

analysis

Nevada Public School Performance

Parents and Employers Give a Failing Grade

by Robert Schmidt and Charles F. Barr*

Executive Summary

When the performance of Nevada public schools is seen through the eyes of parents and employers, the picture is not pretty.

Almost half of Clark County parents doubt that their local school district is adequately preparing their children for college. When Washoe County parents are added to the survey sample, only 42 percent of parents in the state's two most populous counties believe the school districts are adequately preparing youth for the work force. The parents' main criticism: the relatively meager time allocated by the districts to teaching the basic skills of mathematics, writing, and reading.

Parents in both of Nevada's urban centers also agree that the local school districts are too large and should be broken into smaller ones more responsive to their concerns. In this respect, the parents are significantly ahead of Nevada school authorities—the preference for smaller school districts has significant theoretical and empirical support nationally.

When Nevada employers were surveyed, 42 percent of those who had hired recent graduates rated them as unsatisfactory overall. Employers gave very low ratings to recent graduates' skills in mathematics, communication, and problem solving. Of employers seeking to fill job vacancies, 67 percent said they found no qualified applicants for these positions. This is a significantly poor showing, since a primary task of public schools is preparing students to enter the work force.

In the hotel, gaming and recreation sector

on the other hand, 77 percent of employers who had hired recent graduates said Nevada's public school system provides them with an adequate supply of graduates with appropriate skills.

Given the significantly lower levels of employer satisfaction levels in the larger business community, this finding indicates that our public schools are contributing to the perpetuation of Nevada as a one-industry state. Essentially, the state K-12 system is preparing high school graduates for lesser skilled, lower paying careers in the gaming and tourism sector—while failing to provide students with the basic skills necessary to attract other types of businesses and thus diversify the economy.

Because Nevada public schools produce so many of both high school dropouts and graduates without basic skills, Silver State employers often must finance remedial training to overcome their new employees' skill deficiencies. A conservative estimate of the Nevada business community's annual remedial-training burden is \$65 million—encouraging firms to substitute technology for employees.

Substantial empirical evidence confirms that, per dollar spent on schooling, student performance improves when school districts are smaller in size and compete with one another. Moreover, public support for public schools is stronger when school funding and control remain local. In other words, students, parents, and taxpayers are better off when school districts are small enough to allow a meaningful amount of local control.

Nevada Policy Research Institute

The Nevada Policy Research Institute is an independent research and educational organization dedicated to improving the quality of life for all residents of the Silver State through sound free-market solutions to state and local policy questions. The Institute assists policy makers, scholars, business people, the media and the public by providing non-partisan analysis of Nevada issues and by broadening the debate on questions that for many years have been dominated by the belief government intervention should be the automatic solution.

Committed to its independence, the Nevada Policy Research Institute neither seeks nor accepts any government funding. It enjoys the support of individuals, foundations and businesses who share a concern for Nevada's future and recognize the important role of sound ideas. The Institute is a nonprofit, tax-exempt organization under Section 501(c)(3) of the Internal Revenue Code. For more information on programs and publications of the Nevada Policy Research Institute, please contact:

Nevada Policy Research Institute
2073 E. Sahara Ave.
Suite B
Las Vegas, Nevada 89104
(702) 222-0642 ♦ Fax(702) 227-0927
www.npri.org ♦ info@npri.org

Nevada Public School Performance

*Parents and Employers
Give a Failing Grade*

by

Robert Schmidt
and
Charles F. Barr

Demographic Solutions, Inc.

Contents

Executive Summary	Cover
Introduction	7
Results of the Survey of Parents	10
Results of the Survey of Employers	15
Costs of the Failure to Teach Basic Skills	18
Appendices	
A. The Different Perspectives of Parents and Teachers on School Performance	21
B. Background and Methodology of the Research	22
C. Author Biographies and Addresses	23
Endnotes	24

INTRODUCTION

The performance of Nevada's public school systems can be measured in many ways. The wide variation of quality and quantity of data make it difficult to validly and reliably quantify the effectiveness and efficiency of particular schools and/or programs. Simplistic measures of school performance too often fail to account for the complex environment of schooling. However, one bottom-line measure is always of paramount importance for Nevada students seeking employment after high school: the perceptions of employers.

This study examines the performance of the Nevada K-12 public school system as seen by parents and employers. Surveys were conducted to measure the perceptions of Nevada parents and employers regarding the skills acquired by recent Nevada high school graduates in several key areas: academic, technical, communication and problem-solving.

A key finding is that parents in both of Nevada's urban centers agree that the local school districts are too large. Regardless of race or income level, parents share this view. By a margin of 2 to 1 in Clark County, and 5 to 4 in Washoe County, parents see a need to break up the current school districts into smaller ones more responsive to their concerns.¹ Further, this

desire of parents for smaller, more competitive school districts turns out to have substantial theoretical and empirical support.²

Parents' most important concern, the survey finds, is the preparation that their youth receive for college and the work force. Yet, only 58 percent in both counties think their school districts are adequately preparing their youth for the work force, and only 52 percent of Clark County parents believe their schools are adequately preparing their youth for college. (The percentage for the smaller Washoe County School District is a higher but still unsatisfactory 66 percent.) Parents in both counties also report widespread dissatisfaction with the relatively meager time allocated by the districts to teaching the basic skills of mathematics, writing, and reading.

In the business survey, 42 percent of employers who have hired recent graduates rated them as unsatisfactory overall. Employers gave very low ratings to recent graduates' skills in mathematics, communication, and problem solving.

This is a significantly poor showing, since a primary task of public schools is preparing students to enter the work force. Other basic skills most often cited by employers as lacking in recent young applicants include the ability to communicate verbally and in writing, knowledge

Parents in both of Nevada's urban centers agree that the local school districts are too large.

Our public school system is contributing to the perpetuation of Nevada as a one-industry state.

necessary to perform the job, motivation, and a sound work ethic.

Many companies who intended to hire Nevada high school graduates said they could not find qualified applicants. Of employers seeking to fill vacancies, 22 percent said that there were very few qualified applicants for these positions, while 67 percent stated that they found *no* qualified applicants for these positions.

Unlike most industry sectors other than retail, 77 percent of Hotel, Gaming and Recreation (HGR) employers who had hired recent graduates agreed that Nevada's public school system responds to their needs by providing an adequate supply of graduates who enter the work force with appropriate skills. When contrasted with the lower employer satisfaction levels in other industries, this finding indicates that our public school system is contributing to the perpetuation of Nevada as a one-industry state, by preparing high school graduates for lesser skilled, lower paying careers in the gaming and tourism sector, while failing to provide students with the skills necessary to attract other types of businesses and diversify the economy.

The results of both surveys demonstrate that Nevada's public schools permit a large proportion of their students to graduate without the basic skills necessary to be employed by members of Nevada's larger business community. One disturbing statistic supporting these findings is that *over 36 percent* of Clark County School District graduates attending college in Nevada must enroll in remedial courses.³

The number of the state's students who drop out before completing high school is also a major cause for concern. Based on most measures of school dropout rates, the percentage of individuals leaving Nevada's schools without obtaining a regular diploma is among the highest in the nation. A recent report by the U.S. Census Bureau shows that between 11.5 percent and 16.0

percent of Nevada's residents, between the ages of 16 and 19, have left school without qualifying for a regular diploma. For Clark County, the figure is between 14.5 percent and 21.9 percent.

Nevada's combination—large numbers of both high school dropouts and graduates without basic skills—means that Silver State employers must often pay for remedial training to overcome their new employees' skill deficiencies. A conservative estimate of the remedial costs to the business community in Nevada is \$65 million annually.

This is an important issue for two reasons. First, businesses may not step in to fully train individuals with private expenditures—resulting in lower potential productivity (and earnings) for those employees. Second, businesses are being presented with incentives to substitute capital for labor—that is, rather than hire CCSD students, to simply employ technology instead.

The problems of Nevada's schools are severe and cannot be solved by throwing ever-larger sums of money at an entrenched, overly large and fundamentally unresponsive bureaucracy. Replacing the Clark County and Washoe County school districts with smaller, more local ones would be an important step toward making Nevada's public schools more accountable to the parents, students and communities that these districts were initially created to serve.

Substantial empirical evidence confirms that, per schooling dollar, student performance improves when school districts are smaller in size and compete with one another. Moreover, public support for public schools is stronger when school funding and control remain local. In other words, students, parents, and taxpayers are better off when school districts are small enough to allow a meaningful amount of local control.

Overview

Numerous studies of the labor market for young adults have been conducted during the past 20 years. Nearly all of the studies have confirmed the growing importance of formal education to an individual's long-term success in American labor markets, as measured by lifetime earnings.

All have argued that students failing to obtain a regular high school diploma face bleak economic prospects over their working lives.

Based on most measures of school dropout rates, the percentage of individuals leaving Nevada schools without obtaining regular diplomas is among the highest in the nation. A recent report by the U.S. Census Bureau shows that between 11.5 and 16.0 percent of Nevada's residents between the ages of 16 and 19 left school without graduating. For Clark County, the figure is between 14.5 and 21.9 percent. Yet the lifetime earnings of Nevada's high school dropouts are not significantly different than the earnings of those who obtain a Nevada high school diploma and remain in the state. Apparently a Nevada high school diploma adds little value to students' future economic prospects. If so, it is important to find out why.

In an effort to gauge support for reforms to Nevada's K-12 public education system, the Nevada Policy Research Institute (NPRI) commissioned two surveys to assess both employer and parent satisfaction with the education provided by Nevada's kindergarten through twelfth grade (K-12) public school systems. This report examines the findings of these two surveys.

Part I of this report examines the results of the Parent Satisfaction Survey,

which was conducted in August 2003. This survey was designed to measure parents' satisfaction with the quality of instruction and related issues within the Clark County and Washoe County school districts. The survey sought the parents' evaluations of the time devoted to teaching basic skills, adequacy of preparation for college and the labor market, ease of access to school staff members and the size of each school district. Interviews were completed with 301 parents from Clark County and 99 from Washoe County.

Part II looks at the Employer Satisfaction Survey, conducted in August and September 2003. This survey sought to assess employer satisfaction with recent graduates from Nevada's public school system in the areas of academic and technical skills, plus certain non-subject-specific attributes. It also examined employer satisfaction with the overall responsiveness of Nevada's K-12 public school systems to the human resource needs of business. Interviews were completed with 403 Nevada employers.

In Part III, we present a conservative estimate of the costs to Nevada employers that result from the failure of Nevada's schools to teach their students basic skills. Appendix A contrasts the different ways in which school performance is viewed by parents and teachers. Finally, Appendix B details the research background, objectives and methodology of the surveys.

A separate survey of what post-secondary remedial and developmental instructors can tell us about the deficiencies of Nevada's K-12 education system was conducted for NPRI by Prof. J. E. Stone and others, and is also available from the Institute.⁴

Apparently a Nevada high school diploma adds little value to students' future economic prospects.

I. RESULTS OF THE SURVEY OF PARENTS

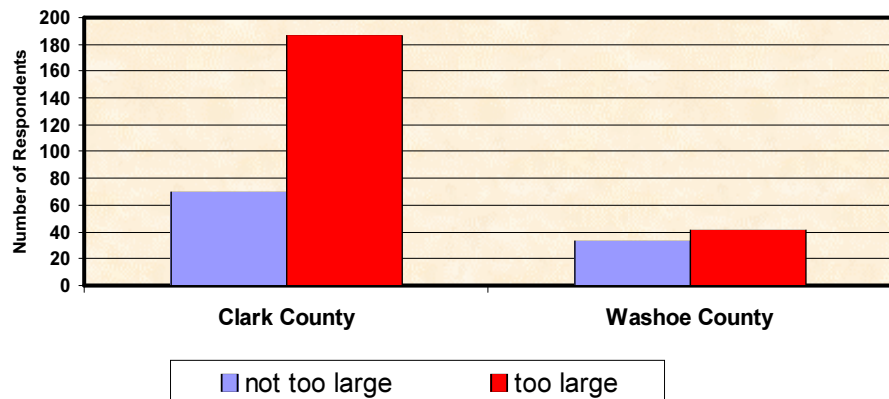
Nevada parents say the state’s metropolitan school districts are too large.

Figure 1-1 shows that a majority of parents in both Clark and Washoe counties agree with the statement, “The school district is too large.” Clark County parents agree with this statement by well over a 2-to-1 margin. Washoe County’s margin is smaller, at about 5-to-4, most likely reflecting the smaller size of Washoe County’s

school district compared to that of Clark.

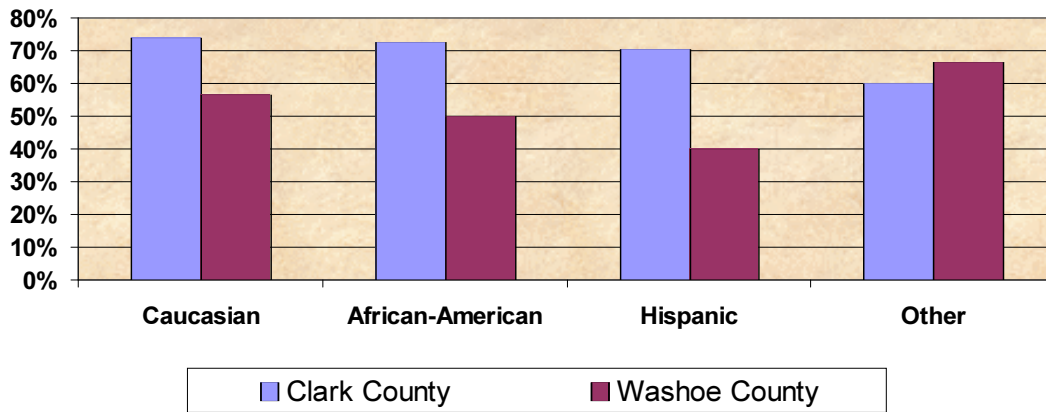
The results from both counties clearly show that parents see a need to break up the current school districts into smaller ones that will be more responsive to their concerns. And indeed, large school districts are accompanied by sizeable administrative bureaucracies, which tend to raise overall spending while decreasing student performance.^{5,6}

Figure 1-1. Number of Parents Who Think School District is Too Large, Clark and Washoe Counties



Numbers include only those respondents who expressed a positive or negative opinion.

Figure 1-2. Percentage of Parents who Think School District is Too Large, by Race



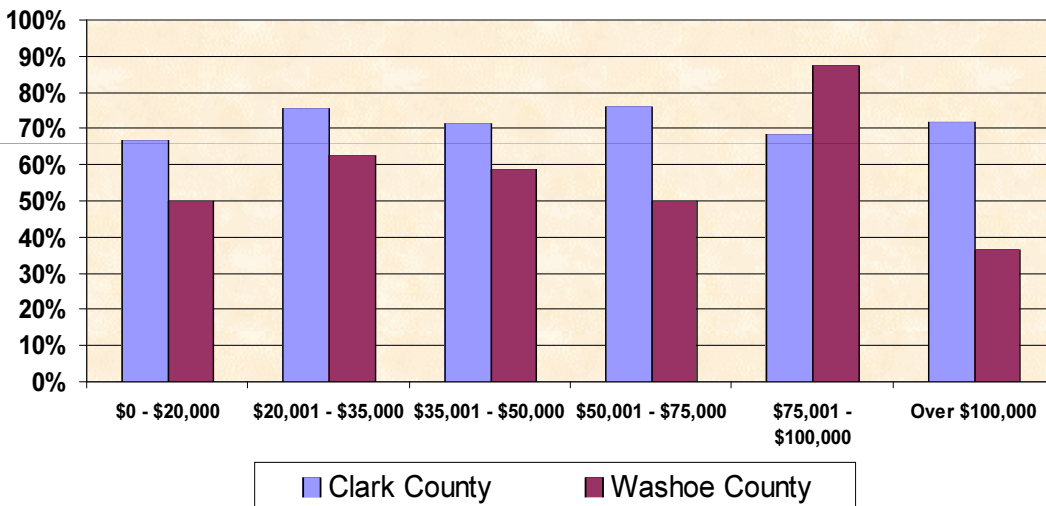
Percentages are based upon only those respondents who expressed a positive or negative opinion.

Figure 1-2 shows that concern about the size of the Clark County and Washoe County school districts crosses racial lines. Taken as a whole, minority parents agree that the school districts are too large, and their level of agreement is only slightly

lower than that of white parents (56 percent vs. 57 percent in Washoe County, and 69 percent to 74 percent in Clark County).

Figure 1-3 shows that concern about the size of the Clark County and Washoe County school districts also crosses

Figure 1-3. Percentage of Parents who Think School District is Too Large, by Income



Percentages are based upon only those respondents who expressed a positive or negative opinion.

The highest level of dissatisfaction is with the time spent teaching basic skills.

income lines. There is no consistent difference in opinion between parents at higher income levels and those at lower income levels.

Clark County parents report widespread dissatisfaction with the proportion of time spent teaching basic skills.

Figure 1-4 shows Clark County respondents' levels of satisfaction and dissatisfaction for each category of quality that they were asked to rate in the survey. It is grouped by the percentage that rated each category as satisfactory compared to unsatisfactory, from least satisfied on the left to most satisfied on the right.

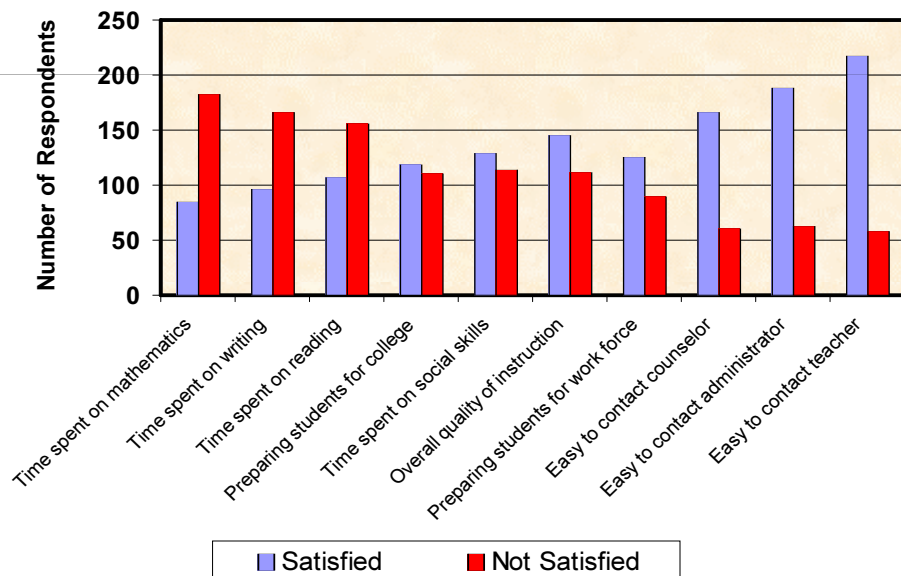
This chart reveals several significant facts. One is that the highest level of dissatisfaction is with the time spent teaching basic skills: mathematics, writing, and reading. For all three categories, a sizeable majority of parents rated the Clark County School District's performance as unsatisfactory.⁷ The highest level of satisfaction,

on the other hand, occurred with categories that are relatively less important in terms of preparing students for the future: the ability to easily contact students' counselors, administrators, and teachers.

Another striking fact exposed by this survey is that none of the above categories demonstrated a high level of satisfaction in the absolute sense. For the highest-scoring category (ease of contact with teachers), the satisfaction level registered 79 percent, which would translate to only a C+ in most school grading systems. Even in this category, more than one in five parents who registered an opinion were dissatisfied with the District's performance.

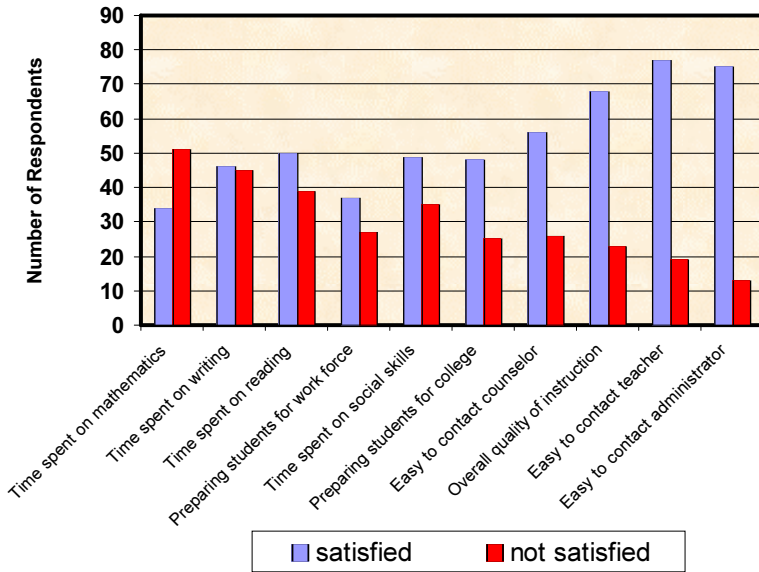
Barely a majority (52 percent) think that the CCSD is doing an adequate job preparing their children for college. And fewer than three out of five (58 percent) believe that the District is properly preparing their youth to enter the work force. Since one of the District's core missions is to arm students with the skills needed to deal with the world of employment that

Figure 1-4. Satisfaction with Clark County School District Performance, by Category



Numbers are based upon only those respondents who expressed positive or negative opinions.

Figure 1-5. Satisfaction with Washoe County School District Performance, by Category



Numbers are based upon only those respondents who expressed positive or negative opinions.

lies before them, parents’ vote of no confidence in District performance in these two critical areas signals a strong consensus that fundamental reforms are needed.

Washoe County parents are more satisfied than Clark County parents, but preparation for college and work force is still a concern.

Washoe County’s rankings are similar to those in Clark County, with the least satisfaction being registered in the time spent in teaching basic skills (mathematics, writing and reading), while the most satisfaction is registered with the ability to easily contact school personnel.

A significant difference between the two counties is that parents rate the smaller Washoe County School District (WCSD) more highly than the Clark County School District in nearly all categories. A typical example is the “overall quality of instruction” category, which gained a 75 percent “satisfied” rating in Washoe County com-

pared to only 56 percent in Clark County.

Despite Washoe County’s better ratings, the survey shows a high level of dissatisfaction with that District’s performance in preparing its children to face the future. Of respondents who gave an opinion, less than two-thirds (66 percent) agreed that Washoe County schools were adequately preparing their students for college. And only 58 percent (the same percentage as among Clark County respondents) believed that the WCSD was giving students sufficient preparation for entering the work force.

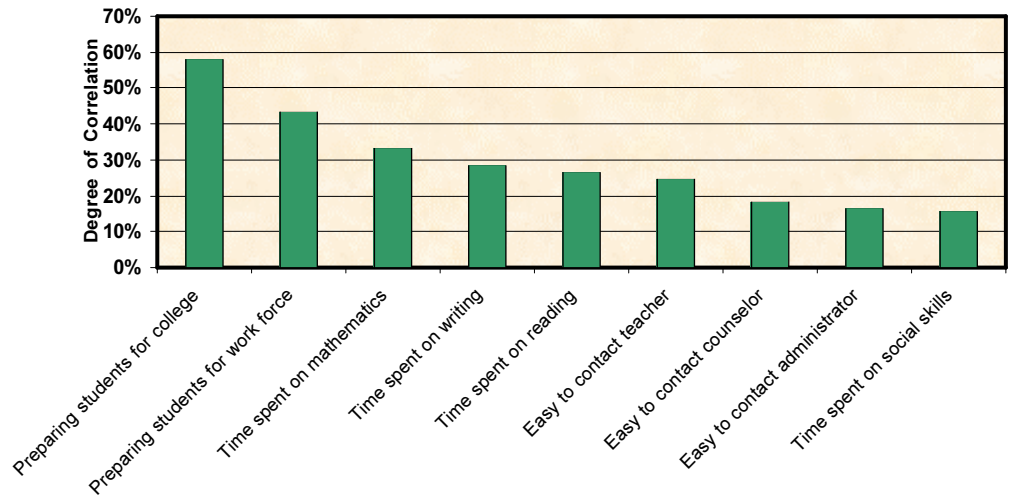
Preparing students for college and the work force are the most important measures of parent satisfaction.

Figure 1-6 (following page) ranks the importance that parents assign to each measure of school performance, by showing the degree to which their individual responses to each survey question matches their overall satisfaction with the quality of

Parents rate the smaller Washoe County School District more highly than the Clark County School District in nearly all categories.

Parents consider the job of preparing students for college to be the schools' most important performance measure

Figure 1-6. How Parents Rank Importance of Each Performance Measure



The percentage is the degree to which each category is tied to respondents' satisfaction with overall instructional quality. The higher the correlation, the more strongly a category is associated with respondents' overall satisfaction.

instruction. (These rankings were confirmed using another statistical technique called regression analysis, which provides quantitative measures of the contribution that each individual category makes to the level of overall satisfaction.)

These rankings show that parents consider the job of preparing students for college to be the schools' most important performance measure (58 percent correlation), followed by preparing them to enter the

work force (43 percent). Ranking directly behind these two general performance measures are the more specific metrics of time spent teaching basic skills (mathematics, writing, and reading, in that order). Less important to parents' overall satisfaction is the ability to easily contact teachers, counselors and administrators. The least important metric, in the parents' view, is the amount of time schools spend teaching social skills.

II. RESULTS OF THE SURVEY OF EMPLOYERS

A significant percentage of employers expressed dissatisfaction with the Nevada high school graduates they hired.

Of the 403 employers interviewed, 77 percent indicate they have recently employed new graduates (high school only, certificate, diploma or degree holding individuals) from the Nevada public school system. The likelihood rises with company size; almost two-thirds (63 percent) of companies with more than 20 employees have hired recent graduates. However, 42 percent of employers who have hired recent graduates rated them as unsatisfactory overall.

Regardless of company size, region or industry of operation, the proportion of satisfied employers is consistently less than 70 percent. Based on company size, the lowest proportion of satisfied employers is 56 percent (for small companies with 5 to 9 employees). Based on industry, the lowest proportion of satisfied employers is 29 percent (Manufacturing).

Only 68 percent of employers of recent graduates agree that Nevada's public school system responds to their needs by providing an adequate supply of graduates who enter the work force with appropriate skills. This is a significantly poor showing, given the primary task of public schools to

prepare students to enter the work force.

Employers of recent graduates were asked if they could think of any particular skills or abilities that are lacking in recent graduates. The three skills most often cited as missing in employees were:

- ◆ Ability to communicate verbally and in writing
- ◆ Knowledge necessary to perform the job
- ◆ Work attitude (motivation) and work ethic

Among all Nevada employers, 72 percent were satisfied with graduates' ability to learn at work, but only 53 percent were satisfied with graduates' general skills and knowledge. This implies that many graduates who are capable of learning did not do so within Nevada's public schools.

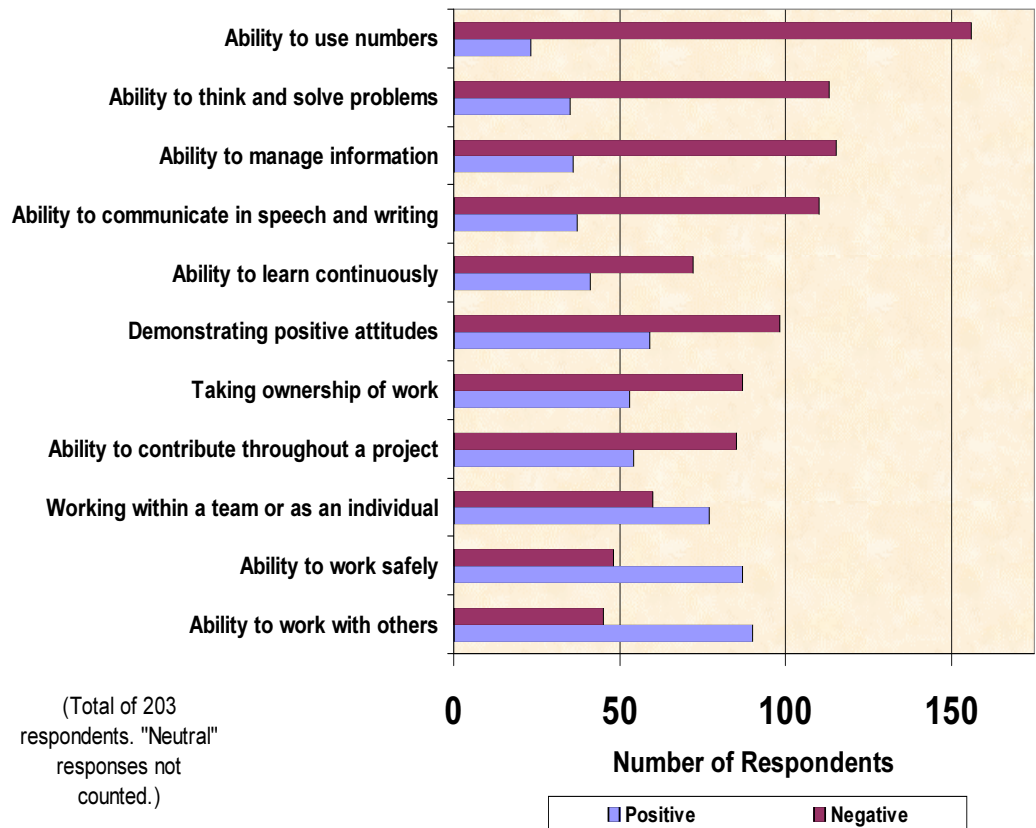
Employers gave very low ratings to recent graduates' skills in mathematics, communication, and problem solving.

Figure 2-1, on the next page, shows employers' perceptions of the skills of recent graduates that they hired. Low marks were given in critical areas such as the abilities to use numbers, solve prob-

Forty-two percent of employers who have hired recent graduates rated them as unsatisfactory overall.

Many companies reported that they intended to hire Nevada high school graduates but could not find qualified applicants.

Figure 3-1. Employers' Ratings of Recent Graduates



lems, and communicate in speech and writing. Highest ratings were for ability to work with others and to work safely. Even for these skills, however, about one-third of employers gave recent graduates negative ratings.

Employer satisfaction increased strongly for employees who continued their education past high school.

Overall, the more education a graduate had received (e.g., post-secondary), the more likely the employers were to be satisfied with his or her non-subject-specific skills and qualities.

For example, 84 percent of employers of college degree graduates were satisfied

with these individuals' ability to "take ownership of their work." On the other hand, only 45 percent of employers were satisfied with the ability of high school graduates to do so.

Many companies reported that they intended to hire Nevada high school graduates but could not find qualified applicants.

A variety of positions were open for recent graduates. Employers in Construction had positions for operators and laborers (41 percent). Employers in Wholesale Trade had positions for sales people (38 percent). Employers in Finance/Real Estate had positions in accounting

and bookkeeping (32 percent). Employers in the Hotel, Gaming and Recreation (HGR) industry sector had positions for cooks (30 percent), customer service (25 percent) and for waiters and waitresses (23 percent). Employers in Retail had positions for sales people (28 percent). Employers in the manufacturing and wholesale trade (warehouse) sectors had positions for operators and laborers (26 percent).

Many of the positions available for recent graduates that were not filled were entry level and would have likely had matching salaries. When asked why positions were not filled, 22 percent of employers offering unfilled jobs indicated that there were very few qualified applicants for these positions, 67 percent of employers stated that had no qualified applicants for these positions, while 11 percent reported other reasons.

The highest level of satisfaction with Nevada's graduates is found in the Hotel, Gaming and Recreation industry sector.

Unlike other industry sectors, 77 percent of Hotel, Gaming and Recreation employers of recent graduates agree that

Nevada's public school system responds to their needs by providing an adequate supply of graduates who enter the work force with appropriate skills.

While not that high a percentage in absolute terms, this finding indicates that the Silver State's public school system is contributing to the perpetuation of Nevada as a one-industry state.

In effect, school districts are preparing high school graduates for lesser skilled, lower paying careers in the gaming-tourism sector. The districts fail to provide students with the skill sets that would attract other types of businesses to the Silver State and diversify its economy.

Employers in Northern Nevada are more satisfied than those in Southern Nevada.

Satisfaction with the skill levels of recent graduates is higher among employers of high school graduates in Northern Nevada than in other areas of the state. Agreement is consistently the lowest among employers in Las Vegas. This matches the findings of the Parent Survey, which found higher levels of satisfaction in communities with smaller school districts.

In effect, school districts are preparing high school graduates for lesser skilled, lower paying careers in the gaming-tourism sector.

III. THE COSTS OF FAILING TO TEACH BASIC SKILLS

Nevada's public schools graduate a large number of students without the basic skills necessary to be gainfully employed.

Human Costs

As is well known, there are significant personal and human costs when schools do not deliver basic skills. For the students and their families, these costs can be substantial—both immediately and in the long term. Also, as pointed out by Walberg (2000), educational deficiencies severely limit students' potential civic and cultural contributions to society.⁸ Economically, students' failure to learn basic skills severely limits their potential earnings and employment prospects.

As measured by in lifetime earnings, the personal consequences of dropping out of high school in America are generally believed to be substantial.⁹ Over his working life, the average male high school dropout in America can expect to earn approximately \$450,000 less than a peer who does obtain a high school diploma, yet does not go on to college.¹⁰

Costs to the Nevada Business Community

In this section of the report we provide partial estimates of costs to the Nevada business community arising from the failure of the education system to teach these basic skills.

Despite the school establishment's

protests to the contrary, a powerful argument can be made that Nevada's public schools graduate a large number of their students without the basic skills necessary to be gainfully employed by Nevada's business community. The largest school district in Nevada, Clark County School District (CCSD), is illustrative. Over 36 percent of District graduates attending college in Nevada must enroll in remedial courses.¹¹ Such figures for the more academically oriented students who *do* go on to higher education suggest that the basic skills of those who do *not* enter college are most likely deficient to an even *higher* degree. In all probability they, too, need significant remedial help.

While definitions of basic academic skills can be debated, it is difficult to argue that the educational level of most students exiting from Nevada high schools is not a problem. Herewith we provide a partial estimate of the costs to Nevada's business community of basic-skills remediation and retraining. These estimates are clearly conservative, since many issues are not considered.¹² However, for purposes of public discussion, even this limited approach sheds light on the magnitude of the problem.

What is a reasonable approach to estimating these costs to the business commu-

nity? One method argued for by Greene (2000) is to use the amount of funds that schools require to produce a successful graduate. After all, these numbers include relevant costs that might approximate the costs imposed on local business, should the latter attempt to fully engage in remedial training. We adopt this approach in this report.

An important point to keep in mind, however, is that official school statistics on graduates and diplomas generally understate costs and overstate accomplishments. In a real sense, Nevada schools produce a significant number of failures—dropouts or graduates without basic skills. While these failures are not captured in most discussions of education, they are a significant determinant of the costs that businesses must later pay to correct deficiencies in their employees' basic skills.

Given the dominance of the Clark County School District in the educational system of Nevada with respect to enrollment, growth, and fiscal issues, we consider this district in some detail. Over the past several years, the annual high school dropout number has been reported in the range of 4,500 individuals. The highest dropout rate in 1998/1999 of 9 percent decreased to approximately 5.0 percent in 2000-2001 before rising slightly to a current (2001/2002) rate of 7.8 percent. The basic dropout rate over the period appears to be about 7 percent.¹³ In terms of future members of the local workforce, this annually represents about 4,300 individuals exiting the high school curriculum.¹⁴ Given the low skill level of these individuals, there is a very small likelihood that they will ever leave the community and move to other labor markets.¹⁵

It must also be stressed that the percentage of students who fail to graduate is much higher than the annual dropout rate. For example, if 7 percent of students in each grade (9 through 12) drop out of school each year, the proportion of entering freshmen who will stay in school long

enough to receive their high school diplomas is under 75 percent.

Different organizations have calculated various dropout rates for Nevada. For example, the Nevada Education Department reported that the high school dropout rate during 2001-2002 was 6.3 percent. That report stated that 6,136 high school students had dropped out of school. Those in the twelfth grade had a dropout rate of 13.5 percent. However, Kids Count, a national organization, reported Nevada's dropout rate as 13 percent, while *Education Week* reported that Nevada's rate in 2000 was 6.2 percent.

These differences reflect the variety of alternative measures and data sources that are used to establish school dropout rates. The best empirical estimates suggest that somewhere between 25 and 30 percent of Nevada's young adults fail to graduate with a standard high school diploma.

Many educators attribute Nevada's persistently high dropout rate to a combination of factors including transient families, increasing volumes of Hispanic-speaking migrants and supposedly insufficient funding for education.¹⁶ However, the Hotel, Gaming and Recreation (HGR) sector's employment profile no doubt plays a highly significant role. Many of the jobs offered in this sector require only minimal skills, for which a high school diploma is not necessary. Thus for many students it often makes short-term economic sense to leave school early and begin making money immediately. The lack of a diploma often will not impact them until much later in their careers.

To estimate the cost to businesses of training their employees in basic skills, a reasonable place to begin is with the CCSD per-pupil annual expenditure of \$5,422.¹⁷ Based upon CCSD statistics, the average dropout is missing approximately 2.3 years of schooling.¹⁸ Thus, on an annual basis, the number of employee training years required approaches 10,000 (i.e., 4,300 dropouts entering the work

Official school statistics on graduates and diplomas generally understate costs and overstate accomplishments.

In a real sense, Nevada schools produce a significant number of failures—dropouts or graduates without basic skills.

A conservative estimate of the total remedial costs borne each year by the Nevada business community is approximately \$65 million.

force times 2.3 missing years of schooling per dropout = 9,900). This represents a cost to the business community of almost \$54 million. It is important to remember that these costs are borne by the local community in the form of higher prices, as southern Nevada businesses attempt to recoup higher costs and lower productivity.

To these costs, we need to add the indirect costs of the general student population of CCSD not having basic academic skills. Although these costs are not directly measurable, it seems reasonable to assume that the percentage of students who fail the high school proficiency exam might represent a conservative estimate of the general lack of knowledge among the high school population that does eventually graduate. Over the past several years, this percentage has been in the area of 5.6 percent.¹⁹ Using the recent figure of about 9,000 standard diplomas awarded by CCSD, a minimum of 500 “lost” training years might be assumed (at one year per affected student).²⁰ This represents an additional remedial cost of \$2.7 million.

Thus, a conservative estimate of the cost of remedial training to the business community in southern Nevada would be

an annual expenditure of \$56.7 million. This is an important issue for the community, primarily for two reasons. First, businesses may not step in to fully train individuals with these private expenditures and thus, in effect, subsidize the CCSD. If not, the individual worker is hurt through his lower potential productivity (and earnings). Second, businesses may simply utilize the option to substitute capital for labor—employing machines or other technology, instead of hiring CCSD students. It is difficult to see how either of these results will not harm both students and the larger community. This is why the quality of education produced by the Clark County School District is such a fundamental issue for the state of Nevada.

Reliable statistics are also available for Washoe County School District (WCSD), the second largest system in Nevada.²¹ Adding the totals from Washoe and other counties for which data are available, but excluding the smallest (primarily rural) school districts where data is only partial, our conservative estimate of the total remedial costs borne each year by the Nevada business community is approximately \$65 million..²²

APPENDICES

A. The Different Perspectives of Parents and Teachers on School Performance

According to a national survey conducted by Public Agenda²³, *Given the Circumstances: Teachers Talk About Public Education Today*²⁴, parents and teachers have similar views concerning order and discipline and what should be taught in the classroom. These including basic academic and computer skills, heterogeneous grouping and the early use of calculators by students. However, according to Public Agenda, teachers and the public part company when rating the performance of their local public schools:

Teachers feel public schools should receive high marks. They also believe, unlike the general public, that their local public schools outperform private schools in key areas such as providing students with better preparation for college and higher academic standards. Asked to compare public to private schools in 13 categories, teachers rate public school performance as better than or equal to private schools in 8 of the 13. The public, on the other hand, feels public schools outperform private in just two areas.

It is not surprising that teachers and the public seem to assess the performance of public schools through very different lenses,” said Deborah Wadsworth, executive director for Public Agenda.

Teachers talk about families in turmoil, schools and communities with inadequate resources, contentious school boards, and top-heavy education bureaucracies. In their view, they’re doing a good job given tough circumstances.” Teachers also do not seem to share the sense of urgency the public and community leaders feel about the issue of higher standards. Only half of teachers think standards are too low in their local schools. Inadequate funding, overcrowded classrooms and disorder are far more pressing problems to teachers. While 65 percent of community leaders and 47 percent of the public believe “a high school diploma is no guarantee that the typical student has learned the basics,” only 31 percent of teachers agree.

Education reformers and policymakers who consider higher academic standards a centerpiece of their movement should not count on teachers to be a driving force,” added Wadsworth. “It may be that the academic energies of even the most motivated teachers are sapped by what they consider to be the stressful day-to-day demands of the classroom. From the teachers’ perspective, order and civility, not higher standards, provide the infrastructure that good teaching builds on.²⁵

Teachers ... do not seem to share the sense of urgency the public and community leaders feel about the issue of higher standards.

B. Research Background and Methodology

Project Objectives

Demographic Solutions, Inc. (DSI) and Magellan Research were retained by NPRI to conduct employer and parent satisfaction surveys that were administered between August 2 and September 4, 2003. The survey was designed by DSI to measure parent and employer satisfaction with recent graduates from Nevada's K-12 public school system.

The objectives of this study were to determine if Nevada parents and employers are:

- ♦ Satisfied with the academic and technical skills acquired by recent Nevada high school graduates.
- ♦ Satisfied with the non-subject-specific skills—communication, problem solving and making judgments appropriate to the context—of recent graduates hired.
- ♦ Satisfied with the overall responsiveness of Nevada's public school system to their parental and human resource needs.

This study also sought to explore the remedial training costs, if any, borne by Nevada's employers, appraise the impact of school system size on community responsiveness, and accumulate employer reports regarding the skill deficiencies of recent graduates.

Methodology

In order to avoid problems with representation and randomization, the results are based on a probability sample of sampling units located in Nevada, drawn entirely at random through the use of the Computer Assisted Interview (CATI) system, which allows for the collection of data from multiple respondents in a timely and efficient

manner.

Statistical Reliability of Results

A sample of parents within the population produced results that are reliable to within plus or minus 5 percent, or 18 times in 20.

Timing

The average time to complete an interview was 12 minutes for those employers indicating they had hired recent graduates, and 6 minutes for those who had not. The average time for parents was 11 minutes.

Multiple Respondents

Due to the design of the questionnaire it was possible to have multiple respondents from a single employer. This means that more than one respondent could be involved in completing the survey if the initial respondent did not have sufficient knowledge to answer all of the questions asked. The human resources manager was determined to be the best qualified to provide employer information regarding hiring practices, but may not have been best qualified to answer specific questions regarding employees. If the human resources manager was not able to answer these types of questions, we asked to speak to a more qualified respondent within their company (i.e. supervisor of a recent graduate). Of the 403 completed interviews, 22 had multiple respondents.

Pre-Test Evaluation

The pre-test was based on the format and flow of the 1999 Southern Nevada Labor Survey. The content of the pre-test was adjusted for the objectives of the 2003 survey. The pre-test took place over two days, starting July 12, 2003. As the survey tool had been used previously, a minimal amount of testing was required. There

were no significant modifications as a result of the pre-test.

Definitions of Program Graduates

Recent graduates from Nevada's public school system were defined as those who graduated within the last two years. The categories are:

- ♦ High school diploma only graduates—graduates from a Nevada public high school with a regular high school diploma.
- ♦ Non-diploma employees—attendees of a Nevada public high school within the last two years that did not met the

Nevada Department of Education requirements for a high school diploma.

Telephone Interviewing, Quality Control & CATI Programming

Field supervisors were present at all times to ensure accurate interviewing and recording responses. A minimum of 10 percent of each interviewer's work is unobtrusively monitored for quality control in accordance with the standards set out by the Association of Marketing Research Organizations. Through survey design and interview monitoring it was assured that the responses provided by employers were of the highest quality.

C. Biographies and Addresses

Robert Schmidt

schmidt@rr@aol.com

is the President of Demographic Solutions, Inc. He holds advanced degrees in economics, sociology and law, and is currently a Visiting Professor at the Helsinki School of Economics—while also serving on the Graduate Faculty of the UNLV School of Public Administration. He is the author of numerous articles and treatises on urban issues, including the *Financing of Regional Infrastructure* for the National Association of Industrial and Office Properties (NAIOP), and the Nevada Development Authority's *Comprehensive Labor Study for Clark County, Nevada*—released in February 2002. He has served as an advisor to numerous local, regional and national government agencies.

Prior to starting Demographic Solutions, Dr. Schmidt held several senior level positions in the private

sector, including COO of Dytel Corporation, a mid-sized telecommunications firm, CEO of Reynolds & Taylor, a mid-sized manufacturing firm in southern California. He also was Senior Manager-in-Charge of consulting with PriceWaterhouse and Assistant Vice President for ECOLAB Europe.

Charles F. Barr

cfbarr@cfbarr.com

is a research analyst with Demographic Solutions, specializing in economic and demographic modeling as well as database design. His extensive and varied experience includes many years in computer programming, specializing in business applications on large-scale IBM systems, as well as newspaper reporting and writing.

Recent clients have included Colliers International, Citibank, and the State of Nevada Demographer's Office. During the early 1990's he was a

socioeconomic analyst at Science Applications International Corporation (SAIC), helping create models of the southern Nevada economy using REMI software. Before Charles came to Las Vegas in 1990, clients included automakers Nissan and Mitsubishi, insurance companies Avco and Pacific Mutual, Coca-Cola Bottling Company, McDonnell-Douglas, Control Data, Security Pacific Bank, Ingersoll-Rand, and Robinson's Department Stores. He also worked for several years in the entertainment industry, doing computer programming for Paramount Pictures,

Metromedia, CBS Television, and William Morris Agency.

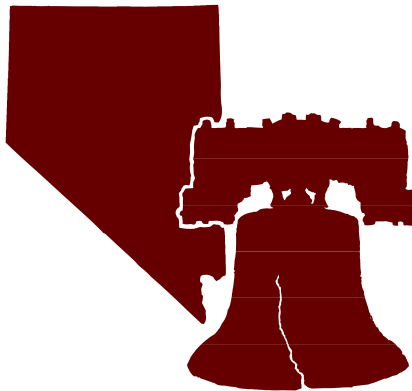
Charles has two Masters Degrees from the University of Nevada, Las Vegas—one in Economics and one in Liberal Studies—as well as a Bachelor of Arts in History from University of Georgia. He is currently pursuing a Ph.D. in Environmental Science. Charles is a co-author of articles that have appeared in the academic journals *Demography*, *Population Research and Policy Review* and *International Journal of Public Administration*

Endnotes

- 1 National Center for Education Statistics, 1999-2000. See their website at: http://nces.ed.gov/pubs2001/100_largest/table01.asp
- 2 In a study of metropolitan areas nationwide, Caroline Hoxby (2000) found a negative relationship between student achievement and the concentration of enrollment in a small number of school districts.
- 3 See CCSD Accountability Report, 2001-2002, "Percent of graduates in Nevada community colleges and Nevada universities taking remedial courses." The reported figure is 36.5 percent across these two categories.
- 4 Stone, J.E., W.L. Brown and R.P. Phelps. *Wasting Time and Money: Why So Many Nevada Students Are Not Ready for College*. Education Consumers Consultants Network, 2003. Available on the NPRI web site at <http://www.npri.org/mgraphs/remedial1.pdf>
- 5 Buckeye Institute. 2001. "Are Some Ohio School Districts Too Large?" Online at: www.buckeyeinstitute.org.
- 6 Anderson, G., W. Shughart and R. Tollison. "Educational Achievement and the Cost of Bureaucracy." *Journal of Economic Behavior and Organization*. 15 (1991): 29-45.
- 7 See *Wasting Time and Money, op cit.*, for significant empirical and theoretical validation of these parents' perceptions.
- 8 See Appendix III in Jay P. Greene, *The Costs of Remedial Education*, Mackinac Center for Public Policy, Sept. 2000.
- 9 See: Andrew Sum, Neeta Fogg and Garth Mangum, *Confronting the Youth Demographic Challenge: The Labor Market Prospects of Out-of-School Young Adults*, Sar Levitan Center for Social Policy Studies, Johns Hopkins University, Baltimore Maryland, October 2000
- 10 See: Andrew Sum, Neil Sullivan, Jaqui Motroni, Sheila Palma, *Gender Differences in Educational Outcomes in Massachusetts and Its Large Cities*, Center for Labor Market Studies, Northeastern University and Boston Private Industry Council, Boston 2002.
- 11 See CCSD Accountability Report, 2001-2002, *op. cit.* The reported figure is 36.5 percent across these two categories.
- 12 For a comprehensive conceptual approach to these issues, see Jay P. Greene, *op. cit.*
- 13 For example, the rate dropped in 1999/2000 to 6.9 percent and further in 2000/2001 but it has now increased. See the figures reported in the relevant CCSD accountability reports and *Las Vegas Review-Journal* (Jan. 12, 2001).
- 14 In 1998/1999, there were 4,788 dropouts, 3,905 dropouts when the dropout rate fell in 1999/2000, etc.
- 15 As is well documented in the demographic literature on the so-called "educational selectivity of migration," the likelihood of these individuals leaving the community to other labor markets is very low.
- 16 Another significant factor that contributes to the high dropout rate but receives little attention in Nevada is the ongoing frustration of students who do not learn basic skills in the earlier grades. Severely impairing their ability to absorb more advanced material in the later grades, this deficiency increasingly causes these students' performance to suffer and their overall school experience to become negative. Many of these students, therefore, will drop out of school as soon as they can.
- 17 See CCSD Accountability Report, 2001-2002, "Fiscal data."
- 18 This is based upon the distribution of credit-deficient students across grades 9-11 of 15 percent, 15 percent, and 4 percent with an overall dropout rate (9-12) of 7.8 percent. See

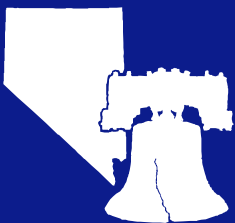
CCSD accountability report, “Percentage of students’ credit deficient/dropout.” We assume that these students drop out when legally able to do so. For comparison, note that Greene (2000) reports a similar figure of (2.29) for the state of Michigan. However, our figure is very conservative in that it allows partial attendance during a specific year to count as completed.

- 19 The percentage of students with failures on the high school proficiency exam has been (7.3, 4.1, 5.5) over (1999/2000, 2000/2001, 2001/2002). See CCSD report, “High school proficiency exam.”
- 20 CCSD reports an exact figure of 8,960 standard diplomas. The figure above assumes one year remedial training needed for 500 individuals (9,000 times 5.6 percent).
- 21 The basic school accountability reports by district are, not surprisingly, less detailed for very small districts. Basic enrollment figures, etc. are available in spreadsheet format from the Nevada Department of education.
- 22 In terms of WCSD, basic points of interest (compared to CCSD) are a lower high school dropout rate (3.4 percent), a higher percentage of students meeting the high school proficiency exam (ranging across subjects from 97 percent to 99 percent), a slightly higher district per pupil expenditure (\$5,599), and, of course, a smaller system (high school enrollment of 15,543 students with standard diplomas granted of 2,477). See the Washoe County accountability reports for 2001/2002 and the specific sections titled “Graduation Information,” “High School Dropout Rate,” “School Statistics,” “High School Proficiency Exam,” and “Per Pupil Expenditures.”
- 23 Public Agenda, a national nonpartisan, nonprofit public opinion research organization, was founded in 1975 by Daniel Yankelovich and Cyrus Vance. Located in New York City, Public Agenda is well respected for its influential public opinion polls and its balanced citizen education materials.
- 24 *Given the Circumstances* is a follow-up to *Assignment Incomplete: The Unfinished Business of Education Reform* and *First Things First: What Americans Expect from the Public Schools*, in which the views of the general public, parents with children in public schools, and community and education leaders were explored.
- 25 Ibid.



NEVADA POLICY RESEARCH INSTITUTE

(702) 222-0642 2073 East Sahara Avenue, #B info@npri.org
fax (702) 227-0927 Las Vegas, Nevada 89104 www.npri.org



Analysis is published by the Nevada Policy Research Institute (NPRI) to evaluate government policies and proposals for reform. Nothing published herein should be construed as necessarily reflecting the views of NPRI as a corporate entity or as an attempt to aid or hinder the passage of

any particular item of legislation. Please contact NPRI for reprint permission or further information. The Nevada Policy Research Institute was founded in 1991 to promote individual liberty, public understanding of free markets and alternatives to governmental coercion.