate.\textsuperscript{43} Given this climate, observers see little prospect for legislative approval of additional education spending in the current biennium.\textsuperscript{44}

That said, in November last year, Nevada voters designated education as a top state priority. Specifically, they passed a ballot measure that was seen as a first step toward amending the state constitution to require the legislature to fund K-12 school operations before any other part of the state budget for the next biennium. (This measure requires a second vote in two years.) However, a measure that would have required per-pupil funding to meet or exceed the national average was defeated at the polls.
STATUS OF REFORM ACTIVITIES

Nevada’s legislature, department of education, and school districts have enacted a number of education reforms intended to address the state’s challenges. The legislature passed its initial accountability law in 1989, and the years since have witnessed an ongoing process of policy reform. A key step was 1997’s landmark Nevada Education Reform Act (NERA), which launched the development of academic standards and set in motion continuing efforts to build an accountability infrastructure by aligning testing and teaching to those standards. NERA revisions in 2003 brought the law into compliance with the federal No Child Left Behind Act (NCLB). Key policy changes included:

- a shift in assessment focus to emphasize standards-based rather than norm-referenced tests;
- an overhaul of school district reporting processes, of how the state designates which schools are (or are not) meeting achievement requirements, and of what consequences will apply; and
- a requirement that the Nevada Department of Education (NDE), each school district, and each school (regardless of performance level) develop and annually revise improvement plans. Those developing the plans must use assessment and accountability information to identify needs as well as disparities in performance among student groups. They must also indicate how they plan to use research-based practice to enact instructional changes to address identified needs.

The implementation efforts of the Nevada Department of Education (NDE) and local school districts — many of them in collaboration with universities and/or research and development agencies — have resulted in accomplishments in multiple areas, including:

Systematic planning

In accordance with the 2003 legislation, NDE has mounted a collaborative effort among multiple stakeholders to successfully develop the State Improvement Plan, which includes multiple recommendations for immediate and long-term action (see p. 26). It focuses on data-driven decision making (see “data-driven instruction and decisions,” below); emphasizes the need for continued focus on early childhood, early literacy, and an aligned system of professional development for teachers and administrators; and points to a need for a high school initiative. In keeping with the statute, NDE also developed a process that has helped each district and school create its own improvement plan that emphasizes the use of data to identify needs and performance differences among student groups and the use of research-based practices to address needs. The state, district, and school plans will be updated annually.

Data-driven instruction and decisions

A foundational step in allowing the state and districts to create data-driven improvement plans has been NDE’s development of the System of Accountability Information. Designed in
collaboration with the school districts, the system now provides a statewide hub of relevant and consistent education data. It consists of multiple, web-based platforms for reporting and sharing assessment, accountability, and other data.

This technological infrastructure is now fueling district efforts to implement their improvement plans by taking advantage of commercially developed data management tools that help educators and parents understand how to help students make achievement progress.

- Under the 2003 legislation, the state is investing $3 to $4 million, plus maintenance costs, to provide all school districts access to the Grow Network, which has developed printed and electronic data management resources for school administrators, teachers, and parents to help them understand test results and how to use these results to support students’ strengths and address their needs. The tools tailor information displays to each role group and to actions that will aid student learning. For example, teachers get displays of student and class strengths and weaknesses. Parents get a chart of their own child’s results, along with suggested remedies they and their student can employ immediately, such as practice links or family math and reading activities.

- Six of the state’s school districts, including Clark and Washoe, have also contracted with a second commercial provider for a data management system directed toward allowing administrators and teachers to analyze instructional practices and professional development and design a districtwide improvement process geared toward aligning curriculum and instruction with state content standards. Teachers will soon be able to access student test results within weeks rather than months, enabling them to identify areas of weakness more quickly and efficiently. Implementation is now underway among administrators and will incorporate teachers in the coming months. Over time, system analyses will be factored into key decisions, such as Clark County’s new emphasis on algebra in 8th grade and Washoe County’s proposal to use a college preparation curriculum for all high school students unless they opt out. “This will put us on the cutting edge,” Clark County Superintendent Carlos Garcia recently told the *Las Vegas Review-Journal*. “And I don’t think a lot of people know that.”

- Both Washoe and Clark Counties have also worked communitywide to develop an internal accountability plan (Washoe’s “Blueprint for Student Success” and Clark’s “A+ in Action”) that articulates the district’s mission and goals, sets specific (year-by-year and school-by-school) student achievement benchmarks for results, and uses data (via student information systems) to track progress.

The state is also focusing resources on analyzing fiscal data. The legislature now requires school districts to collect more-detailed information about their fiscal operation, with the intent that they will connect sound fiscal analysis of expenditure decisions to education goals and priorities. With the help of an external consultant’s financial-analysis model, the state is now able to generate various displays of expenditures within and across districts, yielding useful information for policy decisions about such things as staffing allocations, teacher transfers, and incentives to attract the best teachers to the schools that need them most.
Teacher quality initiatives

In 1999, the state legislature appropriated $3.5 million in annual funds to launch four Regional Professional Development Programs (RPDPs) designed to help teachers in all 17 school districts implement state standards and assess student progress. Besides collaboratively creating professional development standards, the RPDPs individually tailor services to regional needs. Each is overseen by a council consisting of local superintendents, teachers, and representatives from higher education and the Nevada Department of Education (NDE). Since 2001, the RPDPs have also administered the governor’s separately funded early literacy program (discussion follows). Moreover, they help NDE to implement its Student Achievement Gap Elimination program (SAGE) designed to turn around low-performing schools, and they are becoming involved in professional development for principals. Additional appropriations of $4.7 million in 2001-02 and $5.5 million in 2002-03 support both the work itself and an evaluation of the RPDPs.47

Nevada has also established incentives to recruit and retain teachers. To help meet burgeoning teacher demand, the Nevada Department of Education put in place grant-funded technology that enables districts to post available teacher positions online and receive electronic applications. Moreover, a $2,000 signing bonus is offered to all new teachers who complete at least 30 days in the classroom. Those who teach in hard-to-staff schools or subjects (e.g., math, science, English as a second language) receive an additional one-fifth retirement credit annually and teachers who pursue National Board Certification can have part of their application expenses covered by the state and receive a 5 percent annual salary increase once certified.49 The effectiveness of such initiatives, however, is sometimes limited by funding or eligibility hitches. For instance, the salary increase promised for National Board Certification is not funded by the state and must be absorbed by the teacher’s school district. (Despite the unfunded mandate, Washoe County rewards National Board Certification with an 8 percent salary increase.) Further, costs for the retirement credits were severely underestimated for 2003-04, and while funding has increased for 2004-05, any costs exceeding the state allotment will fall to local districts. Finally, to be eligible for the retirement credits, a teacher must have taught as a licensed teacher for at least five consecutive years in Nevada — a disincentive for recently arrived out-of-state teachers, even those with previous teaching experience.50

Meanwhile, local school districts have their own initiatives. Given the fevered pace of growth in Clark County, teacher recruitment strategies there are front and center, ranging from nationwide recruitment (notably in urban districts that are laying off teachers) to a “grow your own” alternative licensure program, wherein a district parent with a bachelor’s degree can take teacher preparation courses near home during his or her child’s school hours. Clark also offers its own incentives for teaching in hard-to-staff schools or subject areas. With union support, the district has launched an experiment in 13 high-poverty schools. Teachers who opt to work in these schools receive six weeks’ advance training in working with children of poverty that includes
mentoring and modeling by on-site expert teachers. Participating teachers move up the salary scale and receive free rent in a local apartment complex during the training. To lure special education teachers currently teaching in regular classrooms back into special education, Clark offers them a three-step increase on the salary scale — again, with union support.

The companion piece to recruitment in Clark is induction — both personal and professional. The district lost about 10 percent of new hires last year and 9 percent the year before. With educators relocating from 40 other states, the district seeks during the recruitment process to link prospective teachers with others from their hometown or state. Working with the Chamber of Commerce, the district also helps prospective teachers find housing and a job for a spouse if necessary. Rising housing costs in Las Vegas have prompted a new initiative to develop a roommate/housemate system. Professional induction is also critical because new hires come to Clark from hundreds of different universities. For district cohesion, Clark needs to make sure these new recruits are on the same page in the same songbook. Ways of accomplishing this include an initial orientation (focused on planning and preparation, assessment of student achievement, the learning environment, instruction, and professional responsibilities) and release days throughout the year for follow-up training.

Washoe County, which hires some 450 teachers annually, about half of them novices, has structured a three-year induction program that includes voluntary novice seminars throughout the year (covering such issues as instructional strategies, grading, parent communication, behavior management, data-driven assessments) and a mandatory mentor-teacher program. Mentors earn $250 per year and also have their own monthly development seminars. Evaluations have shown the induction program cutting the number of novice teacher resignations by as much as half.

In Nevada’s more rural counties, teacher mentoring and induction programs occur at both the regional and district level. Teachers from Carson City and Elko, Lyon, Douglas, Churchill, Humboldt, White Pine, Lander, and Mineral counties visit the state’s western and northeastern RPDP locations for content-area study groups, workshops on effective pedagogy, and one-on-one mentoring sessions on such topics as cooperative lesson planning and the impact of teacher behavior on students. Individual districts, such as Carson City and Douglas County, are using substantial Title II funds to support their mentoring efforts and to foster professional learning communities and cross-grade-level teacher collaboration. Elko County is currently refining its professional development system to allow instructional coaches to better track the implementation of skills and knowledge delivered in training settings.

**Early childhood and early literacy programs**

Nevada’s Early Childhood Education Comprehensive Plan (ECE) was established several years ago to fund new pre-kindergarten programs and expand existing programs. School districts and community-based organizations use about $3 million in yearly ECE
funds to serve more than 1,000 children from birth to age 5 and to provide parenting education services. Priority is given to children from low-income families.

- Nevada also provides funding for the Classroom on Wheels (COW) program, which offers preschool opportunities for 3- and 4-year-olds through the use of buses refurbished as classrooms.\(^{54}\)

- The Nevada Early Literacy Intervention Program (NELIP) works to ensure that all state pupils are reading at grade level by the end of 3rd grade. Endorsed by Governor Kenny Guinn since its 2001 inception and supported by $4.5 million in annual state funds, NELIP provides training for K-3 teachers on fundamental reading strategies like phonemic awareness and text comprehension.\(^{55}\) However, NELIP has yet to lead to improved performance on statewide reading tests at the elementary level, and pre-kindergarten participation rates remain low across the state. Only 2 percent of Nevada’s 4-year-olds were enrolled in state pre-kindergarten programs in 2003-04, ranking the state last among the 37 states offering such programs. (Among these states, Nevada ranks ahead of only Maine, Nebraska, New Mexico, and Vermont in total pre-kindergarten spending.)\(^{56}\) In 2003-04 the state decreased funding for ECE due to budget constraints.

- Several federal grant programs have supplemented the state’s early literacy efforts in recent years. From 2001 to 2004, the Nevada Reading Excellence Act (NREA) utilized $26 million in federal funds to improve early reading instruction and family literacy in poor and low-performing schools throughout the state. Via local sub-grants, NREA funded teacher training to implement scientifically based reading practices in their classrooms and provided schools with early reading specialists who both trained teachers and worked to involve parents in literacy activities.\(^{57}\)

In 2003, Nevada began receiving federal funds under a six-year, $26-million “Reading First” grant. Under the Reading First program, the Nevada Department of Education awards grants to districts to help them implement research-based K-3 reading programs and provide professional development focused on identifying reading barriers and monitoring student progress.\(^{58}\)

- At the district level, both Washoe and Clark Counties have begun offering full-day kindergarten for children in their lowest-income elementary schools. Clark County began its program in fall 2004, and preliminary findings from the district’s study comparing the effects of full-day versus half-day kindergarten on literacy development are promising. They suggest that across both core literacy programs being used, participation in full-day kindergarten is narrowing the pre-existing achievement gap between children from impoverished homes and their more-advantaged peers.\(^{59}\)

### Class size reduction

Nevada has funded primary-grade class size reduction since 1989, with a total investment since then of approximately $1 billion. Beginning with a phased-in program to lower early-grade size from an average of 25 to 16, the initiative evolved as state accountability policies
changed. Since 1998-99, districts have been allowed to use the funding either to reduce primary grade class size or to adopt proven comprehensive programs (K-3) to improve achievement. Current law allows rural school districts to have 22 students in grades 1-3, while Clark and Washoe Counties must keep the number in those grades at 15. As of this writing, legislation was being debated that would allow Clark and Washoe to have 22 as well.

**Educational technology**

As noted above, the Nevada Department of Education has made major strides in building a statewide technological infrastructure for managing and using assessment and accountability data. State accountability policy has also included a focus on ensuring that technology is part of classroom instruction and is used to enhance students’ workplace skills. To that end, the Nevada legislature provided $36 million for educational technology in the 1997 biennium and another $4.2 million in 1999. The Commission on Educational Technology has since worked to establish a plan, develop standards, and manage the funds allocated by the state. Its initial focus was ensuring a “networkable” computer in every classroom. That accomplished, it moved on to linking all those computers to the Internet. Now the focus is upgrading technology in ways that help achieve key goals: technology access for all students, including teacher and student links to high-quality, standards-based materials; strong teacher professional development; and timely technology support. After budget considerations led the governor to freeze all but $500,000 of the 2001 legislative appropriation for educational technology, the legislature allocated another $9.95 million for the 2004-05 school year. About half of that technology money has gone to Clark County to replace computer hardware, provide maintenance services, and improve technical support.

**College scholarships**

In 1999 the legislature funded Governor Guinn’s Millennium Scholarship initiative that awards merit-based scholarships of up to $10,000 to eligible students who attend college in Nevada. High school students must have maintained a 3.0 grade point average (that increases to 3.1 in 2005 and 3.25 in 2007) and pass the high school proficiency exam. The State Improvement Plan credits these scholarships with contributing to improvements over the last decade in the percentage of students who enroll in college immediately after high school.

**STATUS OF STUDENT ACHIEVEMENT**

So in light of all these efforts, how are Nevada’s students faring? To help answer that question, WestEd analyzed achievement results from the array of state and national tests taken by Nevada students. (The state’s accountability and assessment systems are described in Appendix A.) Not surprisingly, given the inherent challenges of Nevada’s record-setting pace of growth in enrollment and student diversity, achievement is low. Findings indicate that despite some recent gains among high school students, the state ranks near the bottom in state-by-state comparisons. Moreover, as is true nationwide, significant achievement gaps persist among different racial, ethnic, and socioeconomic groups.
More specifically, five key conclusions emerge from the analysis:

1. **Statewide student achievement at the elementary and middle school levels remains low and shows few signs of progress.**

   The highest overall percentages of students in any grade meeting standards on Nevada’s 2004 Criterion-Referenced Tests (CRTs) were only 49.4 percent for reading (8th graders) and 49.2 percent for math (5th graders). In grades 3 and 5, for which cross-sectional trend data are available, the overall passing rate on the reading CRT has decreased in each of the past three years.

   Here it is important to again acknowledge the changes in Nevada’s student population — the rapid influx of new students and the surge in numbers of English learners. Moreover, two factors directly affected the drop in overall performance from 2003 to 2004: a greater inclusion of IEP and LEP students and a significant shift in the test administration window, moving it from approximately the 165th day of instruction to the 130th day. In other words, many students took the 2004 exams after having only 90 additional days of instruction as opposed to the full year the scores appear to represent.

---

**Figure 3: Nevada CRT - Percent Proficient in Reading and Math (2002-2004)**

<table>
<thead>
<tr>
<th>Grade 3</th>
<th>Grade 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reading</strong></td>
<td><strong>Math</strong></td>
</tr>
<tr>
<td>2002</td>
<td>2003</td>
</tr>
<tr>
<td>50.2</td>
<td>48.9</td>
</tr>
</tbody>
</table>

Source: *Nevada Student Test Reports*, Nevada Department of Education (www.nevadatestreports.com)
2. Nevada continues to rank at or near the bottom among the states in the National Assessment of Educational Progress (NAEP).

Recent results from the National Assessment of Educational Progress (NAEP), a tool for comparing student performance across states, show Nevada at or near the bottom nationwide. In both reading and math, fewer than 24 percent of Nevada 4th and 8th graders are reaching proficiency. While math scores have been increasing since Nevada began participating in NAEP, Nevada’s 8th graders ranked last among the states in reading in 2002 and second to last in writing in 2002 and 2003. Yet 4th grade math bumped up in 2003 and 4th grade reading scores have been relatively stable despite the continuing enrollment boom and, especially, the burgeoning numbers of English learners.

It is worth noting that the nation’s performance overall on NAEP is poor. For example, while 23 percent of Nevada’s 4th graders scored at the proficient level in mathematics in 2003, the national average was only 31 percent. Nevada does score lower than many states but is also on a par with a number of states among which there is no statistical difference. Nonetheless, NAEP scores help underscore the need to step up the pace of Nevada’s improvement gains.

*Figure 4: Nevada NAEP Results - Percent Proficient in Reading (1998, 2002, 2003) and Math (1996, 2000, 2003)*

Source: Nation’s Report Card, National Center for Education Statistics
3. Significant achievement gaps persist among different groups of students.

- **Racial/ethnic gaps.** Across all grades and tests (NAEP, CRT, and the High School Proficiency Examination, or HSPE), students characterized as white or Asian/Pacific Islander meet state proficiency standards in math and reading in much larger proportions than do African American and Hispanic students.\(^5\)

- **English learner and special needs gaps.** English learners and students with disabilities reach proficiency at much lower rates than their counterparts.

- **Poverty gap.** 2004 CRT passing rates of economically disadvantaged students were consistently lower than those of their more affluent peers in all grades and subjects tested.

4. At the high school level, the average performance of Nevada's students in both math and reading has steadily improved.

From 2002 to 2004, passing rates on the HSPE increased for 10\(^{th}\) and 11\(^{th}\) grade students both statewide and for all racial/ethnic groups except American Indians, for whom both math and reading scores fluctuated. Though it is true that in 2003 the state legislature lowered the bar for passing math, the improved scores are a positive sign.

Figure 5: Nevada 10\(^{th}\) Grade HSPE Proficiency Rates by Ethnicity, 2002-2004 (Reading)

Source: *Nevada Student Test Reports*, Nevada Department of Education (www.nevadatestreports.com)
5. A mixed picture exists in terms of schools making adequate yearly progress (AYP).

In 2004, 63 percent of the state's public schools met their annual targets, compared to 60 percent in 2003. However, a marked disparity occurred across levels. Rates of meeting AYP increased for elementary and, to a lesser extent, middle schools. But those for high schools decreased from 63 percent to 48 percent.68

STATUS OF GRADUATION RATE

Achievement findings tell only part of Nevada students’ story. Another critical piece is whether students are staying in school and earning their high school diplomas. NCLB now requires that high schools and school systems report graduation rates as a companion to achievement test scores.

WestEd’s analysis of Nevada’s high school graduation rate data offers reason for concern. In a global economy where postsecondary education is becoming the new workforce basic, large numbers of Nevada’s young people are not finishing high school. In fact, the state’s graduation rate is one of the nation’s lowest, and — as is the case nationwide — disproportionate numbers of Hispanic and African American students are dropping out every year.69
It is important to note here that calculating graduation rates is not as straightforward as it sounds. Most states lack individual student identifiers that would enable accurate tracking of students from grade to grade and school to school. States, therefore, report their best estimates, calculated by using one of a variety of commonly accepted methods. Since some methods yield a brighter view than others, critics charge that in the absence of clearer federal guidelines states are motivated to choose the method that will show better results.

While the U.S. Department of Education is addressing the issue of multiple calculations, one way to get a valid sense of where any state stands is to use multiple methods to determine the rate, then examine the weight of evidence that emerges.

WestEd’s review of Nevada’s graduation rate involved studies based on three estimating methods (see Appendix B). Findings support the following four conclusions:

1. **Recent state calculations suggest that approximately 70 percent of high school students graduate, but the actual rate may be lower.**

   By one method, Nevada ranked as low as 48th among the states in 2001 (Appendix C). “However you want to calculate it, we have work to do,” Nevada Superintendent of Public Instruction Keith Rheault told the *Las Vegas Sun* in 2003.

   Using 2001 data (the most recent available across these three methods), the breakdown across methods is:

   **Table 1: 2001 Nevada Graduation Rate Calculated by Three Methods**

<table>
<thead>
<tr>
<th>Grad Rate (%)</th>
<th>Class</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>2001</td>
<td>NCES formula (dropout data)</td>
</tr>
<tr>
<td>61</td>
<td>2001</td>
<td>Greene method (enrollment data)</td>
</tr>
<tr>
<td>55</td>
<td>2001</td>
<td>Urban Institute CPI (enrollment data)</td>
</tr>
</tbody>
</table>

   The low graduation rate is not exclusively an urban problem. It is true that graduation rates tend to be higher in Nevada’s rural areas, but three of the state’s smaller districts — Lander, Nye, and Storey — were below the statewide average in 2003. However, in Nevada’s smallest districts a single student can have a disproportionate statistical impact on the overall graduation rate.

   NCLB allows states to choose which calculation method to use in determining graduation rates. In common with most states, the Nevada Department of Education (NDE) has chosen the NCES method. The following is NDE’s breakdown by county.
Table 2: 2003 Nevada Graduation Rate (NCES method) & Number of Graduates by County

<table>
<thead>
<tr>
<th>County</th>
<th>2003 Grad Rate</th>
<th>2003 Graduates</th>
<th>Total Enrollment</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEVADA</td>
<td>74.8</td>
<td>15,152</td>
<td>384,230</td>
</tr>
<tr>
<td>Clark</td>
<td>71.7</td>
<td>9,900</td>
<td>267,858</td>
</tr>
<tr>
<td>Washoe</td>
<td>80.0</td>
<td>2,470</td>
<td>60,125</td>
</tr>
<tr>
<td>Rural districts</td>
<td>82.4</td>
<td>2,775</td>
<td>52,264</td>
</tr>
<tr>
<td>Elko</td>
<td>78.7</td>
<td>402</td>
<td>9,581</td>
</tr>
<tr>
<td>Carson</td>
<td>84.4</td>
<td>508</td>
<td>8,798</td>
</tr>
<tr>
<td>Lyon</td>
<td>83.1</td>
<td>369</td>
<td>7,660</td>
</tr>
<tr>
<td>Douglas</td>
<td>90.9</td>
<td>432</td>
<td>7,117</td>
</tr>
<tr>
<td>Nye</td>
<td>72.8</td>
<td>241</td>
<td>5,353</td>
</tr>
<tr>
<td>Churchill</td>
<td>89.3</td>
<td>285</td>
<td>4,500</td>
</tr>
<tr>
<td>Humboldt</td>
<td>81.2</td>
<td>186</td>
<td>3,507</td>
</tr>
<tr>
<td>White Pine</td>
<td>81.4</td>
<td>96</td>
<td>1,366</td>
</tr>
<tr>
<td>Lander</td>
<td>74.2</td>
<td>69</td>
<td>1,255</td>
</tr>
<tr>
<td>Lincoln</td>
<td>81.3</td>
<td>74</td>
<td>866</td>
</tr>
<tr>
<td>Pershing</td>
<td>95.6</td>
<td>43</td>
<td>841</td>
</tr>
<tr>
<td>Mineral</td>
<td>76.0</td>
<td>38</td>
<td>733</td>
</tr>
<tr>
<td>Storey</td>
<td>70.8</td>
<td>17</td>
<td>467</td>
</tr>
<tr>
<td>Eureka</td>
<td>93.8</td>
<td>15</td>
<td>220</td>
</tr>
</tbody>
</table>

Source: Nevada 2003-2004 State Accountability Comprehensive Report, Nevada Department of Education

2. Clark County, by far the state’s largest school district, also has one of the lowest graduation rates. This is true regardless of measure.

Figure 7: Graduation Rates, 2002-2003 (NCES)*

* The Class of 2003 was the first cohort to spend four years under the state’s current dropout parameters (see Appendix B, Endnote 90). Source: Nevada Department of Education data
3. A racial/ethnic gap is evident.

Across Nevada, white and Asian American students tend to graduate at higher rates than their Hispanic and African American peers, a result consistent across methodologies.

**Figure 8: Nevada 2003 Graduation Rates by Ethnicity (NCES)**

![Graph showing graduation rates by ethnicity](image)


In Clark and Washoe Counties, which have the most substantial minority populations, the gap in graduation rates is pronounced.

**Table 3: 2003 Graduation Rates (NCES formula)**

<table>
<thead>
<tr>
<th>District (Enrollment)</th>
<th>Total</th>
<th>Am Ind+</th>
<th>Hisp</th>
<th>African American</th>
<th>White</th>
<th>Asian</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark (267,858)</td>
<td>71.7</td>
<td>71.3</td>
<td>62.1</td>
<td>59.1</td>
<td>77.5</td>
<td>80.5</td>
</tr>
<tr>
<td>Washoe (60,125)</td>
<td>80.0</td>
<td>71.2</td>
<td>60.2</td>
<td>61.6</td>
<td>85.2</td>
<td>82.6</td>
</tr>
</tbody>
</table>

* For each district, the largest racial/ethnic group is white.
+ In 2003-04, this group represented the following percentages of the student populations in each district: Clark—0.9%, Washoe—2.8%.
 Source: *Nevada 2003-2004 State Accountability Comprehensive Report*

**POLICY IMPLICATIONS**

Inadequate student achievement, a low graduation rate, and significant racial/ethnic and socioeconomic achievement gaps raise grave concerns about the status of education in Nevada. The student population continues to expand rapidly. Growing fastest are the numbers of English learners and students of color, and many teachers are unprepared with strategies...
for teaching students with diverse needs. Early care and preschool are sorely lacking, so that many students — especially poor and minority children — start school lacking the readiness skills of their more-affluent peers. The graduation rate is unacceptable, and opportunities and incentives to foster a college-going mindset are insufficient, especially in light of Nevada’s unique marketplace incentives for students to drop out.

Systematic reforms are underway that hold strong promise for improving performance across the board and narrowing the achievement gap. But great urgency exists to take much more dramatic action to meet the state’s education challenges. The goal is not only equity but also a secure societal and economic future for Nevada.

What actions hold the greatest promise to fast-forward education reform in Nevada? NDE’s State Improvement Plan provides a set of recommendations, generated in collaboration with an array of stakeholders. All are at various stages of implementation. The recommendations that follow endorse those in NDE’s plan and suggest ways to expand and act on them.

**RECOMMENDATIONS**

- Make education a state priority.
- Focus comprehensively on the preparation, induction, and professional development of teachers, with particular emphasis on strategies for teaching English learners.
- Use consistent and relevant data to drive improvement and evaluate progress.
- Identify and use research-based strategies to improve performance and reduce achievement gaps.
- Implement a statewide high school initiative.
- Focus comprehensively on early childhood.
- Provide the resources and support needed to do the job.

**Make education a state priority.**

Numerous initiatives notwithstanding, a fundamental problem is that education is not a priority in Nevada. The state’s policy approach tends to be piecemeal rather than comprehensive, resulting in episodic rather than systemic progress. Piecemeal efforts tend to be underfunded or inconsistently funded over time, creating a sense of three steps forward and two back. (See examples mentioned earlier relevant to teaching and early childhood initiatives.)

Missing in Nevada, but key to comprehensive, sustained reform in other states, has been the driving force of a statewide activist group that advocates for an unrelenting focus on educational improvement. Student data signal the need to put comprehensive and sustained education reform on the front burner, and recent voter passage of the Education First ballot measure suggests that the public supports doing so. Despite the failure on the same ballot of an education funding initiative, the timing appears ripe for mounting a public engagement campaign that champions concerted progress and promotes key elements of an improvement strategy. Leadership for such an effort may come from elected officials, business leaders, university voices, citizen activists, or a coalition representing all these groups. Regardless of who takes the lead, experience nationwide suggests two critical beginning steps:
Create collaborative partnerships. To raise achievement, prevent dropouts, and increase the number of students going on to postsecondary education, schools need broad-based support, both to effectively use and to expand available resources. The resource challenge will gain urgency as increasing numbers of schools are identified as needing improvement under NCLB. The NDE State Improvement Plan appropriately emphasizes partnerships as a crucial means of meeting the challenge. Partnerships that include business, higher education, media, parents, and other concerned citizens can, for example, help schools make the case for greater flexibility in the use of state and federal funds, whose regulated nature often impedes effective allocation. Civic leaders promoting economic-development initiatives can be strong allies in supporting an education system that ensures a highly skilled workforce for the industries they are working to attract.

A high profile example of how a broad-based, statewide partnership can help initiate and sustain comprehensive reform is the Prichard Committee for Academic Excellence in Kentucky. This nonpartisan, independent citizens’ advocacy group, which set out in the early 1980s to make education quality the central public concern for Kentuckians, was instrumental in getting the state’s education reform act passed in 1990. The committee “put forth and planted in the general minds of the people… the concept that education is an absolute necessity if we are to meet the charges and changes and the obligations of the future,” one historian explained. Its early activities included mounting a statewide town forum that produced simultaneous sessions in 145 communities with a combined turnout of 20,000 people. Today the Prichard Committee has been joined by an array of other partnerships, including state, regional, and national foundations, that now amount to a new set of institutions that have jointly sustained the public momentum and protected comprehensive reform against backsliding and the vagaries of partisan politics. NAEP scores indicate that in the years since 1992, Kentucky students overall have made progress and the achievement gap between white and minority students is narrowing.

Articulate the task: Comprehensive, statewide reform aligned with standards. State content and performance standards are in place in Nevada, but as the NDE State Improvement Plan points out, the rest of the pieces — curriculum, instruction, assessment, professional development — are not necessarily aligned with standards, and there is no uniform or standard process in the state to make this happen. In short, a standards-based accountability system has been developed, but has not been systematically or consistently implemented statewide. Also lacking is consistent alignment of statewide textbook adoptions to state standards. As the State Improvement Plan notes, “The state must ensure that students have meaningful access to standards-based general education curriculum and materials, including technology that affords them the opportunity to be proficient on the state standards.”

Missing in Nevada is the driving force of a statewide activist group that advocates for an unrelenting focus on educational improvement.
Develop a comprehensive system for the preparation, induction, and professional development of teachers, with particular emphasis on strategies for teaching English learners.

The quality of teaching has always been important, but recent research shows that good teaching is even more pivotal than commonly thought. For example, a Dallas study showed that reading test scores for students with three years of effective teachers were more than 30 percentile points higher than those of students with three years of ineffective teachers.\textsuperscript{79} Other research shows that the proportion of well-qualified teachers in a state is the strongest and most consistent predictor of average student achievement, even when student poverty and limited English proficiency are taken into account.\textsuperscript{80}

In light of its teacher-hiring pace, growing student diversity, low achievement, and disparities in achievement among different student groups, Nevada urgently needs to raise the number and proportion of well-qualified teachers. This requires creating a career-long system of teacher development aligned with state improvement goals. That means aligning preparation, induction, and professional development with student standards as well as with commonly held standards for accomplished teaching.

Strategies for preparing teachers for diverse classrooms with many English learners are a top priority. The State Improvement Plan notes ongoing efforts to create an aligned system of professional development, saying that the current piecemeal approach allows schools, districts, RPDPs, and the state to plan professional development without linking it to identified improvement goals. Two sets of classroom observations conducted in schools around the state as part of an RPDP evaluation also suggest that this lack of alignment may be limiting progress: teachers are aware of standards and may use standards-based materials, but instructional strategies are falling short of what is required to reach all students. For example, teachers over-rely on such practices as lecturing and direct instruction rather than using small-group and individualized approaches. Strategies such as scaffolding techniques and opportunities for elaboration, which help all students and are particularly beneficial for English learners, are lacking. The result is that many students are not engaged and not challenged to think at high levels.\textsuperscript{81}

Investments in comprehensive professional development pay off. States that are long-time leaders in NAEP math and reading scores (Minnesota, North Dakota, Iowa), as well as those more recently joining the top ranks (North Carolina, Wisconsin, Maine, Montana), have long put their money into upgrading teacher qualifications and capacities. In North Carolina, for example — where 4\textsuperscript{th} and 8\textsuperscript{th} graders topped the nation in NAEP reading and math scores in 2003 — the state’s ongoing commitment to professional development includes extensive support of teachers’ efforts to gain National Board Certification. Not only does the state pay the full participation fee of $2,300, but it also provides three days paid leave time to certification candidates and a 12 percent salary differential to those who successfully become Board certified.\textsuperscript{82}
With so many new teachers in Nevada, induction programs are also critical. Beginning teachers who have mentoring and other kinds of constructive feedback and support are more likely to stay in the profession, continue to learn during this transition time, and be more effective in helping students learn. In California, where a massive influx of new teachers followed passage of a statewide class size reduction initiative in 1996, the state moved to bolster these novices by funding a vast expansion of its proven Beginning Teacher Support and Assessment program—a move that has shown “remarkable” success in terms of teacher retention.83

**Use consistent and relevant data to drive improvement and evaluate progress.**

Good and timely data are indispensable in planning direction, continually checking progress toward goals, and making midcourse corrections. Data need to be methodically and consistently collected and made transparent to all, even when what the data reveal might be painful or politically difficult. As noted above, Nevada is making strides in its use of data. The State Improvement Plan acknowledges that Nevada is disseminating test data and other relevant information in different ways and in different formats and has made significant efforts to provide districts with technical assistance in using data to evaluate programs. Districts, meanwhile, are beginning to implement systematic approaches to helping administrators and teachers learn how to analyze and use data to improve instruction and learning. Cohesive, statewide planning and development of such efforts and systems should continue. Expanding the effort to include postsecondary institutions also makes sense. High schools armed with data on how their graduates fare in college can use that information to improve student preparation for postsecondary education.

**Identify and incorporate research-based strategies to improve performance and reduce achievement gaps.**

A growing body of research provides guidance on strategies and practices for improving student achievement across the board and in low-performing schools, as well as on closing the achievement gap. Key strategies include setting specific, data-driven goals (including creation of a college-going mindset); a central emphasis on teaching, which matters more than anything else; programs and practices that stress rigor (in curriculum and student assignments), reduction of dropouts, and informed parents; continual monitoring and measuring of results; and an ongoing process of intervening and adjusting to improve results.

**Implement a statewide high school initiative.**

Nevada’s low graduation rate, racial/ethnic and socioeconomic gaps in achievement and graduation rates, and low college-going rates warrant a particular focus on high school. Planning for a high school initiative should include attention to research on characteristics of effective dropout-prevention programs, such as schools-within-schools, family involvement, student-centered instruction, a combination of academic and work-based learning, and a culture of high standards for all students.84 It should also explore partnerships with higher
education, which can improve communication about postsecondary academic requirements, especially for disadvantaged students, and create incentives for students to continue their education (e.g., by guaranteeing admission to students who maintain a given grade point average in a college-prep curriculum). Community and business involvement can potentially provide scholarship funds for deserving students from low-income families. (As noted earlier, Nevada’s Millennium Scholarships are not need-based.)

Focus comprehensively on early childhood.

Research and experience in other states suggest that given Nevada’s growing numbers of poor, minority, and limited-English-proficient children, the state’s existing efforts to improve early literacy would profit from being embedded in a comprehensive approach to early care and education from birth to age 8. Effectively serving as a prevention strategy, this comprehensive approach would encompass a system of research-based programs in infant-toddler care, preschool, full-day kindergarten, and early literacy that could be phased in over time, initially targeting disadvantaged children (as Washoe County and Clark County are doing with full-day kindergarten). Cost-benefit analyses should include cost savings (e.g., on learning problems and remediation prevented), and innovative funding alternatives should be identified, using successful ideas from other states.

Though no state has in place all the components of a cohesive, comprehensive early childhood program, a number of states are well underway. In New Mexico and Arizona, legislatures have approved phased-in full-day kindergarten programs that give priority to schools with concentrations of students considered at risk for poor performance. Both states first piloted the programs and thus were able to demonstrate improved student achievement before statewide implementation.

Georgia was the first of three states that now fund universal voluntary preschool for all 4-year-olds. Begun nine years ago and funded by lottery proceeds, the full-day programs operate in schools as well as in Head Start and child-care centers. Some 70 percent of eligible children are served. A study following a sample of 3,600 children showed that after 2nd grade in 2000, 82 percent of students were ready, if not “extraordinarily ready,” for 3rd grade. North Carolina also funds “More at Four,” a program that seeks to provide community-based, voluntary pre-kindergarten instruction for at-risk 4-year-olds in the state.

Nevada’s efforts to improve early literacy would be bolstered by embedding those programs in a comprehensive early care and education strategy.
Provide the resources and support needed to do the job.

Fairness demands that accountability be reciprocal. Policymakers holding educators accountable for student performance under rigorous standards must provide the resources and support that educators need in order to do the job they’re being asked to do. As noted earlier, *Quality Counts 2005* ranked Nevada 47th in the nation in per-pupil funding for school operations. That low level of investment is especially troublesome for an education system trying to manage explosive enrollment growth in addition to the expensive challenges of teaching surging numbers of English learners.

Fully implementing this set of initiatives, bringing them to fruition, and sustaining them requires a commitment not just of energy but also of dollars. Nevada needs a high-profile, statewide public dialogue that allows everyone to take stock of where the state’s students stand in relation to where policymakers, educators, parents, business/civic leaders, and other citizens would like them to be. Public debate needs to address and resolve the question: what resources, spent in what ways, will enable the state to reach its achievement goals? The recommendations above, already endorsed by key stakeholders through NDE, offer a roadmap for that dialogue.
APPENDIX A: Nevada’s Accountability and Assessment Systems

**Accountability.** According to both state and federal law, all Nevada schools must make Adequate Yearly Progress (AYP) towards ensuring that 100 percent of their students are proficient by the completion of the 2013-14 school year. To make AYP, Nevada’s districts and schools must achieve the following benchmarks, both for the school as a whole and within nine separate subgroups based on ethnicity, language needs, special education, and family financial status:

1. Meet their Annual Measurable Objectives (AMO) in English-language arts and mathematics, based on established baseline targets derived from 2001-02 assessment performance (see “Assessment,” below) and the 2014 deadline for 100 percent proficiency.
2. Demonstrate a 95 percent participation rate on all statewide assessments.
3. Meet annual statewide goals regarding average daily student attendance at the elementary and middle school levels and graduation rates in high schools.

**Assessment.** Developed according to recent state and federal accountability guidelines, the Nevada Proficiency Examination Program (NPEP) consists of the following standards-based and norm-referenced tests, taken by public (including charter school) students at specific grade levels:

**Criterion-Referenced Tests (CRT).** The Nevada CRTs evaluate how well students are mastering the content spelled out in the state’s academic standards. Students are tested in reading and math in grade 3 and reading, math, and science in grades 5 and 8. Since they were first administered in 2002, the CRTs have been administered in additional grades each year. The reading and math tests are currently being field tested in other grades and are expected to be implemented throughout grades 3 through 8 in the 2005-06 school year.

**Nevada Writing Assessment Program.** These writing tests, administered in grades 4, 8, and 11 (part of the HSPE program described below), require students to create an original composition based on a given writing prompt. The 4th and 8th grade prompts assess narrative and descriptive writing, while the 11th grade prompts also focus on expository and persuasive compositions. For the state writing assessments, Nevada classroom teachers create the prompts and score all student papers.
High School Proficiency Examination (HSPE). The criterion-referenced HSPE, which tests 10th and 11th grade students’ reading, math, and writing skills, differs from the other state exams in that it carries consequences not just for schools, but for each high school student. For several years, all students in Nevada public (including charter) schools expecting to earn a standard high school diploma have had to pass all sections of the HSPE.

Iowa Tests of Basic Skills (ITBS). The ITBS is a norm-referenced test, meaning that it measures how students compare to the U.S. norm, derived from a national sample of students. The ITBS allows for national comparisons but is not fully aligned to Nevada content standards. In Nevada, the ITBS is administered to students in grades 4 and 7 to determine their achievement and proficiency in reading, language, math, and science.

The Skills and Competencies Alternative Assessment of Nevada (SCAAN). The SCAAN is Nevada’s alternate assessment for the CRT, NRT, HSPE, and writing exams. Developed for students with the most significant cognitive disabilities and administered in grades 3–8 and 10, the SCAAN assesses an alternative curriculum based upon functional skill acquisition and basic competence in language arts and mathematics. Participation in the SCAAN is determined by IEP committees, who evaluate the consequences of access to standard curriculum, grade promotion, and high school graduation.

Test scores from the CRTs, the writing assessments, and the HSPE determine AYP.

For the CRT and writing assessments, Nevada has set the following series of performance levels under which student scores are categorized in relation to state standards:

- Emergent/Developing
- Approaches Standard
- Meets Standard
- Exceeds Standard

For AYP reporting purposes, a “proficient” Nevada student is defined as one who attains the Meets Standard or Exceeds Standard level.89
NCLB’s requirement that states include graduation rates in reporting adequate yearly progress (AYP) has suddenly renewed controversy around this indicator. States have begun reporting their graduation rates, and different states are using different methodologies for estimating the rate. Researchers, scholars, and advocates are questioning whether the data in each case are valid. But there is no research consensus on which method would ensure validity.

A major problem is that in lieu of reliable individual student data — the only kind that would allow an exact graduation rate calculation — states use estimates of school or district data as their unit of analysis. Given that limitation, a central point of debate is whether to base calculations on dropout or enrollment data. The choice can lead to markedly different results. For example, using a National Center for Education Statistics (NCES) method, which relies on dropout figures, the four-year graduation rate for Nevada’s class of 2000-01 was 70.1 percent. Using an enrollment method for that same class over the same four years yields a 54.7 percent graduation rate.

The problem with using dropout data is that they are notoriously unreliable because of the logistical difficulty of precisely tracking every student. Students who drop out do not file forms; most simply stop showing up, often leaving their status an open question. Some end up mistakenly listed in other categories — as transfers, for example.\textsuperscript{90} Enrollment data, though also imperfect, are considered by some to be more reliable than dropout data because they track school and grade populations. Yet with most enrollment-based methods, there is no way to know whether the missing students dropped out or, for example, repeated grades, left the state, or transferred to private schools.

Graduation rate estimates, therefore, are at best inexact. Yet clarity on graduation rates remains critical for understanding how well public education systems are serving students. By looking across calculations done by differing methods, researchers are able to move one step closer to the rate that individual tracking would probably reveal.
**Three Calculation Methods.** The three methodologies used in studies WestEd examined are:

- **NCES formula.** Nevada uses this method for NCLB reporting purposes. Based on dropout data for grades 9-12, the formula divides the total number of graduates by the total number of completers (students finishing without a standard diploma, such as special education students or those unable to pass all sections of the HSPE) plus the total number of dropouts in grades 9, 10, 11, and 12. It is designed to answer the question, “Of those students who have left school, what proportion have done so as graduates?” This method results in a higher graduation rate than the other three.

- **Greene method.** Developed by Jay Greene of the Manhattan Institute, this method is enrollment-based. The Greene method compares the cohort of graduates with the cohort of students who entered 9th grade four years earlier. However, it estimates the 9th grade size by averaging 8th, 9th, and 10th grade enrollments (to account for students held back) and also uses a formula to adjust for population changes over the four years due to such factors as mobility and retention in grade.

- **Urban Institute’s Cumulative Promotion Index (CPI).** The CPI, developed by Christopher Swanson and Duncan Chaplin of the Urban Institute, uses projected promotion rates to calculate the probability that a student entering 9th grade will graduate from high school with a diploma and on time. In contrast to the NCES and Greene methods, both of which estimate what happens to a single cohort over four years, CPI creates a synthetic cohort. The promotion rate (the fall enrollment of the following year divided by the enrollment of year before) for each grade, 9 through 12, is calculated. The results are then multiplied together to project an estimated graduation rate for the 9th grade cohort.
APPENDIX C: State Graduation Rate Comparison, 2000-2001 (CPI formula)

APPENDIX D: Disaggregated CRT and HSPE Test Results, 2002-2004

Source: Nevada Student Test Reports, Nevada Department of Education (www.nevadatestreports.com)
Endnotes


2 2003 Nevada Education Data Book, p. 73.

3 Ibid.


6 Ibid.


8 iNVest ’05: A Funding and Accountability Proposal by the Nevada Association of School Boards and the Nevada Association of School Superintendents, p. 12.


10 iNVest ’05, p. 12.


12 Ibid.


14 Frey, W. “Brain Gains, Brain Drains,” American Demographics, 6/1/04.


16 Nevada Governor Kenny Guinn, as quoted in “Nevada Taxable Sales Again Increase,” Las Vegas Sun, 10/27/04.


18 Ibid.

19 According to the National Association of Realtors, the median price increase of a used home in Las Vegas shot up 52.4 percent from the second quarter of 2003 to the second quarter of 2004, the nation’s biggest increase. (http://www.realtor.org/publicaffairsweb.nsf/Pages/20QtrMetroPrices04?OpenDocument)

20 According to the Children’s Defense Fund, 17.2 percent of Nevada’s preschoolers do not have health-care coverage. That is the second-highest percentage in the nation, exceeded only by Texas where 22.6 percent are uninsured. The national average is 12 percent. (www.childrensdefense.org/data/childreninthestates/nv.pdf)

21 Ibid.

22 See, for example:


26 Human Resources Division data, Clark County School District, 2005.

27 Nevada’s regulations regarding capital outlay for school facilities are outlined in Revised Statutes 387.335 and 387.328.

28 Patricia Wasley and Richard Lear’s 2001 Educational Leadership article “Small Schools: Real Gains” offers a comprehensive review of small schools research.


33 “Nevada Economy in Brief,” September 2004 Research and Analysis Bureau, Nevada Department of Employment, Training, and Rehabilitation. (http://www.nevadaworkforce.com/cgi/databrowsing/?PAGEID=45&SUBID=163)

34 Reid Secures $1 Million to Strengthen Nevada Economy.” News release from U.S. Senator Harry Reid, 10/7/04.
Student Achievement and Graduation Rates in Nevada: Urgent Need for Faster Improvement


Nevada Department of Education, State Improvement Plan, December 2004


“Guinn Safe: Effort to Recall Governor Dies,” Las Vegas Review-Journal, 10/25/03.


Nevada’s legislature meets only in odd-numbered years. The current session began in February 2005.


“New” for purposes of this bonus means they may have taught in another state but have never taught in Nevada.

A recent four-year study in 14 Arizona school districts compared the reading, math, and language arts performance of 3rd through 6th grade students with National Board Certified (NBC) teachers with that of students taught by their non-certified peers. Using gain scores adjusted for students’ entering ability, researchers found that students taught by NBC teachers surpassed students in the classrooms of non-Board certified teachers in almost three-quarters of the comparisons. Gains made by students of NBC teachers were over one month greater than gains made by the students of non-NBC teachers. See Vandervoort, L.G., Amrein-Beardsley, A, & Berliner, D.C. (2004). National Board Certified Teachers and Their Students’ Achievement. Tempe, AZ: Arizona State University. Education Policy Analysis Archives. (http://epaa.asu.edu/epaa/v12n46/)

States that have created especially strong incentives for NBC include North Carolina, which pays the full fee, provides three paid release days for preparation, and gives teachers a 12 percent annual pay increase for the life of the certificate; and Florida, which pays 90 percent of the fee and provides a 10 percent annual pay increase to NBC teachers who agree to provide 12 days of mentoring to non-NBC teachers.

Nebraska Department of Education Non-Regulatory Guidance Briefs and conversations with State Superintendent Keith Rheault and NDE consultant Orval Nutting.

Sharyn Appolloni, WCSD Staff Development & Mentor Teacher Program Coordinator. WCSD MTP website. (http://www.washoe.k12 nv.us/mentorteach/)

Western and Northeastern RPDP websites. (www.lyon. k12.nv.us/Rpdp/Home.htm; www.elko.k12.nv.us/pdp/)


Although the Reading Excellence Act grant program has officially ended, www.nevadaread.org continues to offer a repository of NREA early literacy information for parents and teachers.

For more info on Reading First grants in Nevada, visit www.nevadareading.org.


Ibid.


The figures in this section reflect statewide averages. Disaggregated results are presented in Appendix D.


Since 1969, NAEP tests in reading, writing, mathematics, science, history, geography, and foreign language have been administered periodically by the U.S. Department of Education in states opting to participate. Nevada began participating in 1996.

Two states, Colorado and Minnesota, did not participate or meet minimum participation guidelines for reporting.

While American Indian/Alaska Native students also score below state averages on both math and reading tests, they tend to score higher than African American and Hispanic students and are not tested in significant enough numbers on some tests to allow reliable estimates.

Nebraska Department of Education Adequate Yearly Progress and School Designations website. (http://www. doe. nev. gov/nclb/ayp/)
Though the authors noted that the BTSA’s effectiveness was challenged by workplace conditions, teacher retention among first- and second-year teachers in the program was approximately 93 percent in 1999-00. It concluded that BTSA’s organizational structures helped teachers create intellectual communities that improve teacher practices as well as student achievement. Though the authors noted that the BTSA’s effectiveness was challenged by workplace conditions, teacher retention rates did not vary significantly among programs serving schools with different degrees of urbanicity, programs at different levels of maturity, or programs of different sizes. “Overall,” the authors observed, “the achievement of BTSA is remarkable.” (http://www.ctca.ca.gov/reports/BTSA-Eval-2003-Complete.pdf)


87 Research on all aspects of Smart Start is available at http://www.epg.unc.edu/~smartstart/reports.html.

88 For more information on More at Four, visit http://www.gov.uor.state.nv.us/Office/Education/ProgramInformation1.asp.

89 Speaking before the Nevada Legislative Committee on Education on 5/21/04, Nevada Department of Education consultant David Lamitina noted that the state’s Meets Standard proficiency definition may actually be similar to the NAEP Basic achievement level. The four NAEP achievement levels (Below Basic, Basic, Proficient, and Advanced) are based on collective judgments about what students should know and be able to do relative to the content reflected in the NAEP assessment framework. A Proficient NAEP student has “demonstrated competency over challenging subject matter, including subject-matter knowledge, application of such knowledge to real-world situations, and analytical skills appropriate to the subject matter.” For details on Mr. Lamitina’s presentation to the Legislative Committee, see http://wwwleg.state.nv.us/72nd/Interim/StatCom/Education/exhibits/13048E.pdf. For details on NAEP achievement levels, visit http://nces.ed.gov/nationsreportcard/about/nathowreport.asp.)

90 Nevada changed its method of tracking students in 1999. First, a transcript request from a student’s new school was no longer necessary to ensure transfer status; once a school documented that the student’s guardian intended to enroll him/her elsewhere, that student was considered a transfer. Secondly, if a student left the country, (s)he was taken off the state rolls completely. And finally, a student was considered a transfer if (s)he was transferred to a guardian intended to enroll him/her elsewhere, that student was not considered a dropout if (s)he earned a GED by October 1 of the following year. These modifications resulted in a reduced number of dropouts in subsequent years.

91 After consulting with the U.S. Department of Education, Nevada modified its NCES-based formula in fall 2002, listing graduates as only those students who had completed their high school requirements and passed all portions of the Nevada High School Proficiency Examination. This limitation excluded from the formula’s numerator all special-education students receiving adjusted diplomas.