

Out-of-field Teaching among Beginning Teachers Trained and Teaching in Rhode Island



The REL Northeast & Islands studied rates of out-of-field teaching among beginning teachers who completed a teacher preparation program in Rhode Island. This brief is intended to support state stakeholders and teacher preparation program providers who are interested in understanding staffing patterns of new teachers trained in public, private, or alternative programs.

Are students being taught by qualified teachers?

Whether students are being taught by qualified teachers has been a perennial topic of education policy and research, examined in numerous studies and reports over the past 40 years, from *A Nation at Risk* in 1983 to *What Matters Most: Teaching for America's Future* in 1996 and *Out-of-Field Teachers and Student Achievement* in 2008.^{1,2,3} Teachers—even those who are highly qualified—assigned to subjects outside of their field of preparation may not be in a position to best meet their students' academic needs. Furthermore, out-of-field teaching may be an even more pressing issue for high-needs schools (see key terms). In a number of states, out-of-field teachers were more likely to teach in a high-poverty school or to teach racial/ethnic minority students than to teach in a low-poverty school or to teach White students.⁴ This concern is also evident in the REL Northeast & Islands region.

Stakeholders in Rhode Island are concerned about the rates of out-of-field teaching among beginning teachers trained in a Rhode Island teacher preparation program. In 2015/16, 30 percent of teachers who were trained in the state and teaching in Rhode Island public schools within one year of completing training were teaching in a certificate field different from the one in which they were trained.⁵ This brief provides a closer look at out-of-field teaching, particularly in high-needs schools, across five cohorts of beginning Rhode Island teachers by addressing the question: **Are beginning teachers who were trained in Rhode Island teaching in certification fields in which they were prepared?**

1 National Commission on Excellence in Education (1983).

2 National Commission on Teaching and America's Future (1996).

3 Dee & Cohodes (2008).

4 Williams, Adrien, Murthy, & Pietryka (2016)

5 Rhode Island Department of Education (2019) includes a broader pool of educators in their analysis than was used in this brief. For example, this study looked only at out-of-field teaching rates for beginning teachers, while the 2019 study included other school staff such as building level administrators, counselors, and psychologists. Our results showed a higher percentage of beginning teachers working in their field of preparation compared to the 2019 study's overall findings on educators.

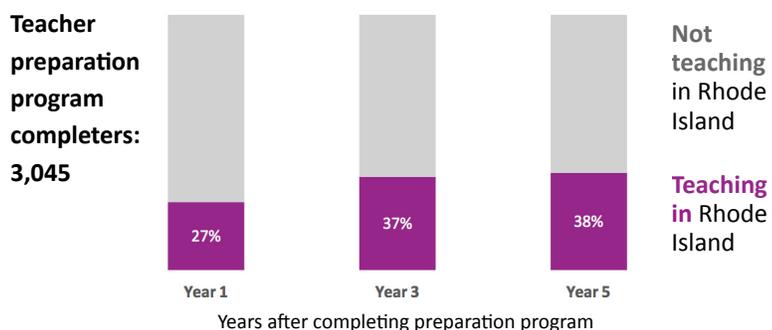


The teacher preparation context in Rhode Island

Each year, between 650 and 750 aspiring teachers complete a teacher preparation program from providers in Rhode Island.⁶ At the time of this study, there were 11 approved providers, including public and private postsecondary institutions and private organizations (see key terms). Collectively, the providers offered programs aligned to more than 100 certification fields. For this brief, the study team grouped the certification fields into the following categories: early childhood; elementary; middle grades; secondary; special education; world languages; dual-language, bilingual, or English as a second language; electives; and non-teacher related, such as administrator.

Many people trained in a teacher preparation program in Rhode Island come from—and may return to teach in—the nearby surrounding states. Among the 3,045 people who completed programs between 2012/13 and 2016/17, approximately 40 percent went on to teach in Rhode Island public schools by the 2017/18 academic year. The analyses presented in this brief include teachers who both completed a teacher preparation program in Rhode Island during this time period and who went on to teach for at least one year in the state’s public school system by the 2017/18 academic year.

The number of program completers who were teaching in Rhode Island **increased** each year to **an average of 38%**.



⁶ RIDE (2019)

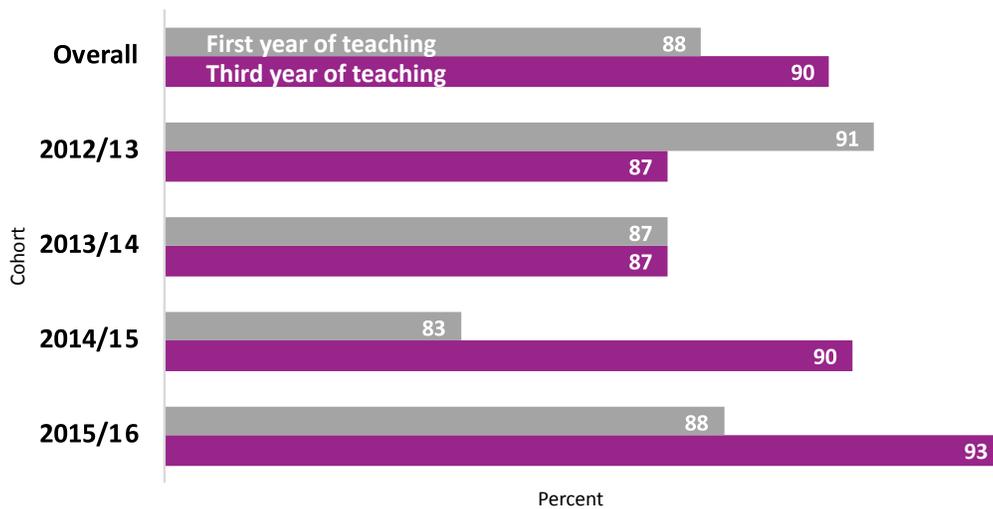


FINDING 1 | Most beginning teachers trained in Rhode Island are certified and teaching in fields in which they were prepared.

A majority of beginning teachers trained in and teaching in Rhode Island initially teach in the field in which they were prepared, and continue to do so over time. Specifically, during their first year of teaching, more than 80 percent of beginning teachers prepared in Rhode Island were certified and teaching in the field in which they were trained. By their third year of teaching, approximately 90 percent were.

There are some differences in the percentages of teachers teaching in the field in which they were prepared. Teachers prepared in secondary education had the highest rates of in-field teaching, at almost 99 percent. Teachers prepared in early childhood education had the lowest rate of in-field teaching, at 83 percent.⁷

A majority of beginning teachers trained in Rhode Island and teaching in their preparation field continued to do so in the **first year** and **third year** of teaching ($n = 1,064$)



Note: This analysis did not include teachers who were certified in middle grades because the information needed to accurately compare teachers in middle grades with their fields of preparation was not available. Specifically, a teacher can be certified to teach in the middle grades using a middle grades certificate, an elementary extension, or a secondary extension. Because of the overlap, the results contributed to an underestimation of the percentage of out-of-field middle grades teachers.

FINDING 2 | Beginning teachers in high-needs schools were nearly twice as likely to be teaching out of their preparation field as were their counterparts in non-high-needs schools.

This finding held even after the study controlled for teacher demographics (race, gender, and ethnicity); school size; and the type of teacher preparation program (public, private, or alternative) in which the teacher was trained. Indeed, these beginning teachers in high-need schools were 1.68 times more likely to be teaching outside their field than were beginning teachers in non-high-need schools.⁸



⁷ This analysis tracks teachers from each cohort to examine the percentage of teachers teaching within their field of preparation after one and three years. Third-year frequencies and percentages are missing from the 2016/17 and 2017/18 cohorts because teachers had not reached their third years of teaching at the time of this analysis.

⁸ Detailed methods and analysis for the results can be found in the full report at <INSERT LINK>



Implications

The finding that most beginning teachers trained and teaching in Rhode Island are teaching their preparation field is reassuring to the Rhode Island Department of Education (RIDE) and to preparation program providers in the state. However, this reassurance is tempered by the finding that teachers trained in Rhode Island who were teaching in high-needs schools in the state were significantly less likely than those who were teaching in non-high need schools to be teaching in their preparation field. The finding confirms other research conducted in Rhode Island and nationally that suggests that high-poverty schools with high percentages of racial/ethnic minority students have higher rates of out-of-field teaching and higher percentages of beginning teachers.^{9,10}

Although overall alignment between teachers' field of preparation and field of teaching was high, more research is needed to better understand why alignment is lower in high-needs schools. Further investigation is also needed to understand what teacher preparation program providers and districts are doing or might do to address the lower alignment in high-need schools.

Overall, strengthening the quality of data records could provide better information about out-of-field teaching trends. Rhode Island might consider coding middle school grades in a way that does not overlap with other grade-level certifications. Understanding employment trends for this group of teachers is particularly important, since middle grade teachers have high rates of out-of-field teaching nationally.¹¹ Future research on the state's supply of and demand for certification fields would also be useful in helping RIDE understand why teachers with certain certifications are more likely to teach outside their field. With this knowledge, RIDE could work closely with teacher preparation program providers to reduce shortages and surpluses in preparation fields and ultimately reduce the need to assign teachers to out-of-field positions.

Data sources, sample, and methods

Data sources. RIDE's Office of Educator Excellence and Certification Services provided anonymized teacher-level data. RIDE also provided teacher-level employment data, which included annual teaching assignment, the certification being used for each teaching assignment, certificates held by teachers, and teacher characteristics. RIDE provided a separate file with school characteristics, including enrollment size, high-need status, and grade span. Additional district- and school-level characteristics, such as poverty rates, were obtained through the Common Core of Data (U.S. Department of Education, 2016).

Sample. The primary sample included 1,164 beginning teachers who were ever employed in Rhode Island public schools between 2012/13 and 2016/17, and who were trained at one of the 11 teacher preparation program providers in Rhode Island. This represents 38 percent of the 3,045 individuals who completed a program in Rhode Island for the first time during this five-year time frame. The sample does not include people who were trained in a Rhode Island teacher preparation program who were not employed in a Rhode Island public school (approximately 60 percent of those trained from 2012/13 to 2016/17) or beginning teachers in Rhode Island who were trained in another state. The sample also does not include beginning teachers who received a certification other than through a Rhode Island–approved program, for example through reciprocity. Annually, this is approximately 46 percent of beginning teachers (Rhode Island Department of Education, 2017).

Methodology. The study team calculated the percentage of beginning teachers trained in Rhode Island who were teaching in the field in which they were prepared. The percentages were calculated across cohorts to determine whether they were consistent or differed over time—specifically, after one or three years. The percentages were then disaggregated by the certification field in which a teacher was teaching during his or her first teaching position. Teaching in the field in which the teacher was prepared was also analyzed using statistical tests to determine whether the institution or institution type at which a teacher was trained was related to teaching in the field, after teacher and school characteristics were controlled for.

9 Ingersoll (2002)

10 Williams, Adrien, Murthy, & Pietryka (2016)

11 Boyd, Grossman, Lankford, Loeb, & Wyckoff (2006)



Key terms used in this brief

Alternative teacher preparation program. A program that allows participants to become a teacher before completing all the program requirements for certification. Individuals participating in such a program generally teach under a preliminary certification while completing coursework through a state-approved preparation program.

Certification field. RIDE categorizes certification field by grade level and subject. For example, “Middle Grades English Teacher” is a certification field. Some certifications, such as electives or special education, may be applicable to all grades. For this study, certification areas were collapsed into the following groupings: early childhood grades; elementary grades; middle grades; secondary grades; special education; world languages; dual-language, bilingual, or English as a second language; electives; and non teacher related such as administrator.

Beginning teacher. This brief considers teachers in their first three years of teaching to be a beginning teacher.

High-need school. A school in which both the percentage of students who qualify for free or reduced-price lunch and the percentage of racial/ethnic minority students is greater than 75 percent.

Out of field. Refers to teaching in a subject area that does not correspond to the teacher’s preparation field. This brief refers to field of teaching (the subject or content area in which a teacher teaches) and field of preparation (the subject or content area in which a teacher was trained).

Preparation field. A teacher’s specialized field of training in a teacher preparation program. For this study, the fields were collapsed into the following classifications: early childhood, elementary, middle grades, secondary, special education, world languages, and electives. Teachers are not necessarily certified in all fields in which they were trained.

Teacher preparation program and provider types. The analysis for this brief compared public and private providers and alternative programs.

Teacher preparation program. A state-approved sequence of courses and experiences that, if completed, meets preparation requirements for certification in Rhode Island.

Teacher preparation program provider. The institution or organization that offers one or more teacher preparation programs. At the time of this study there were 11 approved providers, including postsecondary institutions and other organizations. Three of the 11 providers offer alternative teacher preparation programs.

References

- Boyd, D., Grossman, P., Lankford, H., Loeb, S., & Wyckoff, J. (2006). How changes in entry requirements alter the teacher workforce and affect student achievement. *Education Finance and Policy*, 1(2), 176–216.
- Dee, T.S. & S.R. Cohodes, (2008). Out-of-Field Teachers and Student Achievement Evidence from Matched-Pairs Comparisons. *Public Finance Review*, 36(1), 7-32.
- Ingersoll, R. (2002). Out-of-Field Teaching, Educational Inequality, and the Organization of Schools: An Exploratory Analysis. *CPRE Research Reports*.
- National Commission on Excellence in Education. (1983). *A Nation at risk: The imperative for educational reform*. Washington, DC: Government Printing Office.
- National Commission on Teaching and America’s Future. (1996). *What matters most: Teaching for America’s future*. New York: NCTAF.
- Rhode Island Department of Education. (2019). Rhode Island education preparation index. Providence, RI: Author.
- Rhode Island Department of Education. (2019). Certification Requirements and Applications.
- Williams II, W., Adrien, R., Murthy, C. & Pietryka, D. (2016). *Equitable access to excellent educators: An analysis of states’ educator equity plans*. Rockville, MD: Westat.
- U.S. Department of Education, National Center for Education Statistics. (2016). Common Core of Data. Retrieved from <http://nces.ed.gov/ccd/>

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