

# Teacher Certification & Permits



## Executive Summary

Many states, including Missouri, face challenges recruiting and retaining K-12 teachers. There are several routes to earning a teaching certification in Missouri, but teacher preparation program attendance rates have declined in recent years. [House Bill 1998](#) would allow school districts to design and issue district-specific teaching permits based on their own criteria. The bill establishes minimum criteria for permit eligibility, including possession of a bachelor's degree, completion of a background check, participation in professional development in lesson planning and classroom management, and participation in a mentoring program. These permits would be valid only in the issuing district and other participating districts. This bill also creates a new process for substitute teacher certification.

## Highlights

- Missouri has significant teacher shortages with the highest vacancy rates being in elementary education, special education, and early childhood education.
- The traditional route to receiving a teaching certificate is through completing a four year degree in education. However, Missouri has approved several alternative routes to receiving a teacher certificate.
- Research has found that high teacher quality is correlated with various student outcomes including higher college attendance rates, higher lifetime earnings, and lower teenage pregnancy rates.
- In-service professional development opportunities, including teacher coaching programs, have been shown to increase teacher retention rates and student performance.

## Limitations

- The effect of traditional teacher certifications on student outcomes is a topic of ongoing research.
- The wide variety of nontraditional routes for earning a teaching certification can make judging their effect on student outcomes difficult.

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## Research Background

### Teacher Certification Routes in Missouri

In Missouri, there are [several routes](#) to earn a teaching certificate. Most routes result in an “initial certificate” that is valid for four years and requires two years of mentoring, annual evaluations, participation in a beginning teacher assistance program, and a professional

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development plan that includes 30 hours of professional development. After four years, teachers can apply for a career certification based on teaching and other requirements.

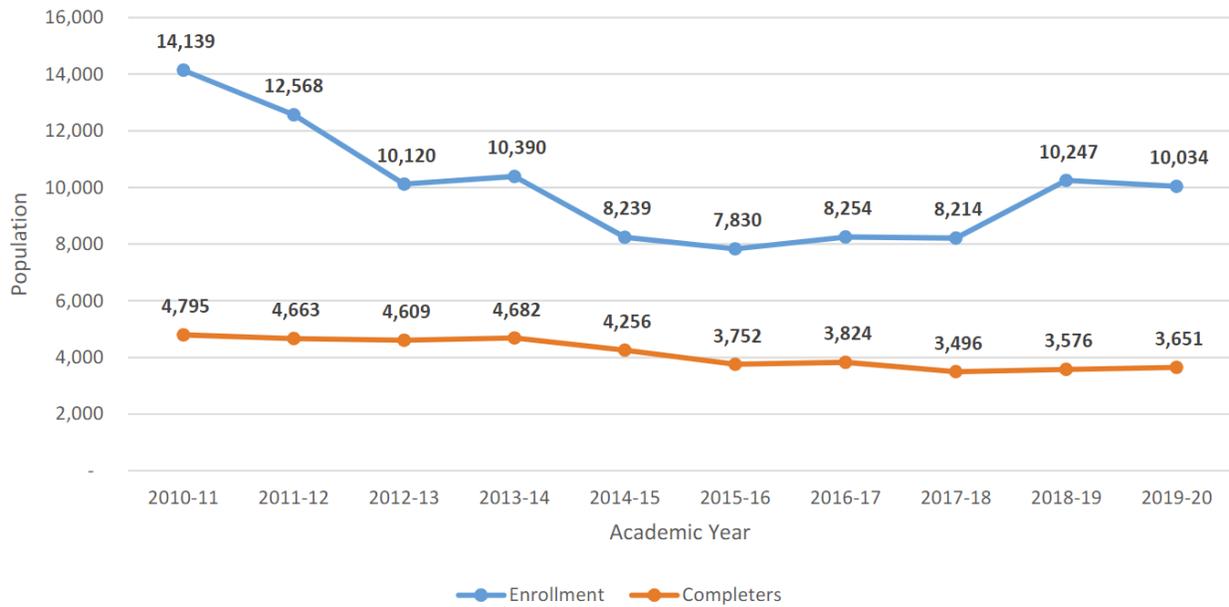
The routes to becoming a teacher at public schools in Missouri are as follows:

- **Traditional:** Individuals earn a bachelor's degree in Education, which includes student teaching and a designated assessment test.
- **Alternative:** Individuals earn a bachelor's degree in a school-relevant subject area (biology, English, math, etc.) then complete a two-year program (~30 semester hours) in teaching followed by a designated assessment test. Some programs may allow teaching under a provisional license during this two-year period.
- **Temporary Authorization:** Individuals earn a bachelor's degree in a subject area then a minimum of 24 credit hours of self-directed study that fulfill several [requirements](#). Additionally, the individual must pass two exit exams, be mentored by a school district, and teach for two years.
- **Out-of-State Certified:** Individuals with a teaching certificate from another state receive a comparable certificate in teaching upon verification. Based on experience, the state may issue an initial or career certificate.
- **American Board of Certification for Teacher Excellence (ABCTE):** Individuals with a bachelor's degree, a certificate from the [American Board](#), and 60 hours of teaching experience (being a paraprofessional, substitute teaching, etc.) can earn a certificate. This route is only available in certain middle and high school subject areas.
- **Doctoral:** Individuals with a PhD may teach in a related area at the high school level via an initial teaching certificate. To do so, they must pass the [063 Professional Knowledge: Secondary exam](#). This route provides an initial certification, which may be renewed, but no career certificate can be issued.
- **Visiting Scholar Program:** Established via [HB 1665](#) in 2018, this route allows individuals to teach at the high school level for up to three years as part of a business-education partnership if they have a degree or credential related to the subject area.<sup>1</sup> For more information about this program, read our Science Note on [Career and Technical Education in Missouri](#).

### Missouri's Teacher Supply and Related Legislation

Missouri has significant teacher shortages, with the highest vacancy rates occurring in elementary education, special education, and early childhood education.<sup>2</sup> These vacant positions are often being filled by teachers who have a teaching certificate but are teaching in a subject area outside of the scope of their teaching certificate. Furthermore, enrollment and completion rates of Educator Preparation Programs in Missouri have been steadily decreasing for the last decade, with an approximate 29% decrease from 2010 to 2019 (**Figure 1**).<sup>3</sup>

In Missouri, the current 5-year teacher retention rate is 46.5%.<sup>3</sup> In a 2021 survey, the primary reason teachers gave for considering leaving the profession was low teacher pay.<sup>4</sup> This was also the primary obstacle for retaining teachers according to school administrators. Missouri teacher compensation tends to be lower than the national average.<sup>5</sup> For more information see our Science Note on [Teacher Recruitment & Retention](#).



**Figure 1. Enrollment & Completion of Education Preparation Programs in Missouri.** The number of individuals completing education preparation programs in Missouri has fallen steadily since 2010. Data from the Missouri Department of Elementary and Secondary Education.<sup>3</sup>

[House Bill 1998](#), introduced in the 2022 regular legislative session, would allow school districts to issue district-specific teacher permits based on a set of minimum criteria including possession of a bachelor's degree, completion of a background check, participation in professional development in lesson planning and classroom management, and participation in a mentoring program. Districts would only be allowed to fill up to 15% of total positions through this method. The proposed legislation would also expand eligibility criteria for substitute teaching certificates and allow substitute teacher background checks to be valid in up to five different school districts.

### Teacher Quality and Student Outcomes

Teacher quality can have significant long-term effects on student outcomes. One study analyzed teacher quality based on value-added (VA) to student test scores, and used data from ~2.5 million children in grades 3-8 in a large urban school district over three decades.<sup>6</sup> It found that high teacher quality was correlated with several student outcomes including higher college attendance rates, higher lifetime earnings, and lower teenage pregnancy rates. The authors of this study estimated that if the lowest-performing teachers (bottom 5% of VA) were replaced

with average performing teachers, the total lifetime earnings of a classroom (28.2 students on average) would increase by \$250,000.<sup>6</sup>

### Nontraditional Certification and Student Outcomes

The traditional route to earning a teaching certification is a four-year degree in education. The term “nontraditional route” encompasses a wide variety of alternative methods (listed above), which can make assessing relationships between nontraditional preparation routes and student outcomes difficult. One Texas study found no significant difference in the number of student discipline referrals between traditionally and non-traditionally certified teachers, which was interpreted to indicate similar levels of classroom control.<sup>7</sup> Another study in California found an association between the percentage of teachers hired through emergency permits and school performance; lower-performing schools were found to have higher proportions of teachers with emergency permits.<sup>8</sup> The effect of traditional teacher certifications on student outcomes is an topic of ongoing research.<sup>9</sup> However, some factors such as teacher experience are widely accepted as having positive effects on student outcomes.<sup>10</sup>

## **Factors that Influence Teacher Retention and Quality**

### Factors that Influence Teacher Retention

Analyses of the Schools and Staffing Survey and Beginning Teacher Longitudinal Survey conducted by the National Center for Education Statistics find that teacher induction programs significantly improve retention rates. Specifically, access to collaboration time with other teachers and having a teacher aide reduced teacher attrition and school migration rates by ~40%, respectively. In addition, receiving a combination of supports (such as mentorship, attending a beginner’s seminar, and receiving supportive communication from school leadership), further increased retention rates compared to teachers who received a single support or no additional support.<sup>11</sup>

### Factors that Influence Teacher Quality

A large review of K-12 teacher coaching programs (i.e., individualized, sustained professional development procedures where experienced teachers observe new teachers’ instruction and provide constructive feedback) found that this form of training improves both teaching quality and student achievement. Specifically, teachers with access to coaching demonstrated: 1) improved scores on evaluations of effective practices such as the use of open-ended questions, student-teacher relationships and interactions, and classroom climate and 2) improved student outcomes on low- and high-stakes standardized tests in reading, math, and science. Both virtual and in-person coaching programs provided similar benefits to teachers and students. This study also noted that 90% of coaching programs were combined with at least one additional professional development element (such as a group training or summer workshop, sample curriculum/lesson plan, or instructional videos), so coaching alone may not be sufficient to achieve the aforementioned results.<sup>12</sup>

Finally, a Missouri study of [educator preparation programs](#) (typically undergraduate/postgraduate curricula and hands-on experiences that prepare candidates for teaching certification) found that different programs perform comparably at the level of elementary school student achievement; different programs prepare teachers similarly with respect to student outcomes. This finding corroborates other research indicating that teachers from highly selective undergraduate programs do not necessarily outperform teachers from less selective institutions. This study was restricted to traditional preparation programs, so the effectiveness of [alternative certification programs](#) may vary.<sup>13</sup> For more information on teacher training and retention, see the National Conference of State Legislatures's [Guide to Educator Effectiveness](#).

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