The Nevada Teacher Workforce

*What We Know, Don’t Know, & Need to Know*
What We Know

The most important factor affecting student learning is the classroom teacher.
Overview

- Highlights from the Nevada Class Size Report
- Current Trends in the Teacher Workforce
- The Work Ahead
What Happens When Nevada Makes Strategic Investments in Education?
Nevada Has Made Massive Investments in Early Literacy

Full Day Kindergarten
- 2015 to 2017 $41 - $96 Million per year

Class Size Reduction
- 2015 to 2019 $147 - 189 Million per year

Zoom
- 2013 to 2014 $25 Million per year
- 2015 to 2019 $50 Million per year

Victory
- 2016 to 2019 $25 Million per year

Read by Grade 3
- 2016 to 2019 $4.9 - $22.3 Million per year
US Department of Education tests the nation in 4th Grade Reading every two years.
2005 average scale score for Nevada is significantly lower than National public average scale.
In 2019 the 1st cohort with exposure to Nevada’s massive investment in early literacy took the NAEP reading assessment.

What Happened?

<table>
<thead>
<tr>
<th>School Year</th>
<th>Class Size Reduction</th>
<th>Zoom</th>
<th>Read by 3</th>
<th>Victory</th>
<th>Full Day K</th>
</tr>
</thead>
<tbody>
<tr>
<td>4th Grade</td>
<td>2018-2019</td>
<td>$152 M</td>
<td>$50 M</td>
<td>$25 M</td>
<td>$25 M</td>
</tr>
<tr>
<td>3rd Grade</td>
<td>2017-2018</td>
<td>$147 M</td>
<td>$50 M</td>
<td>$20.5 M</td>
<td>$25 M</td>
</tr>
<tr>
<td>2nd Grade</td>
<td>2016-2017</td>
<td>$155 M</td>
<td>$50 M</td>
<td>$22.3 M</td>
<td>$25 M</td>
</tr>
<tr>
<td>1st Grade</td>
<td>2015-2016</td>
<td>$151 M</td>
<td>$50 M</td>
<td>$4.9 M</td>
<td>$25 M</td>
</tr>
<tr>
<td>Kindergarten</td>
<td>2014-2015</td>
<td>$189 M</td>
<td>$50 M</td>
<td></td>
<td>$41 M</td>
</tr>
</tbody>
</table>

Values indicate statewide allocations, not grade level specific.

Class size reduction in 2014-2015 includes additional funding specifically for Kindergarten.
2019 average scale score for Nevada is not significantly different from National public average scale score (0-500).
Investment

Nevada is improving significantly faster than the Nation!

Only 3 states have made more progress than Nevada in 4th grade reading achievement over the last decade.
Nevada Education
Is a System Worth Investing In

2019 average scale score for Nevada is not significantly different from National public.

Performed in line with their national peers! For the 1st Time Ever!
What Is the Biggest Threat to the Academic Gains Our Students Have Made?
Recommended Class Sizes in Nevada

Grades 1\textsuperscript{st} - 3\textsuperscript{rd} = 15

Grades 4\textsuperscript{th} - 12\textsuperscript{th} = 25

In 2018, the State Board of Education passed a non-binding suggested ratio of pupil per licensed teacher for each classroom and course of instruction, except choir, orchestra, and band.

How does this compare to actual class sizes experienced by students?
The average 2nd grader in Nevada had a class size of 20.

Average Class Sizes Experienced by Nevada Students
2019-2020

- First Grade: 19.7
- Second Grade: 20
- Third Grade: 21.6
- Fourth Grade: 26.9
- Fifth Grade: 27.6
- Secondary English: 27.4
- Secondary Math: 27.7
- Secondary Science: 29.2
- Secondary History: 30

SBOE recommended class sizes

Source: Infinite Campus Secondary is defined as grades 6 through 12. Analysis based on students enrolled on October 1, 2019 and enrolled in the school for a total of at least 165 days. Section enrollments of 50 or greater excluded from elementary analysis and 70 or greater from secondary analysis. There were 350,807 students included in this analysis.
Average Class Sizes Experienced by Nevada Students
2019-2020

How many students were in a class larger than the recommended size?

SBOE recommended class sizes

Source: Infinite Campus. Secondary is defined as grades 6 through 12. Analysis based on students enrolled on October 1, 2019 and still in the school for at least 60 or more days. Section enrollments of 50 or greater excluded from elementary analysis and 70 or greater from secondary analysis. There were 30,807 students included in this analysis.
How many students were in a class larger than the recommended size?

374,424
Class Sizes

Approximately 9 in 10 students had a class size larger than the recommended class size.
How many teachers do we need?
# Teachers Needed

<table>
<thead>
<tr>
<th></th>
<th>Total Current Teacher Count</th>
<th>Estimated Additional Teachers Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 1-5</td>
<td>8,315</td>
<td>2,133</td>
</tr>
<tr>
<td>Secondary Core Subjects</td>
<td>11,212</td>
<td>930</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>3,063</strong></td>
<td></td>
</tr>
</tbody>
</table>

To get to recommended class sizes for elementary grades 1-5 and core secondary courses, a very conservative estimate would require over **3,000 more classroom teachers!**

3,000+ Teachers Needed

Grades 1-5 & Secondary Core Subjects

To verify this is a valid and conservative estimate, we can compare Nevada’s student-teacher ratios to the national average.

National Student-Teacher Ratios

| National Average | 14.9-to-1 |
| Vermont (lowest in nation) | 10.5-to-1 |

How many teachers would we need in Nevada to meet the national student-teacher ratios?

### National Student-Teacher Ratios

<table>
<thead>
<tr>
<th></th>
<th>Student-Teacher Ratio</th>
<th>Additional Teachers Needed in Nevada</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Average</td>
<td>14.9-to-1</td>
<td>9,823</td>
</tr>
<tr>
<td>Vermont (lowest in nation)</td>
<td>10.5-to-1</td>
<td>23,678</td>
</tr>
</tbody>
</table>

Nevada needs almost **10,000 more teachers** to meet average staffing ratios!

*Data based on 2019-2020.*
Nevada Needs More Teachers.

Teachers Needed

- Improve Core Class Sizes
  - 3,000+

- Meet national system-wide student-teacher ratios
  - 9,800+

- Lead the nation in student-teacher ratios
  - 23,000+
What’s been happening since that report came out?
This line is the average of cumulative licensed staff separations through the school year for 2011-2012 through 2019-2020.
As of February 2021, CCSD had the lowest licensed staff separations of any year over the last decade. That changed after the vaccine came out, and CCSD ended the school year with above average separations.
CCSD Teacher / Licensed Staff Separation Announcements
Total (Aug - Mar) Separation Announcements for the Last Decade

Source: Licensed Staff Separations Reports from CCSD Board Docs.
CCSD Teacher / Licensed Staff Separation Announcements

Total (Aug - Mar) Separation Announcements for the Last Decade

Source: Licensed Staff Separations Reports from CCSD Board Docs.
### Data

**AB266**

**2021-2022 AB266**

### Employee Count by Group

**2021-2022**

**2020-2021**

**2019-2020**

**2018-2019**

**2017-2018**

**2016-2017**
CCSD Licensed Staffing Count by School Year

For the months of October and March

<table>
<thead>
<tr>
<th>School Year</th>
<th>Licensed Staff Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>18,400</td>
</tr>
<tr>
<td>2018</td>
<td>18,600</td>
</tr>
<tr>
<td>2019</td>
<td>18,700</td>
</tr>
<tr>
<td>2020</td>
<td>18,800</td>
</tr>
<tr>
<td>2021</td>
<td>18,900</td>
</tr>
</tbody>
</table>

Source: https://ccsd.nvild/region/human-resources/diveholddata
Employee Count by Group, date range
What do teacher/licensed staff separations look across the country?
Texas teacher turnover rate remains low despite pandemic challenges, new data shows

- Attrition rate in Texas was at 9.4%
  “...our attrition rate right now is at its lowest as it was in 2011.”

- 2,000 more teacher certifications in Texas compared to last year

Is Chicago's school staffing crunch about to get worse?

By Mauricio Pena and Cassie Walker Burke | Dec 8, 2021, 5:49pm CST

“The overall vacancy rate has gone down since the start of the year, when Chicago Public Schools reported a 3.3% vacancy rate the first week of school – a stronger staffing position than in previous years.”

Chicago Public Schools teacher vacancy rates have been improving throughout the school year.

- Beginning of school year: 3.3%
- December: 2.9%
- January 3: 2.7%

Teacher turnover rate in Washoe County lower than national average

by Abigail Vaerewyck | Thursday, February 3rd 2022

“Schools across the country are facing a teacher shortage because of the COVID-19 pandemic and burn out. Some schools are even having to move to virtual learning due to lack of teachers, but that’s not the case for Washoe County.”

"According to the Bureau of Labor Statistics, while turnover rates are setting new highs in the private sector, they look pretty normal in public education."

Source: https://www.the74million.org/article/aldeman-there-is-no-big-quit-in-k-12-education-but-schools-have-specific-labor-challenges-that-need-targeted-solutions/
While we have seen no evidence that there is a massive exodus of teachers during this school year like what is happening in CCSD,
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We expect national teacher attrition to be above average at the end of the school year.
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We expect national teacher attrition to be above average at the end of the school year.

This will make teacher recruitment more competitive than ever.
Where does the national perception on the teacher exodus come from?
Key Finding

- Nearly one in four teachers said that they were likely to leave their jobs by the end of the 2020-2021 school year.

Never actually happened.

Source: https://www.rand.org/pubs/research_reports/RRA1108-1.html
Teachers Are Quitting, and Companies Are Hot to Hire Them

Businesses eager to fill jobs are offering former educators better pay and more autonomy

By Kathryn Dill
Updated Feb. 2, 2022 7:26 am ET

Corrections & Amplifications

The rate of people quitting jobs in the private educational-services industry rose more than in any other industry in 2021. An earlier version of this article incorrectly said the overall education sector had the highest rate. (Corrected on Jan. 31, 2022.)

Appeared in the February 1, 2022, print edition as ‘Companies Are Hot to Hire Teachers Quitting in Dromes.’

Private educational-services does not include public school teachers.

Source: https://www.wsj.com/articles/teachers-are-quitting-and-companies-are-hot-to-hire-them-11643634181?mod=hp_lead_pos11
SC education advocates say 2021 state report shows stark reminder of teacher shortage

by: Melanie Palmer
Posted: Dec 2, 2021 / 04:49 PM EST / Updated: Dec 2, 2021 / 05:37 PM EST

State, districts mulling ways to stay open as 2022 NC schools close for COVID-19 staff shortage

Posted January 12, 2022 6:36 p.m. EST
Updated January 13, 2022 9:50 a.m. EST

Philadelphia School District teacher vacancies, absences have created a staffing crisis in some buildings

by Kristen A. Graham
Published Nov 29, 2021

Philadelphia typically employs about 19,000 workers, and its 3% vacancy rate for teachers this year is not much worse than in previous years, the district said. But the practical reality of the open jobs — spurred by a national labor shortage — is complicated by the staff absences, a dire lack of substitutes, the pandemic, and a challenging school year after children had been out of classrooms for 18 months. The result is crushing in some schools.
What do teacher vacancy rates look like across the country?
Teaching Vacancy Rates

- South Carolina 1.9%
- North Carolina 2.7%
- Chicago Public Schools 2.7%
- Philadelphia 3.0%
- CCSD 4.4%

Year over year, the number of licensed staff in Philadelphia has been rising!

There are more licensed staff working to support students in Philadelphia than any January over the last 5 years.
There are less licensed staff working to support students in CCSD than any January over the last 5 years.

Licensed staff counts are plummeting in CCSD!
Students per Licensed Staff

(Includes all licensed staff. This is not student teacher ratio)

School District of Philadelphia

11.9 Students Per Licensed Staff

Clark County School District

16.3 Students Per Licensed Staff

To match Philadelphia’s staffing ratio, CCSD would need to **hire 6,821 more licensed staff!**

CCSD’s ratio uses an approximate student enrollment of 300,000 and licensed staffing count of 18,389. Philadelphia’s ratio uses student enrollment of 114,902 and licensed staffing count of 9,046.
Teaching Vacancy Rates

- Philadelphia
- CCSD

If thousands of teachers & licensed staff quit in Philadelphia so that Philadelphia was staffed at CCSD’s ratio of 16.3 students per licensed staff...

Philadelphia would have a vacancy rate of 27%
CCSD efforts to bring in more teachers, but is it enough?

by Tiffany Lane | Thursday, March 3rd 2022

Right now the district website shows more than 1,400 openings for teachers.

CCSD officials say that those are projected opening for next year and that they are currently short 77 teachers.

CCSD already has 1,472 teacher/licensed staff positions to fill before next school year!
Historically, the biggest wave of teacher separations happens in April - June.
Over the last decade, the average separations announcements in April has been 265.
In the first CCSD Board Meeting for April 2022, there are 29 pages of separation announcements.

402 Licensed/Teacher Separation Announcements

Source: Licensed separation report from CCSD Board Docs.
This was two years ago.

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The Work Ahead
Strategic Questions

What is happening with Nevada’s teacher workforce right now?

What are the class sizes our children are experiencing right now?

How many students have a long-term sub right now?

What does the teacher pipeline look like right now?

What obstacles do we face going forward?
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