

Nevada Class Sizes A Comprehensive Review



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

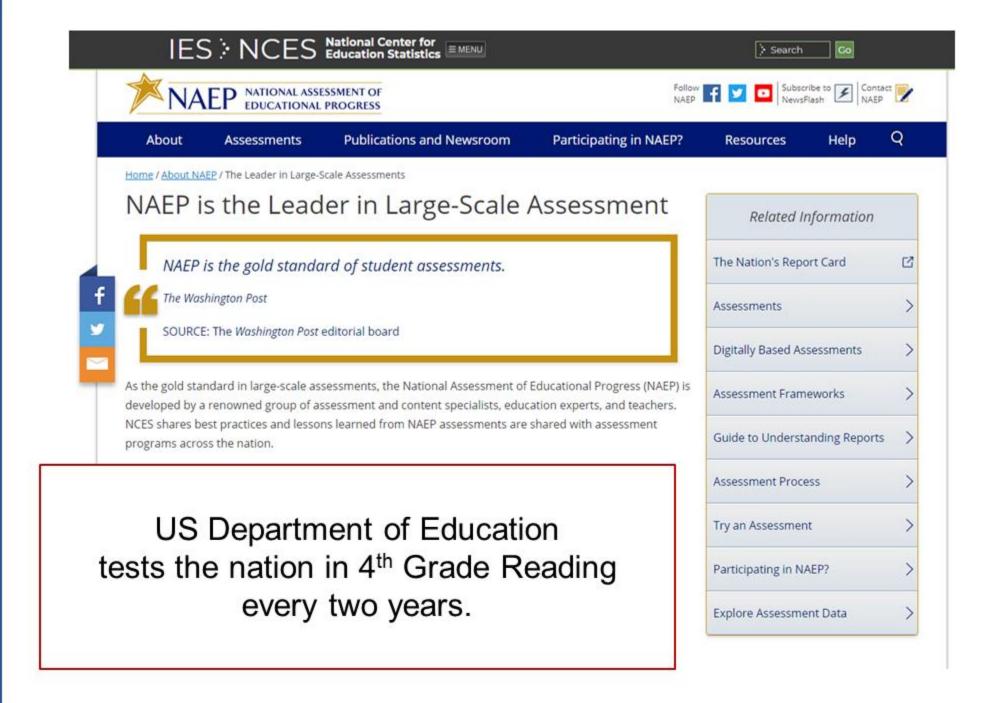
Victory

2016 to 2019 \$25 Million per year

Read by Grade 3

2016 to 2019 \$4.9 - \$22.3 Million per year



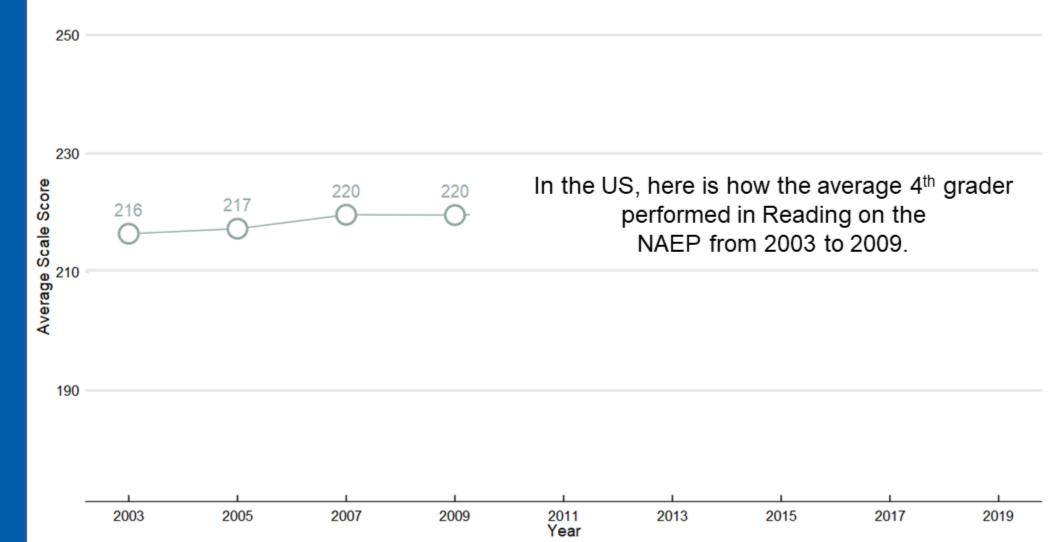




National Assessment of Educational Progress (NAEP)

4th Grade Reading





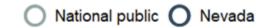


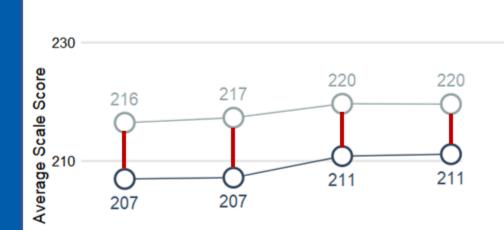
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National Assessment of Educational Progress (NAEP)

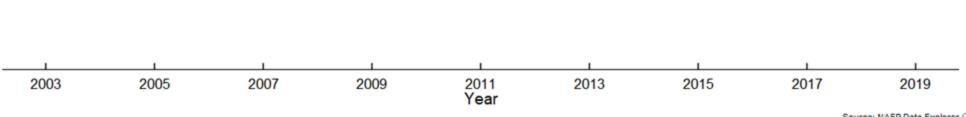
4th Grade Reading





Prior to the major investments in early literacy, Nevada's 4th graders were performing about a year behind their national peers.





In 2019 the 1st cohort with exposure to Nevada's massive investment in early literacy took the NAEP reading assessment.

What Happened?

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



National Assessment of Educational Progress (NAEP)

4th Grade Reading



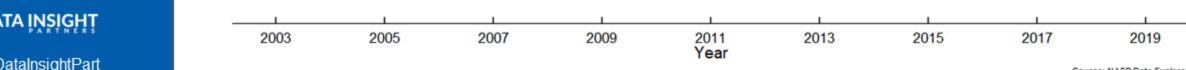


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The first cohort with full exposure to the investment, Performed in line with their national peers!

For the 1st Time Ever!





GRADE 4 READING 2019

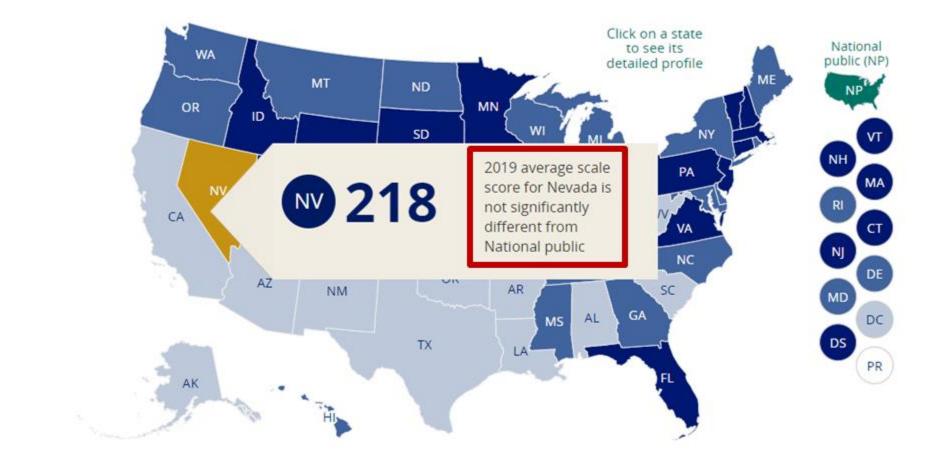
AVERAGE SCALE SCORES







Reading, grade 4, Difference in average scale scores between jurisdictions, for all students [TOTAL] = All students, 2019



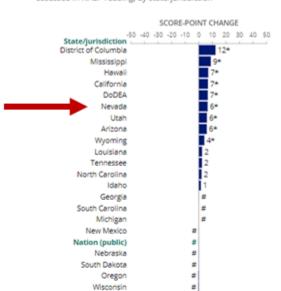


NAEP

Improvement 2009 to 2019



Score-point change between 2009 and 2019 for fourth-grade public school students assessed in NAEP reading, by state/jurisdiction



Pennsylvania Colorado Oklahoma Indiana Iowa Minnesota Florida Illinois

Arkansas West Virginia Washington New Jersey

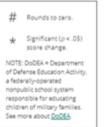
Rhode Island

Massachusetts Texas Virginia Montana Alabama Connecticut Kentucky New York North Dakota Kansas New Hampshire Missouri Maryland Alaska Vermont Delaware

Maine

-50 -40 -30 -20 -10 0 10 20 30 40 50

SCORE-POINT CHANGE



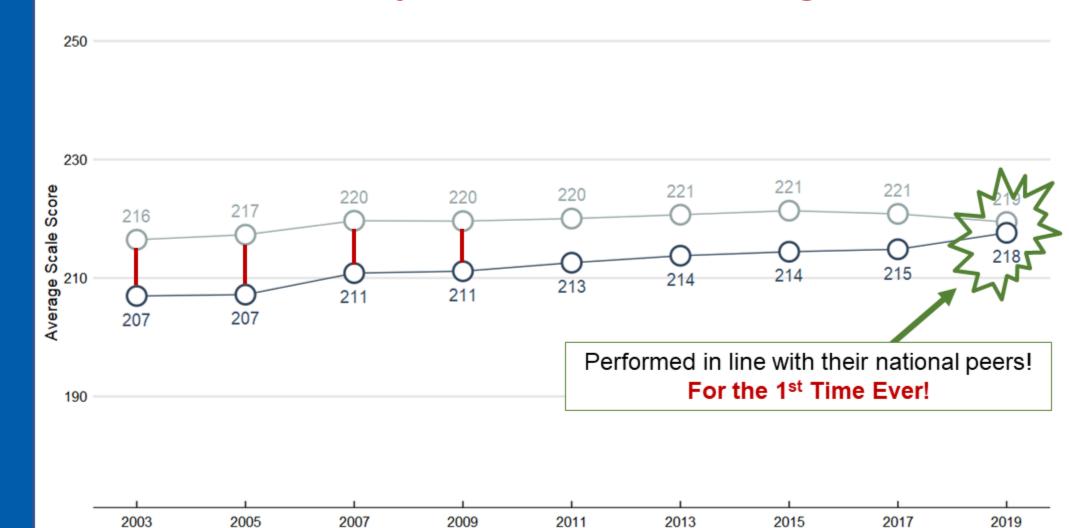
Nevada is improving significantly faster than the Nation!

Only 3 states have made more progress than Nevada in 4th grade reading achievement over the last decade.



10

Nevada Education Is a System Worth Investing In



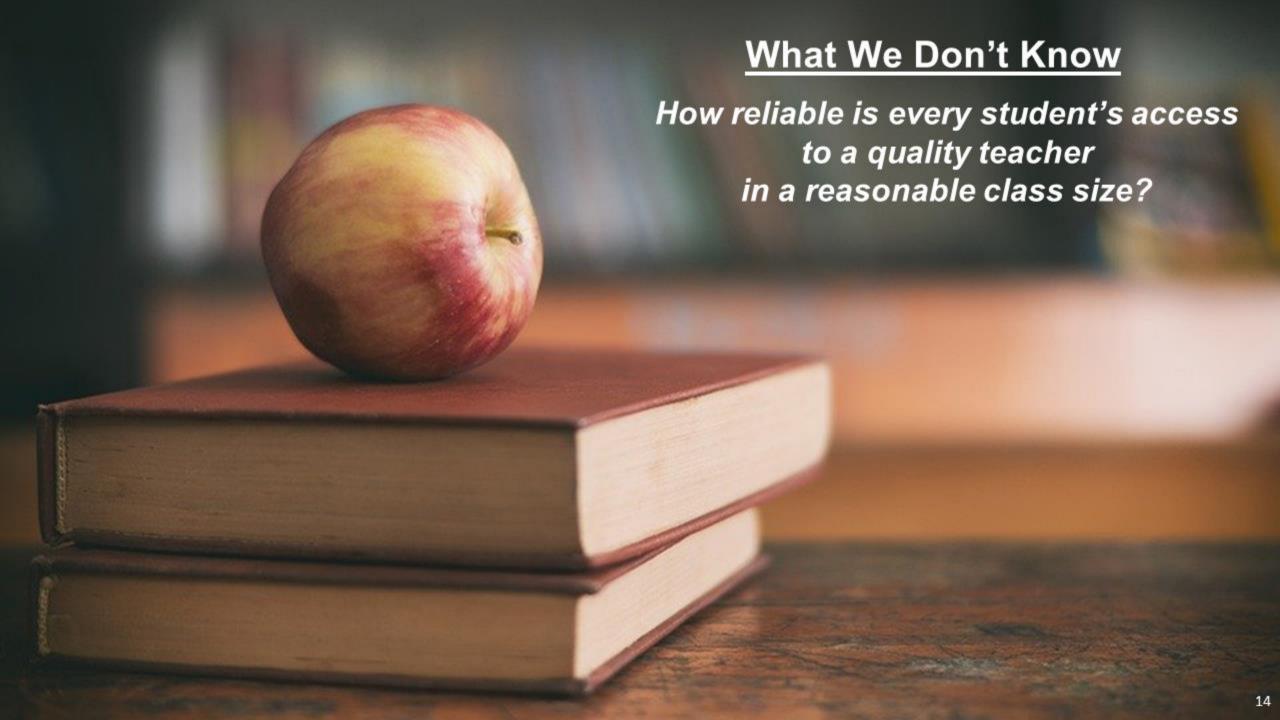
Year



What Is the Biggest Threat to the Academic Gains Our Students Have Made?







What is the context for our review?

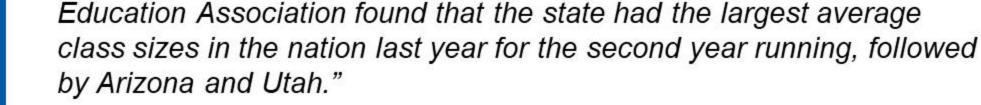




"Nevada is declaring its teacher shortage as an emergency, a move that allows vacancy-filled schools to hire teachers from out of state who aren't yet licensed locally."







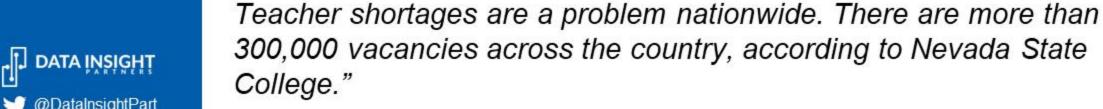






"Washoe County School District is facing a teacher shortage and they are looking to hire as many applicants as possible, but many parents say the lack of teachers affect their students' education."









"To help with staff shortages amid the COVID-19 pandemic, the Washoe County School District can now hire emergency substitute teachers who only have high school diploma."

"The Washoe County School District has said staff shortages are a main reason it cannot keep all schools open for in-person learning."



Strategic Questions

Strategic Questions

What are the actual class sizes our students are experiencing?

How many teachers do we need?

Do students have equitable access to teachers?

What obstacles do we face?



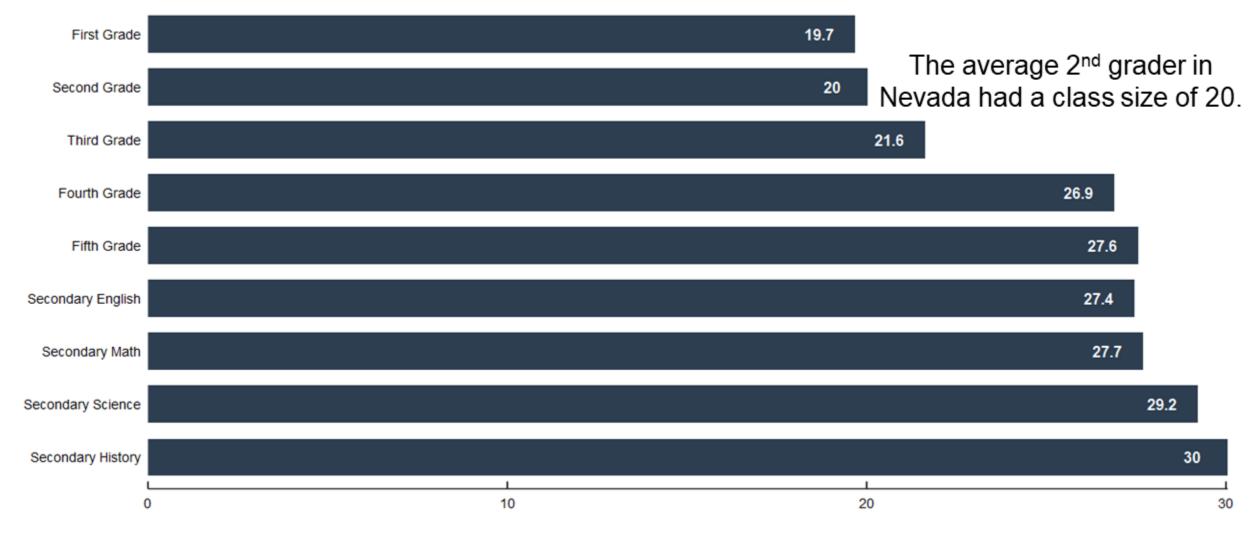
What are the actual class sizes our students are experiencing?



Strategic Questions

What are the actual class sizes our students are experiencing?





Class Sizes

Recommended Class Sizes in Nevada

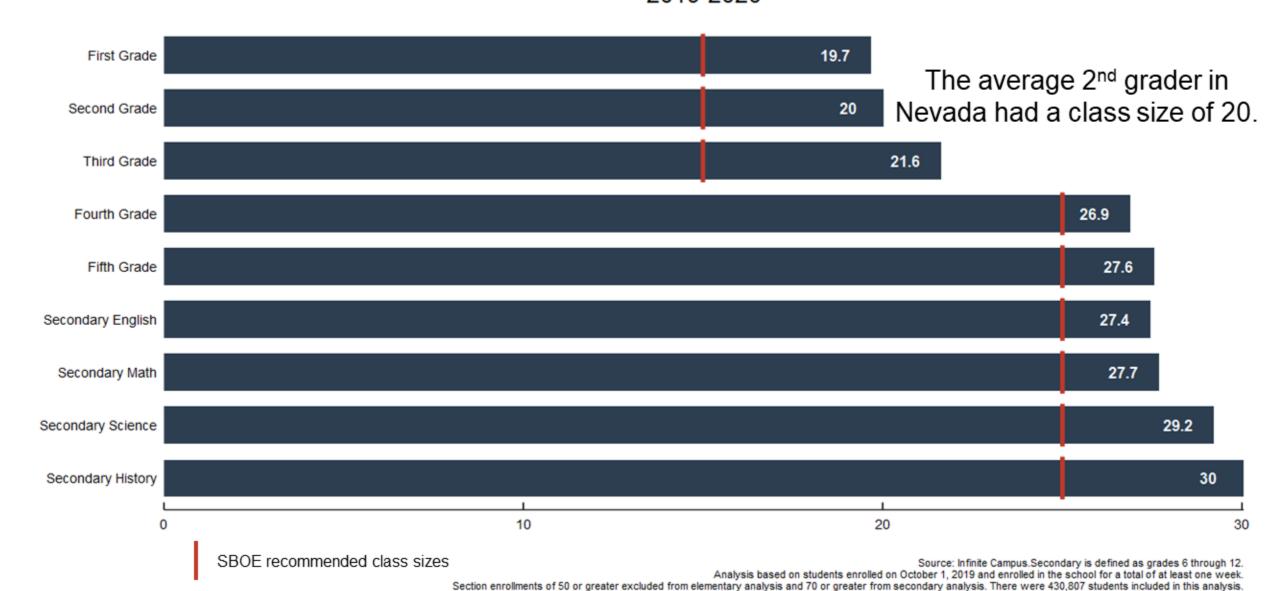
Grades
$$1^{st} - 3^{rd} = 15$$

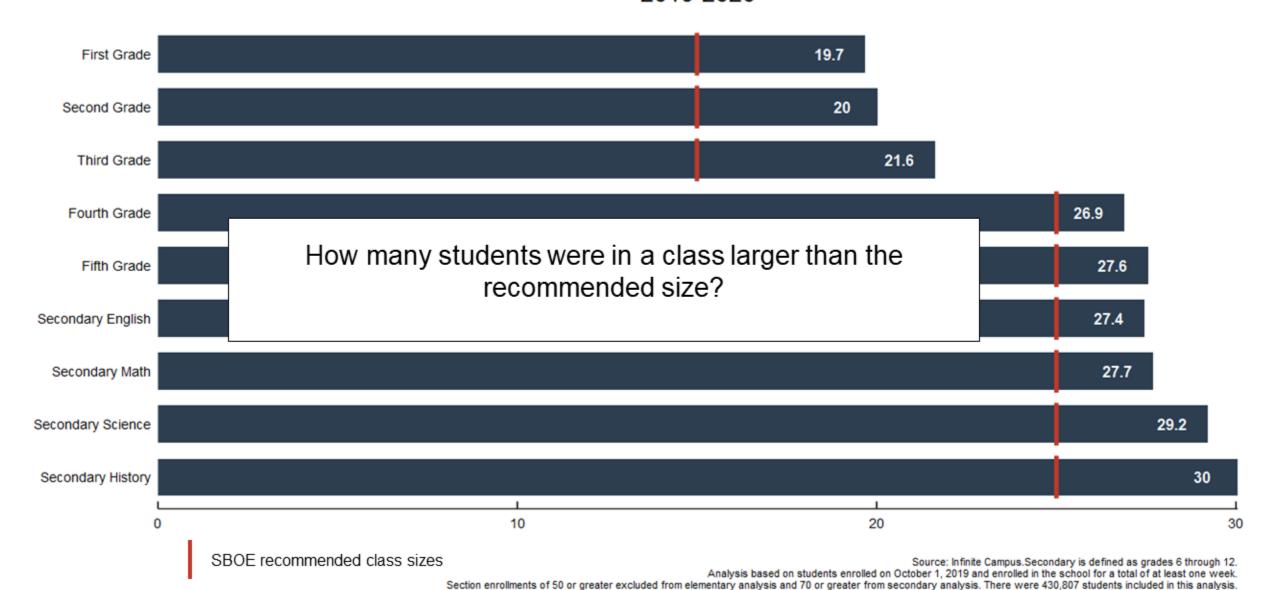
Grades
$$4^{th} - 12^{th} = 25$$

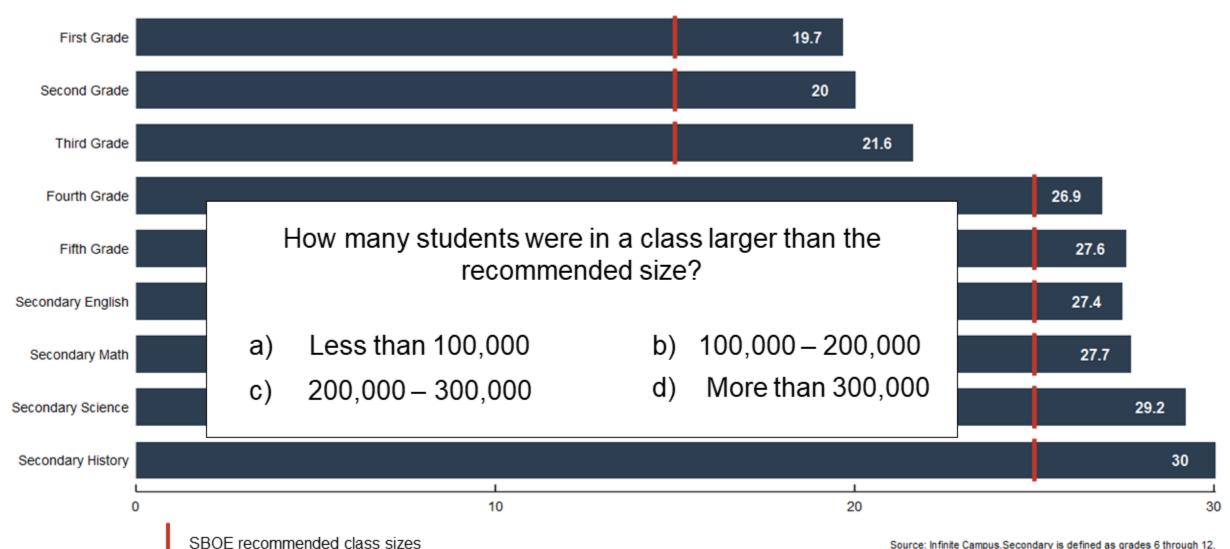
In 2018, the State Board of Education passed a non-binding suggested ratio of pupil per licensed teacher for each classroom and course of instruction, except choir, orchestra, and band.

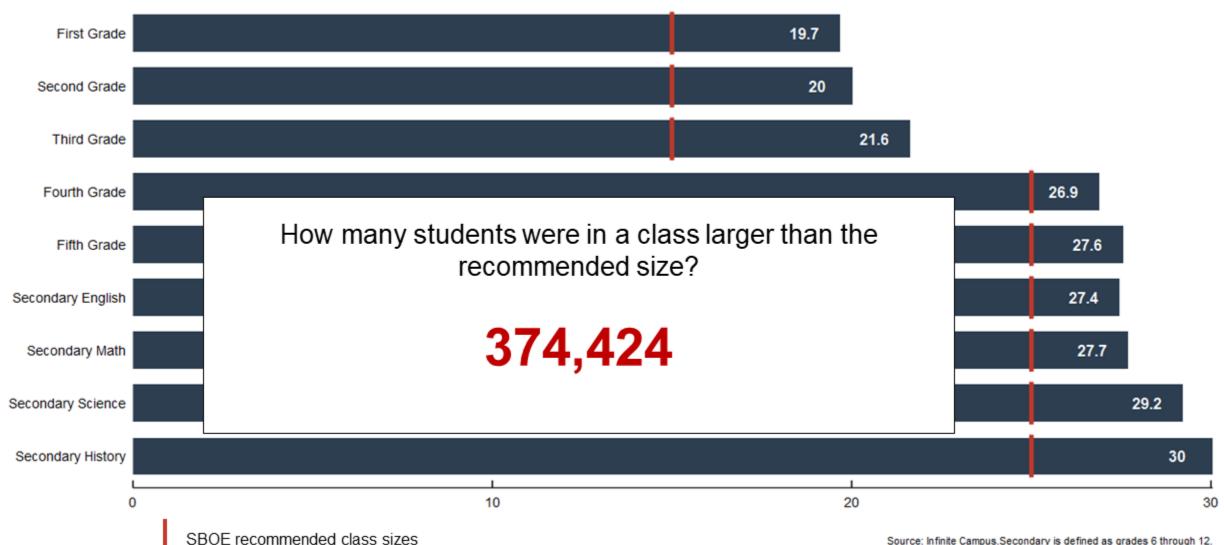
How does this compare to actual class sizes experienced by students?

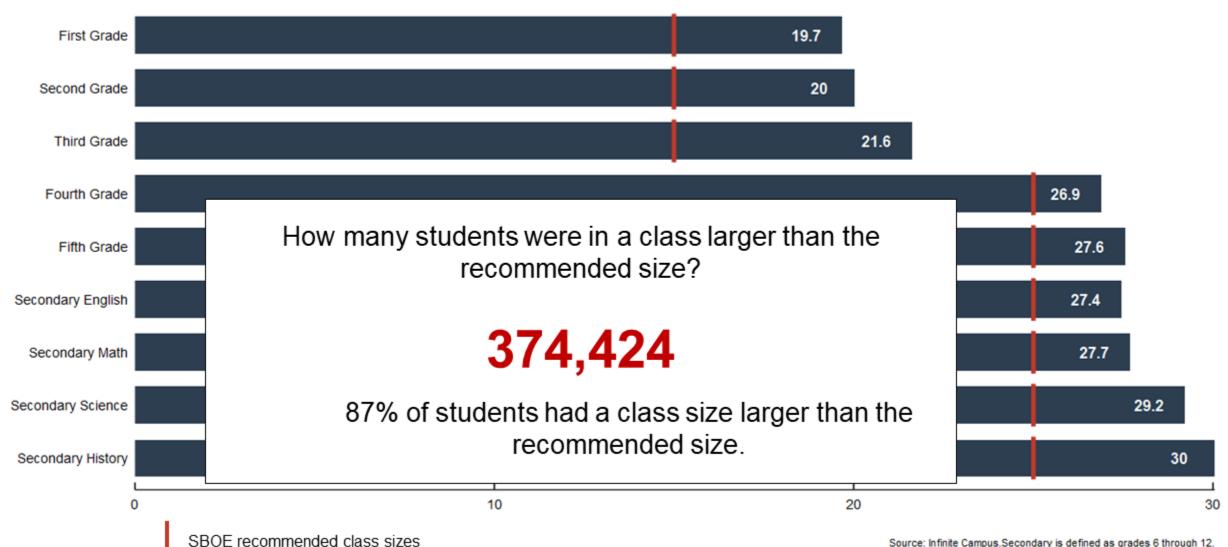












Summary

Where Are We?

Approximately 9 in 10 students have a class size larger than the recommended class size



How many teachers do we need?



Classroom Teachers

Teachers Needed

	Total Current Teacher Count	Estimated Additional Teachers Needed
Grades 1-5	8,315	2,133
Secondary Core Subjects	11,212	930
	Total:	3,063

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!



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.



Classroom

National Student-Teacher Ratios

	Student-Teacher Ratio
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?

Classroom Teachers

National Student-Teacher Ratios

	Student-Teacher Ratio	Additional Teachers Needed in Nevada
National Average	14.9-to-1	9,823
Vermont (lowest in nation)	10.5-to-1	23,678



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

Summary

Nevada Needs More Teachers.

Teachers Needed

Improve 3,000+

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

Lead the nation in student-teacher ratios 23,000+

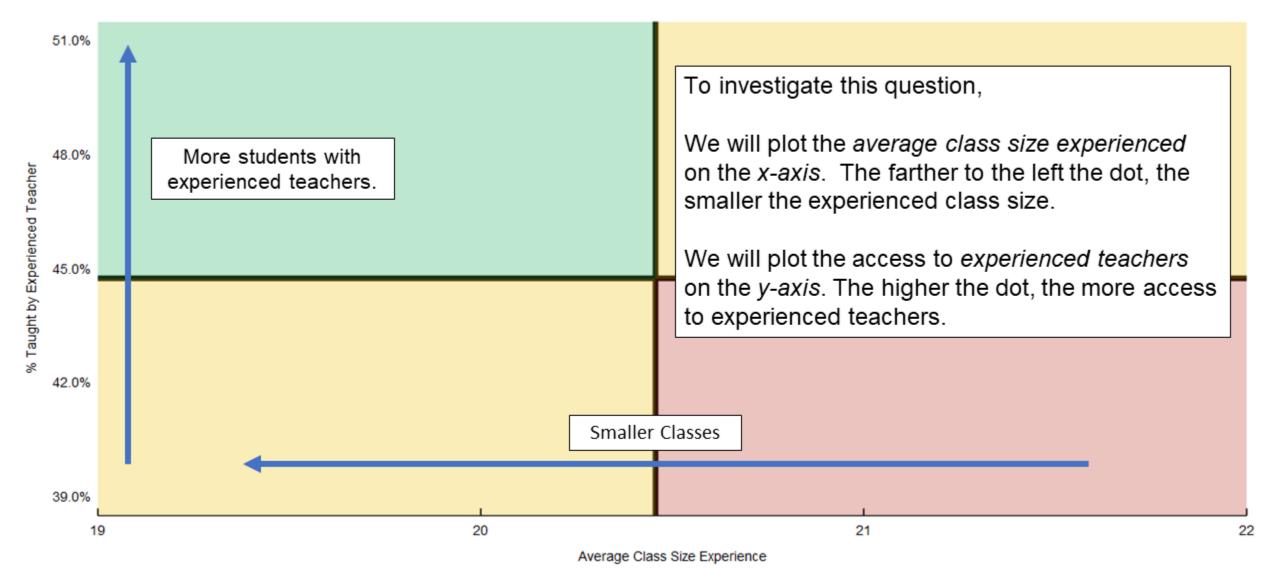


Do students have equitable access to teachers?

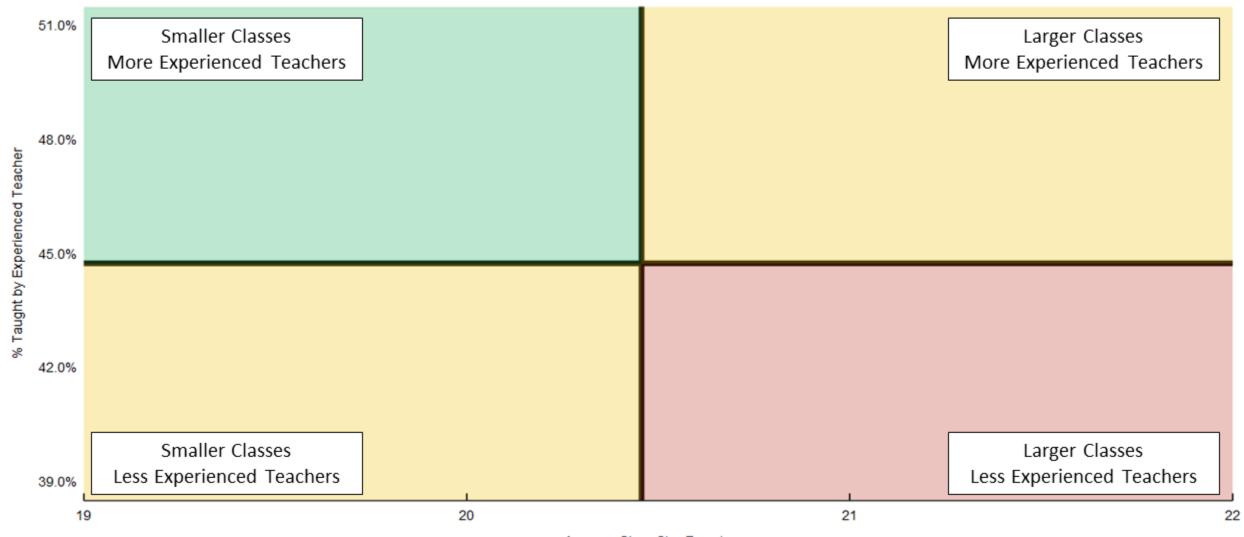
Is access associated with disparate student outcomes?



First Through Third Grade Classroom Experience

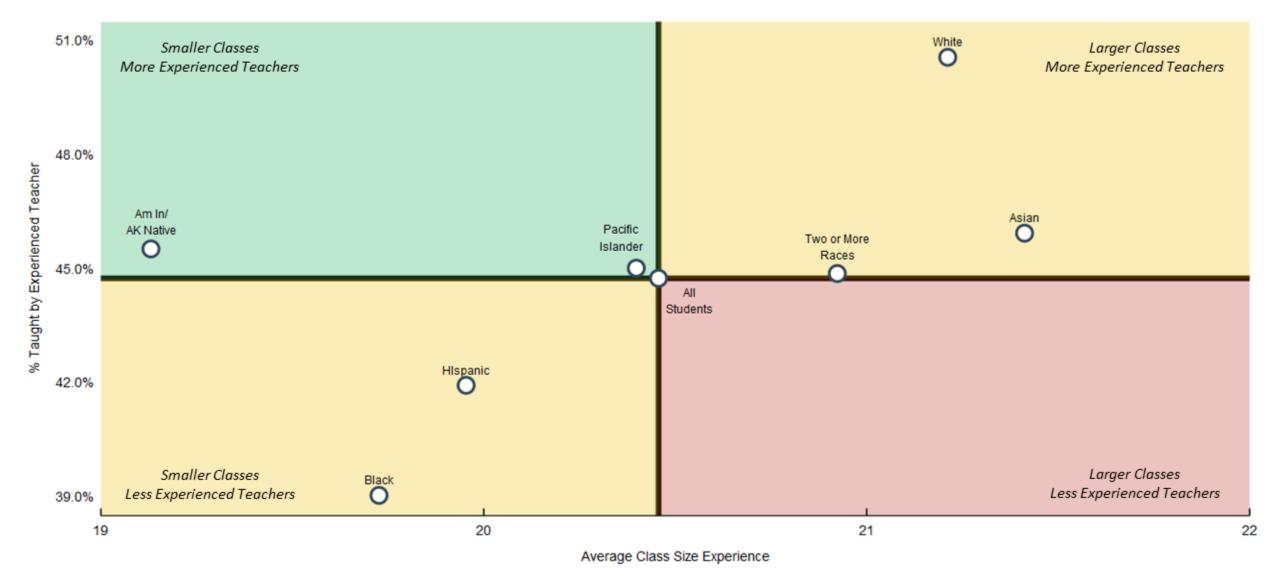


First Through Third Grade Classroom Experience 2019-2020

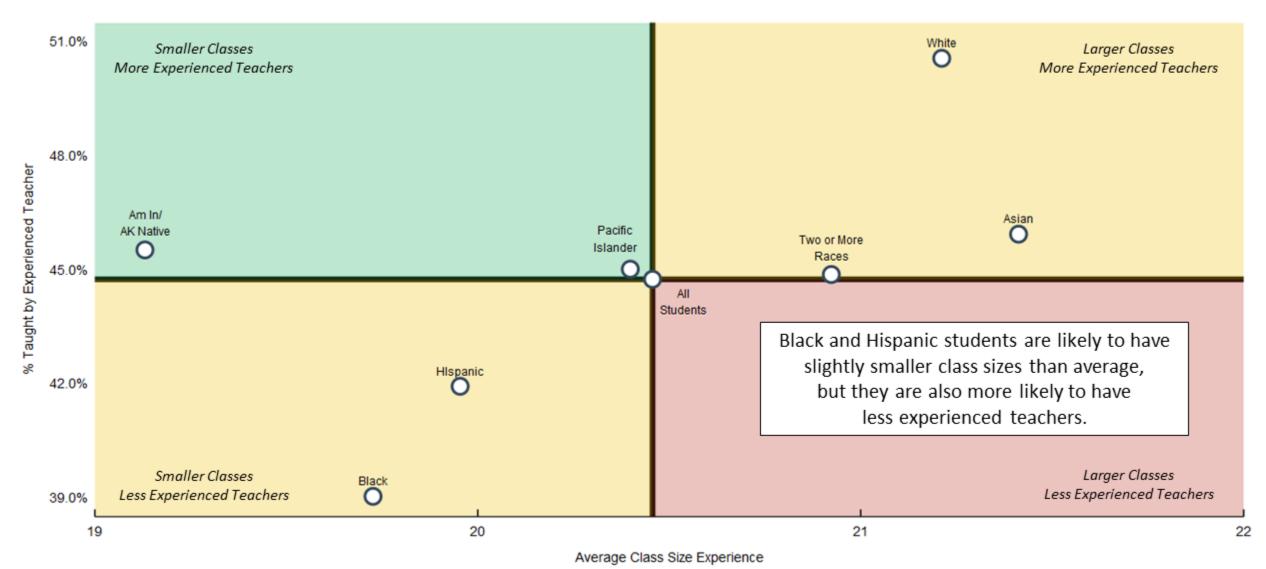


Average Class Size Experience

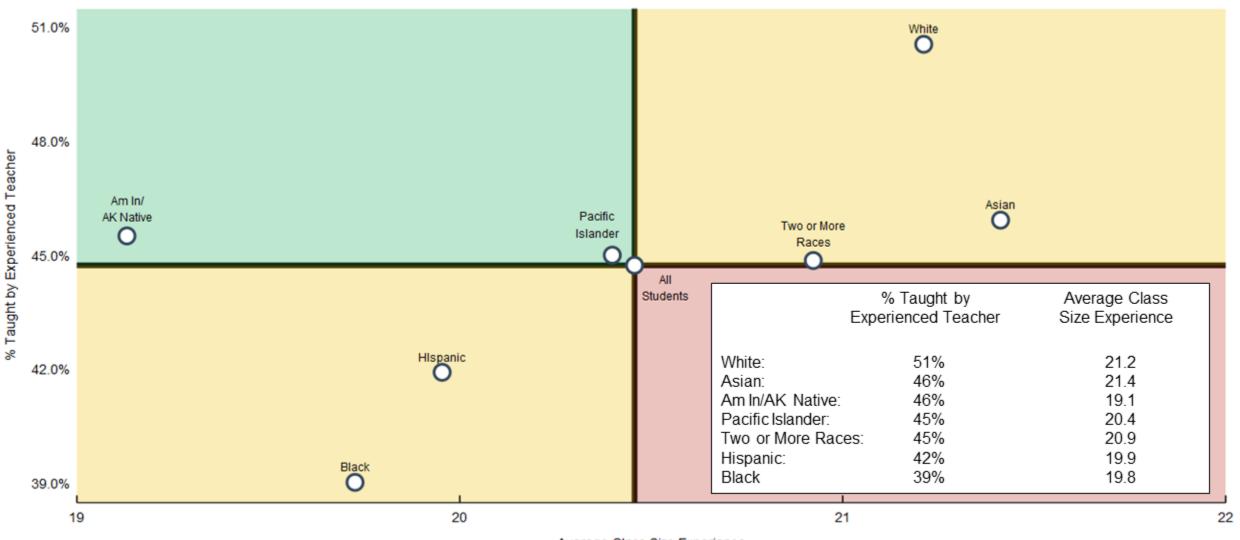
First Through Third Grade Classroom Experience 2019-2020



First Through Third Grade Classroom Experience

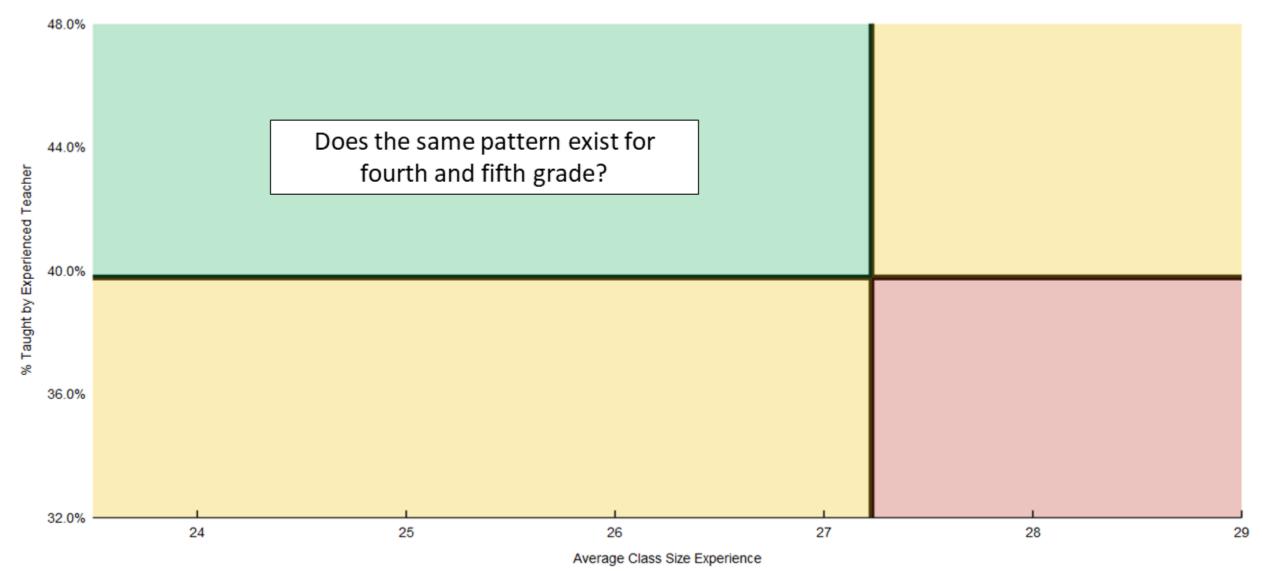


First Through Third Grade Classroom Experience 2019-2020

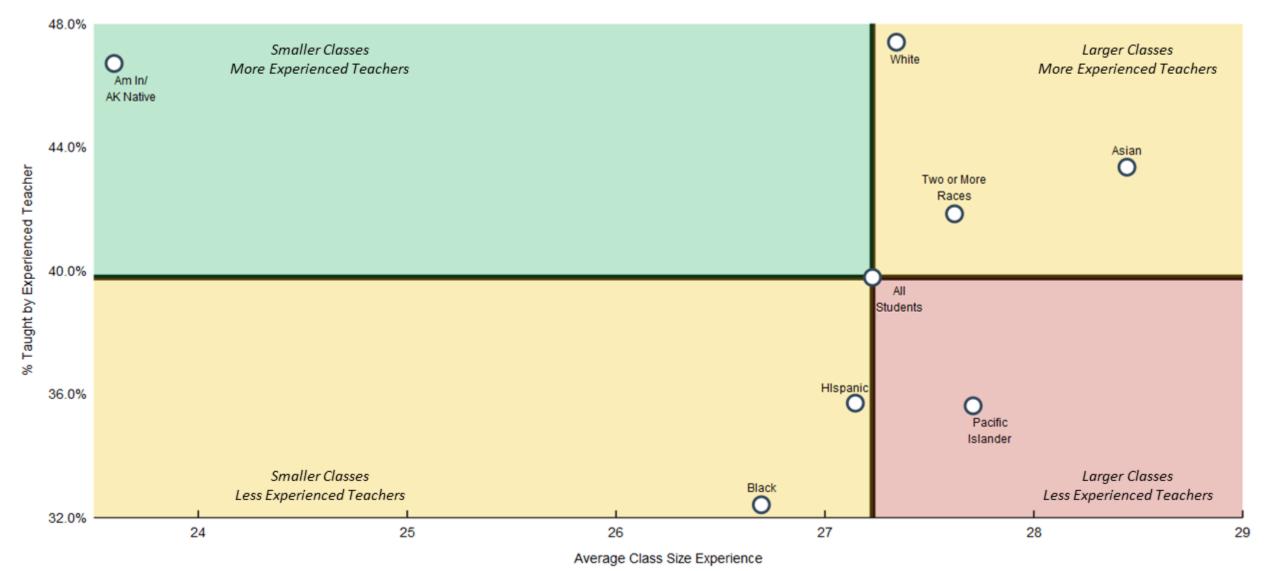


Average Class Size Experience

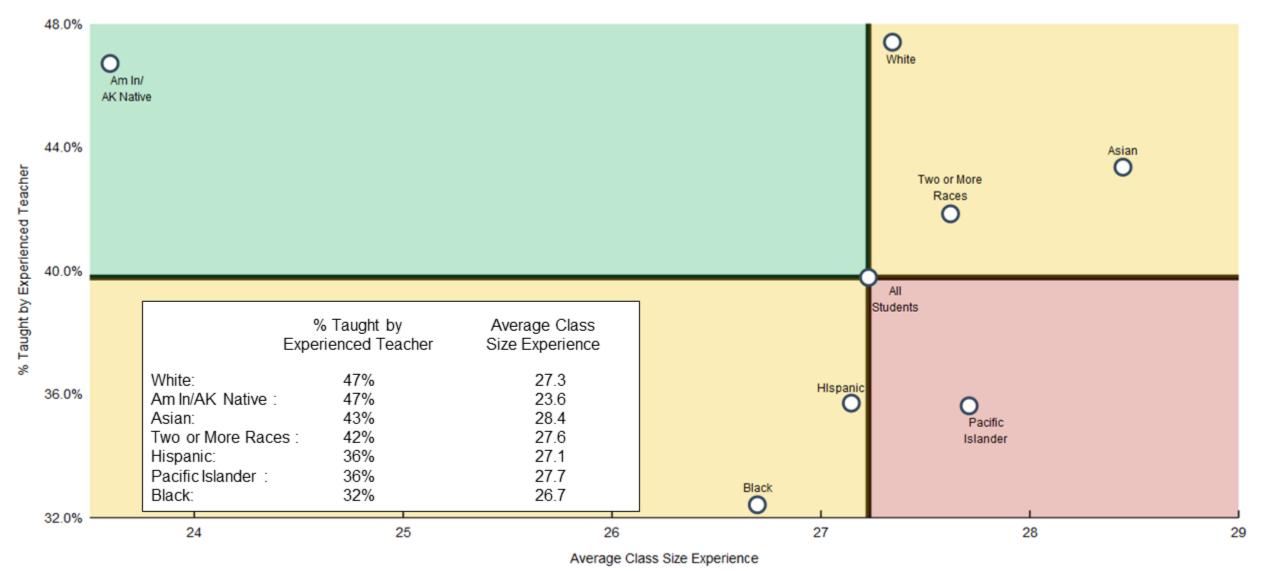
Fourth Through Fifth Grade Classroom Experience 2019-2020



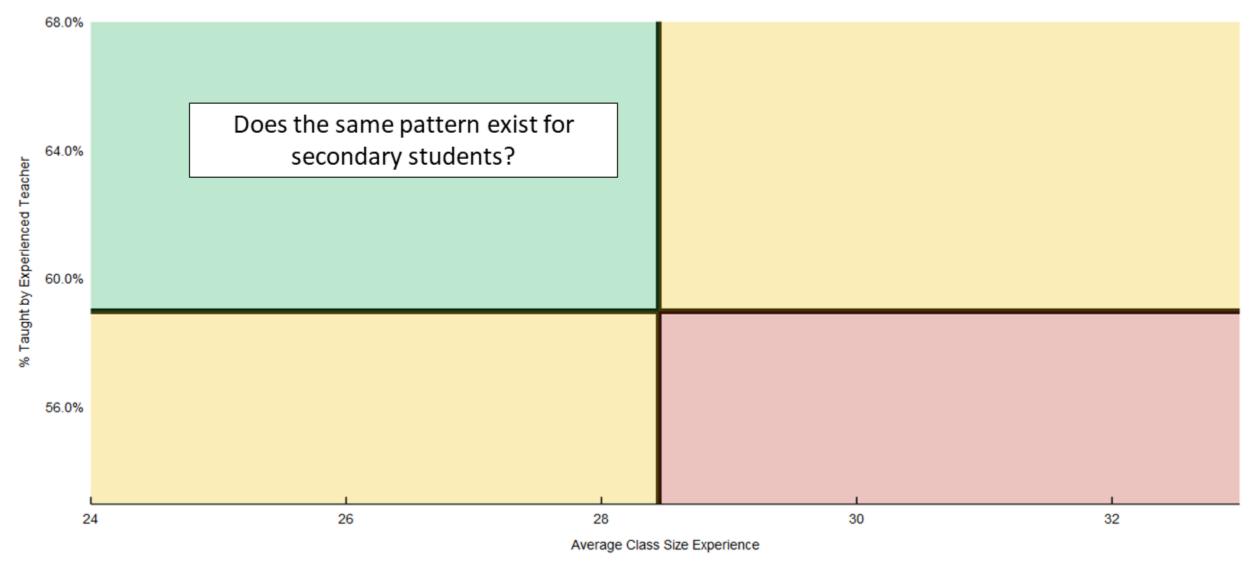
Fourth Through Fifth Grade Classroom Experience 2019-2020



Fourth Through Fifth Grade Classroom Experience 2019-2020



Secondary Core Subject Classroom Experience 2019-2020

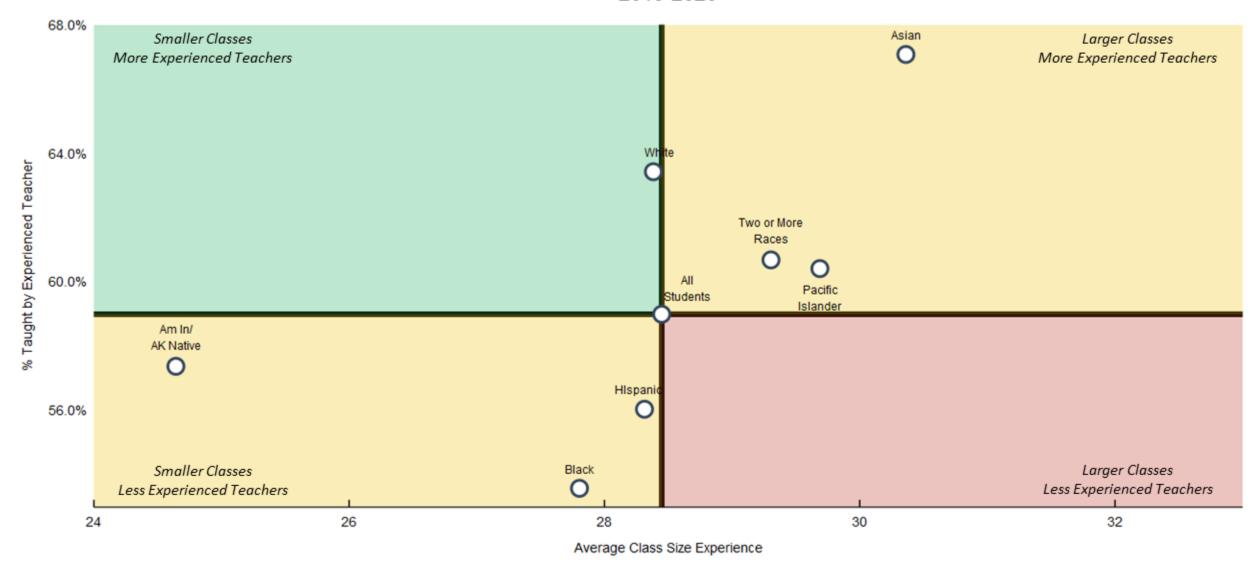


Source: Infinite Campus. Experienced teacher defined as three years teaching in the subject and the school.

Analysis based on students enrolled on October 1, 2019 and enrolled in the school for a total of at least one week.

Section enrollments of 70 or greater excluded from secondary analysis. Core subject areas include: Mathematics, English, Science, and History.

Secondary Core Subject Classroom Experience 2019-2020

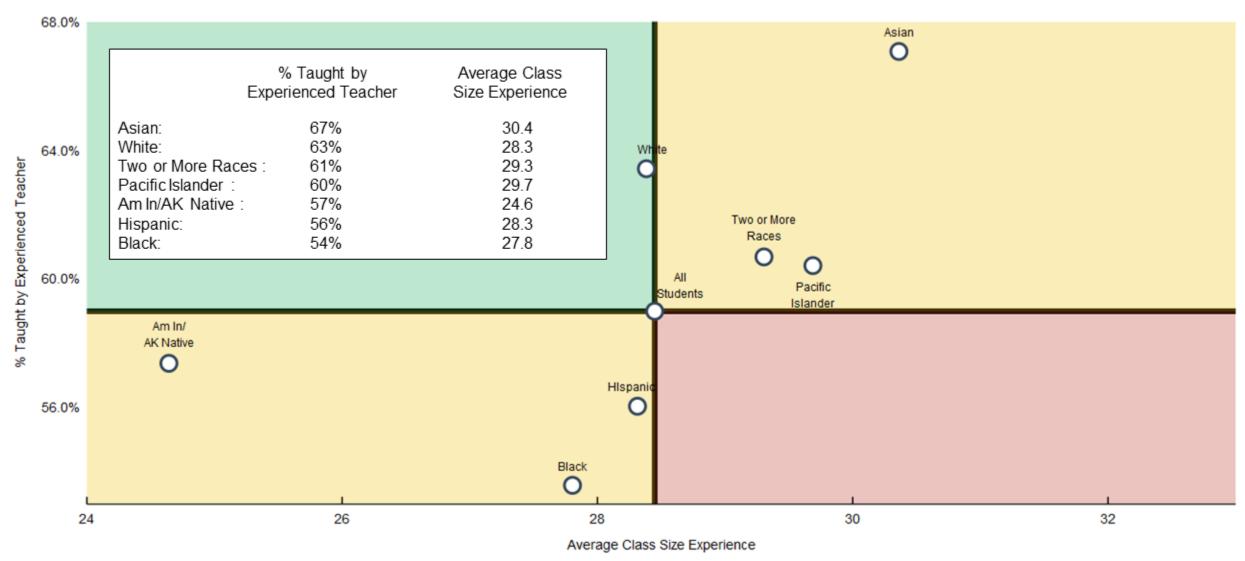


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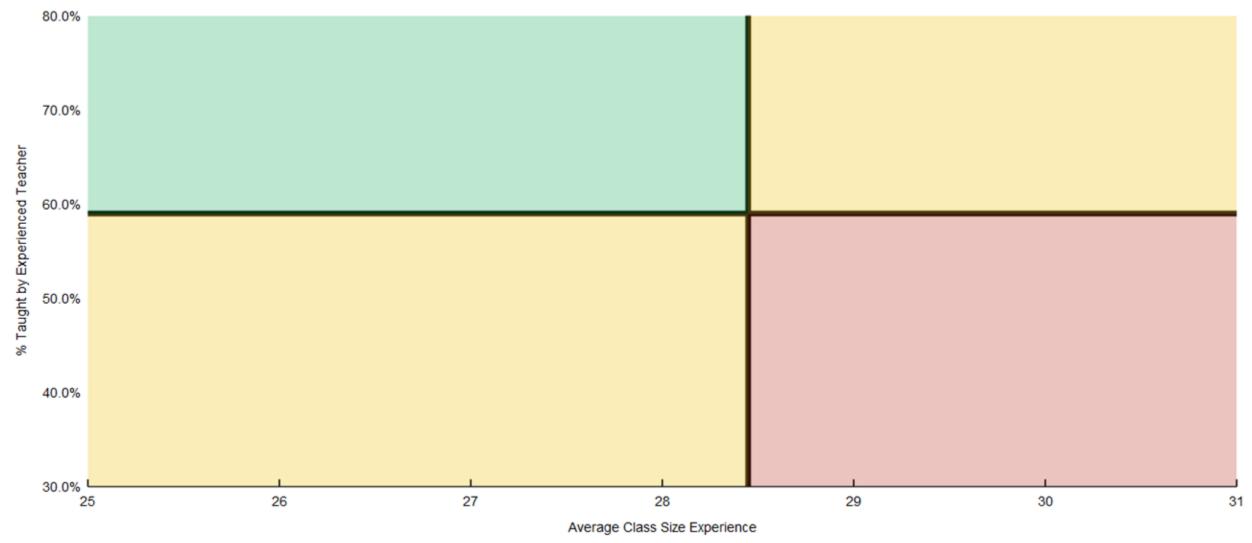
Strategic Questions

Is access to experienced teachers associated with disparate student outcomes?

To investigate this question, we will explore class experiences by Nevada School Performance Framework star ratings.

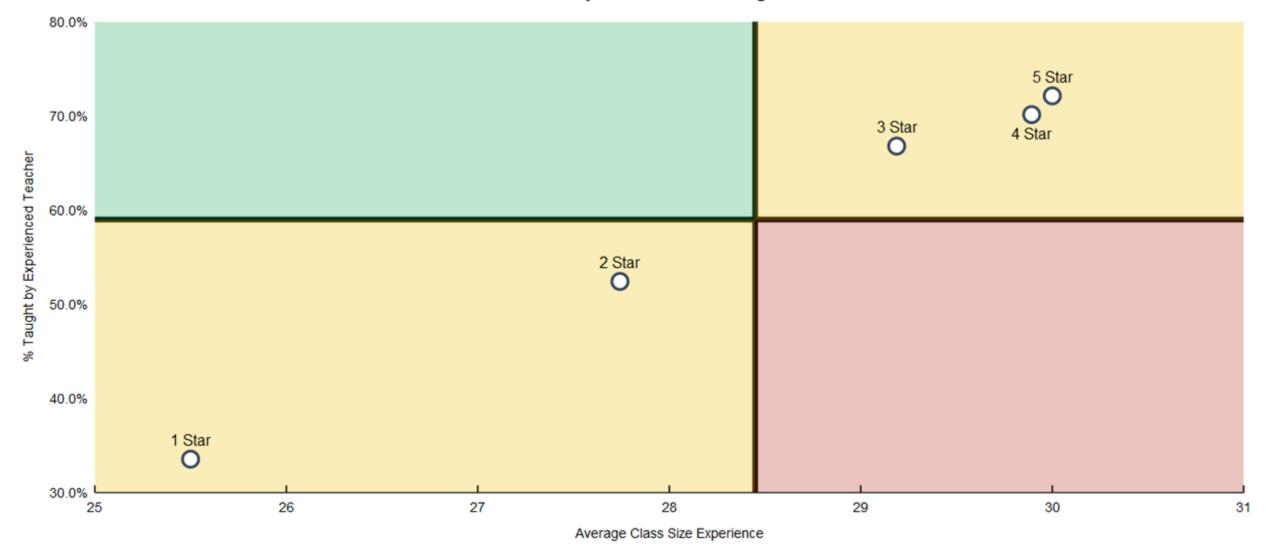


Secondary Core Subject Classroom Experience By NSPF Star Rating



Star Rating based on 2018-2019 school year. Limited to schools with only one star rating (i.e. not spanning multiple levels). Source: Infinite Campus. Experienced teacher defined as three years teaching in the subject and the school. Analysis based on students enrolled on October 1, 2019 and enrolled in the school for a total of at least one week. Section enrollments of 70 or greater excluded from secondary analysis. Core subject areas include: Mathematics, English, Science, and History.

Secondary Core Subject Classroom Experience By NSPF Star Rating



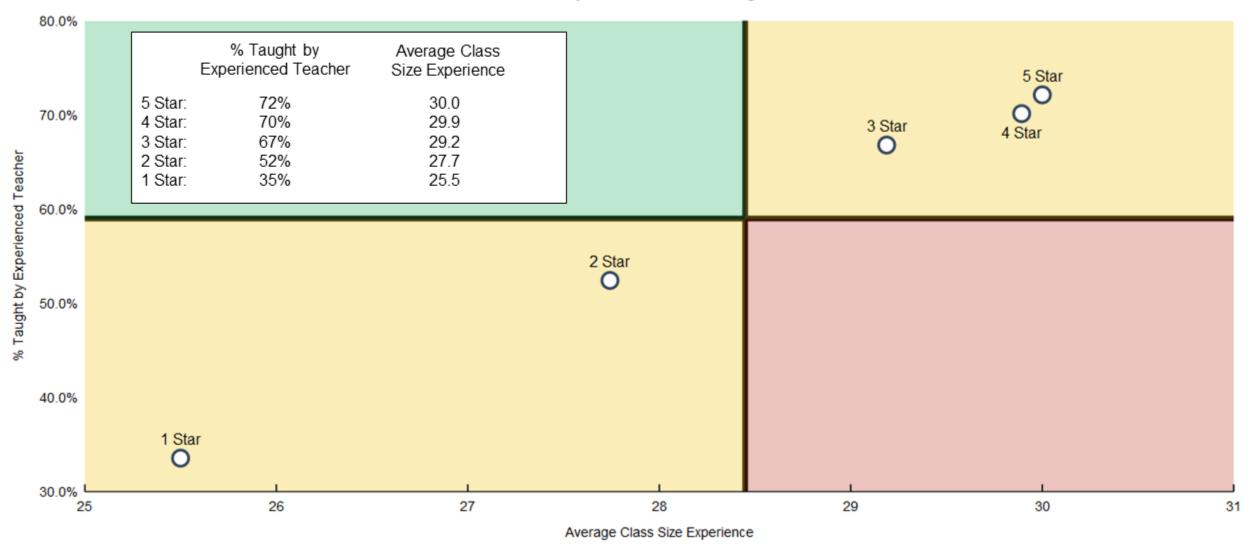
Star Rating based on 2018-2019 school year. Limited to schools with only one star rating (i.e. not spanning multiple levels).

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Secondary Core Subject Classroom Experience By NSPF Star Rating

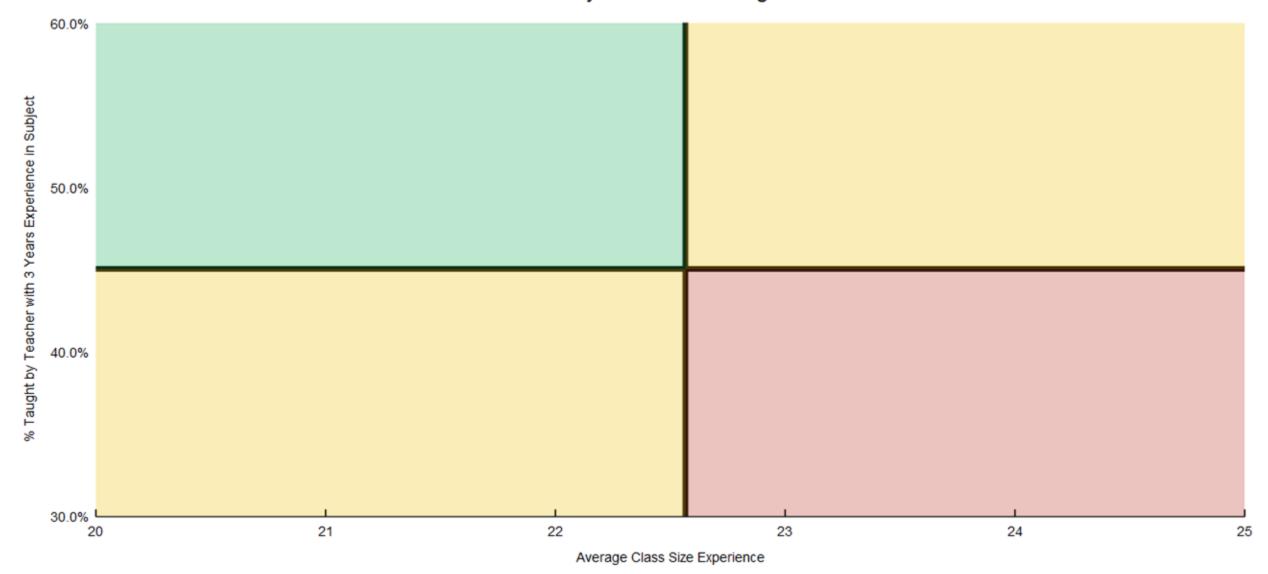


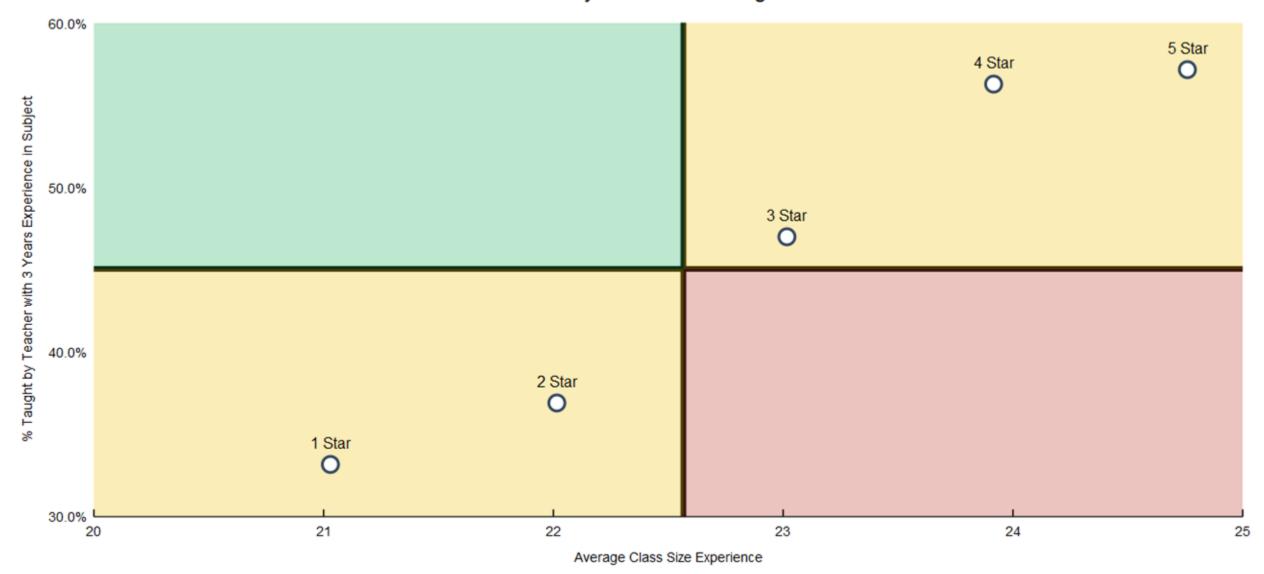
Star Rating based on 2018-2019 school year. Limited to schools with only one star rating (i.e. not spanning multiple levels).

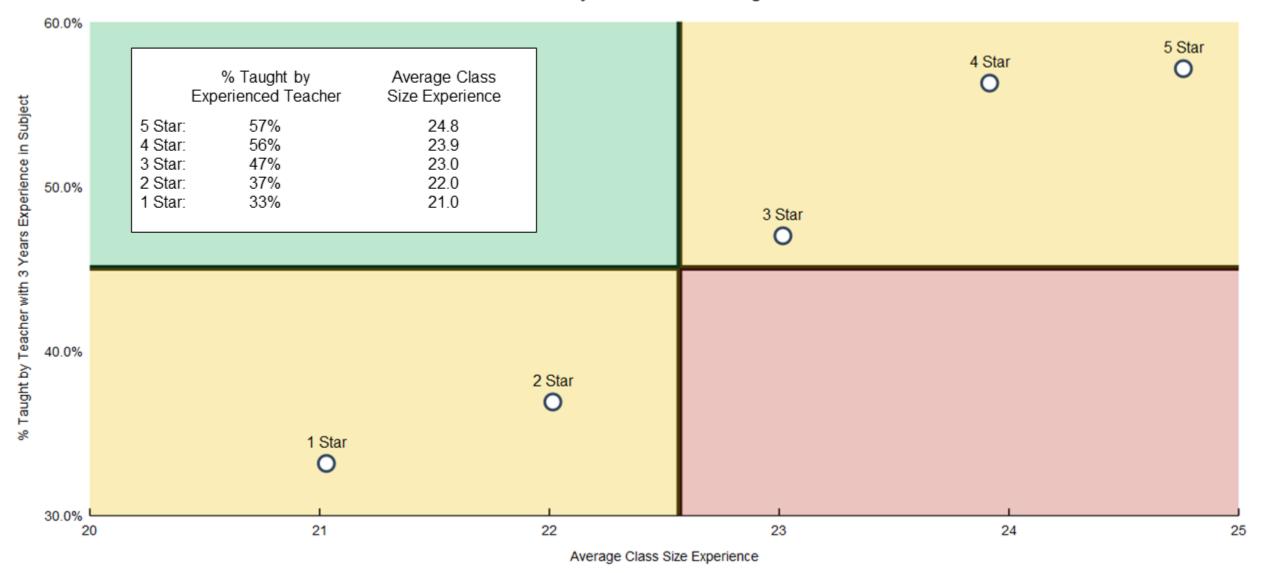
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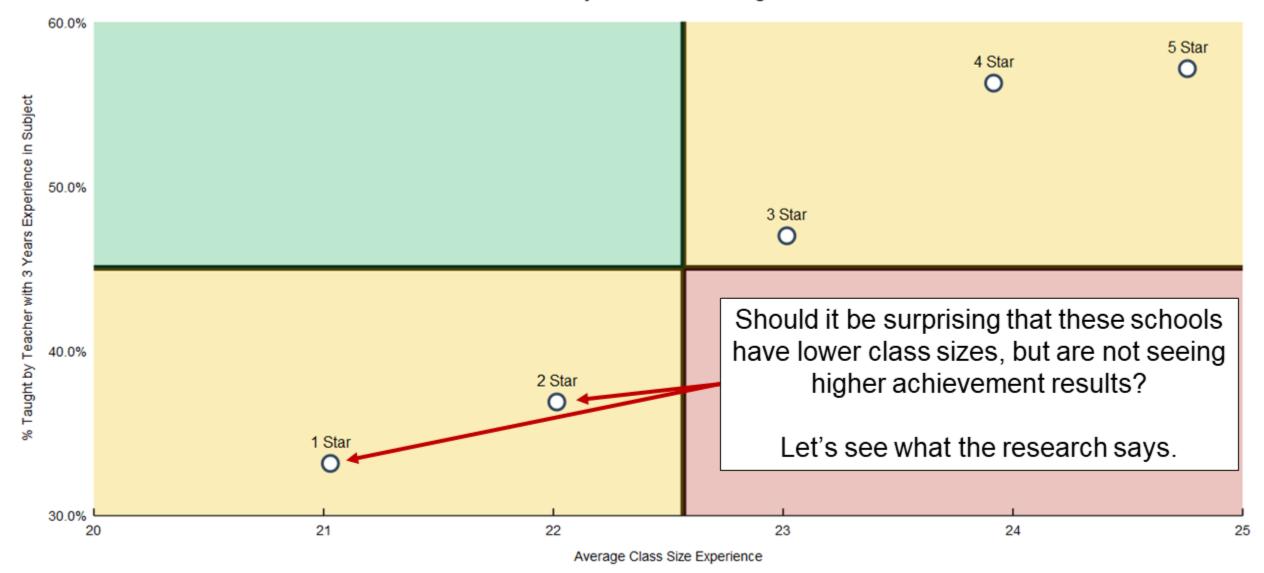
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Class Size: What Research Says and What it Means for State Policy

The most influential and credible study of CSR is the Student Teacher Achievement Ratio, or STAR, study which was conducted in Tennessee during the late 1980s.

In this study, students and teachers were randomly assigned to a small class, with an average of 15 students, or a regular class, with an average of 22 students.

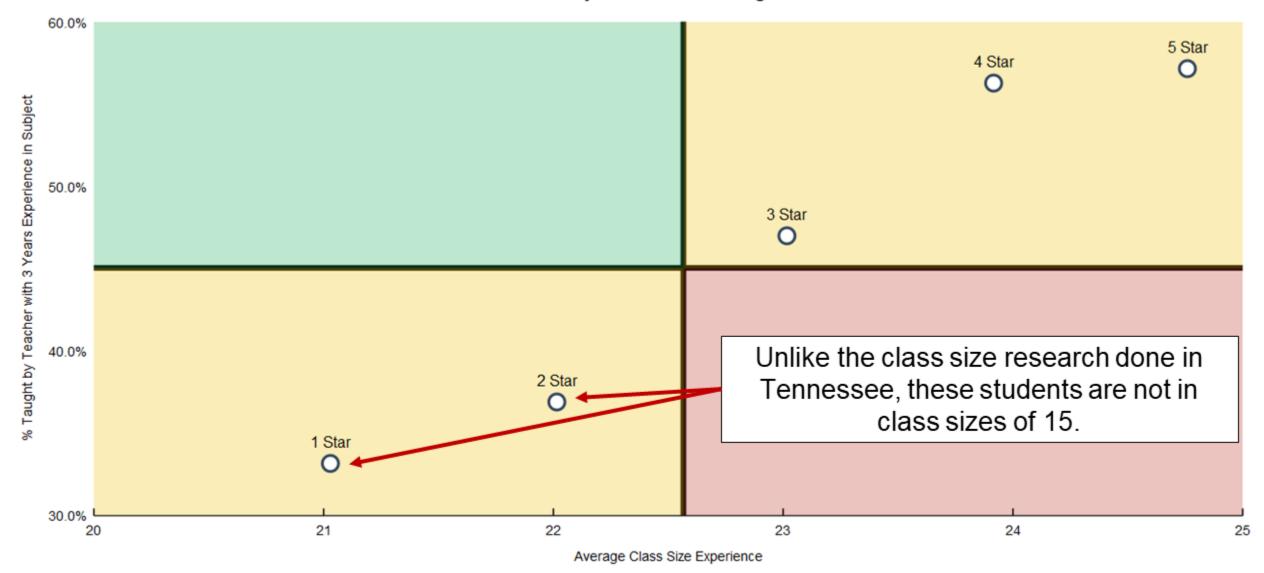
This large reduction in class size (7 students, or 32 percent) was found to increase student achievement by an amount equivalent to about 3 additional months of schooling four years later.

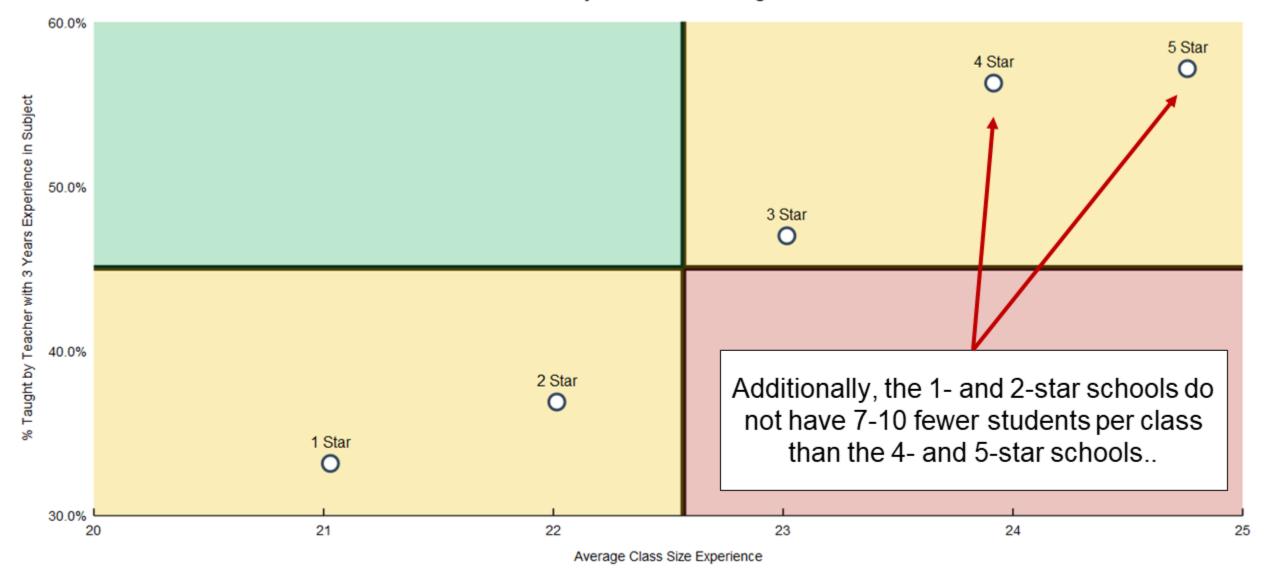


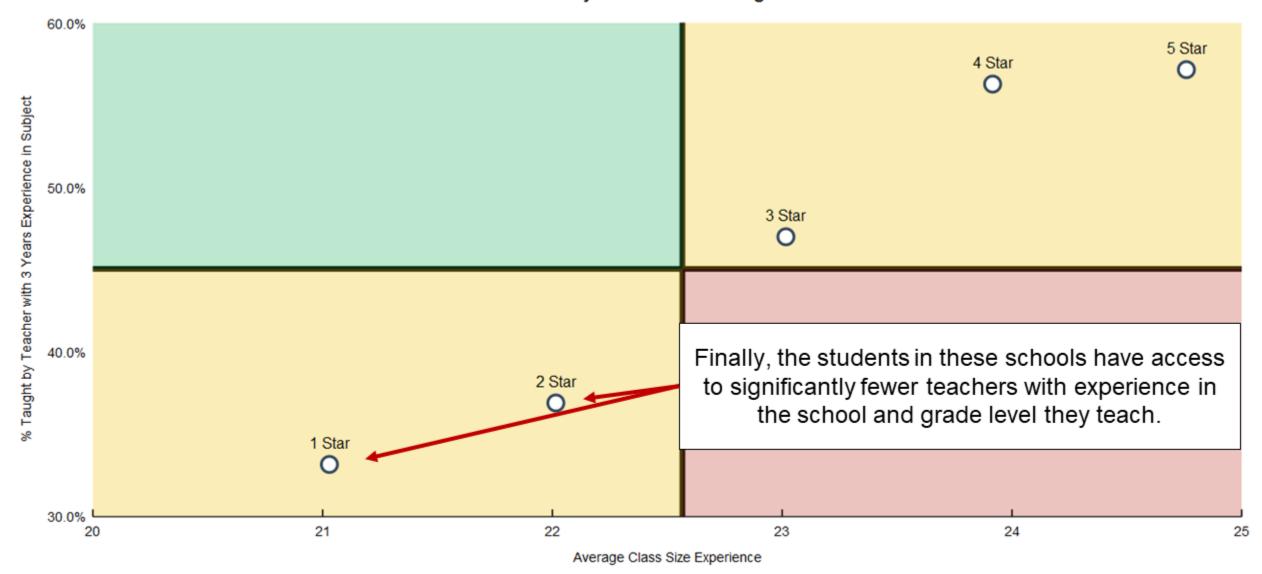
Class Size: What Research Says and What it Means for State Policy

But it appears that **very large class-size reductions**, on the order of magnitude of **7-10 fewer students per class**, can have significant long-term effects on student achievement and other meaningful outcomes.

These effects seem to be largest when introduced in the earliest grades, and for students from less advantaged family backgrounds.







Summary

Equity & Access

- Black and Hispanic students have significantly less access to experienced teachers compared to their Asian and Caucasian peers.
- Students in 1- and 2-star schools have significantly lower access to experienced teachers.
- Despite slightly smaller class sizes experienced by students in 1- and 2-star schools, research says the class size difference is not large enough to improve student outcomes.



What obstacles do we face?

- Educator preparation pipeline
- Staffing ratios
- Teacher retention and attrition
- Teacher morale



Where Are We?

Educator Preparation Pipeline Review

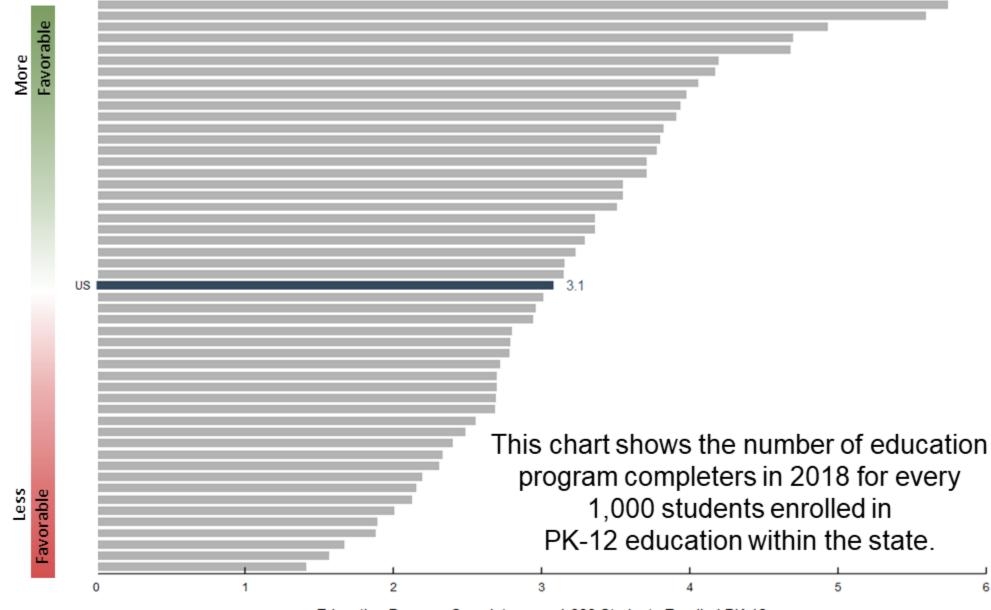
To review the educator pipeline, we will look at how many people are completing education preparation programs in each state. These are programs people complete so they can become licensed to teach.

In order to make an apples-to-apples comparison across states we will convert the number of completers to a ratio based on the number of PK-12 students the state serves.



What Does Education Program Completion Look Like By State?

Educator Pipeline

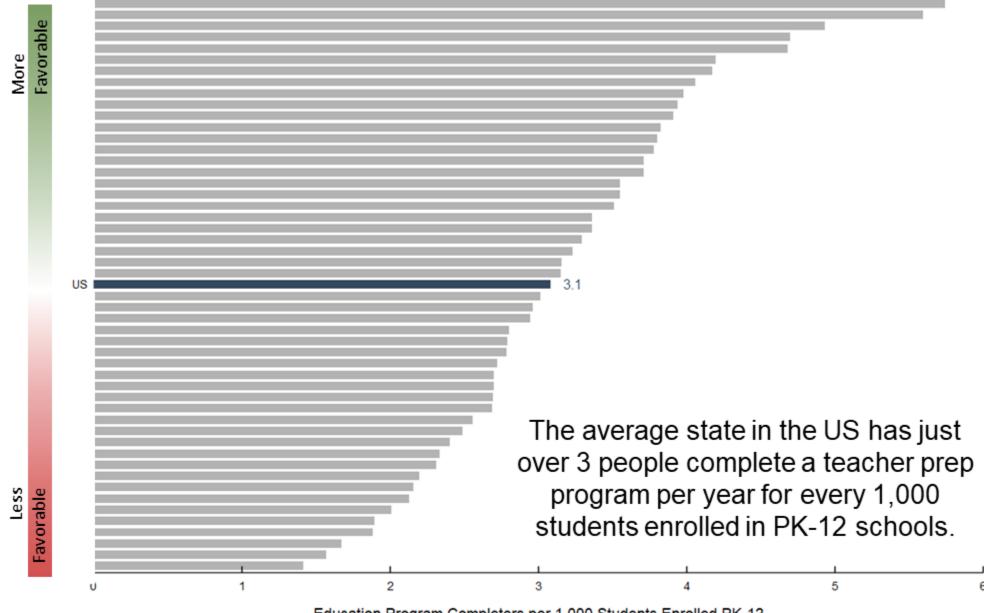




Education Program Completers per 1,000 Students Enrolled PK-12

What Does Education Program Completion Look Like By State?

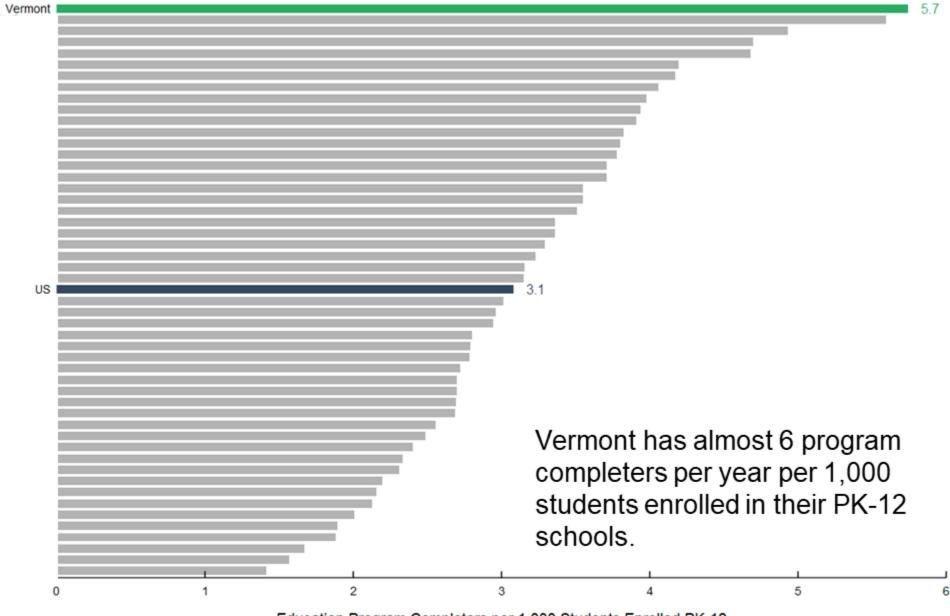
Educator Pipeline





What Does Education Program Completion Look Like By State?

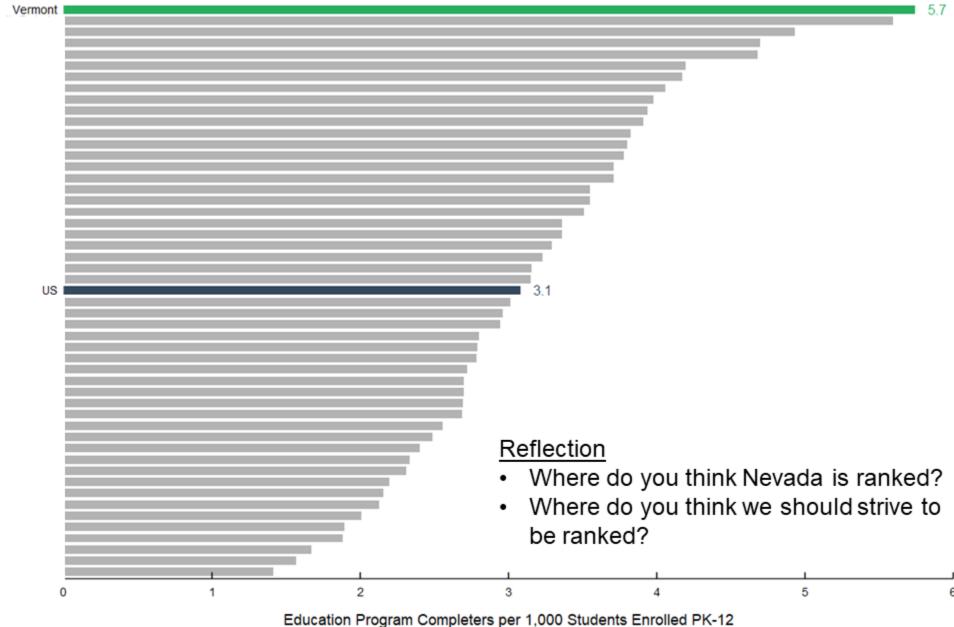
Educator Pipeline





Educator Pipeline

What Does Education Program Completion Look Like By State?

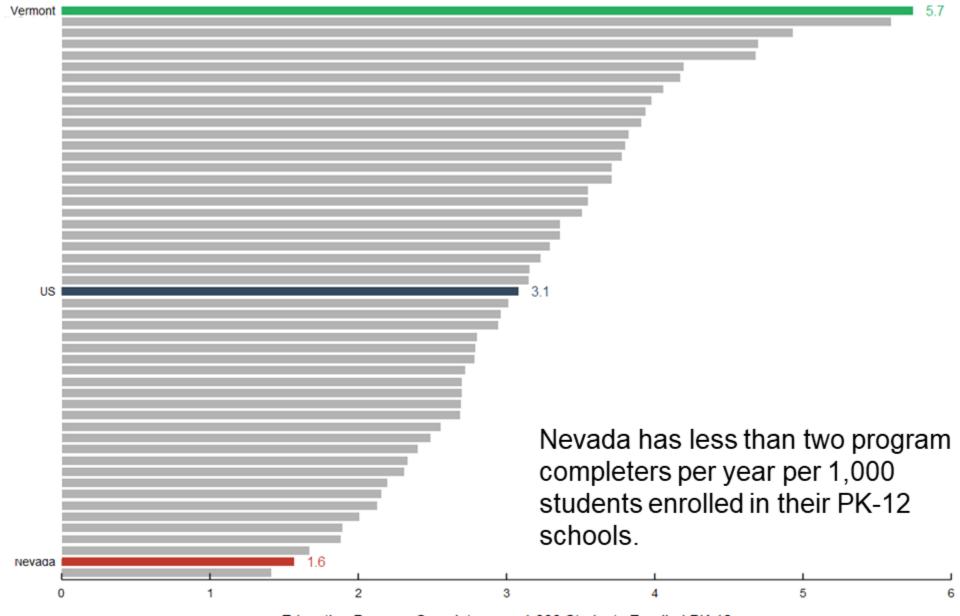




What

What Does Education Program Completion Look Like By State?

Educator Pipeline

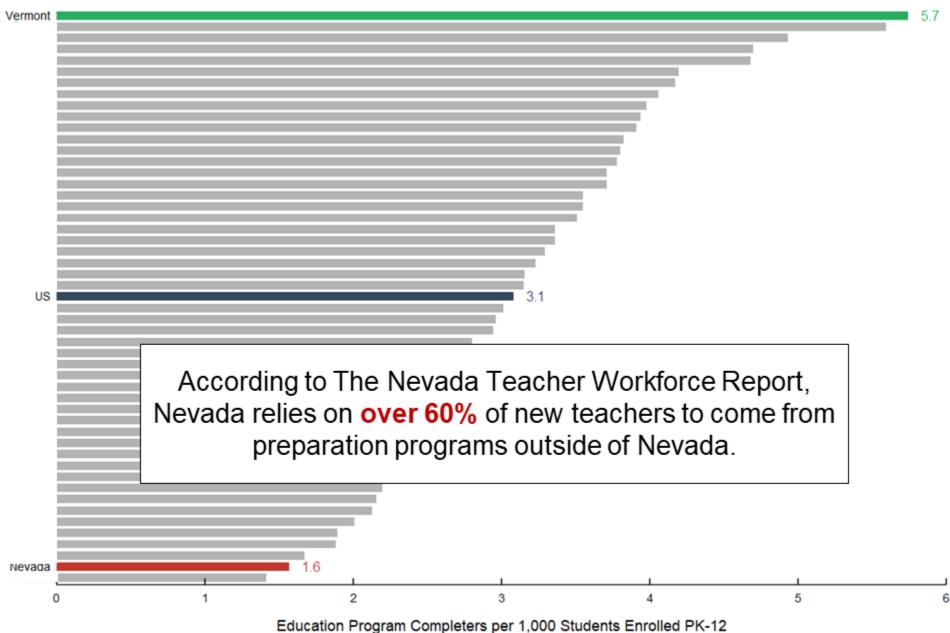




Education Program Completers per 1,000 Students Enrolled PK-12

Educator

What Does Education Program Completion Look Like By State?

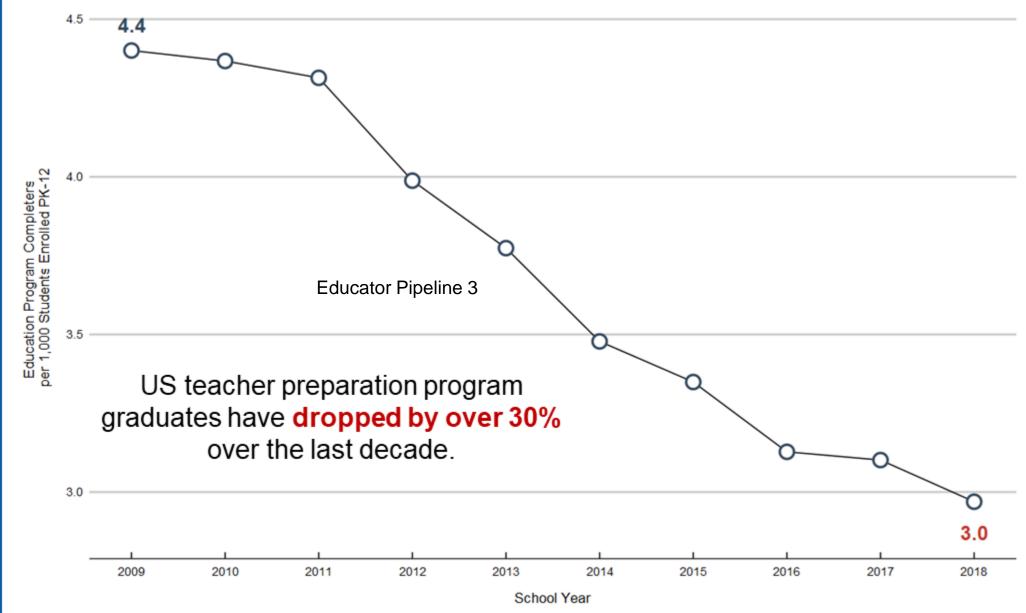




Pipeline

Educator Pipeline

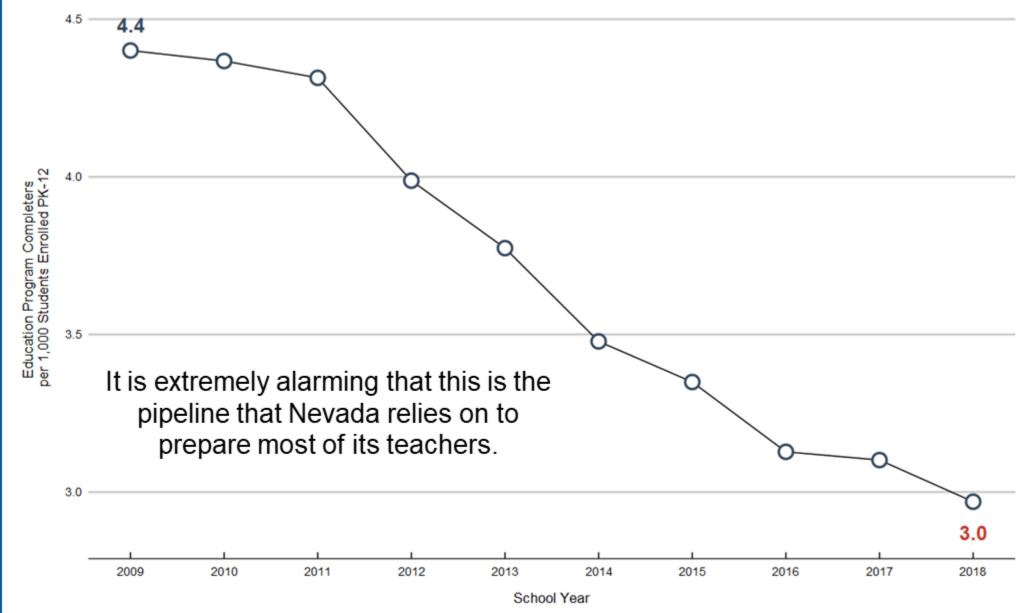
What Has Education Program Completion Looked Like in the US Over Time?





Educator Pipeline

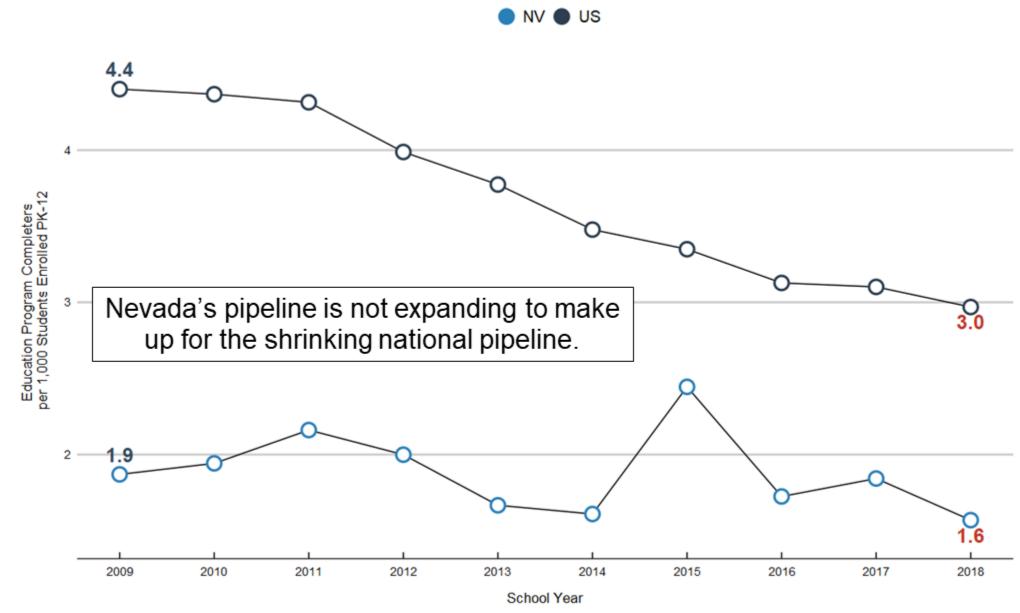
What Has Education Program Completion Looked Like in the US Over Time?





Conclusion

What Has Education Program Completion Looked Like in Nevada and the US Over Time?





Summary

Educator Pipeline

- Nevada's teacher pipeline significantly lags national averages.
- Nevada relies on out-of-state teacher prep programs for over 60% of new teacher licenses.
- The national pipeline is significantly and consistently shrinking over time.
- Nevada's pipeline is not expanding to make up for the shrinking national pipeline.



- Educator preparation pipeline
- Staffing ratios
- Teacher retention and attrition
- Teacher morale



Staffing Ratios Review

Licensed staff are made up of more than just classroom teachers.

Before reviewing staffing ratios, we need a way to organize and think about this information.



For this analysis, each licensed staff will be accounted for and placed into only one category, per year.

These will be treated as mutually exclusive and collectively exhaustive categories to account for licensed staff.

Classification of Licensed Staff

Classroom Teacher

2. Administrator

These include central office administrators (e.g. Director of Assessment, Assistant Supt, etc.) and school administrators (e.g. Principal, Deans, etc.).

3. Non-classroom Staff

These include facilitators (e.g. Literacy specialists, Instructional Coaches, etc.) and counselors, nurses, librarians, etc.



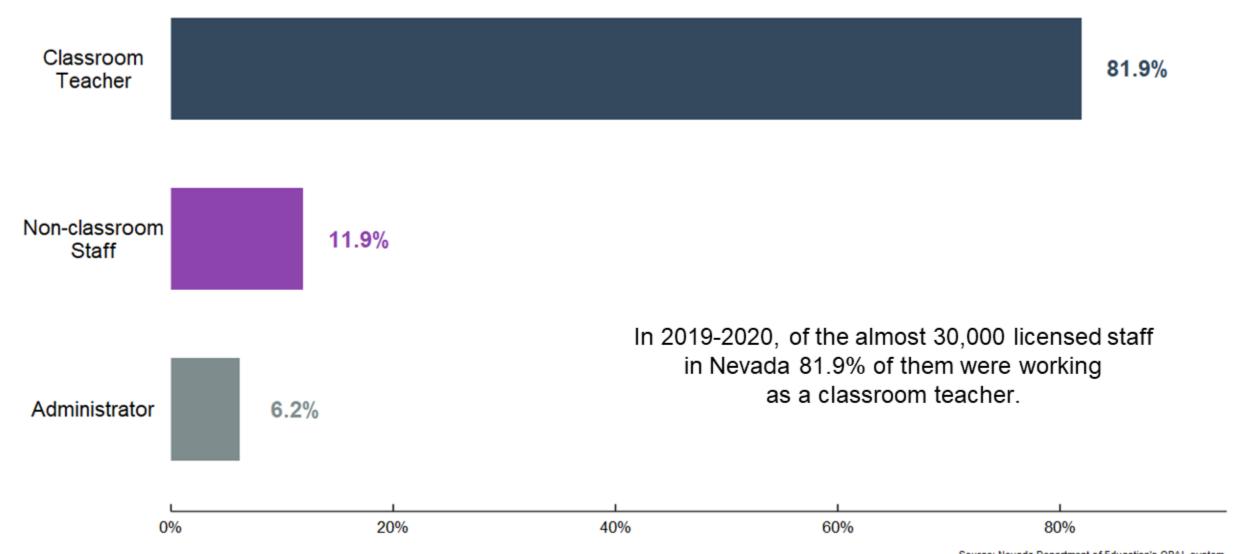
What percent of licensed staff make up each classification?

1. Classroom Teacher

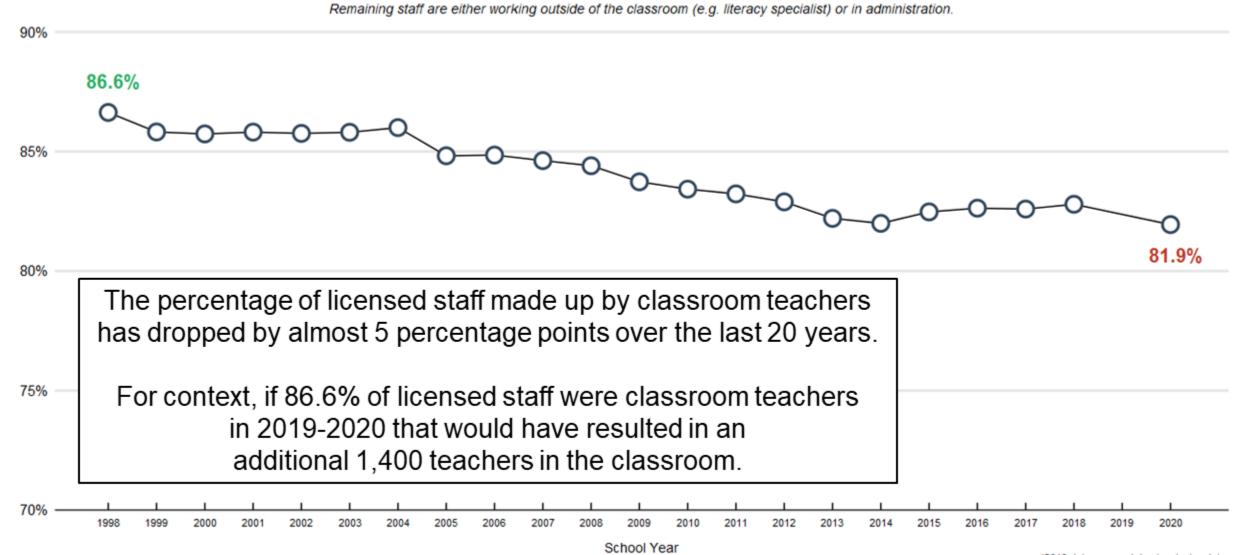
- 2. Administrator
- 3. Non-classroom Staff



Classification of Licensed Staff in Nevada 2019-2020

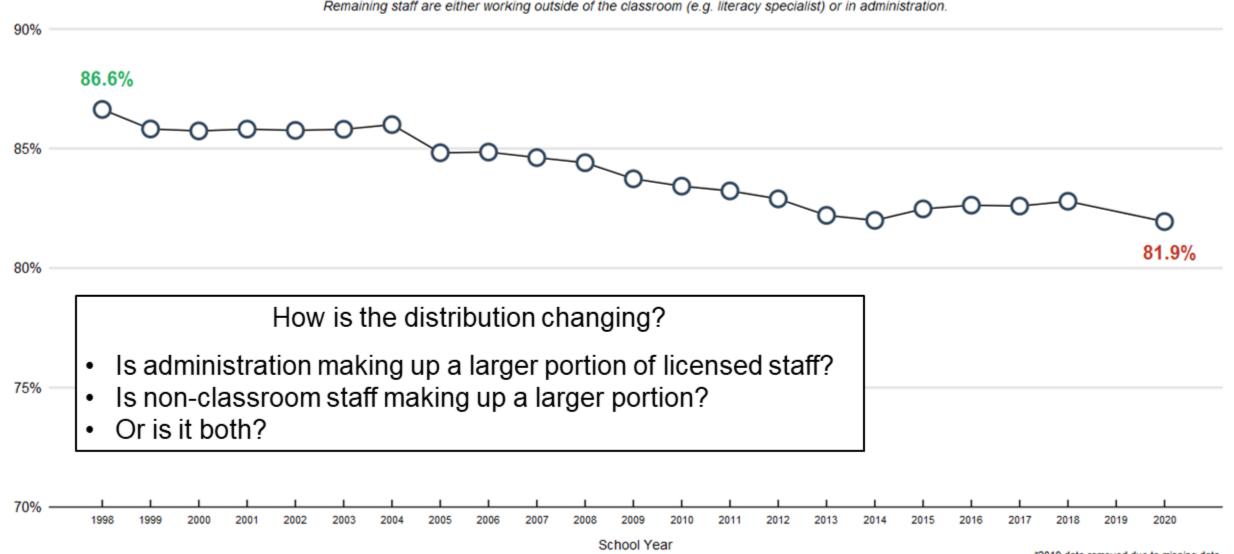


Percent of Nevada's K-12 Licensed Staff Working as Classroom Teachers



Percent of Nevada's K-12 Licensed Staff **Working as Classroom Teachers**

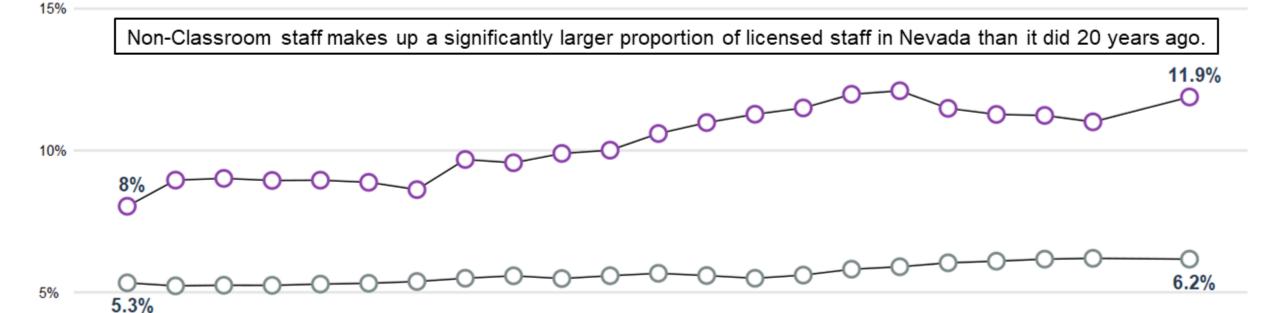
Remaining staff are either working outside of the classroom (e.g. literacy specialist) or in administration.



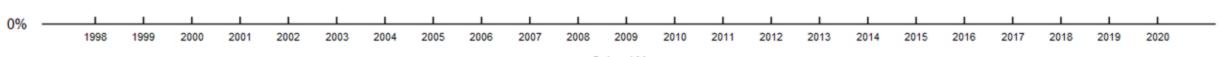
Percent of Nevada's K-12 Licensed Staff Working as Non-Classroom Staff or in Administration

Remaining staff are working as classroom teachers.





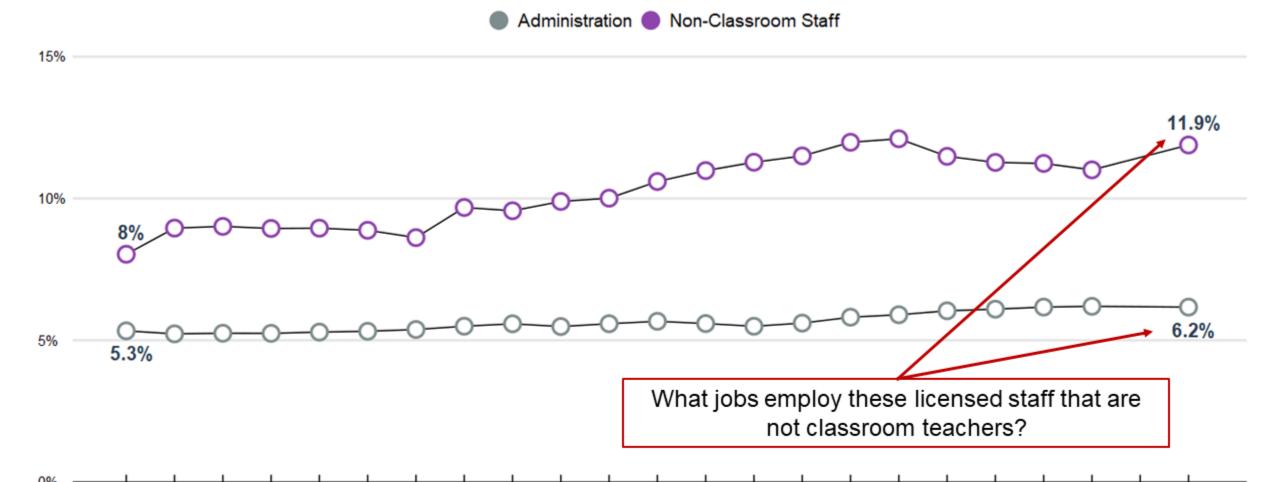
Administration makes up a larger portion as well, but it has not grown at the rate of non-classroom staff.



School Year

Percent of Nevada's K-12 Licensed Staff Working as Non-Classroom Staff or in Administration

Remaining staff are working as classroom teachers.



2011

2007

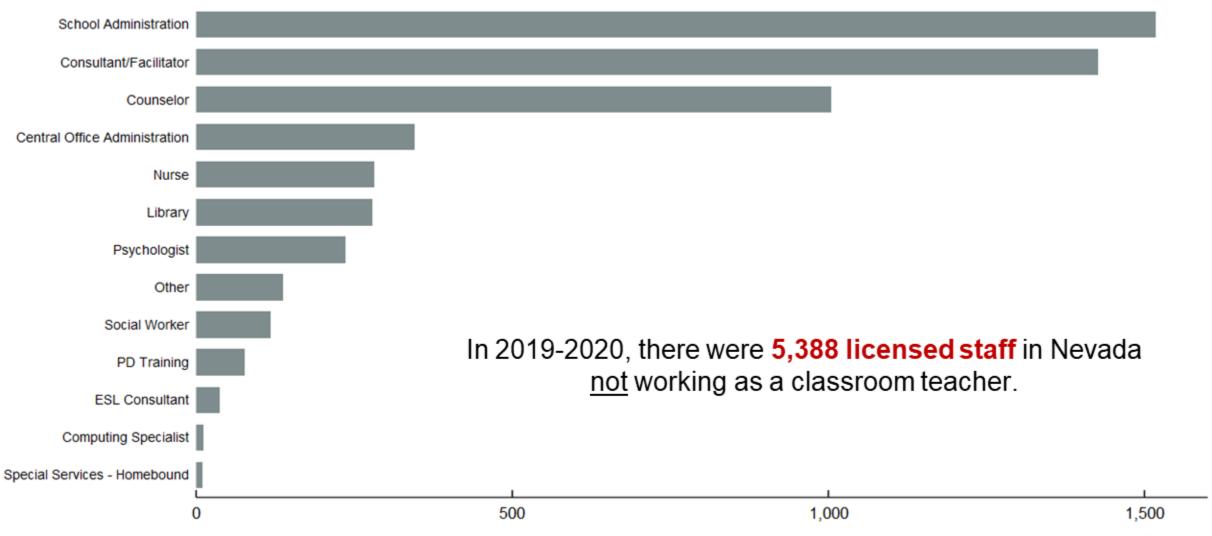
2020

2016

2014

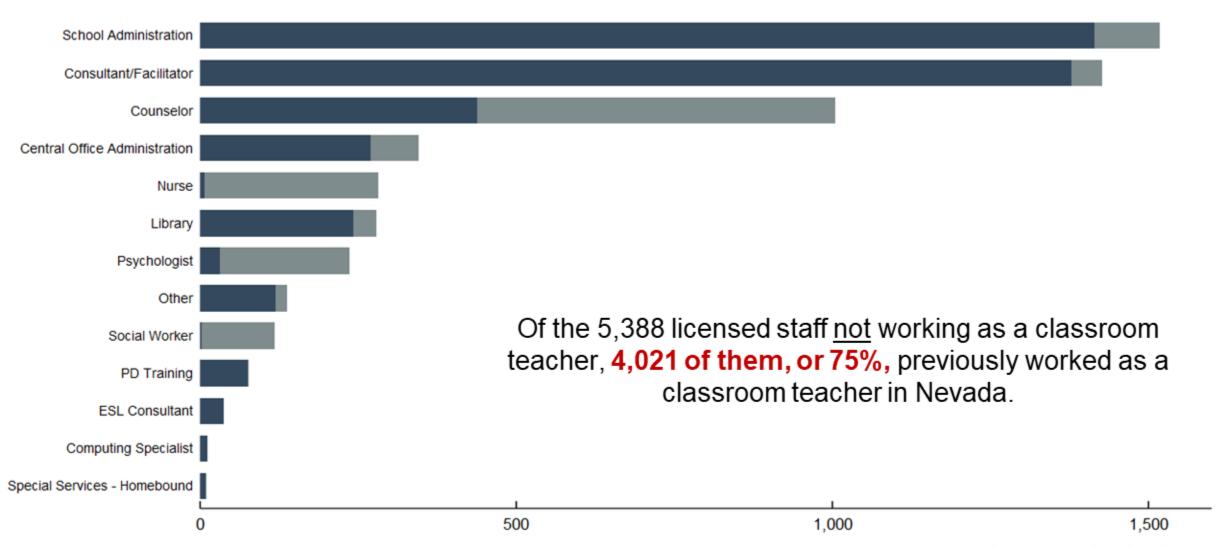
Nevada Licensed Staff Not Working as a Classroom Teacher 2019-2020

Total Staff



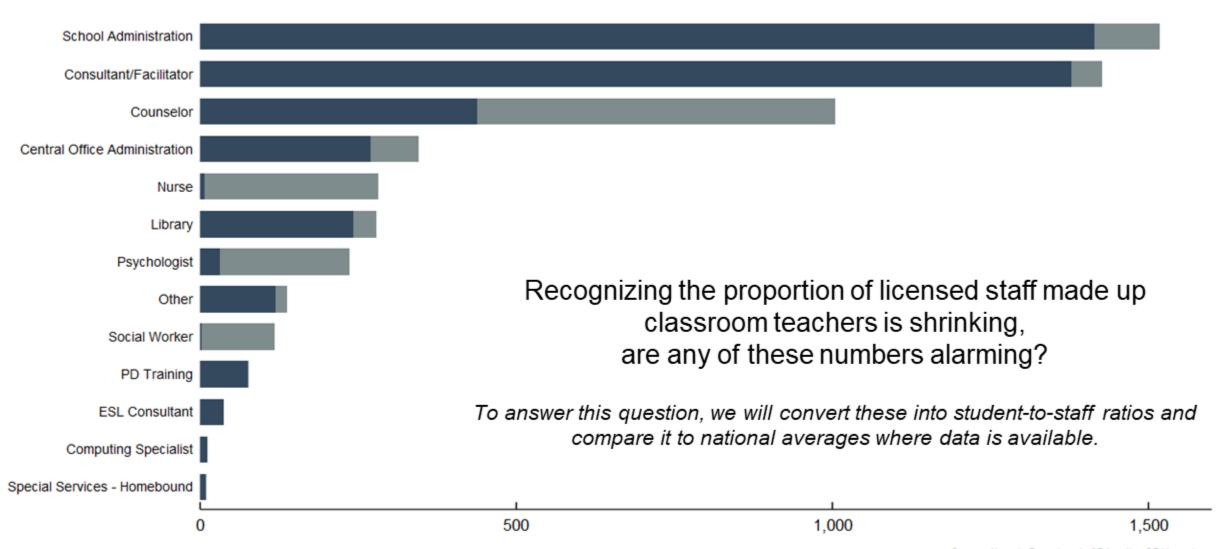
Nevada Licensed Staff Not Working as a Classroom Teacher

Previously Nevada Classroom Teacher Total Staff



Nevada Licensed Staff Not Working as a Classroom Teacher





Nevada vs. US Licensed Staffing Ratios

	US Staffing <u>Ratios</u>	Nevada Staffing Equivalent	Nevada Staffing <u>Actual</u>
School Administration	262-to-1		
Counselor	430-to-1		
Central Administration	684-to-1		
Library Specialist	1208-to-1		



Nevada vs. US Licensed Staffing Ratios

	US Staffing <u>Ratios</u>	Nevada Staffing <u>Equivalent</u>	Nevada Staffing <u>Actual</u>	
School Administration	262-to-1	1,897		
Counselor	430-to-1	1,156		
Central Administration	684-to-1	727		
Library Specialist	1208-to-1	411		



Nevada vs. US Licensed Staffing Ratios

	US Staffing <u>Ratios</u>	Nevada Staffing <u>Equivalent</u>	Nevada Staffing <u>Actual</u>
School Administration	262-to-1	1,897	1,518
Counselor	430-to-1	1,156	1,004
Central Administration	684-to-1	727	345
Library Specialist	1208-to-1	411	278



Nevada vs. US Licensed Staffing Ratios

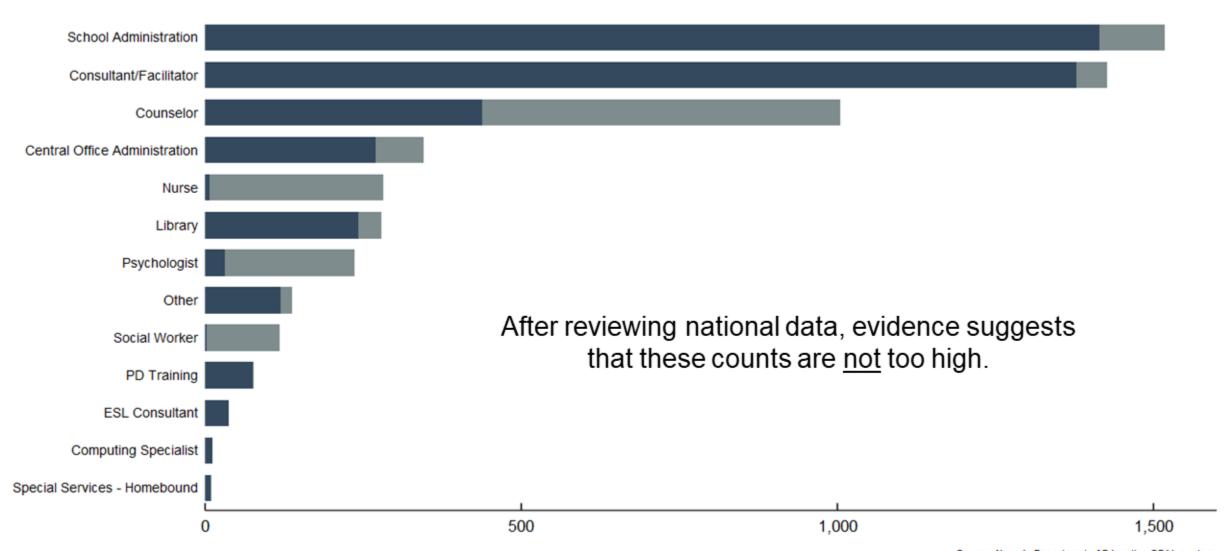
	US Staffing <u>Ratios</u>	Nevada Staffing <u>Equivalent</u>	Nevada Staffing <u>Actual</u>	Staffing <u>Difference</u>
School Administration	262-to-1	1,897	1,518	-379
Counselor	430-to-1	1,156	1,004	-152
Central Administration	684-to-1	727	345	-382
Library Specialist	1208-to-1	411	278	-133

Nevada has significantly less staff than the national average.



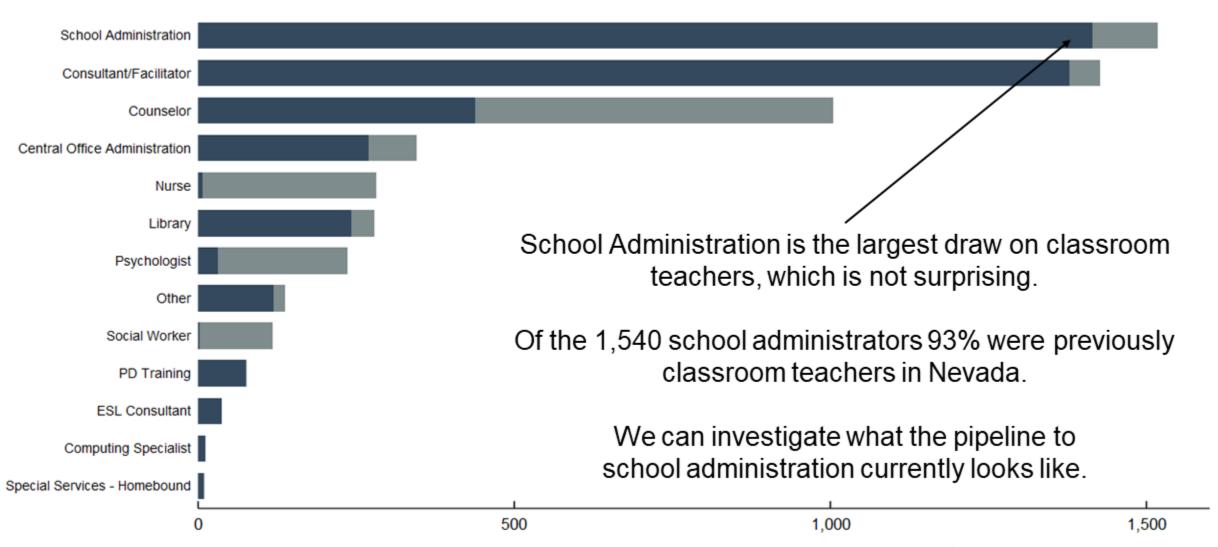
Nevada Licensed Staff Not Working as a Classroom Teacher

Previously Nevada Classroom Teacher 🔲 Total Staff



Nevada Licensed Staff Not Working as a Classroom Teacher





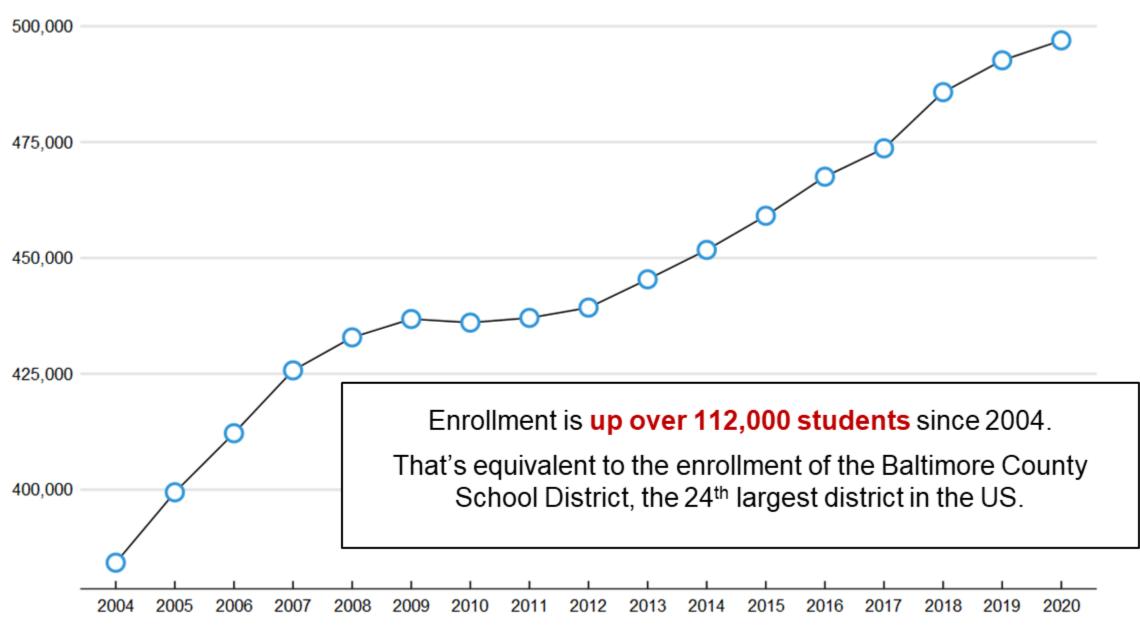
Pipeline to School Administration

	<u>Pathway</u>	Count	<u>Percent</u>
Classroom Tea	cher → Admin	906	58.8%
Classroom Teacher \rightarrow Non-classroom \rightarrow Admin		525	34.1%
Non-classi	room → Admin	16	1.0%
	Start at Admin	93	6.0%
Total School Administrat	ors 2019-2020	1,540	100%

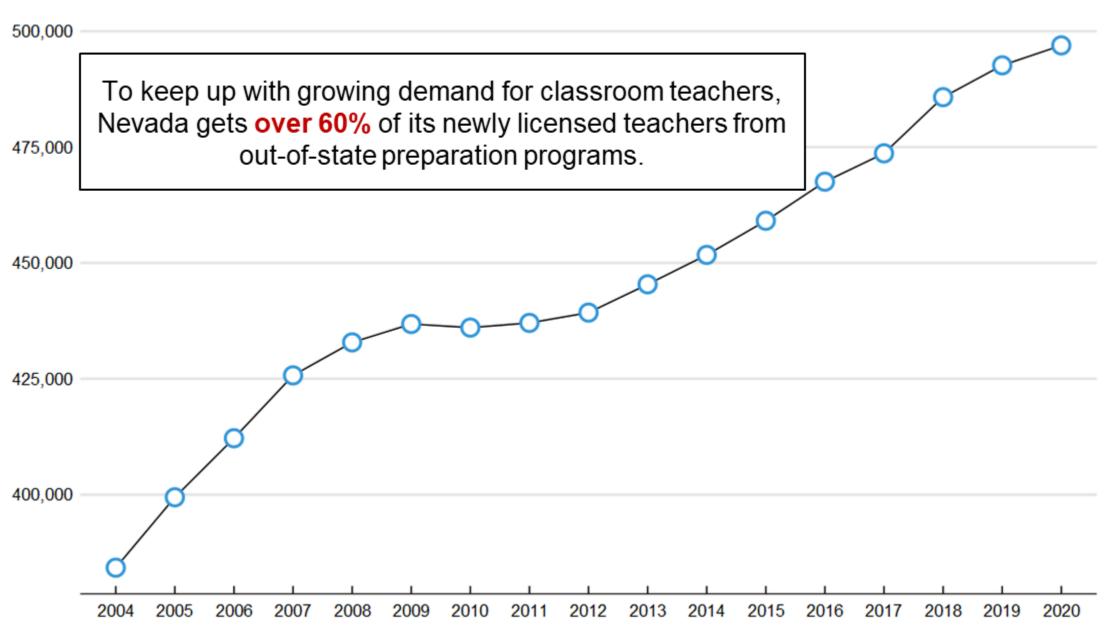
- 93% of school administrators started as classroom teachers in Nevada.
- Only 6% of school administrators started as administrators.
- Classroom teaching in Nevada is the main pathway to school administration.



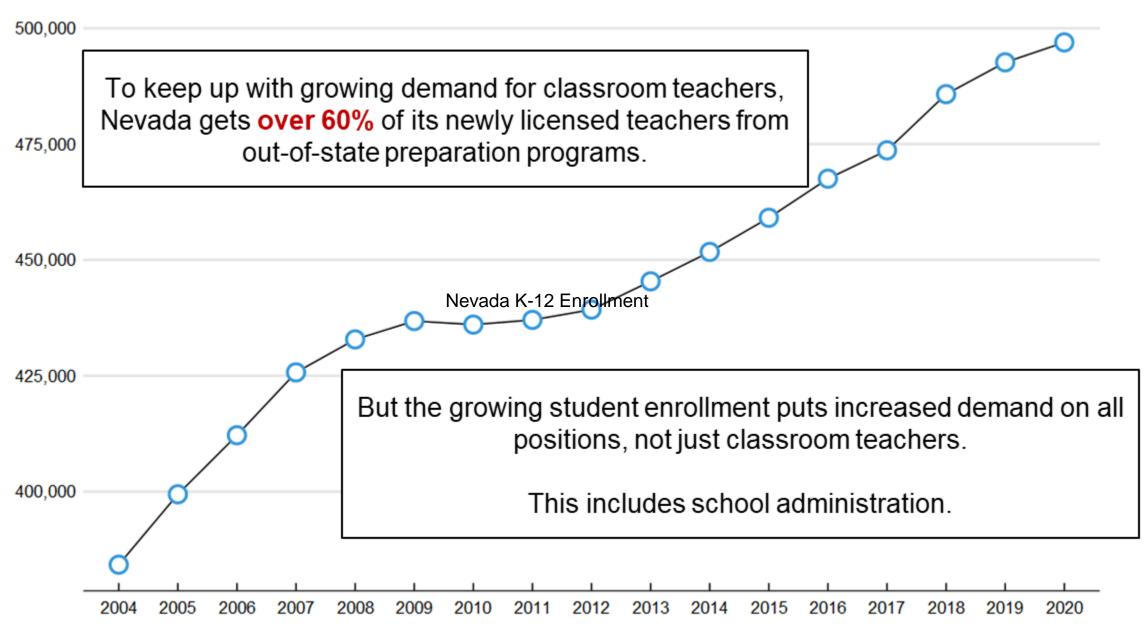
Nevada K-12 Enrollment



Nevada K-12 Enrollment



Nevada K-12 Enrollment



Pipeline to School Administration

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Classroom teaching in Nevada is the pathway to school administration.

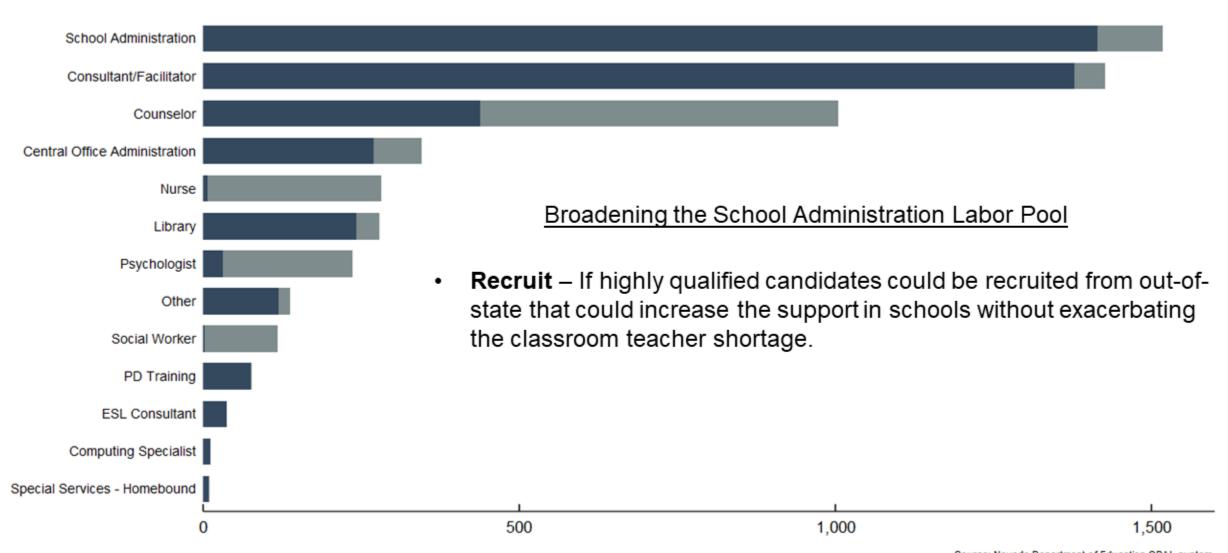
Why does this matter?

Could out-of-state recruitment of administrators be a tool to broaden and deepen the education labor pool?



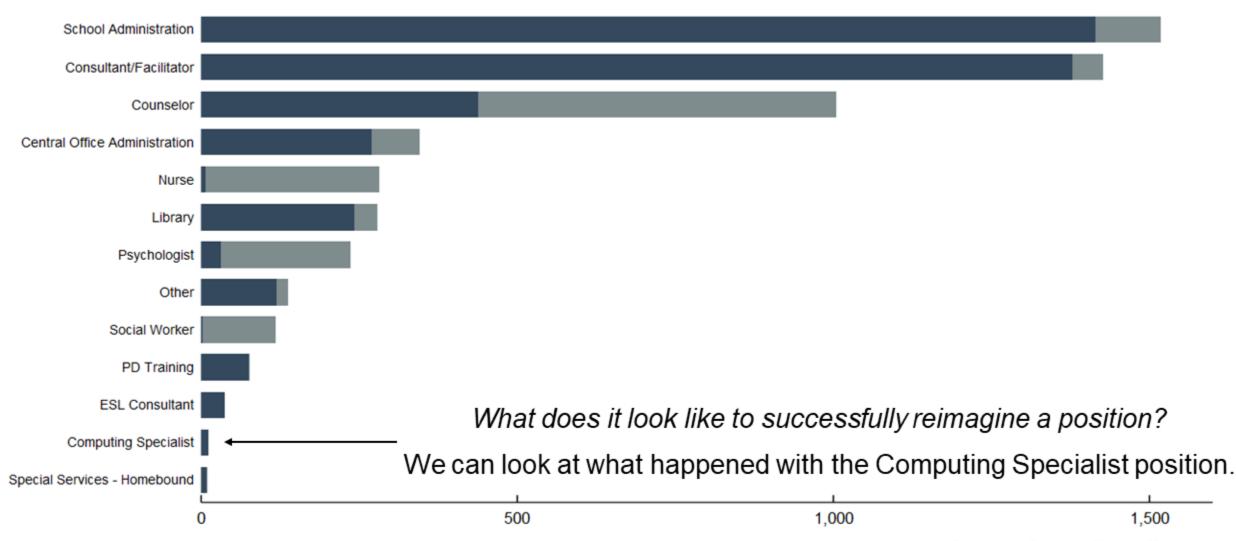
Nevada Licensed Staff Not Working as a Classroom Teacher



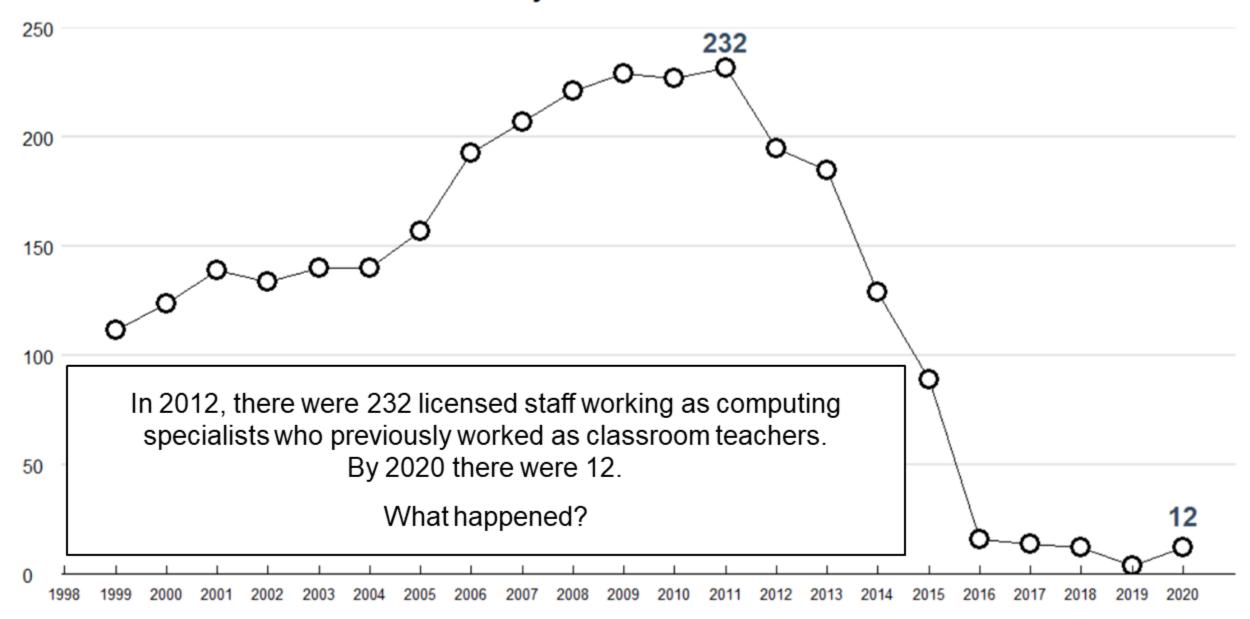


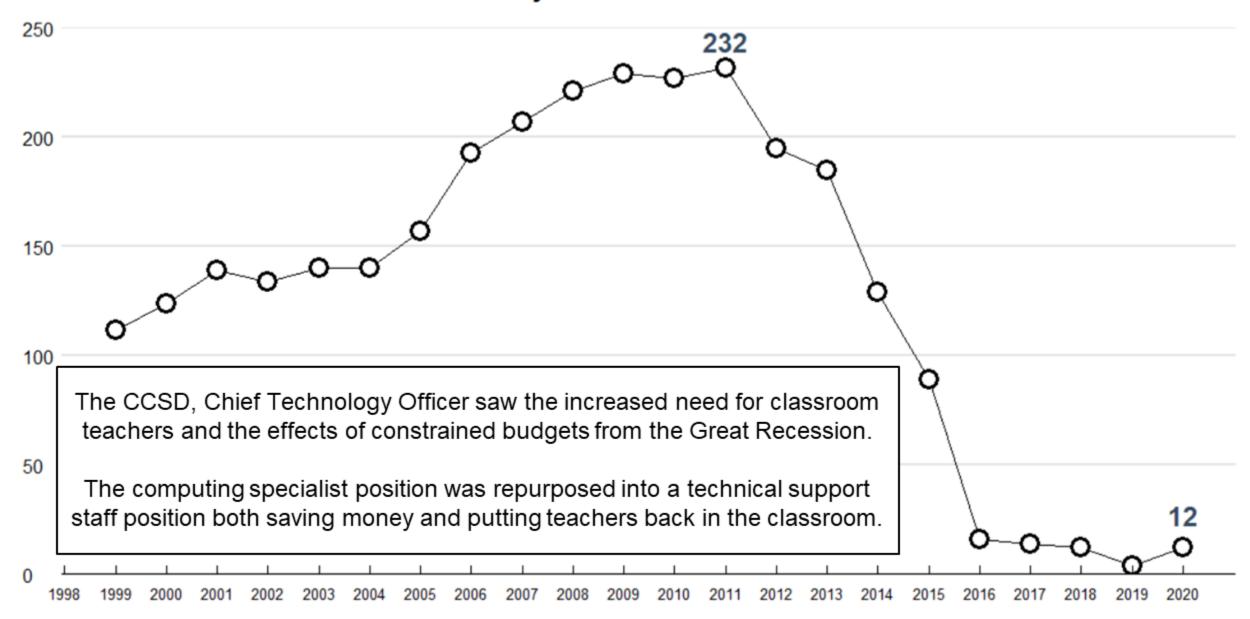
Nevada Licensed Staff Not Working as a Classroom Teacher

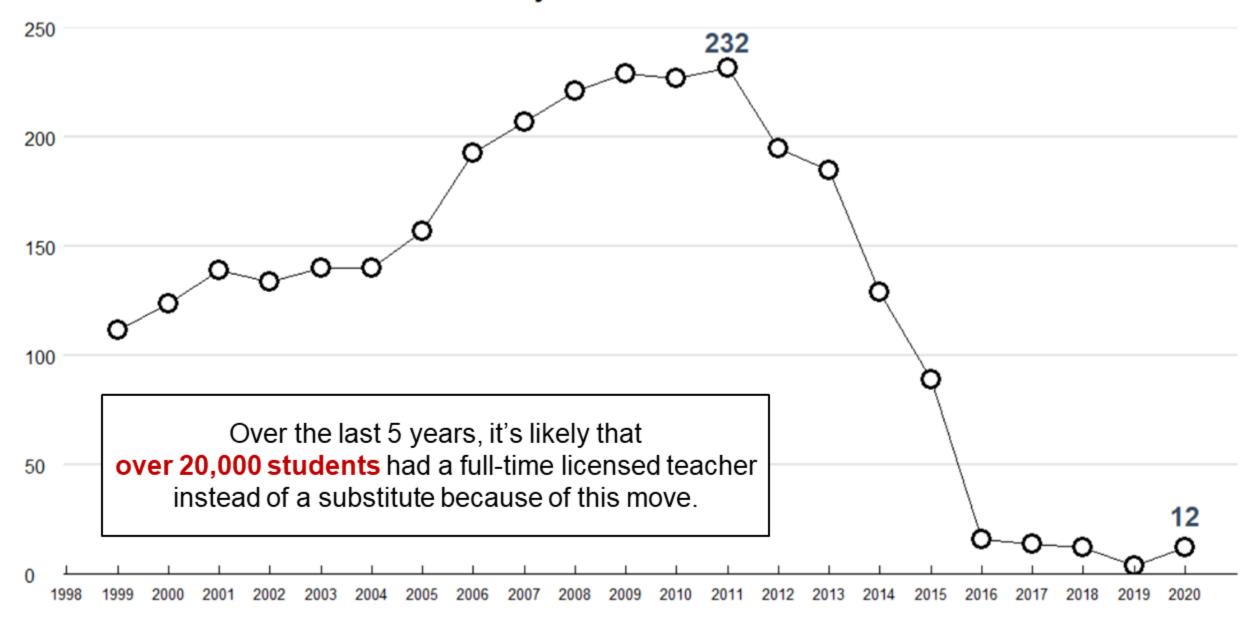
Previously Nevada Classroom Teacher Total Staff

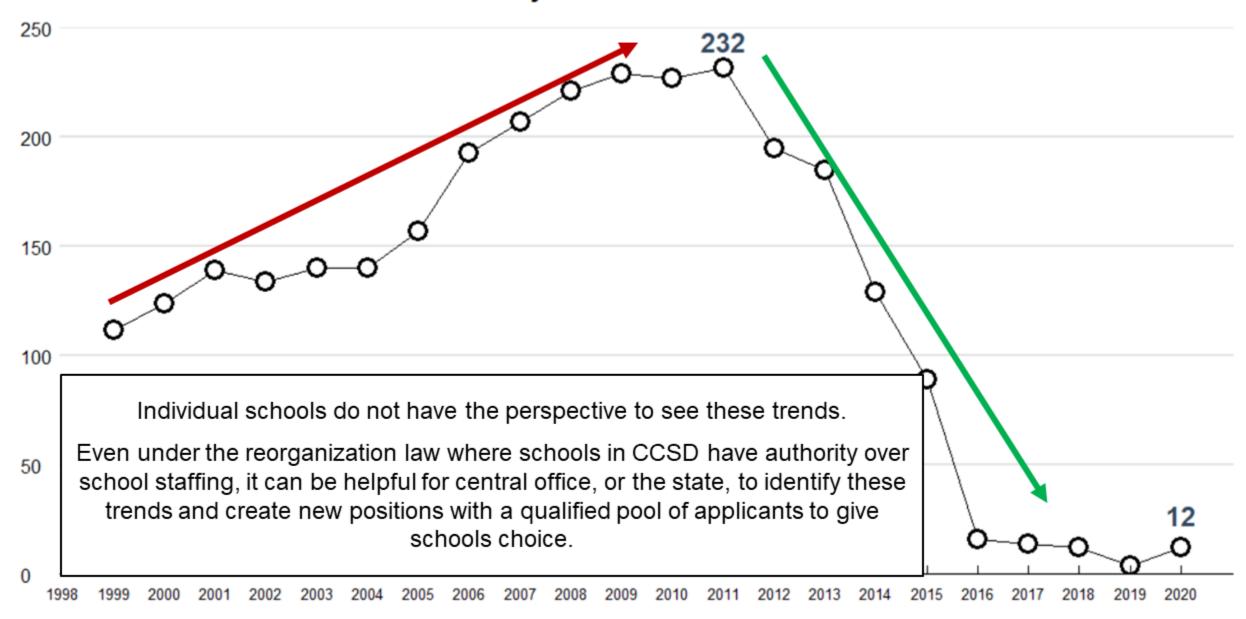


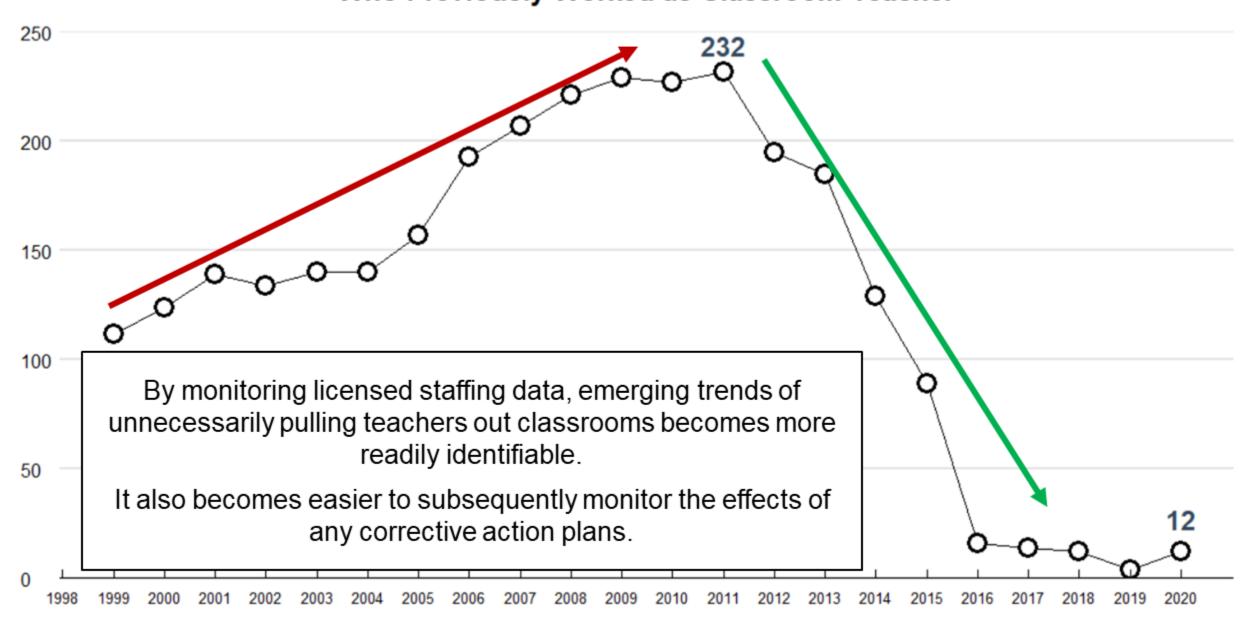












Reimagine Ways to Broaden the Labor Pool

- Expand national recruitment beyond the classroom
- Beware of classified/clerical and technical support positions that do not require instructional expertise pulling licensed staff from classrooms.

These are not recommendations of what should happen, these are examples of strategies leaders in Nevada have used. The purpose here is to identify how data could support work to identify when these efforts, or efforts like these, are needed and if they are working.

Summary

Staffing Ratios

- Non-classroom positions are making up a larger percentage of licensed staff in Nevada.
- National data suggested that staffing is not inflated outside of the classroom, but rather significantly understaffed inside the classroom.
- Nevada needs to reimagine ways to expand the education labor pool to prevent exacerbating the classroom teacher shortage.



What obstacles do we face?

Are The Differences Equitable?

- Educator preparation pipeline
- Staffing ratios
- Teacher retention and attrition
- Teacher morale



Teacher Retention and Attrition

Before reviewing teacher retention and attrition we need a way to organize and think about this information.



Classification of Teacher Retention

Methodology used by the US Department of Education.

1. Stayer

These are classroom teachers that <u>stay</u> in the classroom the next school year in the same school.

2. Mover

These are classroom teachers that <u>move</u> schools the next school year but remain in the classroom.

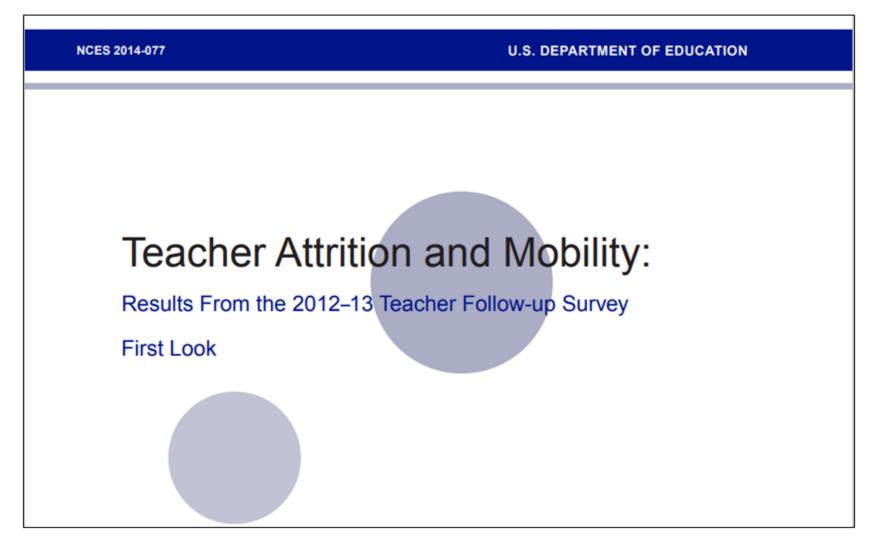
3. Leaver

These are classroom teachers who <u>leave</u> the classroom the next school year. Leavers include teachers who quit the profession, teachers who go into administration, and teachers who retire. Any teacher who leaves the classroom is included in this group.



For every classroom teaching position these are mutually exclusive, collectively exhaustive options. In other words, every classroom teaching position the next school year is in one, and only one of these categories.

The most recent national data put out by the US Department of Education was in 2012-2013





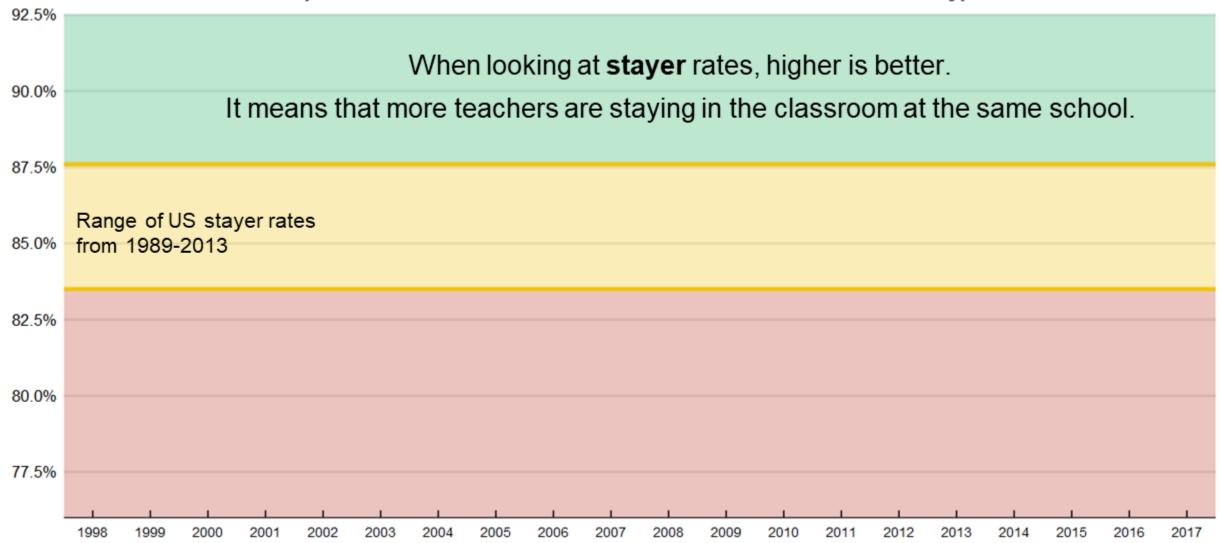
From 1989 through 2013, national teacher stayer rates ranged from 83.5% to 87.6%

Table 1. Number and percentage distribution of public school teacher stayers, movers, and leavers: 1988-89 through 2012-13

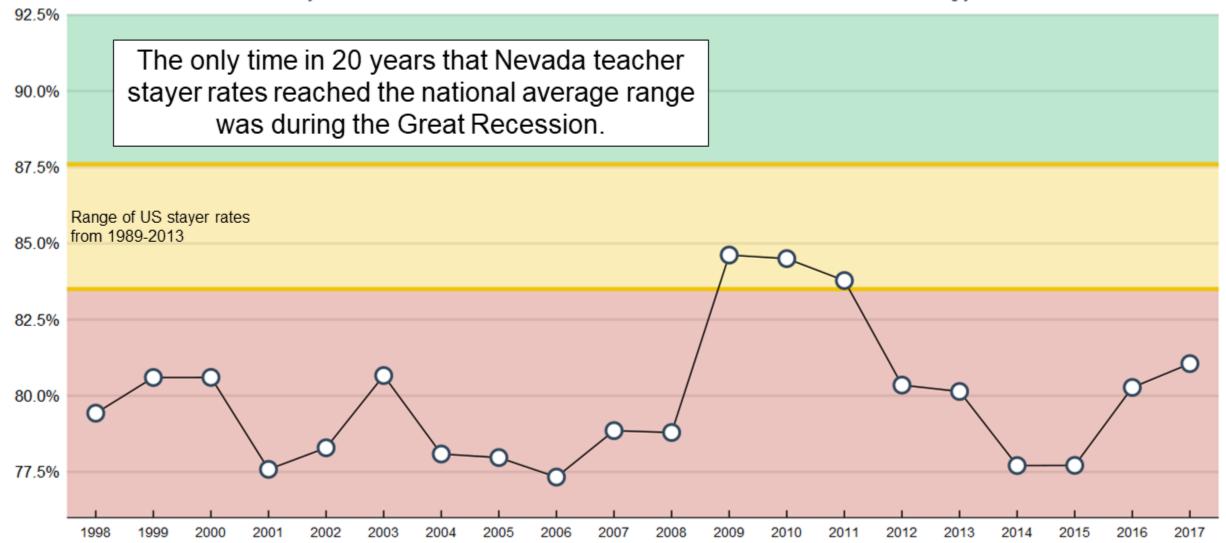
	Number			Percent			
Year	Total base year teachers ¹	Stayers	Movers	Leavers	Stayers	Movers	Leavers
1988-89	2,386,500	2,065,800	188,400	132,300	86.5	7.9	5.6
1991–92	2,553,500	2,237,300	185,700	130,500	→ 87.6	7.3	5.1
1994–95	2,555,800	2,205,300	182,900	167,600	86.3	7.2	6.6
2000-01	2,994,700	2,542,200	231,000	221,400	84.9	7.7	7.4
2004-05	3,214,900	2,684,200	261,100	269,600	→ 83.5	8.1	8.4
2008-09	3,380,300	2,854,900	255,700	269,800	84.5	7.6	8.0
2012-13	3,377,900	2,846,500	271,900	259,400	84.3	8.1	7.7



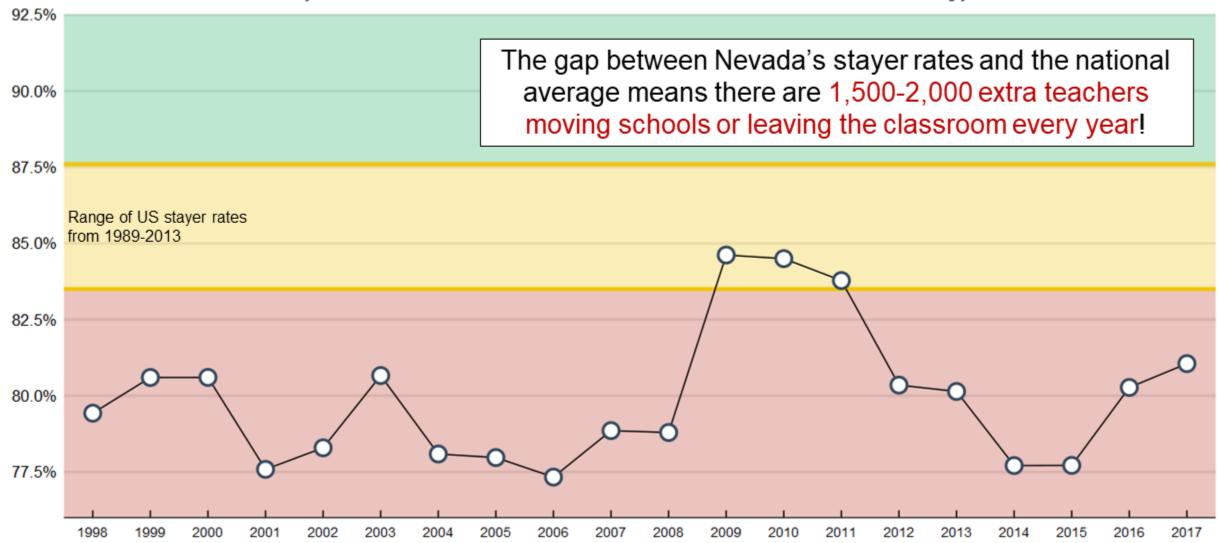
Nevada Classroom Teacher Stayer Rates Stayers are classroom teachers who remain in the classroom in the same school the following year.



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From 1989 through 2013, teacher **leaver** rates ranged from 5.1% to 8.4%

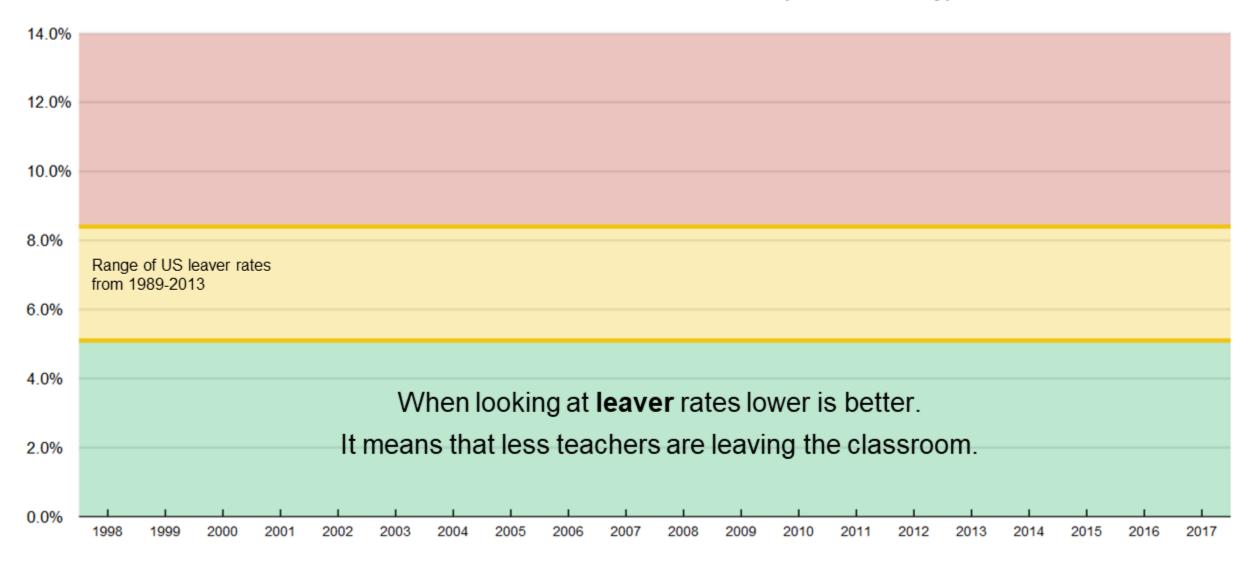
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1994–95	2,555,800	2,205,300	182,900	167,600	86.3	7.2	6.6
2000-01	2,994,700	2,542,200	231,000	221,400	84.9	7.7	7.4
2004-05	3,214,900	2,684,200	261,100	269,600	83.5	8.1	8.4
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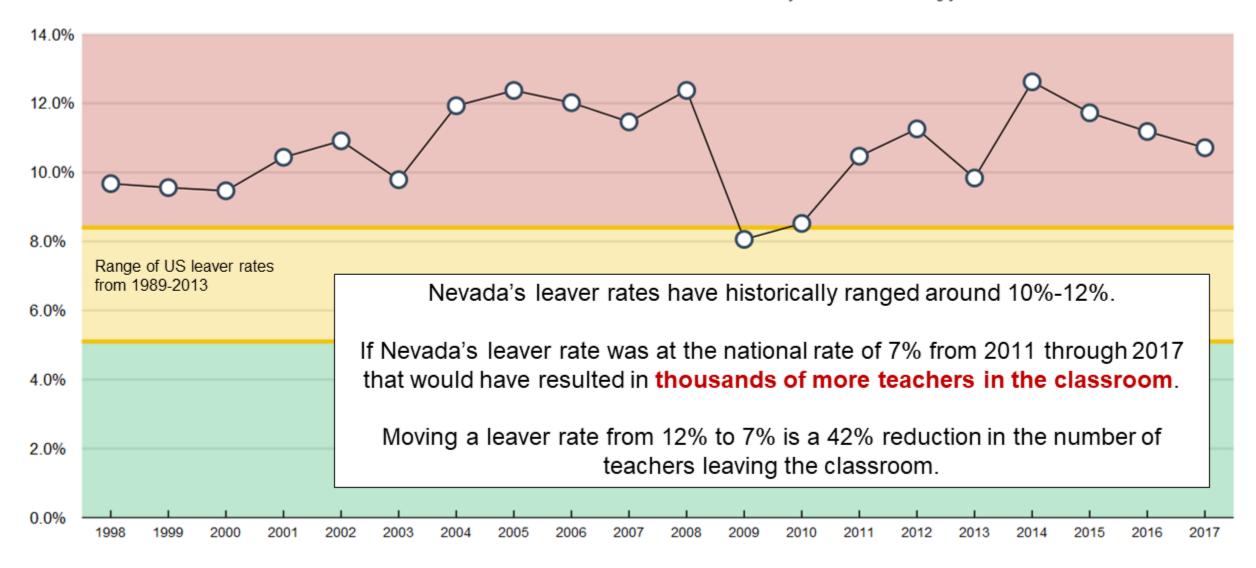
Nevada Classroom Teacher Leaver Rates

Leavers are classroom teachers who leave the classroom for any reason the following year.



Nevada Classroom Teacher Leaver Rates

Leavers are classroom teachers who leave the classroom for any reason the following year.



What do stayer, mover, and leaver rates look like by teacher ethnicity?



Average Rates by Ethnicity 2007 through 2017

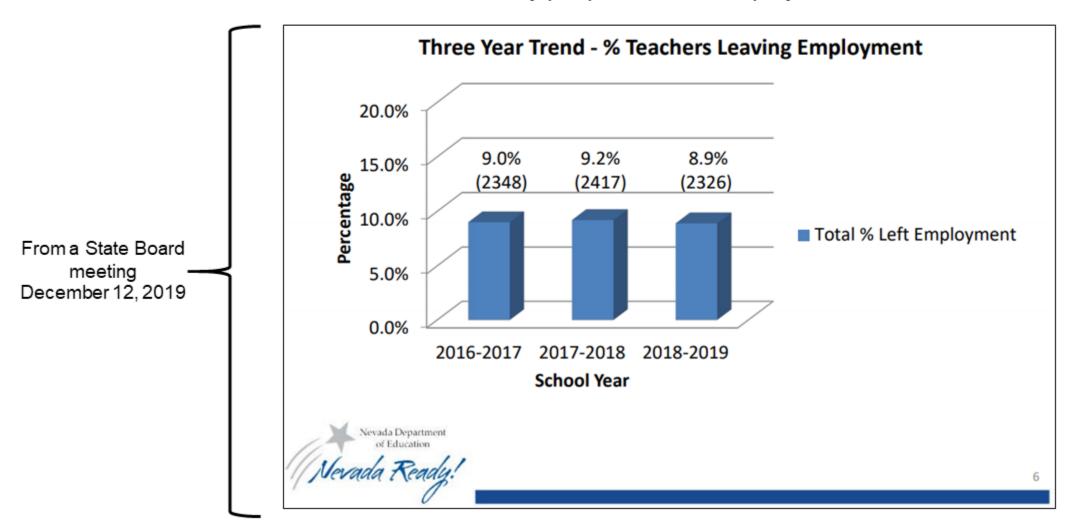
Teacher Ethnicity	Stayer Rate	Mover Rate	Leaver Rate
Caucasian	81.1%	<u>8.2%</u>	10.6%
Hispanic	80.3%	10.2%	9.5%
African American	<u>76.3%</u>	<u>11.0%</u>	<u>12.7%</u>
Asian	81.9%	<u>10.3%</u>	<u>7.7%</u>
Two or More Races	81.0%	10.0%	9.0%
American or Alaskan Native	<u>78.6%</u>	<u>8.3%</u>	<u>13.1%</u>
Native Hawaiian / Pacific Islander	<u>83.7%</u>	9.7%	<u>6.6%</u>



The leaver rates in this analysis are higher than what you typically see because we are using nationally aligned methodology which includes anyone who leaves the classroom regardless of reason.

That means staff can still be employed with the district or school, but they are no longer in the classroom.

This analysis is concerned with **how many more people do we need in classrooms**, not how many people retained employment.



Teacher Retention and Attrition

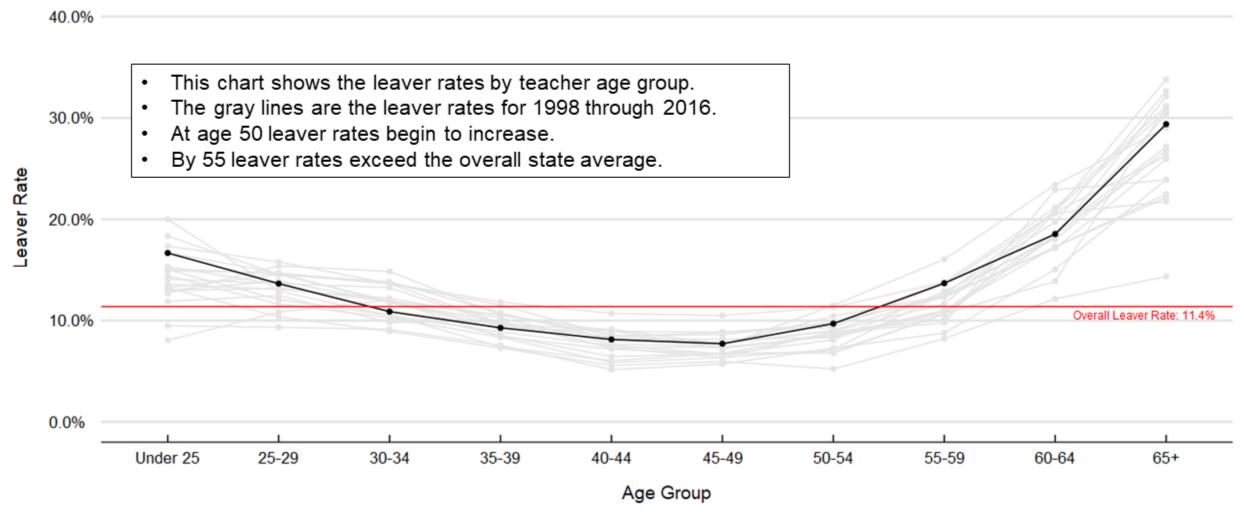
Is there anything to help predict teacher attrition?

We can start by looking at leaver rates by age group.

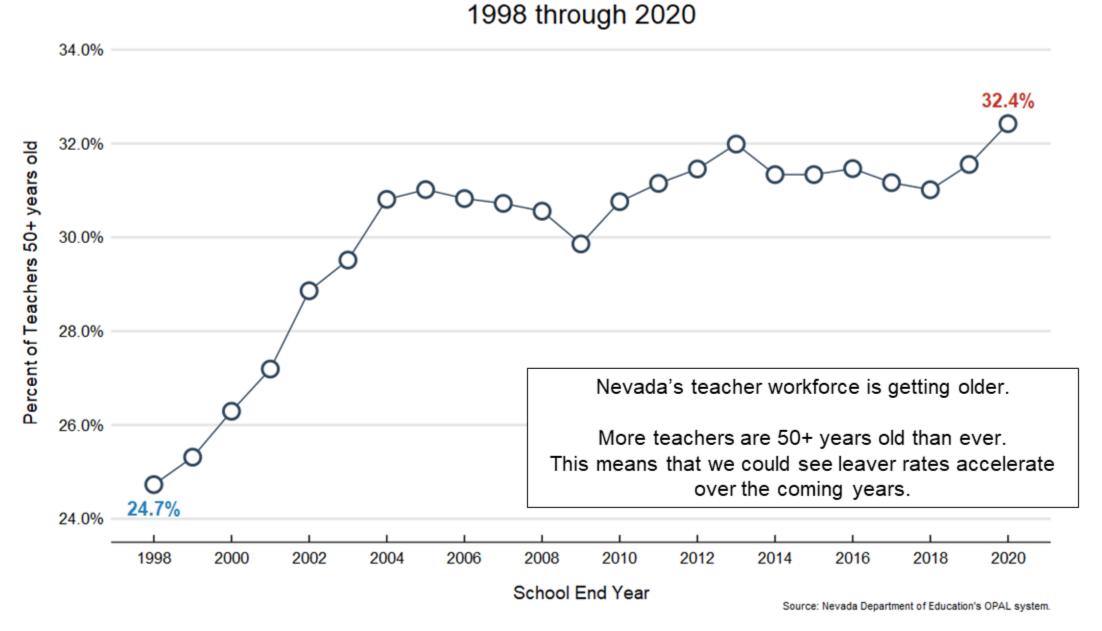


Nevada Classroom Teacher Leaver Rates by Age Group School Year: 2017

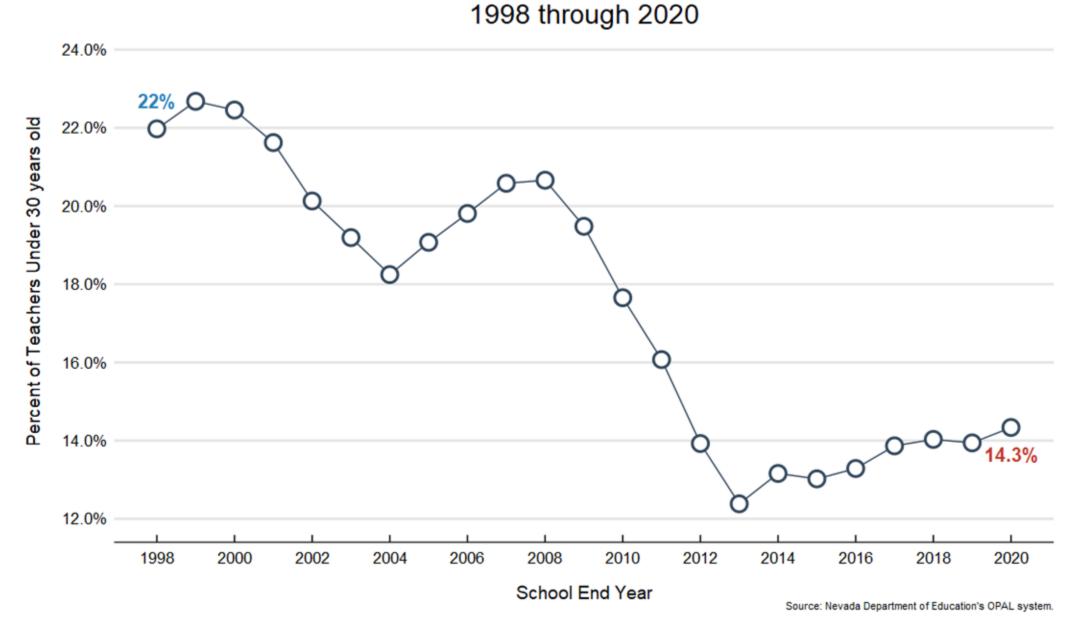
Leaver Rate: Percent of classroom teachers who leave the classroom the following year.



Nevada Classroom Teachers - 50+ Years Old



Nevada Classroom Teachers - Under 30 Years Old



Strategic Questions

What do we know about the age of the teacher workforce?

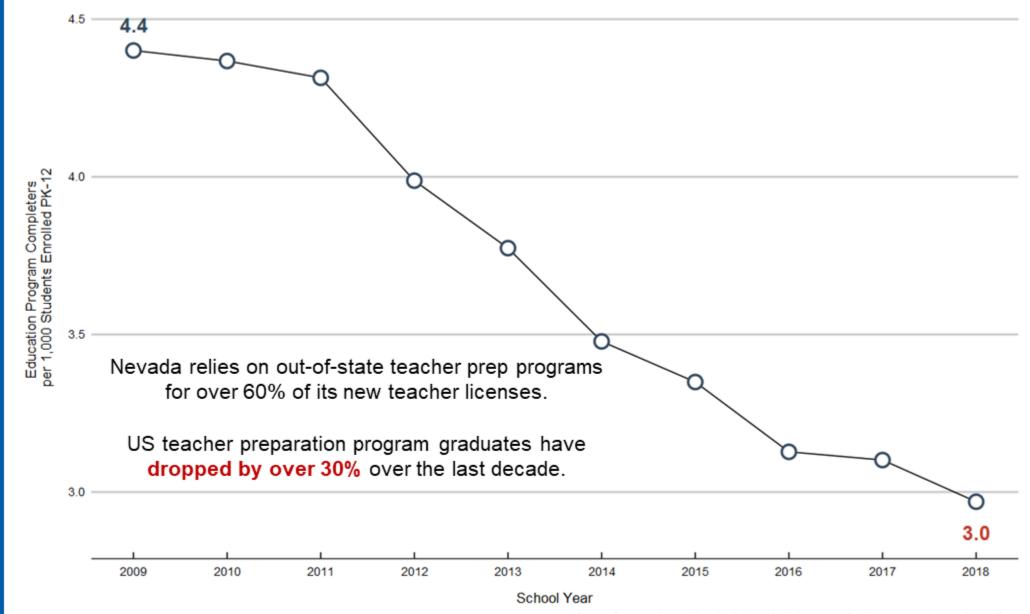
- At age 50 leaver rates start to increase.
- By age 55 leaver rates exceed the overall state average.
- Age 50 is the most popular teacher age in 2020-2021.
- Hiring young teachers contracts during a recession.

Why is this so alarming?



Educator Pipeline

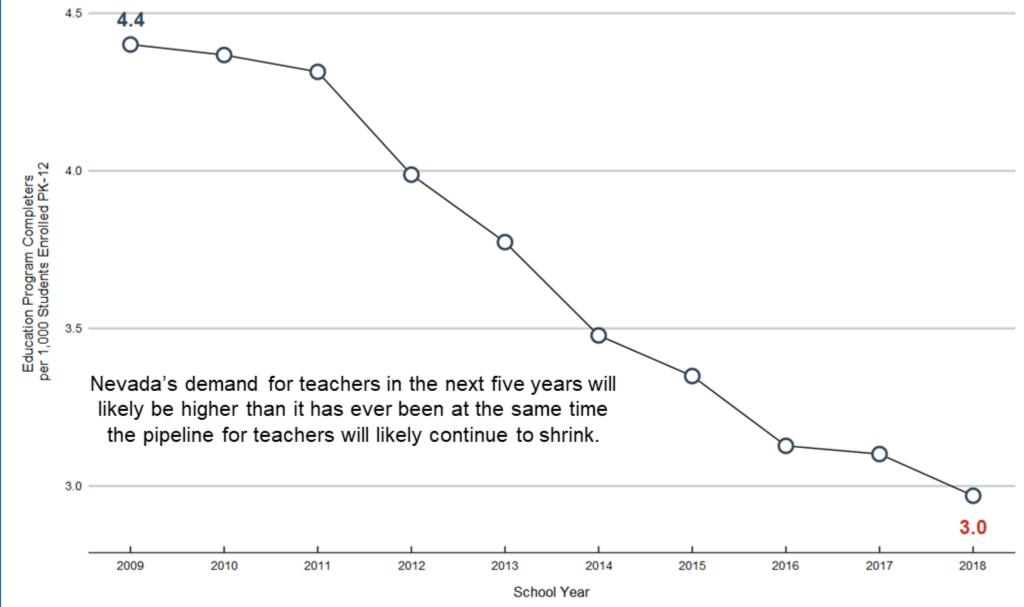
What Has Education Program Completion Looked Like in the US Over Time?





Educator Pipeline

What Has Education Program Completion Looked Like in the US Over Time?





Summary

Teacher Retention

- Nevada's teacher attrition rates have continuously lagged national averages.
- African American teachers, teachers under 25, and teachers over 55
 are the most likely to leave the classroom.
- Nevada's teacher workforce is older than it has ever been and will likely lead to an acceleration of leaver rates over the next 5 years.
- At the same time leaver rates are likely to accelerate, the national teacher pipeline is shrinking.



What obstacles do we face?

- Educator preparation pipeline
- Staffing ratios
- Teacher retention and attrition
- Teacher morale



Where Are We?

Teacher Morale

To investigate teacher morale, we are going to review the US Department of Education's National Teacher and Principal Survey from 2017-2018.

This is a survey of a nationally representative sample of over 50,000 from all 50 states.

This will allow us to compare teacher perceptions in Nevada to teachers across the country.



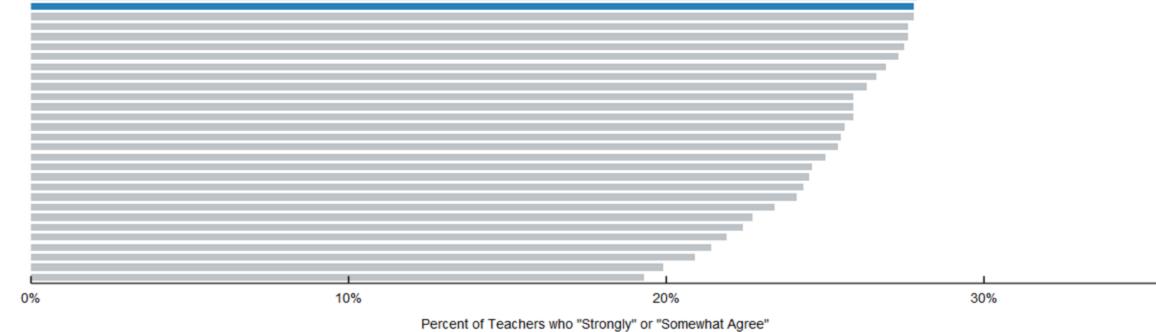
Question: "The stress and disappointments involved in teaching at this school aren't really worth it."

NCES - National Teacher and Principal Survey

This is a ranking of all the states by the percent of teachers who agreed with the statement:

The stress and disappointments involved in teaching at this school aren't really worth it.

A higher ranking on this chart is less favorable.

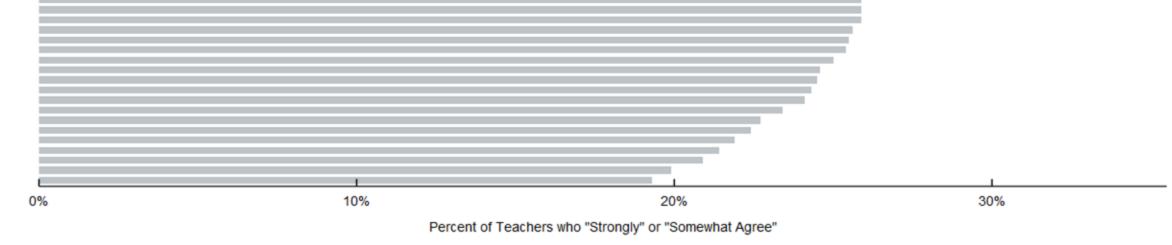


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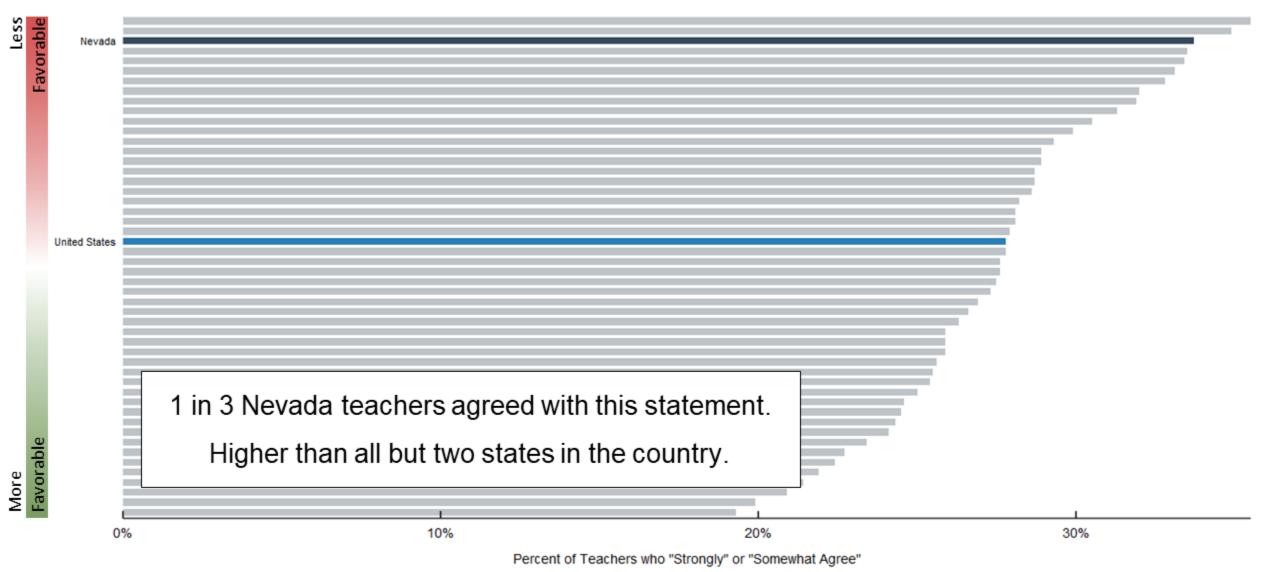
NCES - National Teacher and Principal Survey

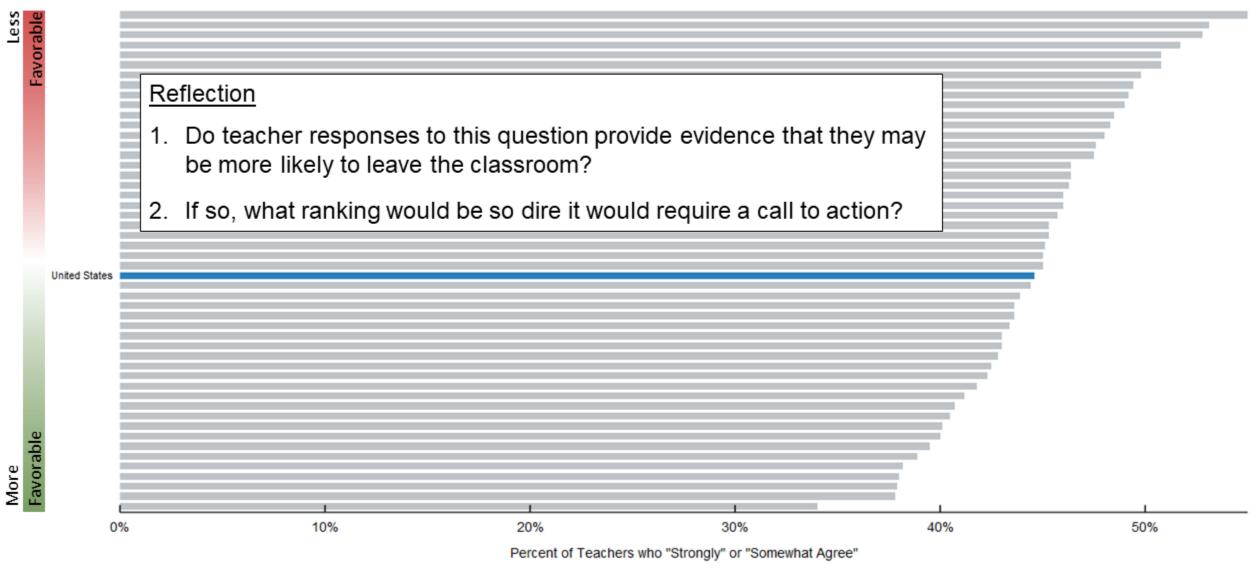
Reflection

- 1. Do teacher responses to this question provide evidence that they may be more likely to leave the classroom?
- 2. If so, what ranking would be so dire it would require a call to action? Top 10? Top 5? None of these rates are concerning to you?

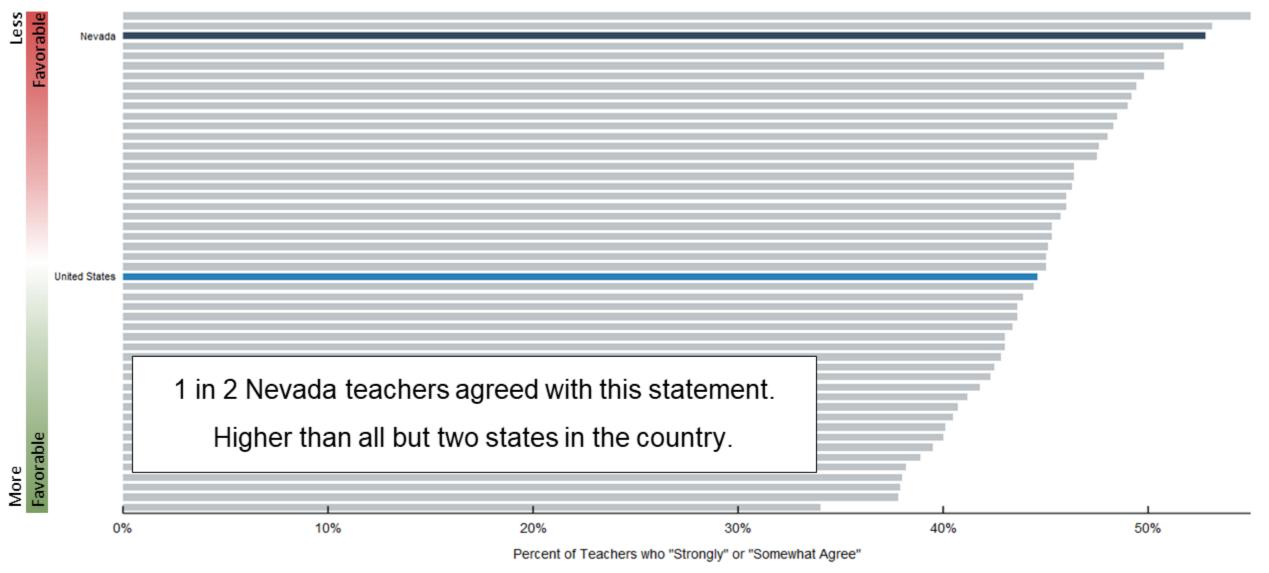


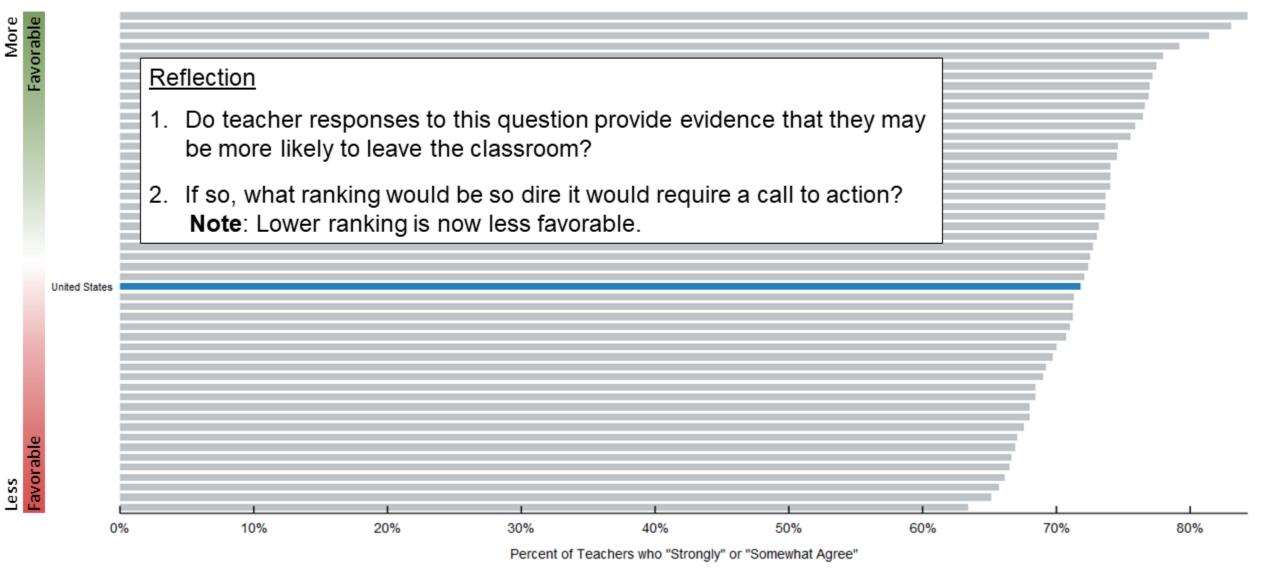
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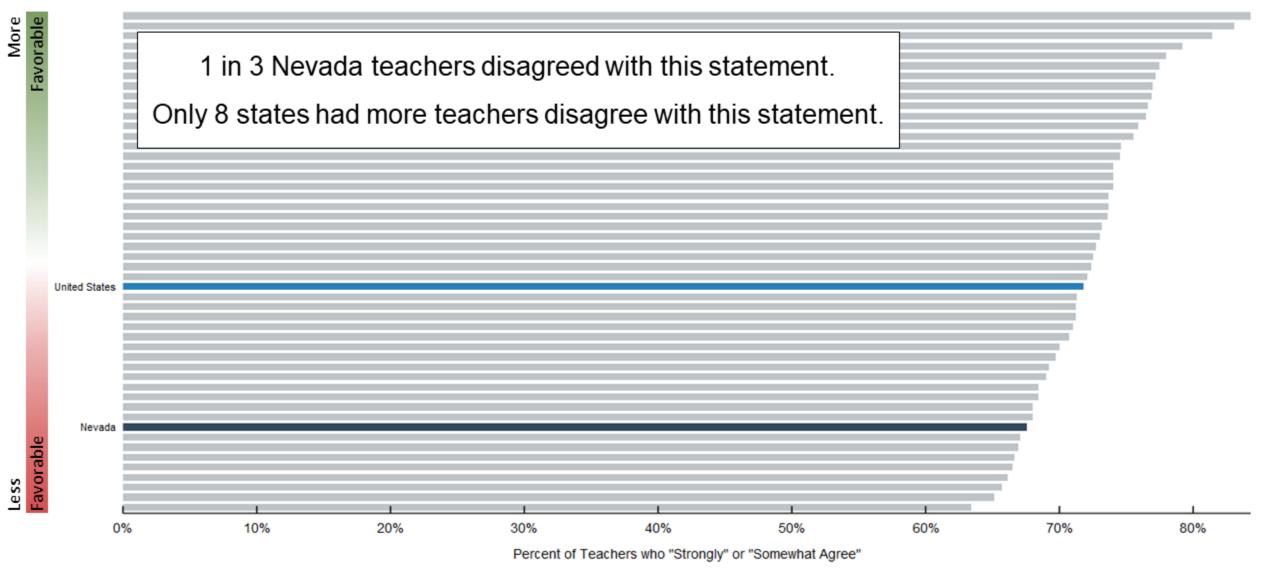


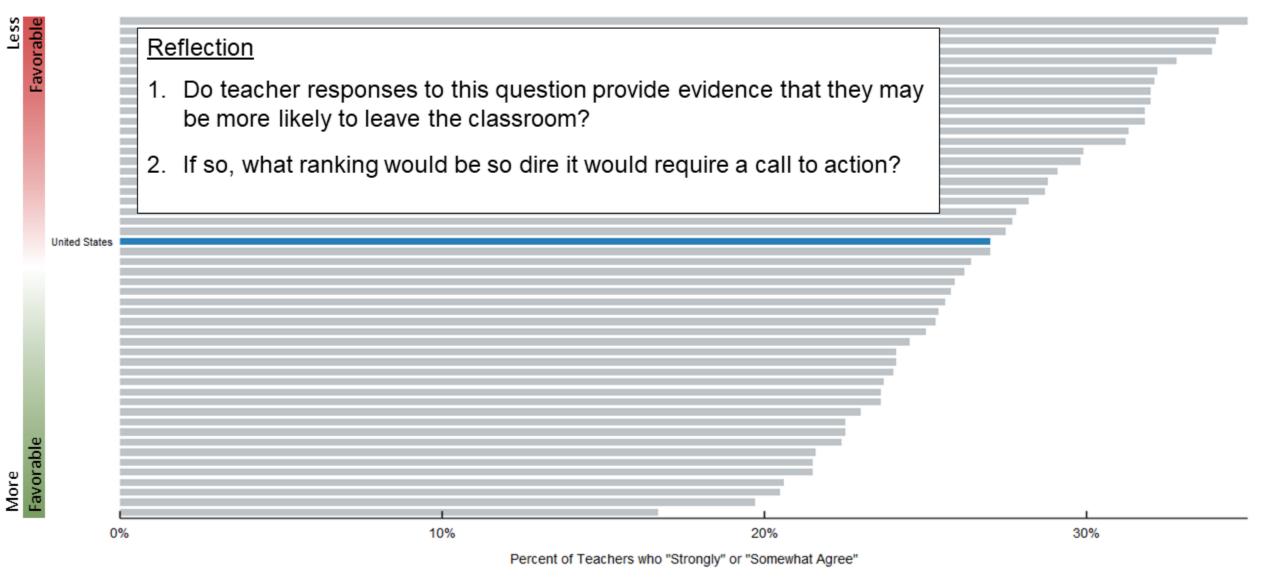
Question: "I don't seem to have as much enthusiasm now as I did when I began teaching."





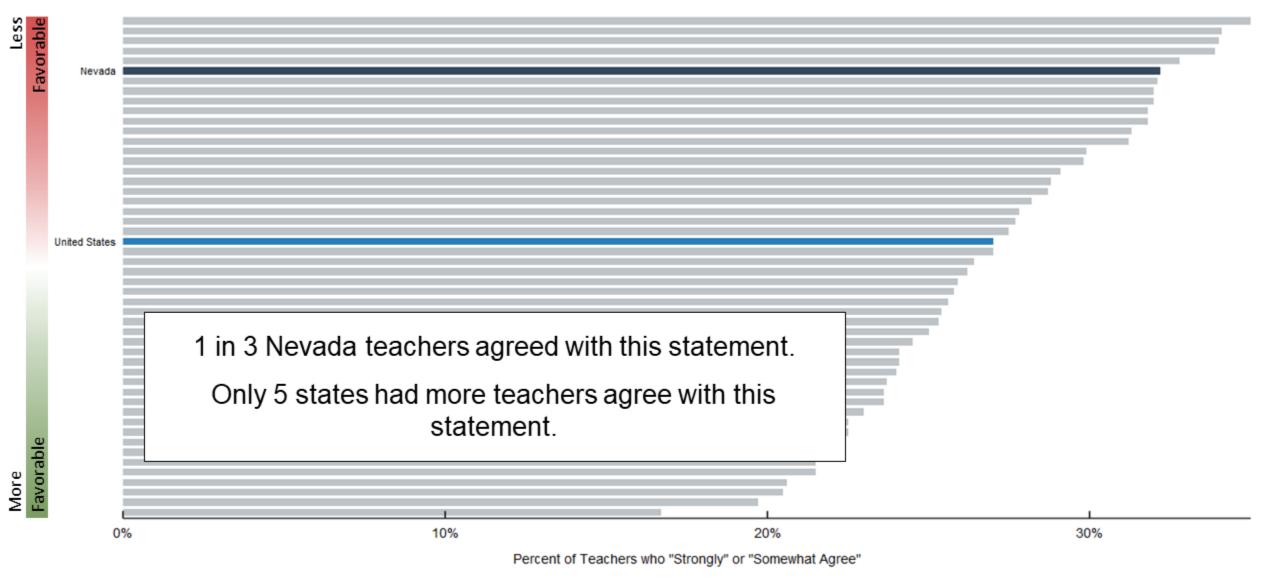
Question: "I like the way things are run at this school."



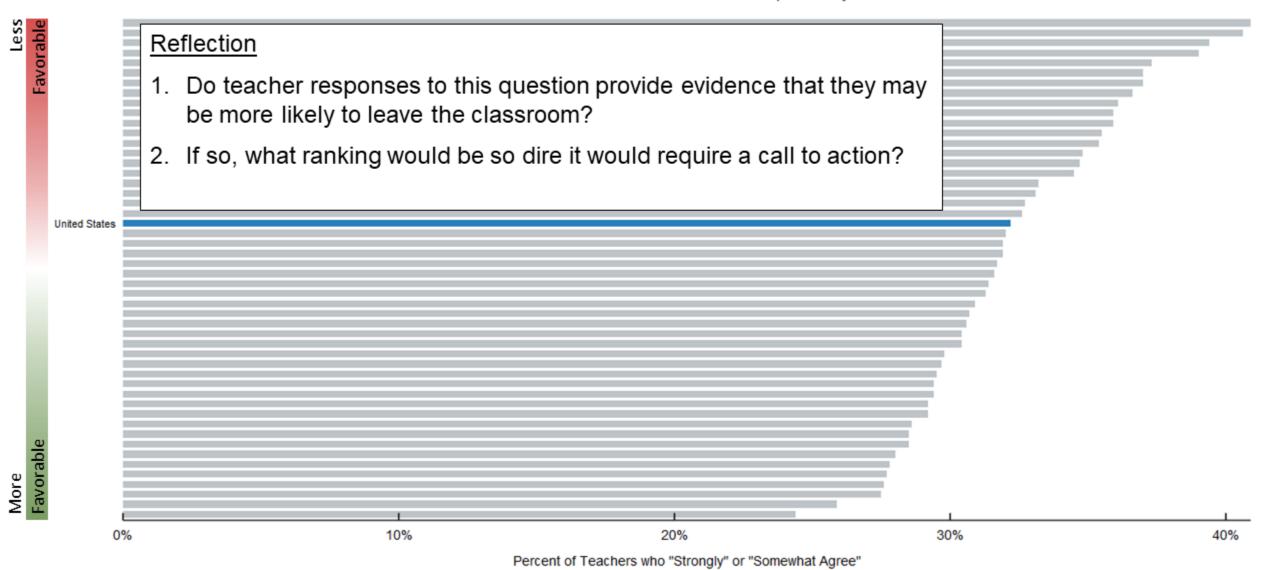


Question: "I think about staying home from school because I'm just too tired to go."

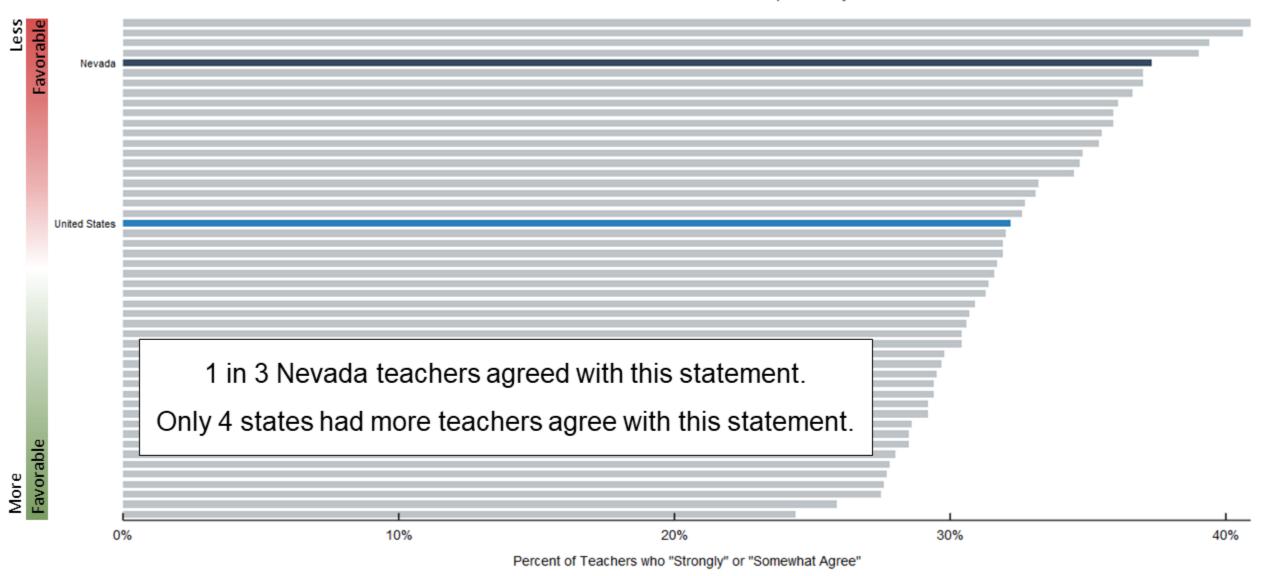
NCES - National Teacher and Principal Survey

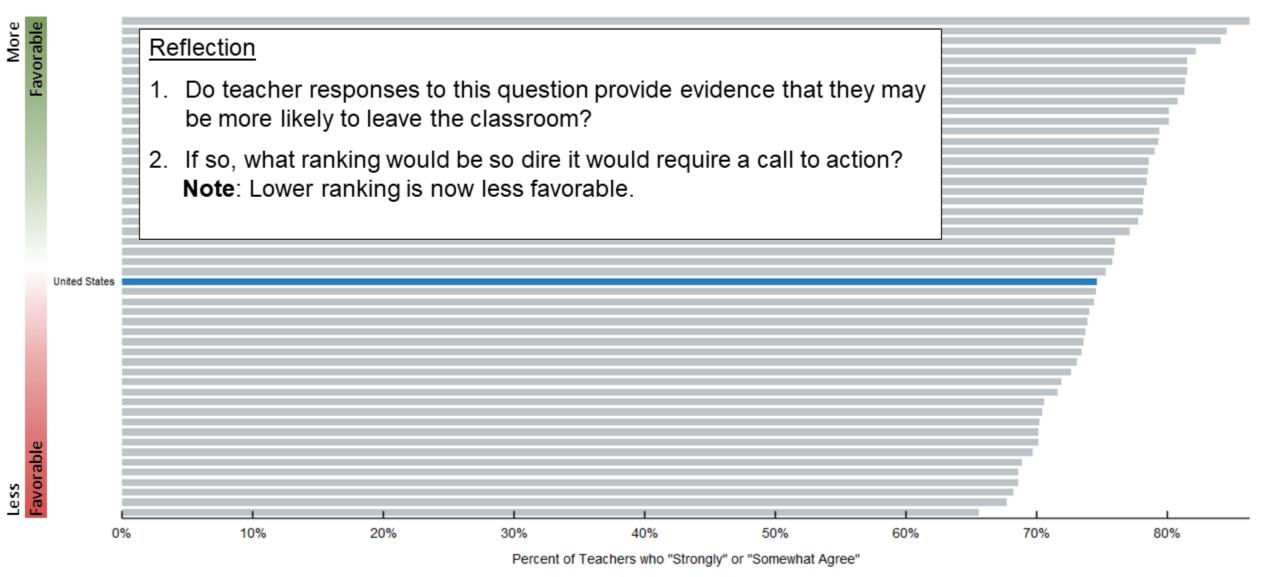


Source: NCES National Teacher and Principal Survey 2017-2018.

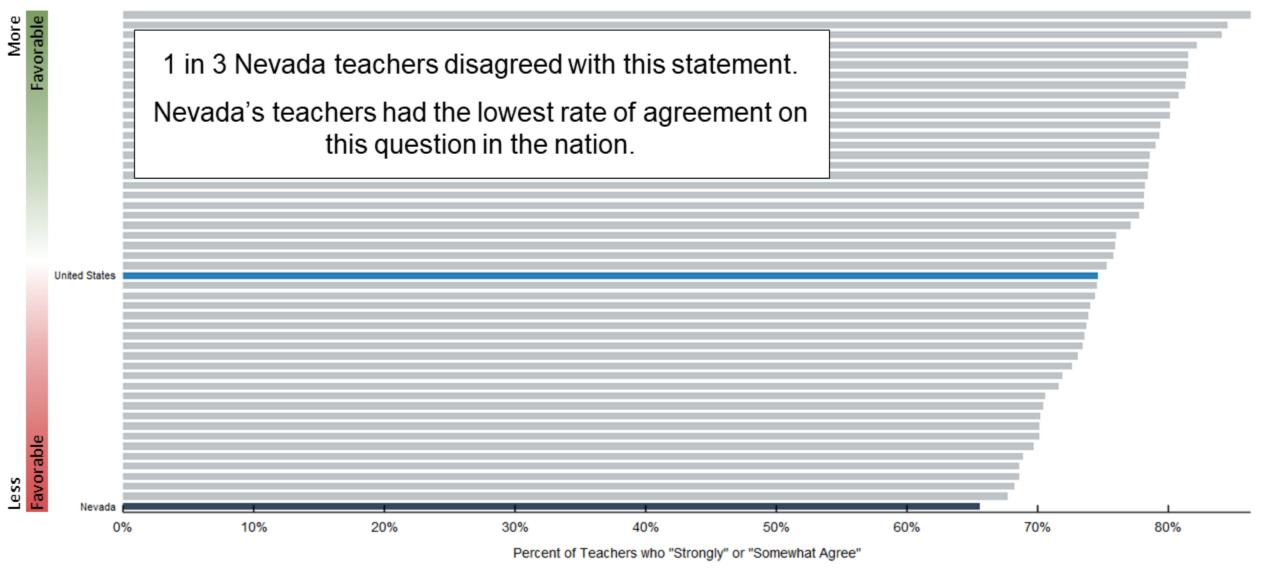


Question: "I think about transferring to another school."

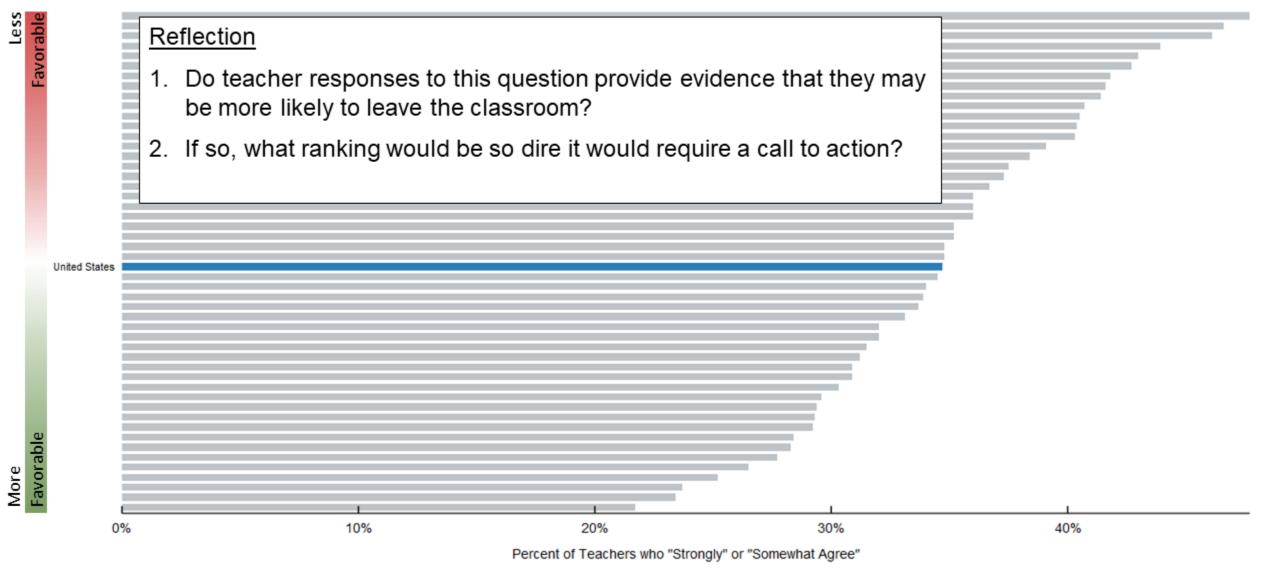




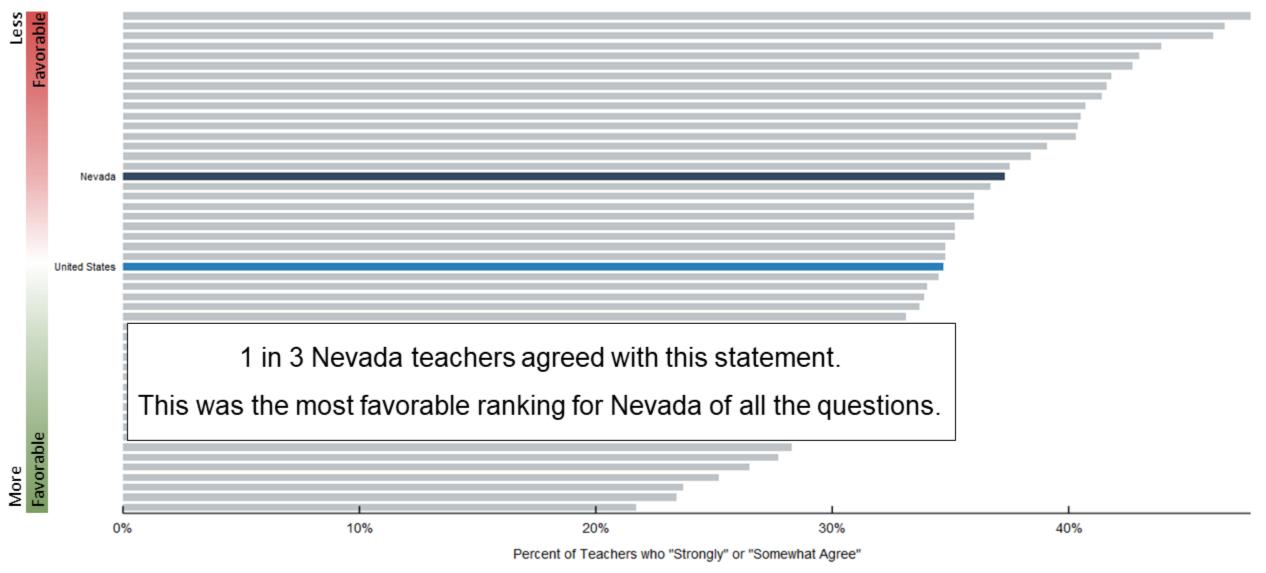
Question: "The teachers at this school like being here; I would describe us as a satisfied group."



Question: "If I could get a higher paying job I'd leave teaching as soon as possible."



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Summary

Teacher Morale

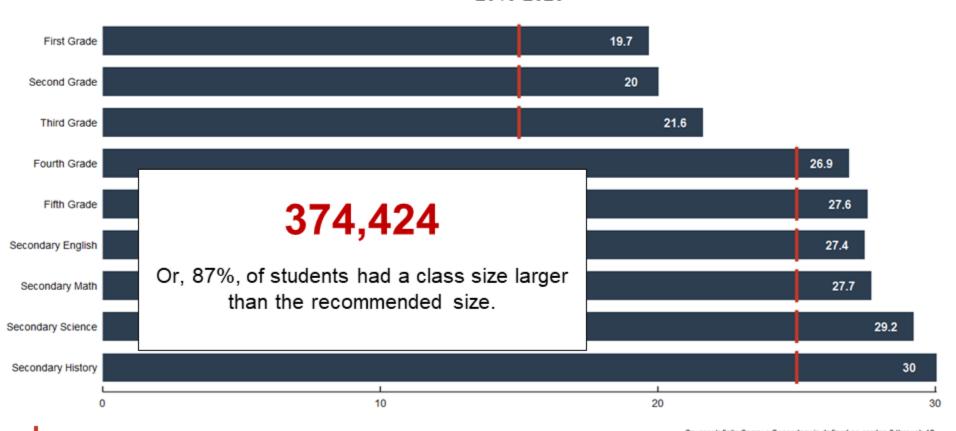
- Nevada teacher morale is alarmingly low when compared to their national peers.
- This low morale may have an impact on the leaver/mover/stayer rates of Nevada's classroom teachers.





Class sizes in Nevada are too big.

Average Class Sizes Experienced by Nevada Students 2019-2020





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 one week.
Section enrollments of 50 or greater excluded from elementary analysis and 70 or greater from secondary analysis. There were 430,807 students included in this analysis.

Nevada Needs More Teachers.

Teachers Needed

Improve
Core Class SpæslusionConclusion

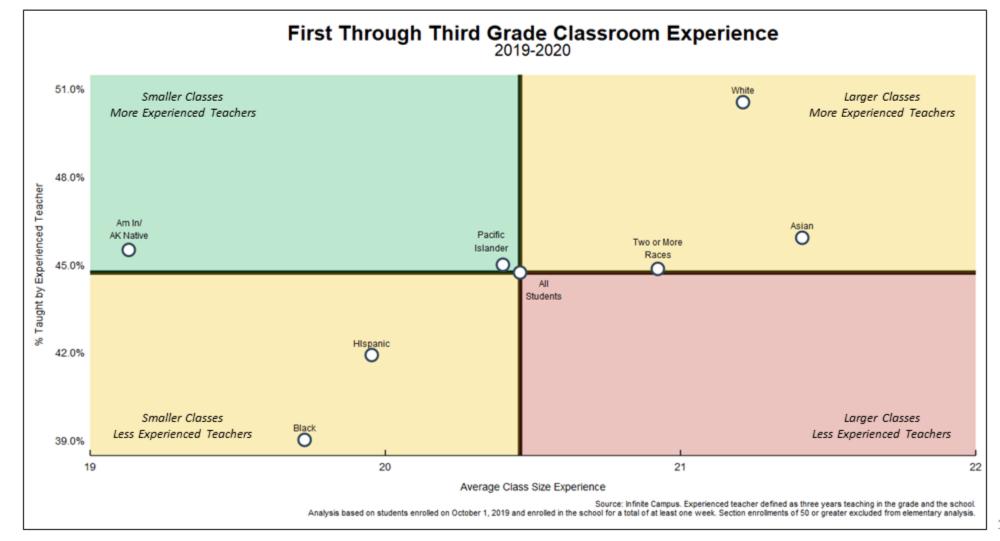
3,000+

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

Lead the nation in student-teacher ratios 23,000+

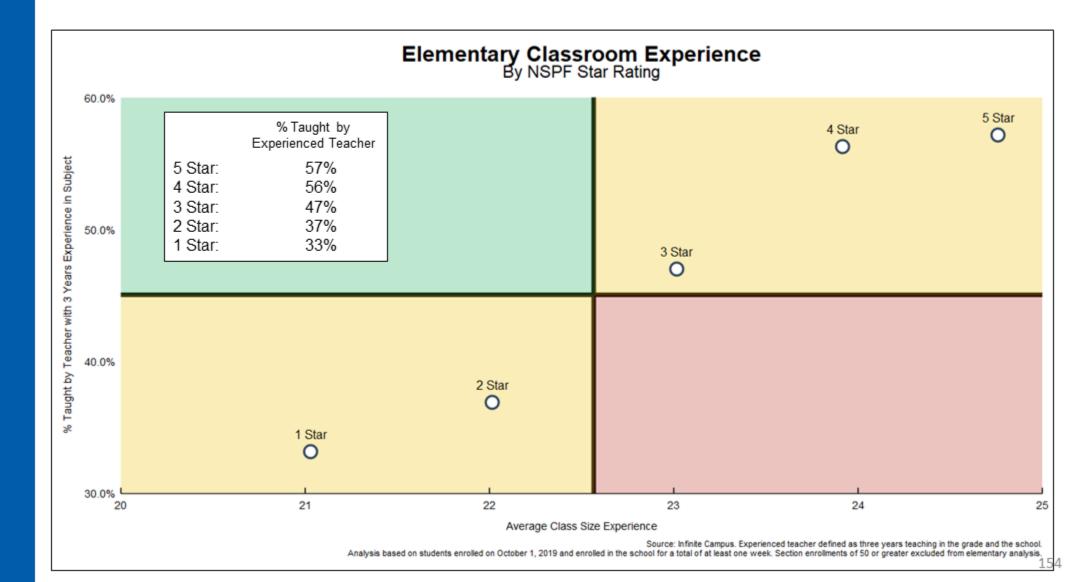


Not all students have equitable access to experienced teachers.





Lack of access to experienced teachers is associated with lower student achievement.

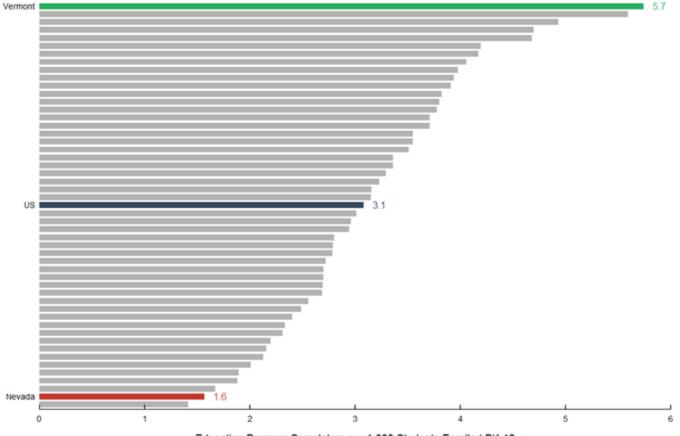




Nevada's teacher pipeline significantly lags national averages.

Nevada relies on out-of-state teacher prep programs for over 60% of new teacher licenses.

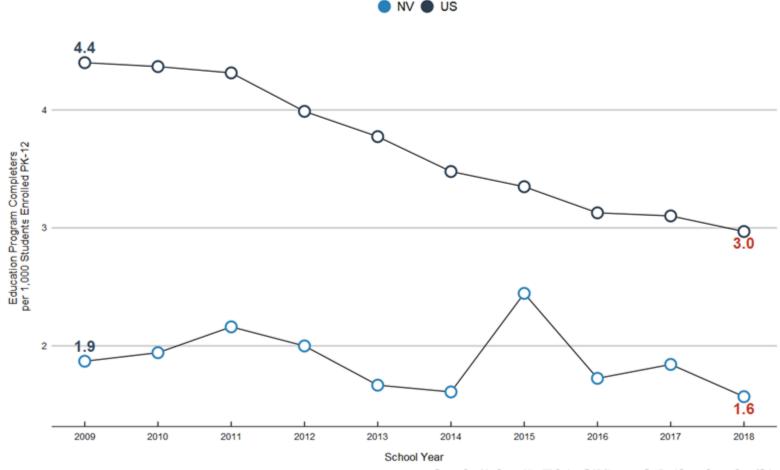
What Does Education Program Completion Look Like By State?





However, the national pipeline is severely contracting, and Nevada's pipeline has not been expanding.

What Has Education Program Completion Looked Like in Nevada and the US Over Time?

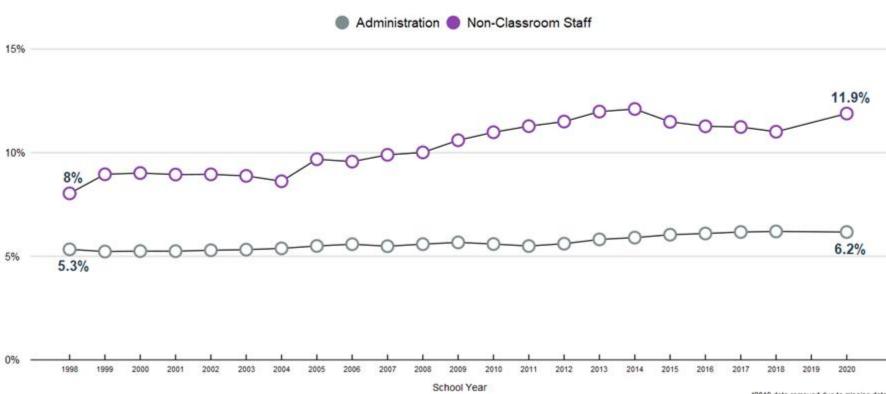




Despite non-classroom positions making up an increasing proportion of licensed staff ...

Percent of Nevada's K-12 Licensed Staff Working as Non-Classroom Staff or in Administration

Remaining staff are working as classroom teachers.





*2019 data removed due to missing data. Source: Nevada Department of Education's OPAL system.

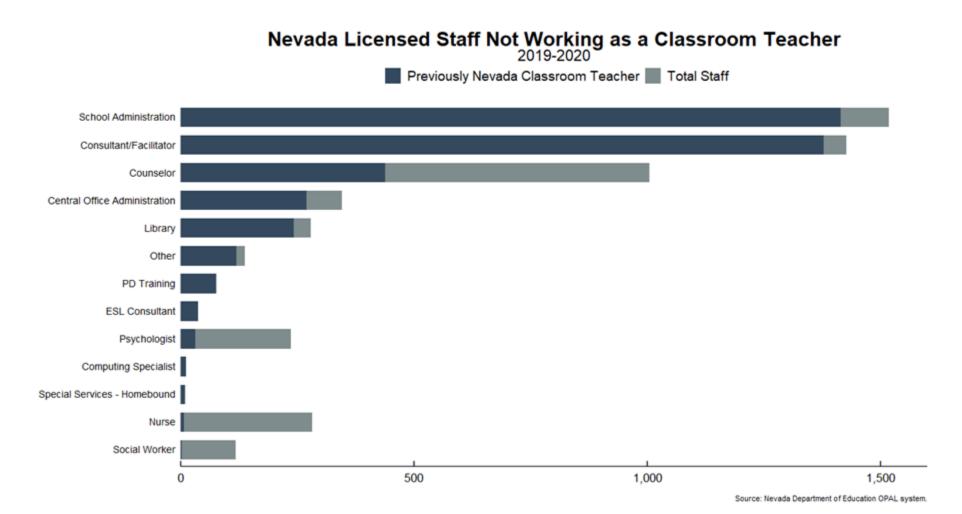
... evidence suggested these positions are not inflated compared to national averages.

	US Staffing <u>Ratios</u>	Nevada Staffing <u>Equivalent</u>	Nevada Staffing <u>Actual</u>	Staffing <u>Difference</u>
School Administration	262-to-1	1,897	1,518	-379
Counselor	430-to-1	1,156	1,004	-152
Central Administration	684-to-1	727	345	-382
Library Specialist	1208-to-1	411	278	-133

Nevada has significantly less staff than the national average.



However, relying on classroom teaching experience in Nevada so heavily for many of these positions is exacerbating the teacher shortage problem.





The teacher shortage problem is compounded by the fact Nevada's teacher attrition rates have continuously exceeded national averages.

Nevada Classroom Teacher Leaver Rates

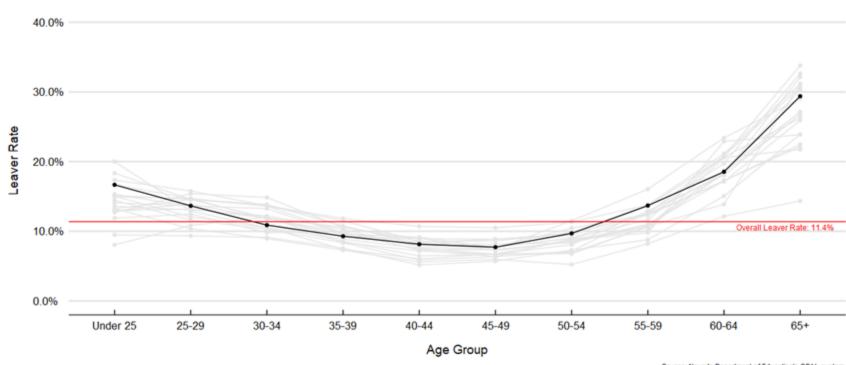
Leavers are classroom teachers who leave the classroom for any reason the following year





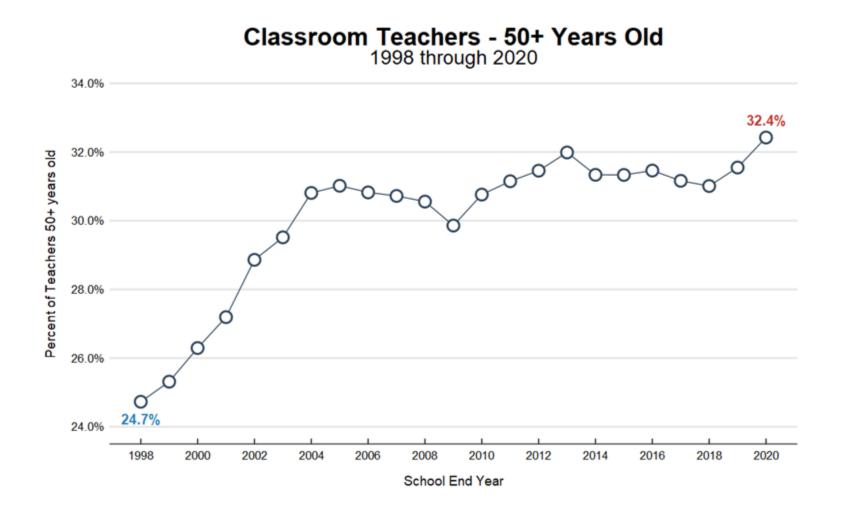
Teacher leaver rates begin to increase at age 50 and exceed the overall state rate by age 55.

Classroom Teacher Leaver Rates by Age Group School Year: 2017





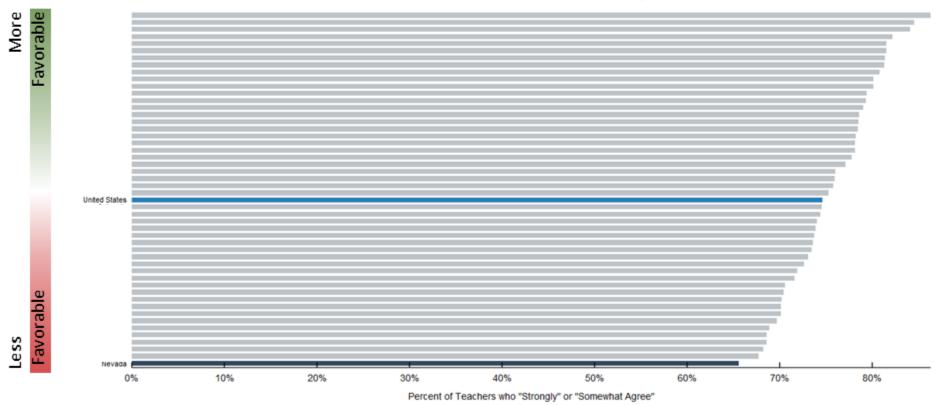
The percent of Nevada's workforce that is 50+ years old is higher than it has ever been.





Teacher morale is alarmingly low.

Question: "The teachers at this school like being here; I would describe us as a satisfied group."







Does Nevada Have an Education System Worth Investing In?



Nevada Has Made Massive Investments in Early Literacy

Full Day Kindergarten

- 2013 funding doubles to \$50 Million
- 2015 funding expanded to \$75 Million

Class Size Reduction

2016 to 2019 \$139 - 151 Million per year

Zoom

2013 to 2014 \$25 Million per year
2015 to 2019 \$50 Million per year

Victory

2013 to 2014 \$20 Million per year
2015 to 2019 \$25 Million per year

Read by Grade 3

2016 \$3.8 Million 2017 to 2019 \$20 Million per year



In 2019 the 1st cohort with exposure to Nevada's massive investment in early literacy took the NAEP reading assessment.

	School Year	Class Size Reduction*	Zoom*	Read by 3*	<u>Victory</u> *	Full Day K*
4th Grade	2018-2019	\$151 Million	\$50 Million		\$25 Million	
3 rd Grade	2017-2018	\$150 Million	\$50 Million	\$22 Million	\$25 Million	
2 nd Grade	2016-2017	\$147 Million	\$50 Million	\$22 Million	\$25 Million	
1 st Grade	2015-2016	\$139 Million	\$50 Million	\$3.8 Million	\$20 Million	
Kindergarten	2014-2015		\$25 Million			\$75 Million



National Assessment of Educational Progress (NAEP)

4th Grade Reading





190

250

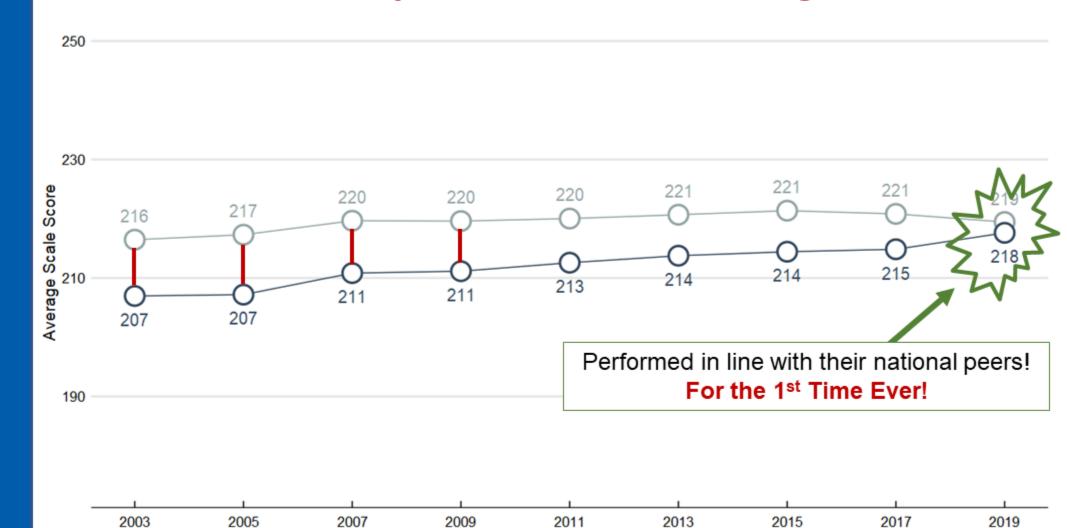
The first cohort with full exposure to the investment, Performed in line with their national peers!

For the 1st Time Ever!





Nevada Education Is a System Worth Investing In



Year



Source: NAEP Data Explorer 168

Hope has two beautiful daughters; their names are Anger and Courage.

Anger at the way things are, and Courage to see that they do not remain as they are.

- St. Augustine



Nevada Class Sizes A Comprehensive Review

