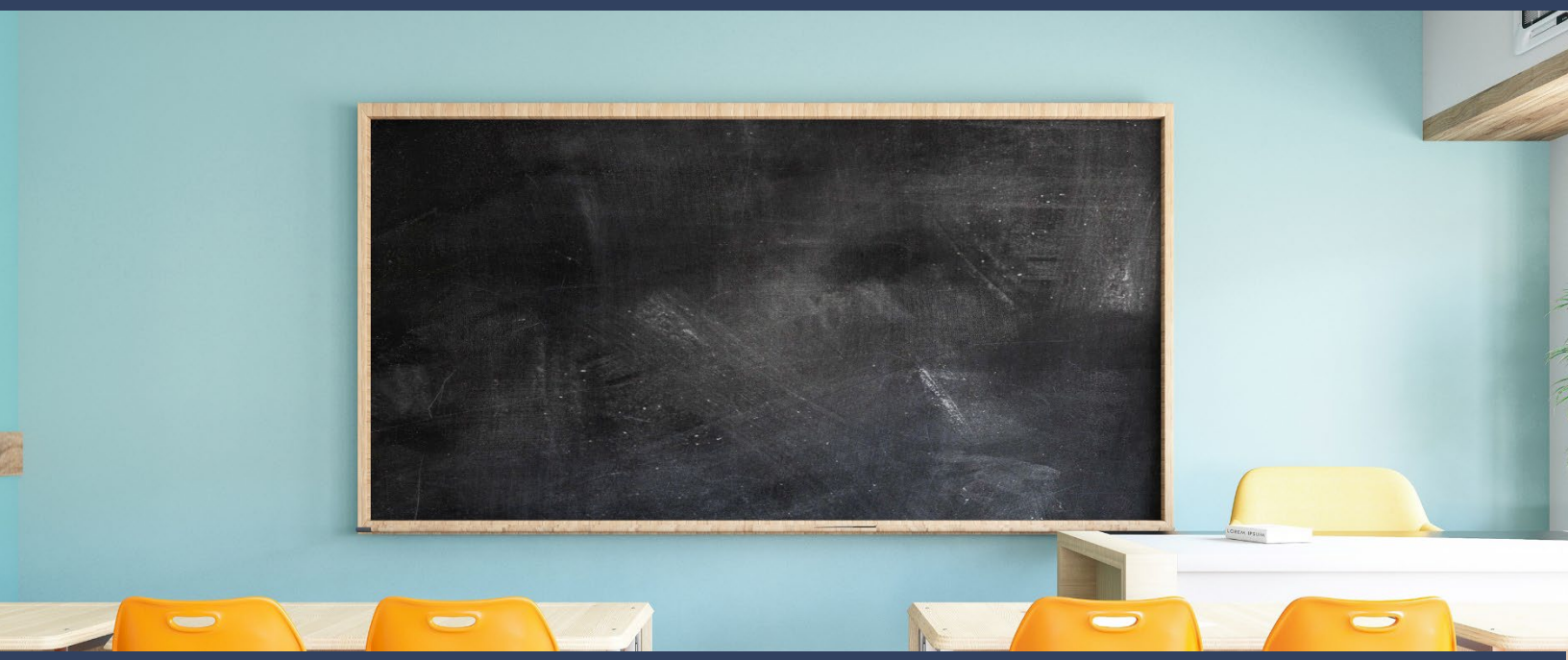
OMNI

September 2024



OMNI INSTITUTE REPORT

Quality Teacher Recruitment Grant Program

2023-2024 Funding Cycle, Year 2 Evaluation Report Addendum

OMNI Institute Report

Quality Teacher Recruitment Grant Program

2023-2024 Funding Cycle, Year 2 Evaluation Report Addendum

Submitted to:

Educator Talent Division

The Colorado Department of Education

For More Information:

projects@omni.org

Acknowledgements:

The OMNI Institute wants to thank the Colorado Department of Education, Public Education & Business Coalition, Teach for America-Colorado, and Fort Lewis College for their contributions to the creation of this report.

Suggested Citation:

OMNI Institute (2024). Quality Teacher Recruitment Grant Program: 2023-2024 Funding Cycle, Year 2 Evaluation Report Addendum. Submitted to the Colorado Department of Education, Denver, CO.

Introduction

Section 22-94-101, C.R.S. (Senate Bill 13-260), created the Quality Teacher Recruitment (QTR) Grant Program. The program authorizes the Colorado Department of Education (CDE) to fund programs to coordinate recruitment, preparation, and placement of licensed teachers in school districts that have had difficulty attracting and retaining high-quality teachers. To achieve these objectives, CDE has awarded grant funds to:

- Public Education & Business Coalition's Teacher Residency program (PEBCTR), placing teachers each year under the QTR program since fall 2014
- Teach for America (TFA)-Colorado, placing teachers each year under the QTR program since fall 2014
- Ft. Lewis College (FLC), placing teachers each year under the QTR program since fall 2019

OMNI Institute (OMNI) serves as the current contractor for the evaluation and completed the Year 2 Summative Report in August 2024. In this addendum, we provide additional findings about how the QTR Grant Program is supporting improvements in the placement of teachers in subject areas experiencing teacher shortages, educator diversity, and teacher retention. Findings reflect the most recent five cohorts of teachers placed through the QTR Grant Program as of the 2023-2024 school year. All data for this evaluation were provided to OMNI by CDE, PEBCTR, TFA, and FLC.

Method

The analysis included data from a total of 892 teachers across the three programs (PEBCTR = 391, TFA = 457, FLC = 44). Data sources for this evaluation included program-provided recruitment, placement, and retention files, used to answer four evaluation questions:

- *Is the placement of QTR-supported educators in positions in shortage areas changing over time?*
- *Is the diversity of QTR-supported teachers placed changing over time?*
- *To what degree are QTR-supported teachers being retained in the classroom over time?*
- *What factors predict successful retention of QTR-supported teachers?*

To assess whether the proportion of teachers in identified shortage areas has changed from year to year, we examined beginning-of-year placement files from 2019 onwards, identified which teachers in the relevant (newly-placed) cohort worked in shortage areas (defined as those subjects that have had consistent teacher shortages for all five years), and compared the proportion of teachers in these shortage areas against the total number of teachers each year.

We examined whether the proportion of diverse teachers (in terms of race/ethnicity or gender) has changed over the years using beginning-of-year placement files from 2019 onwards and categorizing teachers as either BIPOC (Black, Indigenous, People of Color) or not, and as Woman solely versus a gender identity other than Woman (i.e., identified as Man, Gender Non-Binary, or Gender Non-Conforming). We then calculated the percentage of teachers in non-majority racial/ethnic and gender categories (i.e., teachers identifying as BIPOC and as a gender identity other than Woman) each year to determine whether there's been a significant change in their representation over time.

To assess retention and predictive factors, we tracked participants from their placement year (i.e., for Cohort 6, since 2019; for Cohort 7, since 2020, and so forth) to 2023-2024 to see if teachers were still in the program at the end of 2024. We then conducted statistical tests to determine whether gender or race/ethnicity predicted retention in the QTR program.

Placements Over Time

The table below shows the total number of teachers placed in district areas across all programs from 2019 to 2023, as well as within each specific program. The percentages presented in the figures throughout this addendum are calculated based on these total number to analyze placements over time. The number of teachers placed here do not exactly match the number of placed individuals reported in the Summative Report due to small amounts of missing data.

Table 1: Total Number of Teachers Placed in Districts from 2019 to 2023

Year	Total	PEBCTR	TFA	FLC
2023	189	99	83	8
2022	161	77	81	3
2021	173	75	89	9
2020	179	65	97	17
2019	188	74	107	7

Is the placement of educators in positions in shortage areas changing over time?

2019-2023 Statewide Shortage Areas

From 2019 – 2023, the following subject areas were consistently cited as "shortage areas" in the past five years of Colorado's "Educator Shortage Survey" (findings from those surveys can be found here):

- Special Education Specialist: Deaf and Hard of Hearing
- Special Education Specialist: Visually Impaired
- Health Education
- Agriculture and Natural Resources
- Special Education Generalist
- Business/Marketing
- Early Childhood Education
- Family and Consumer Sciences
- Mathematics
- Drama Theater Arts
- Science
- Industrial Arts
- Computer Science/Instructional Technology
- Elementary Education
- Physical Education
- Music
- Social Studies
- World Languages
- Visual Art
- English
- Language Arts
- Teacher Librarian

Other teacher placements that are not considered to fall in a shortage area from school years 2019 – 2023 included bilingual, English Language Acquisition-Spanish, English Language Development, English Language Learners (formerly LEP: Limited English Proficiency), English as a Second Language, Psychology, Engineering, Social Justice, and Exceptional Student Services. Of note, Culturally and Linguistically Diverse classrooms are considered a statewide shortage area as of school year 2024-2025 (based on 2023-2024 Educator Shortage Survey results).

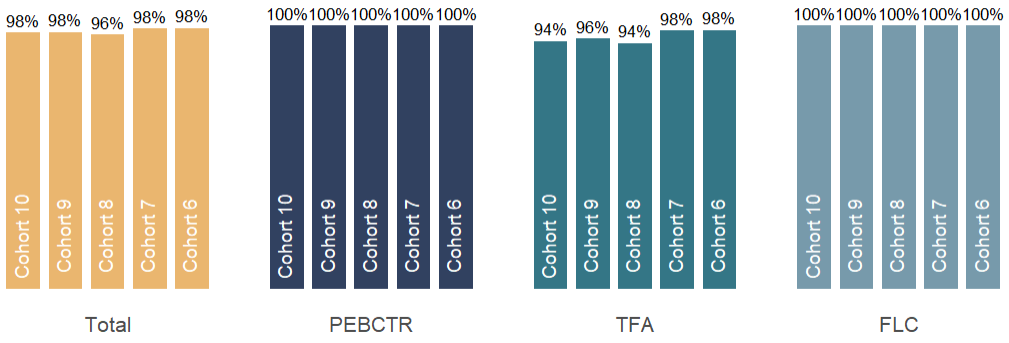
Shortage Area Placement Analyses

Across all three programs, from 2019 to 2023, the proportion of QTR-supported teachers placed in shortage areas has remained stable (98% of Cohort 6 teachers were placed in shortage areas, compared to 98% of Cohort 7, 96% of Cohort 8, 98% of Cohort 9, and 99% of Cohort 10). Chi-square tests indicated that a lower proportion of teachers were

placed in shortage areas in 2023 and 2021 compared to previous years, but that these results are not outside of differences that could be expected by chance.[1]

Since 2019, PEBCTR and FLC have consistently placed 100% of their teachers in shortage areas, so we did not perform further analyses for these organizations. We performed a Chi-square test for TFA Colorado, and although there was a slight decrease in the proportion of teachers placed in shortage areas, this change did not differ meaningfully from one year to the next.

Percent of Teachers Placed in Shortage Areas



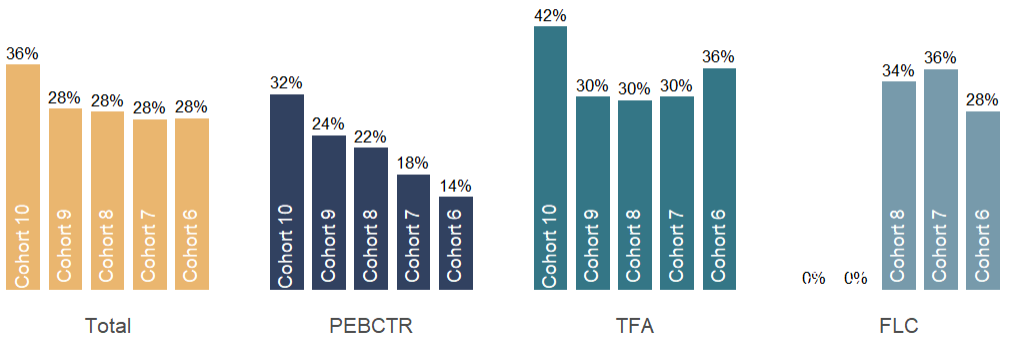
Teacher Identities Over Time

Is the diversity of educators placed changing over time?

Race and Ethnicity

To assess changes in the diversity of educators placed through the program, we analyzed race and ethnicity as well as gender differences across placements from Cohort 6 to Cohort 10 with Chi-square tests. To allow for the analysis to be completed despite the small number of teachers in some specific racial and ethnic categories, we assigned individuals into one of two categories: BIPOC and non-BIPOC, though we recognize that these categories oversimplify lived experiences of race and ethnicity. We excluded data from 30 teachers who did not provide information on race or ethnicity (PEBCTR = 5, FLC = 4, TFA = 21) from these specific analyses.

Percent of BIPOC Teachers

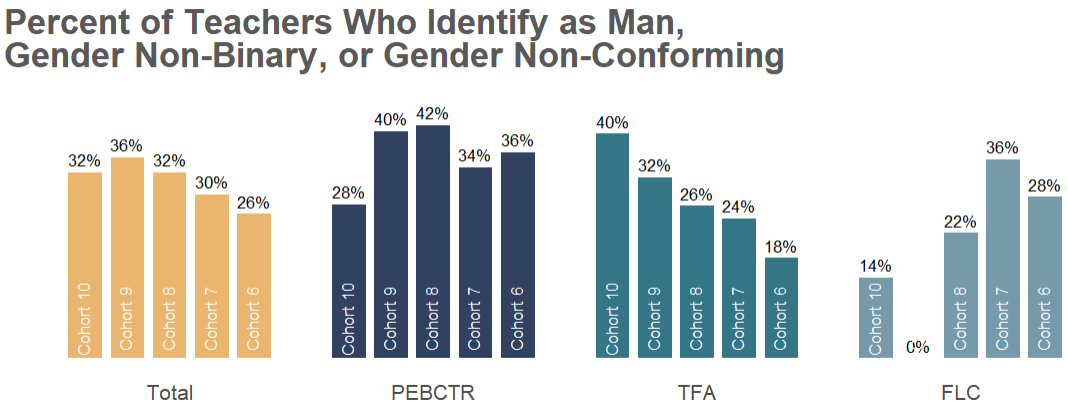


[1] When the phrase "more than/less than expected by chance" is used, we are indicating that the frequency of a characteristic observed in the data is significantly different than what would be expected if the characteristic were distributed evenly across the categories being compared. These determinations are made using inferential statistics.

Chi-square tests found no meaningful changes in the proportion of BIPOC teachers over the past five years. This suggests that, across all programs, the racial and ethnic diversity of teachers placed by the program has remained relatively stable during this period.

Gender

We applied a similar approach to analyze gender diversity by grouping teachers into one category of individuals identifying as Woman versus another category containing individuals identifying as Man, Non-Binary, or Non-Conforming. Four teachers who did not specify their gender were excluded from these analyses (TFA = 4).



Since 2019 and until 2023, there has been a slight increase in the proportion of Man, Non-Binary, and Non-Conforming teachers across all three programs, but when combining program data the change is not meaningful. However, chi-square tests revealed that the percentage of Man, Non-Binary, and Non-Conforming teachers changes from year to year more than would be expected by chance for TFA. Specifically, the percentage of Man, Non-Binary, and Non-Conforming teachers was lowest in 2019 at 18% and has steadily increased in the last five years to 40% in 2023, indicating increased gender diversity of TFA's candidate pool. This is particularly meaningful progress in the context of national statistics demonstrating that 77% of public school teachers in the United States identify as female (Institute of Education Sciences, 2023).[2] No other program-level changes in the proportion of genders were found, suggesting that gender diversity of teachers has remained stable over the past five years.

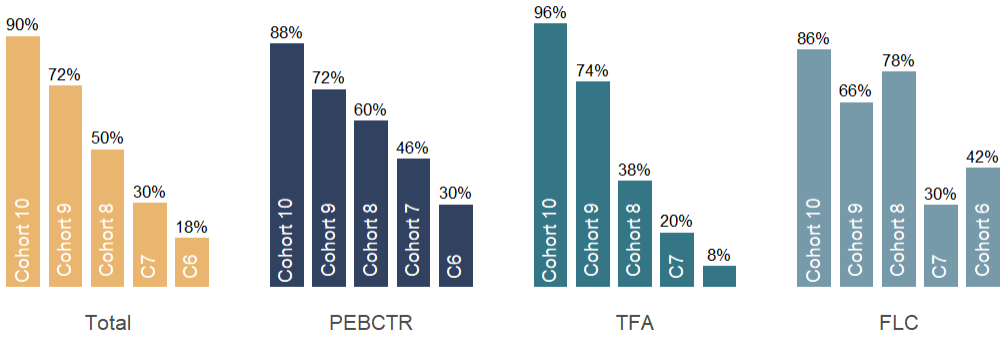
Program Teacher Retention

To what degree are teachers being retained in the classroom over time?

In the 2023-2024 school year, the number of teachers retained in the classroom varied across Cohort, with fewer teachers retained from Cohorts 6 and 7 than in recent Cohorts 8, 9, and 10.

[2] Institute of Education Sciences (2023). *Report on the Condition of Education 2023* (NCES 2023-444). U.S. Department of Education, National Center for Education Statistics. 2023144.pdf (ed.gov)

Percent of Teachers Retained 2023-2024

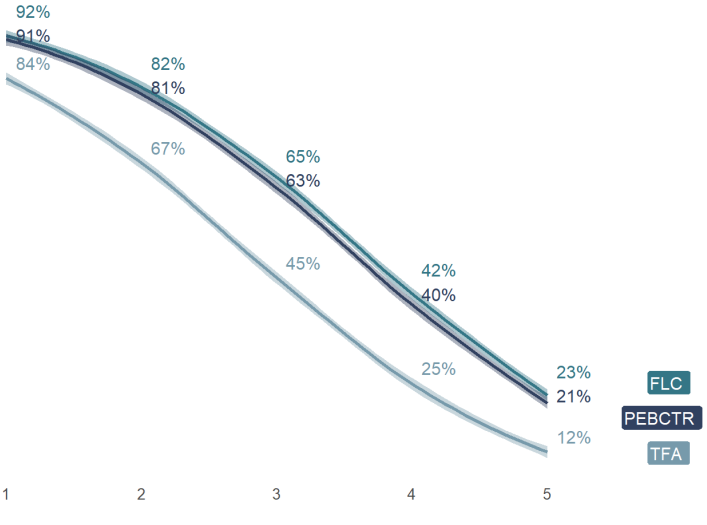


To explore teacher retention trends from 2019 to 2023 and the factors that influence teacher retention (here, cohort year, race/ethnicity, and gender), we conducted a logistic regression analysis. This analysis helps to understand which of these factors meaningfully impact teacher retention. Cohort year was a significant factor in teacher retention; for each additional year since QTR placement, teachers are significantly less likely to have been retained as of 2023-2024 than would be expected by chance.

Race/ethnicity and gender did not significantly impact retention rates, suggesting that BIPOC and non-BIPOC teachers, as well as Woman and non-Woman teachers, are being retained at similar rates.

The predicted rate of retention for TFA Colorado teachers is lower than the rates of retention for PEBCTR and FLC than would be expected by chance. Please note that retention is defined here as remaining in a teaching position; there are many reasons why teachers may be counted as "not retained", including for additional opportunities in educational leadership, returning for advanced degrees, or changing careers, among others. More detail on retention by program can be found in the *Quality Teacher Recruitment Grant Program: 2023-2024 Funding Cycle, Year 2 Evaluation Report.*

Predicted Probability of Teacher Retention Over Time, by Program



Note: *The percentages in this figure show the predicted likelihood of teachers staying in each program given several factors (like gender, BIPOC identity, and how long they've been in the program), as estimated by a statistical model. These percentages are different from those in the "Percent of Teachers Retained" figure, which shows the actual retention rates without considering how combined individual factors might influence those rates.*