

The Systemic Problem of High Class Size

Clark County Education Association

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Nevada's educators have long struggled with class sizes that are among the largest in the nation.¹ For nearly 30 years, state government has endeavored to lower class sizes in elementary schools through the Nevada Class Size Reduction program. First passed in the 1989 Legislative Session, the Class Size Reduction (CSR) law sought to reduce class sizes in the early grades to 15:1, eventually landing on class sizes that would not exceed 25:1 in all grades.² Today, due to newer laws³ and regulatory guidance from the Nevada Department of Education (NDE),⁴ large school districts in Nevada are allowed to have larger class sizes in grades 1-3 than originally contemplated in the 1989 CSR law.

Despite decades of laws and regulations, actual class sizes remain at high levels. According to Clark County School District (CCSD) reports submitted to the state and analyzed by CCEA, class sizes in the earliest grades are 2-3 pupils higher than those allowed by the Nevada Department of Education.⁵ Furthermore, budgeted class sizes in all other grades hover between 33 and 36 pupils per teacher.⁶

¹ Delaney, Meghin. [Study shows that Nevada schools have the largest average class sizes](#). August 11, 2018: Las Vegas Review-Journal.

² Butterworth, Todd. [Fact Sheet: Class Size Reduction](#). Research Division, Nevada Legislative Counsel Bureau: December 2015.

³ S.B. 515 (2015) and S.B. 544 (2017) changed provisions regarding class size reduction

⁴ Canavero, Steve. [District Guidance Document 23-17](#). Nevada Department of Education: September 29, 2017

⁵ [2017-18 Class Size Reduction Quarterly Report: Quarter 1](#). Clark County School District Human Resources Division.

⁶ According to school strategic budgets for 2018, CCSD middle schools were allocated teachers at a ratio of 33.5:1 in grades 4-5, 36:1 in middle school grades, 35.5:1 in high school, and 33:1 for magnet students.

That’s a higher than the 25:1 maximum class size ratio contemplated by legislators in 1989, and much higher than the national average of 15.96:1. Why do class sizes remain high, despite these laws?

It’s a systemic and self-perpetuating problem that, at its root, is caused by inadequate resources and a tired way of thinking about class size reduction. It’s a major concern for educators, students, and parents. **We’d like to take this opportunity to propose a more holistic type of solution.**

Class size ratios in current law

Grade Level	Ratio
1	17 : 1
2	17 : 1
3	20 : 1

A Systemic Problem

In Nevada, CSR is a grant funded by the Legislature. Each biennium, the legislature sets a number of teachers to be funded for class size reduction under certain constraints. For the 2017/2018 school yr, the legislature required the state to fund not less than 1,944 teachers for class size reduction purposes, and they allocated \$147,445,963 to this purpose. Of that money, about 75% came to Clark County. Clark County allocated that money directly to schools through the school strategic budgeting process– but it turns out that this grant was insufficient to realize class size reduction goals.

Class size ratios in CCSD in 2017

Grade Level	Ratio
K	21 : 1 (budgeted)
1	19.57 : 1
2	19.97 : 1
3	22.28 : 1
All other grades	33-36 : 1 (budgeted)

After reviewing available data, CCEA has found that, for 2017, the State of Nevada only allocated CCSD enough money to hire about 1,394 additional teachers to meet CSR requirements in grades 1-3.⁷
⁸ CCEA estimates that the district would have needed to hire **507**

additional teachers for CSR in grades 1-3.⁹ Hiring these teachers would have cost the district more than \$40.4M in 2017 over and above the state CSR grant.¹⁰ If the state of Nevada wanted to reach the original CSR goal¹¹ of 15:1 in the lower grades, it would cost an additional \$70M.

While CCSD did have enough money from the state to hire 1,394 teachers through Class Size Reduction, our analysis estimates that only about 1300 were hired.¹² As it has done for many years, CCSD applied

⁷ At an average unit cost of \$79,833 with benefits, CCSD’s \$111,268,300 CSR grant was enough to fund 1,394 classroom teachers.

⁸ The Nevada Legislature appears to have calculated the cost of a full-time teacher based upon a state average salary of \$75,847 (including benefits). The urban areas of the state have higher costs of living, and the average salary of teachers is slightly higher at CCSD (\$79,833 with benefits). This had the effect of reducing the purchasing power of the CSR grant in Clark County. The Legislature may want to look at chaining the cost of Class Size Reduction to some measure of local wealth or local inflation.

⁹ For 2017, CCSD set the base class size for elementary schools at 33.5:1 (one can see this in the 4th and 5th grade strategic budget allocations). If CCSD funded grades 1-3 at a 33.5:1 student teacher ratio in 2017, they would have needed 2,135 teachers. CSR ratios required CCSD to hire a total of 3,994 teachers for grades 1-3, a difference of 1,859 teachers over the baseline.

¹⁰ By our calculations, to make up for the shortfall in the CSR grant, CCSD would have had to hire 465 more teachers in grades 1-3 at a total cost of \$37,097,578.55.

¹¹ Butterworth, Todd. [Fact Sheet: Class Size Reduction](#). Research Division, Nevada Legislative Counsel Bureau: December 2015.

¹² Based on Q1 2017 waiver data, CCEA estimates that CCSD employed approximately 3,426 teachers in grades 1-3 in Q1 2017. Subtracting this number from the baseline of 2,135 teachers at a 33.5:1 ratio, we estimate that CCSD used the CSR grant to fund approximately 1,291 teaching positions in grades 1-3 during this period.

for, and received, a waiver from class size reduction requirements, and class sizes remained higher than the statute allows.

Though the CSR program in Nevada is an important part of the state’s educational program, because it only exists for pupils in grades 1-3, the vast majority of Nevada’s students are still educated in crowded classrooms. Numerous studies have justified the targeting of class size reduction resources at lower grade levels,¹³ but it should be noted that Nevada’s class sizes at higher grade levels far exceed the national average.¹⁴ At CCSD, class sizes in grades 4-12 all average above 33:1. That means a 4th grade classroom is often twice the size as a 1st grade classroom in the same school. In the secondary level, the effect of a class size of 36:1 is multiplied by the fact that secondary teachers can have five to seven sections of the same class. This means, in many cases, middle and high school teachers have the responsibility of educating well over 200 students per year.¹⁵ As part of this policy brief, CCEA gathered available public data and estimated how much it would cost for classes in grades 4-12 to be reduced to a 25:1 ratio. Based on our estimates, reducing class size in the higher grades would require the hiring of 2,593 teachers and cost at least an additional \$207M per year. **If class sizes were reduced to originally conceived levels in all grades,¹⁶ it would cost \$309.9M.**

Grade	2017 ADE	Current CCSD policy	Budgeted teachers under current policy	15/22/25:1 CSR Ratio	Number of teachers needed for 15/22/25:1 CSR	Difference
K	22,700	16	1419	15	1513	95
1	24,010	17	1412	15	1601	188
2	23,812	17	1401	15	1587	187
3	24,451	20	1223	15	1630	408
4	25,466	33.5	760	22	1158	397
5	25,775	33.5	769	22	1172	402
6	24,344	36	676	22	1107	430
7	24,207	36	672	25	968	296
8	23,929	36	665	25	957	292
9	25,212	35.5	710	25	1008	298
10	25,282	35.5	712	25	1011	299
11	26,624	35.5	750	25	1065	315
12	23,208	35.5	654	25	928	275
			11823		15706	3882
2017 Average Salary Unit Cost			\$79,833.00		\$79,833.00	Total Add'l Cost
Cost of Current Policy			\$943,894,199.36	Cost of Enhancement	\$1,253,832,761.03	\$309,938,561.67

¹³ [Class Size & Student Achievement](#). Center for Public Education: 2018.

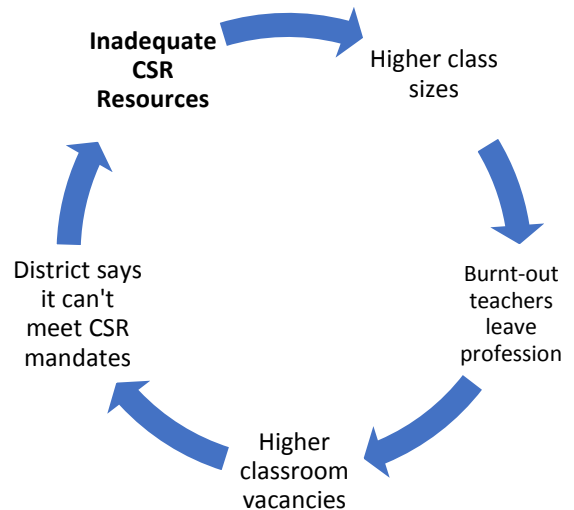
¹⁴ As previously noted, a report by [NEA](#) notes that Nevada’s average class size of 25.86:1 far exceeds the national average class size of 15.96:1

¹⁵ Dr. William Ouchi, who consulted with the state on the CCSD Reorg and Empowerment schools, wrote an entire book on the subject of “total student load.” In it, he asserts that the teachers should not have the responsibility of educating more than 80 students.

¹⁶ Originally conceived levels were 15:1 in grades K-3, 22:1 in grades 4-6, and 25:1 in grades 7-12 (Butterworth 2005)

What CCEA has seen is that high class size is a problem that has a lot of downstream effects:

- The stress associated with higher class sizes causes many teachers to burn out and leave the profession.¹⁷ In 2017, more than 1,700 teachers left CCSD, and many reported leaving the district to pursue careers outside of education.
- Attrition due to teacher burnout causes CCSD to have a high number of classroom vacancies. When attempting to fill vacant positions with new recruits, CCSD has a harder time doing so because of its reputation for high class sizes.
- Because of high classroom vacancies, the District routinely concludes that it is unable to reduce class size to the statutory requirements – so it asks for waivers from the Department of Education- annually. The Department routinely grants these waivers and allows class size to exceed the statutory requirements.
- At the state level, budgets are built upon these historical precedents. Inadequate resources are provided to districts for class size reduction, knowing that districts are likely unable to reach statutory CSR targets anyway.
- Meanwhile, classroom teachers continue to deal with the increased stress of educating large classes of students, starting the cycle all over again.



CCEA believes that we need to break this cycle and rethink how we deliver low class sizes to our teachers and students. In the 2019 legislative session, we believe that lawmakers will have an opportunity to rethink class size reduction and make significant progress for our kids.

What should lawmakers do in 2019 about high class size?

- 1) The State should allocate the necessary resources to ensure that CCSD can comply with current statutory requirements.
 - a. As it sits today, the state does not allocate enough money to CCSD to meet statutory requirements. **In 2017, CCEA estimates that CCSD needed about \$40.4M in additional resources to comply with the current CSR law.** That would have been enough to hire 507 additional teachers in the early grades.
- 2) The State should consider changes to the method which it allocates CSR funds.
 - a. Currently, the state funds CSR based upon an estimate of the minimum number of teachers required to meet the CSR statute. This estimate appears to be based off a measure of **state average wage for teachers, and it shortchanges urban areas**, which tend to have higher average wages for teachers.

¹⁷ A multitude of studies have supported this conclusion. Some are summarized in Jerkins, Morgan. [Too Many Kids: School districts are packing more and more students into classrooms—and that's pushing teachers out.](#) The Atlantic: July 1, 2015.

- b. Instead of setting CSR budgets by placing a number of teachers in statute, CSR should be **converted into a weight for eligible elementary school pupils**. Based upon our analysis, adequately funding CSR would have meant adding a 0.36 – 0.4 weight to funding in 2017 for these pupils.¹⁸
- 3) The State should consider ways to begin to reduce class sizes in grades 4-12
 - a. At higher grade levels, Nevada’s teachers are dealing with some of the largest class sizes in the country. These high class sizes contribute to attrition and have a long-term effect on teacher vacancies.
 - b. **CCEA estimates that it would have cost at least \$309.9M to reduce class sizes in all grades in 2017**. This is a large number, but we contend that the State should look at ways to begin reducing class sizes in the higher grades, perhaps starting with ways to incentivize middle and high schools to reduce the total student load of teachers and keep more teachers in the profession longer.
- 4) The State should pass legislation authorizing local County government or school Districts to have **a local funding option that would provide funds** that would be outside the Distributive School Account (DSA) to supplement existing state revenue that specifically would address reducing class sizes.

In Conclusion

This white paper has addressed the issue of class size reduction for Clark County School District because the problem is not only systemic but escalating. Addressing large class sizes has been an ongoing discussion in education policy and politics in Nevada for years especially in Clark County. However, to advance this discussion to find solutions, one cannot ignore the fiscal impact this would have. When one sees the size of the fiscal impact and understands the challenges in finding additional funds in Nevada politics, then one has to look for other sources of revenue outside of the State’s Distributive School account to help alleviate this problem in Clark County.

CCEA believes that it is possible – and necessary – to reduce class sizes in CCSD to the statutory requirements in a cost-effective way. By taking these steps, and thinking out of the box on funding solutions, we believe that CCSD can attract more teachers, retain more teachers, and boost student achievement.

¹⁸ CCEA estimates that adequately funding CCSD’s CSR requirements in 2017 would have cost approximately \$148,365,878.55. Given that CCSD had 71,519 students enrolled in grades 1-3 in 2017, and given that the state basic support allocation was \$5,700, CSR funding could have been expressed as a 0.3637 weight. More research would need to be done to ensure that this is the right weight going forward.