#### BACKGROUND

A key reform initiative for the past decade is Nevada's program to reduce pupil-to-teacher ratios, commonly known as the Class-Size Reduction Program. Following a review of the topic by a 1988 interim legislative study, the 1989 Nevada Legislature enacted the Class-Size Reduction Act (Assembly Bill 964, Chapter 864, *Statutes of Nevada 1989*). The measure was designed to reduce the pupil-to-teacher ratio in the public schools, particularly in the earliest grades and in classrooms where the core curriculum is taught.

The program was scheduled to proceed in several phases. The first step reduced the ratio in selected kindergartens and 1<sup>st</sup> grade for the 1990-1991 school year. The following phase was designed to improve 2<sup>nd</sup> grade ratios, followed by 3<sup>rd</sup> grade reductions and broadening kindergarten assistance. The 1991 Legislature made funds available for the 1991-1992 school year to reduce the ratios in 1<sup>st</sup> and 2<sup>nd</sup> grades and selected kindergartens to the 16 to 1 ratio. Due to budget shortfalls late in 1991 and continuing state fiscal needs, the 3<sup>rd</sup> grade phase was delayed until the 1996-1997 fiscal year when partial funding was provided at a 19 to 1 ratio. Those funding formulas continued through the 1999-2001 biennium.

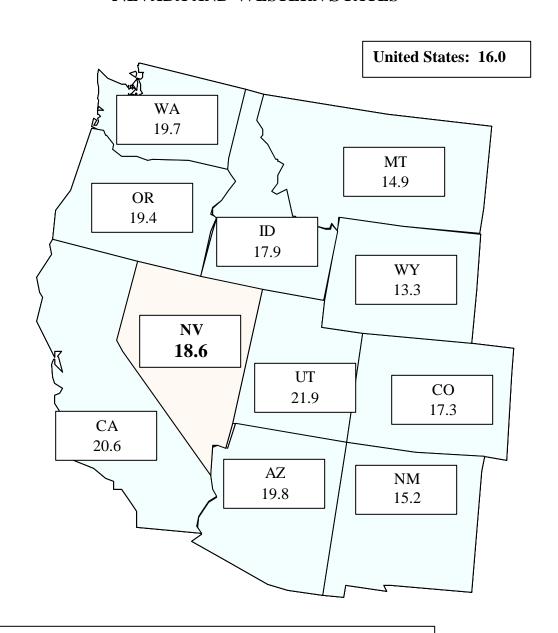
After achieving the target ratio of 15 pupils to 1 teacher in the primary grades, the original program proposed that the pupil-to-teacher ratio be reduced to 22 pupils

per class in grades 4, 5, and 6, followed by a reduction to no more than 25 pupils per class in grades 7 to 12. With the exception of a pilot program in Elko County, only the primary grades (K-3) have been addressed.



#### PUPIL-TEACHER RATIOS

PUPIL-TEACHER RATIO FOR GRADES PRE-KINDERGARTEN THROUGH 12, SCHOOL YEAR 2000-2001 NEVADA AND WESTERN STATES



**Source:** NCES, *Education Statistics Quarterly* "Early Estimates: SY 2001-2002."

# STATEWIDE PUPIL-TEACHER RATIOS

	STATEWIDE PUPIL-TEACHER RATIOS FISCAL YEARS 1998 - 2003													
Grade	FY 1998- 1999	FY 1999- 2000*	Difference FY 1999 & FY 2000	FY 2000- 2001	Difference FY 2000 & FY2001	FY 2001 - 2002	Difference FY 2001 & FY2002	FY 2002- 2003	Difference FY 2002 & FY2003					
KINDER - GARTEN	22.7	23.7	1.0	23.6	(0.1)	23.7	0.1	22.5	(1.2)					
FIRST GRADE	15.8	15.9	0.1	16.0	0.1	16.1	0.1	16.2	0.1					
SECOND GRADE	15.8	15.9	0.1	16.2	0.3	16.3	0.1	16.5	0.2					
THIRD GRADE	19.0	19.1	0.1	19.0	(0.1)	19.2	0.2	20.1	0.9					

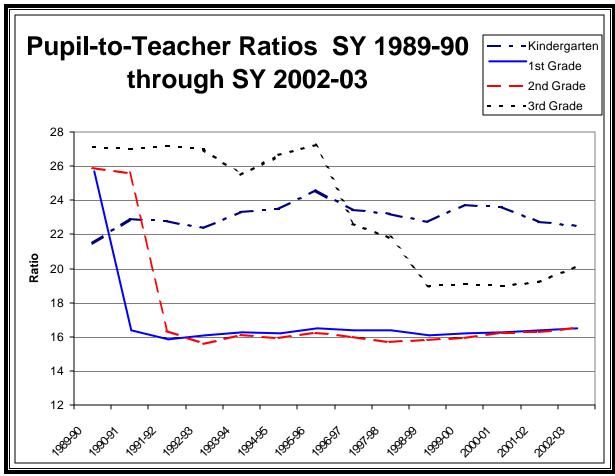
Note: Elko County School District's pupil-teacher ratios are not included in the statewide ratios shown in this table.

Source: Fiscal Analysis Division, Legislative Counsel Bureau, from School District Reports to the Nevada Department of Education, December 2002.

PUPI	PUPIL-TEACHER RATIOS FOR SCHOOL YEAR 2002-2003									
<b>B</b> .	y Grade For Ni	EVADA AND S	CHOOL DISTRICT	ΓS						
<b>School District</b>	Kindergarten	First	Second	Third						
Carson City	22.9	15.6	15.1	19.2						
Churchill	20.4	16.5	16.7	18.1						
Clark	23.8	16.5	16.7	21.0						
Douglas	23.9	15.6	16.0	19.0						
Elko *										
Esmeralda	2.0	6.0	8.0	10.0						
Eureka	9.5	8.5	8.5	10.5						
Humboldt	18.6	13.4	13.9	17.2						
Lander	15.5	17.2	14.4	18.3						
Lincoln	12.0	11.4	14.2	12.6						
Lyon	20.3	16.4	17.0	18.1						
Mineral	11.8	15.0	16.3	14.5						
Nye	16.6	15.5	16.3	18.9						
Pershing	18.3	11.8	15.3	17.3						
Storey	8.4	13.0	13.1	14.3						
Washoe	19.7	15.4	16.4	18.0						
White Pine	17.7	18.4	16.8	17.4						
STATE	22.5	16.2	16.5	20.1						
Note: Elko's Demon	nstration Program allows	the district to esta	blish ratios of 22:1 in gr	rades 1 through 6.						

#### CSR—RATIOS GRADES K-3

GRADE	1989- 90	1990- 91	1991- 92	1992- 93	1993- 94	1994- 95	1995- 96	1996- 97	1997- 98	1998- 99	1999- 00	2000- 01	2001- 02	2002- 03
Kindergarten	21.5	22.9	22.8	22.4	23.3	23.5	24.6	23.4	23.2	22.7	23.7	23.6	22.7	22.5
1st Grade	25.4	16.11	15.6	15.8	16	15.9	16.2	16.1	16.1	15.8	15.9	16.0	16.1	16.2
2nd Grade	25.9	25.6	16.32	15.6	16.1	15.9	16.2	16	15.7	15.8	15.9	16.2	16.3	16.5
3rd Grade	27.1	27	27.2	27.03	25.5	26.63	27.23	22.6	21.8	19	19.1	19.0	19.2	20.1



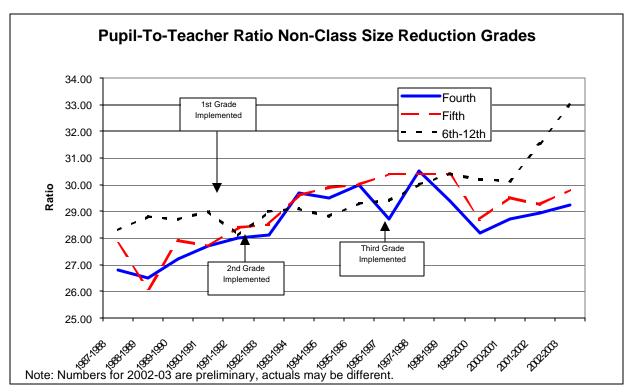
Source: Nevada Department of Education, 2002.

#### CSR—RATIOS GRADES 4–12

#### Nevada Pupil-to-Teacher Ratio Grades 4 Through 12 SY 1987-88 Through 2002-03

GRADE	1987- 88	1988- 89	1989- 90	1990- 91	1991- 92	1992- 93	1993- 94	1994- 95	1995- 96	1996- 97	1997- 98	1998- 99	1999- 00	2000- 01	2001- 02	2002- 03
Fourth	26.8	26.5	27.2	27.7	28	28.1	29.7	29.5	30	28.7	30.5	29.4	28.2	28.7	29.0	29.2
Fifth	27.8	26.1	27.9	27.7	28.4	28.5	29.6	29.9	30	30.4	30.4	30.4	28.7	29.5	29.3	29.8
6th-12th	28.3	28.8	28.7	29	28.1	29	29.1	28.8	29.3	29.4	30	30.4	30.2	30.1	31.6	33.0

Source: Nevada Department of Education, 2003.

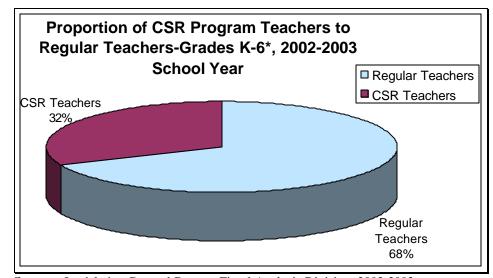


Source: Nevada Department of Education, 2003.

#### **CSR TEACHERS**

NUMBER OF C	CLASS SIZE REDU	CTION TEACHE	ERS (FTES) HIREI	FOR SCHOOL
YEAR 2002	2-2003 – BY GRA	DE, FOR NEVA	DA AND SCHOOL	DISTRICTS
<b>School District</b>	Kindergarten	First	Second	Third
Carson City	1.0	20.0	16.0	9.0
Churchill	0.50	7.5	8.0	3.0
Clark	11.0	514.0	543.0	265.0
Douglas	.50	5.0	2.0	5.0
Elko *				
Esmeralda	0	0	0	0
Eureka	0	0	0	0
Humboldt	0	6.0	4.0	4.0
Lander	.25	1.5	1.0	.50
Lincoln	0	1.0	1.0	0
Lyon	.50	8.0	9.0	7.25
Mineral	1.0	0	2.0	.50
Nye	.50	5.75	7.5	3.0
Pershing	.25	1.0	1.0	1.0
Storey	0	1.0	1.0	1.0
Washoe	5.0	113.0	89.0	75.0
White Pine	1.0	2.25	2.0	1.0
STATE	21.5	686	686.5	375.25

**Note**: Elko's Demonstration Program allows the district to establish pupil-teacher ratios of 22:1 in grades K through 6. Additional Elko teachers: K-1; 1<sup>st</sup>-7.5; 2<sup>nd</sup>-8.5; 3<sup>rd</sup> -12.0; 4<sup>th</sup>-9.5; 5<sup>th</sup>-9.5; 6<sup>th</sup> -7.75 = 55.75 additional CSR teachers in grades K-6.



**Source**: Legislative Counsel Bureau, Fiscal Analysis Division, 2002-2003.

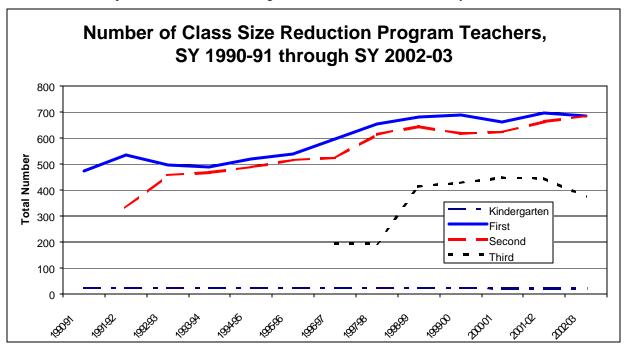
#### **CSR TEACHERS**

#### NUMBER OF CSR PROGRAM TEACHERS HIRED By Grade, By School Year (1990-91 to 2002-03)

Grade	1990- 1991	1991- 1992	1992- 1993	1993- 1994	1994- 1995	1995- 1996	1996- 1997	1997- 1998	1998- 1999	1999- 2000	2000- 2001	2001- 2002	2002- 2003
Kindergarten	23	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	22.5	21.75	21.5
First	475.5	534.5	498.5	489.5	521.5	539.5	599	653.3	681.3	690.8	663.0	697.0	686
Second	0	332.5	458.5	468	489	517	524.5	615.8	644.8	617.8	625	664.5	686.5
Third						0	195	194.3	415.3	428.8	448.5	445.25	375.25

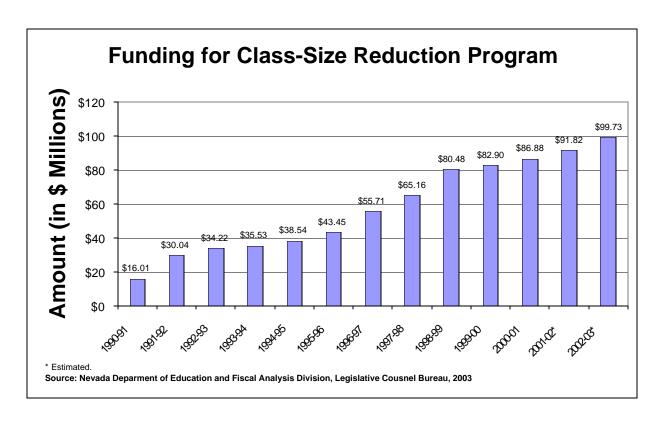
In the current fiscal year, Nevada employs 1,825 CSR teachers, including those hired for the Elko Demonstration Project. The growth in the numbers of these teachers reflected on these charts is a function of student growth in existing CSR grades, plus the addition of other grades as the program was phased in.

Source: Nevada Department of Education and Legislative Counsel Bureau, Fiscal Analysis Division, 2003.



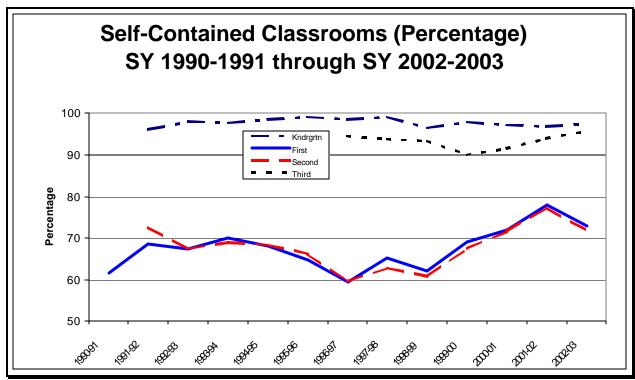
**Note:** The actual funding allocation for Nevada's CSR Program is calculated by projecting student growth, figuring in the number of teachers districts would have hired to keep pace with that growth under the old ratios, then calculating the number of additional teachers needed to reduce the pupil-to-teacher ratio to the funded level (currently 16 to 1 for grades 1 and 2; 19 to 1 for grade 3). The CSR appropriations bill typically specifies the number of teachers to be hired, by grade. The measure also specifies the amount of the appropriation, by grade, based upon that estimated number of teachers multiplied by actual average of new hire salaries and benefits.

#### CSR EXPENDITURES



**Note:** By the end of the 2002-2003 Fiscal Year, Nevada will have expended approximately \$673.5 million for the direct costs of funding the CSR Program, excluding any local capital expenditures or other local costs.

#### CSR—CLASSROOM CONFIGURATION



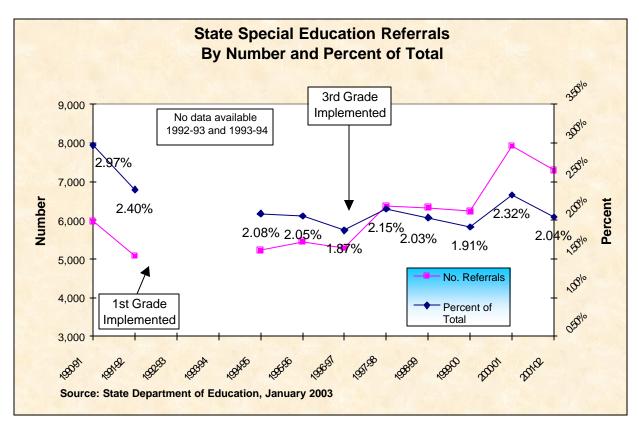
Sources: Class Size Reduction Reports, Nevada Department of Education and Legislative Counsel Bureau Fiscal Analysis Division, 2003.

The table below lists the percentage of "self-contained" Kindergarten 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> grade classrooms, where one teacher is alone in the room with the students.

	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03
Kindergarten		96.1%	98%	97.7%	98.5%	99.1%	98.5%	99.1%	96.5%	97.9%	97.2%	96.8%	97.5%
First	61.5%	68.7%	67.3%	70%	68.2%	64.7%	59.4%	65.2%	62.2%	69.1%	72%	78%	72.9%
Second		72.6%	67.4%	69%	68.4%	66.2%	59.6%	62.8%	60.8%	67.5%	71.6%	77.3%	71.8%
Third							94.5%	93.8%	93.3%	90%	91.5%	94%	95.7%

#### CSR—SPECIAL EDUCATION REFERRALS

The following table displays the total statewide special education referrals for all ages and grades:



**Note**: The data is not separated by grade or by whether the pupil was part of a federal program to identify children with disabilities beginning at ages 3 and 4.

# ELKO DEMONSTRATION PROGRAM

# ELKO COUNTY SCHOOL DISTRICT DEMONSTRATION PROJECT ON CLASS-SIZE REDUCTION – CATEGORIES OF CLASSROOM OBSERVATION

CATEGORIES	DESCRIPTION
INDIVIDUALIZATION IN TEACHING	
だめMonitoring ためGrouping ためChoice ためHelp ためWhole Class ためAll Children	<ul> <li>∠∠Teacher moves about room to check on students' work.</li> <li>∠∠Teacher divides class into subgroups.</li> <li>∠∠Teacher permits students to create own learning activities.</li> <li>∠∠Teacher offers feedback, critique, assistance, etc.</li> <li>∠∠Teacher provides whole class instruction.</li> <li>∠∠Teacher enables all children to participate in an activity.</li> </ul>
STUDENT ENGAGEMENT	
Ex Listening Ex Practicing Ex Responding Ex Gaming Ex Manipulating Ex Creating Ex Dialoguing Ex Problem-Solving Ex Reporting Ex Reflecting Ex Initiating Ex On-Task	<ul> <li>∠∠ Students listen to teacher direction, lectures, explanations, etc.</li> <li>∠∠ Students work at their seats to complete exercises, worksheets, etc.</li> <li>∠∠ Students respond orally to teacher questions, follow directions, etc.</li> <li>∠∠ Students play educational games, role-play, sing, etc.</li> <li>∠∠ Students manipulate blocks, markers, objects, etc.</li> <li>∠∠ Students draw, paint, work on projects, etc.</li> <li>∠∠ Students engage in discussion with other students and/or teacher.</li> <li>∠∠ Students engage in investigation, inquiry, drawing conclusions, etc.</li> <li>∠∠ Students share, present, report on accomplishments, ideas, etc.</li> <li>∠∠ Students evaluate their knowledge and skill based on teacher critique.</li> <li>∠∠ Students volunteer own ideas, perceptions, understanding, etc.</li> <li>∠∠ Students on-task with classroom assignment.</li> </ul>
MANAGEMENT OF STUDENTS	
Med Movement  Med Praise  Med Disruptions  Med Reproof  Med Remind  Med Warms  Med Cools  Med Peer  Med Permits	<ul> <li>Z≥Teacher moves about and interacts with students.</li> <li>Z≥Teacher gives oral praise, stickers, etc. for academic achievement.</li> <li>Z≥Teacher addresses disruptions.</li> <li>Z≥Teacher gives oral reproof, isolates a student, etc. for behavior.</li> <li>Z≥Teacher reminds students of class rules, procedures, etc.</li> <li>Z≥Teacher personalizes learning by sharing own experiences, jokes, etc.</li> <li>Z≥Teacher turns students off to learning by ignoring students, sarcasm.</li> <li>Z≥Teacher allows students to develop socialization skills in problem solving.</li> <li>Z≥Teacher permits students to make choices re: behavior (water, bathroom, etc.).</li> </ul>

Source: Elko County School District Demonstration Program Evaluation, Preliminary Results, 2001.

#### ELKO DEMONSTRATION PROGRAM

# COMPARISONS OF CLASSROOM BEHAVIOR OF TEACHERS IN CLASSROOM OBSERVATIONS – MARCH 2000 COMPARED WITH DECEMBER 2001

(Scale Scores out of Possible 5)

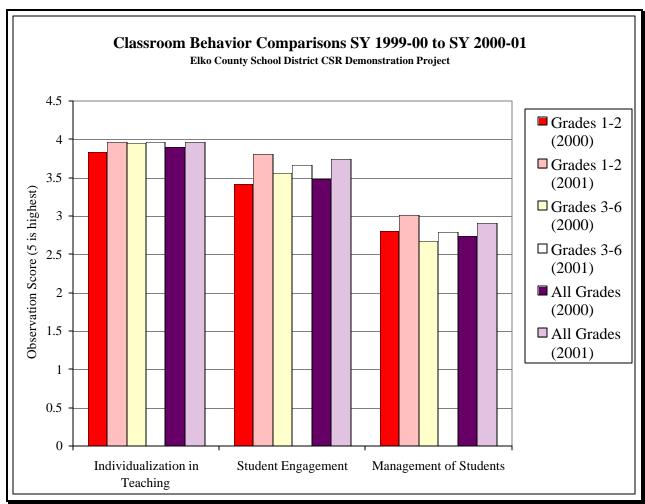
Grades	Types of Classrooms	Individualization in Teaching	Student Engagement	Management of Students
Grades 1 - 2	School Year 1999-2000 Observations n = 16	4.19	3.56	2.94
Grades 1 - 2	School Year 2000-2001 Observations n = 21	3.96	3.81	3.02
Grades 3 - 6	School Year 1999-2000 Observations n = 12	3.92	3.42	2.58
Grades 3 - 0	School Year 2000-2001 Observations n = 28	3.96	3.67	2.79

Source: Great Basin College. Report on the Elko County School District Class Size Reduction 22:1 Demonstration Project, January 2003.

#### **Scale for Scoring**

- 1 = Never Observed
- 2 = Seldom Observed
- 3 = Sometimes Observed
- 4 = Often Observed
- 5 = Constantly Observed

#### ELKO DEMONSTRATION PROGRAM



Source: Great Basin College. Report on the Elko County School District Class Size Reduction 22:1 Demonstration Project, January 2003.

#### ELKO DEMONSTRATION PROGRAM-TERRANOVA TEST RESULTS

# TERRANOVA TESTING RESULTS FOR SCHOOLS IN ELKO COUNTY SCHOOL DISTRICT FOR SCHOOLS IMPLEMENTING CSR AT 22:1 DURING SCHOOL YEAR 1999-2000 VS. SCHOOL YEAR 2000-2001

	SCIE	ENCE	REAL	DING	LANG	UAGE	MA	тн
	Implemented							
	SY1999-00	SY2000-01	SY1999-00	SY2000-01	SY1999-00	SY2000-01	SY1999-00	SY2000-01
Grade 2								
Oct. '01	43	49	47	55	53	65	50	53
Oct. '00	45	51	50	52	52	57	50	51
Oct. '99	42	52	45	55	49	58	41	52
Grade 3								
Oct. '01	46	50	50	59	52	60	47	48
Oct. '00	45	53	44	54	45	54	43	49
Oct. '99	51	55	50	64	53	57	47	46
Grade 4								
Oct. '01	44	57	41	55	42	59	43	51
Oct. '00	52	54	51	54	53	56	49	51
Oct. '99	46	56	45	57	51	59	43	49
Grade 5								
Oct. '01	48	59	44	57	48	61	44	46
Oct. '00	50	54	49	55	51	57	46	48
Oct. '99	52	53	49	55	50	57	44	45
Grade 6								
Oct. '01	46	60	43	59	50	65	48	59
Oct. '00	54	51	50	50	55	53	55	51
Oct. '99	52	50	51	49	55	53	50	51

Shading indicates score for year CSR 22:1 ratio started.

Source: Great Basin College. Report on the Elko County School District Class Size Reduction 22:1 Demonstration Project, January 2003.