



# Strengthening Missouri's Teacher Pipeline

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UNDERSTANDING RECRUITMENT, PREPARATION  
AND RETENTION IN THE FIELD

OCTOBER 2024

# INTRODUCTION

All students in Missouri deserve an effective and appropriately certified teacher. Research shows that an effective teacher is one of the most significant school-based levers influencing student achievement and students' life outcomes.<sup>1</sup> Missouri students need teachers who are prepared with the content knowledge and instructional skills to make a positive impact on their learning from day one.

**Schools across Missouri currently face difficulties in finding enough appropriately certified teachers and in maintaining a stable teacher workforce.** Over the past decade, the educator ecosystem in Missouri has faced growing challenges, particularly in the number of vacancies and inappropriately filled teaching roles. These challenges are not felt equally across the

state: Teacher vacancies affect students of color and students from low-income backgrounds in greater numbers, while inappropriately filled vacancies are a challenge in rural, city and suburban districts. While distinct, the challenges that Missouri schools face both in finding enough appropriately certified teachers and in maintaining a stable teaching workforce have real financial and human impacts. The cost of replacing a teacher is estimated to be anywhere from \$11,860 to \$24,930, as it takes significant resources and personnel time to fill a vacant position.<sup>2</sup> In addition, teacher turnover across schools and districts can undermine improvement efforts and make instructional progress and teacher collaboration more challenging.<sup>3</sup>

## The Teacher Pipeline Has Three Key Phases: Recruitment, Preparation and Retention of Teachers.



- *Recruitment* focuses on the value proposition for becoming a teacher and efforts to recruit a range of individuals into pathways that support them to become an appropriately certified teacher.
- *Preparation* focuses on the experiences of candidates within their preparation programs, both in terms of the content and training they receive as well as their lived experiences and potential challenges they face in completing their programs.
- *Retention* focuses on efforts to ensure those who complete their programs become and continue to grow as effective teachers within the state.

All three phases of the pipeline are important and deeply connected—strengthening one helps reinforce the others. Supports all along the pipeline are important for ensuring that all students in Missouri

have access to an effective, appropriately certified teacher.

**Addressing challenges in the pipeline can generally be categorized into two areas: pre-certification and post-certification considerations.** Pre-certification challenges focus on entrance into and retention in teacher preparation programs and can include factors such as the perceived value proposition of becoming a teacher, location of teacher preparation programs and financial burdens. Post-completion challenges focus on the gap between those who complete preparation programs but do not enter the state teaching workforce as well as post-certification challenges related to interstate competition and challenges with preparation that have impacts once a teacher enters the classroom.

<sup>1</sup> [Stronge \(2018\)](#); [Javornik & Mirazchyski \(2023\)](#)

<sup>2</sup> [LPI \(2024\)](#)

<sup>3</sup> [Ibid.](#)

Over the past two years, the State Board of Education's Teacher Recruitment and Retention Blue Ribbon Commission took a close look at teacher pay, climate and culture and provided a series of legislative and policy changes intended to support teacher recruitment and retention. Since then, the state has implemented several of the recommendations, including increasing the starting beginning teacher salary to \$40,000, appropriating money for a teacher baseline salary grant and reinstating funding for the Career Ladder Program. The Office of Educator Quality has also led exciting new initiatives such as the introduction of state-funded Grow-Your-Own program grants, the TeachNow professional development program for new teachers and the continued support of the Beginning Teacher Assistance Program (BTAP).

While these recent changes are promising, they alone are not enough to address the challenges facing Missouri. It is crucial that Missouri students are prepared to face the economy of the future—and that begins with effective, high-quality teachers. Ensuring those teachers reach, stay and thrive in the classroom is the effort of many stakeholders, and collaboration across sectors will strengthen the teaching profession in Missouri. This report and the associated analysis aim to build upon the previous work done by the Blue Ribbon Commission and others to more deeply understand both the opportunities and challenges at each stage of the teacher pipeline in Missouri.

This analysis has informed six key recommendations for strengthening the teacher pipeline in Missouri:

1. Launch **targeted communications** campaigns that elevate the value proposition of becoming a teacher in Missouri and increase awareness about pathways into the profession.
2. Define the essential components of **high-quality teacher preparation experiences** and work to ensure that these are integrated into the preparation of all teachers.
3. Expand **financial strategies** to support candidates into and through preparation programs.
4. Address **unnecessary structural barriers** that prevent aspiring educators from accessing and persevering through EPPs.
5. Improve how teachers experience the profession through increased focus on **effective leadership** and **professional learning**.
6. Develop and implement **systems that provide transparent and accessible data** to inform actors across the educator ecosystem and build capacity for use of that data.

# TEACHER VACANCIES AND SHORTAGES

## Both Teacher Turnover and Shortages Provide Insight Into the Challenges Facing the Teacher Pipeline in Missouri.

Understanding the current landscape the state faces in finding appropriately certified teachers and maintaining a stable teaching workforce is necessary for knowing how to address challenges with the teacher pipeline.

A **vacancy** indicates any position that needs to be filled for the current school year. This includes teaching positions previously filled by an educator who left a district/charter school, for any reason, in the prior year and require a district/charter school to fill or alter that position for the current school year.<sup>4</sup> Analyzing these vacancies can illuminate districts' overall needs in filling roles and provide insight into teacher turnover across the state.

When it comes to shortages, analyzing the number and percentage of **inappropriately filled vacancies** (those in which applicants without certification in the appropriate subject area/grade level or substitutes have filled a vacancy) helps identify where districts struggle to find appropriately certified teachers.

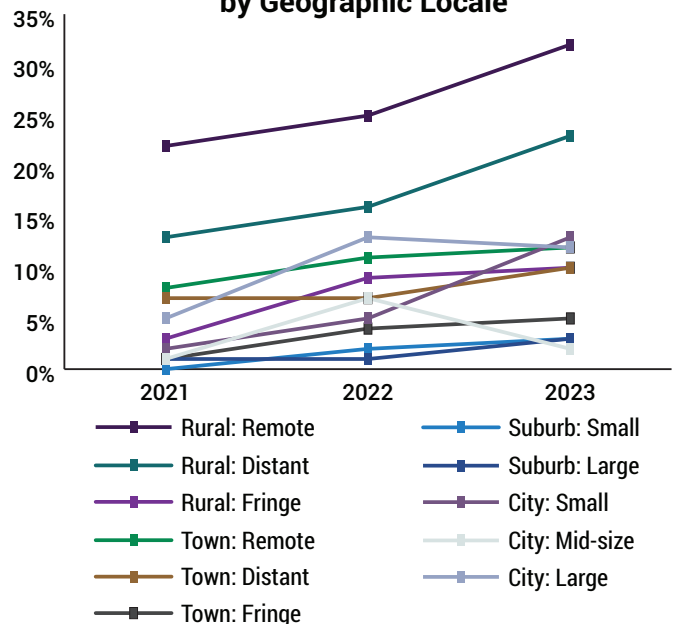
While these data measure different challenges and can inform different solutions, they both come with financial and human costs. Research indicates that the cost of replacing a teacher in a large district is approximately \$24,930 on average, while the cost of replacing a teacher in a small district is around \$11,860.<sup>5</sup> These estimates provide insight into the cost of teacher turnover by geography, as rural districts tend to be small, and urban districts tend to be large. The costs associated with teacher turnover come from the significant resources and personnel time that it can take to fill a vacant position, including separation costs, recruitment and hiring costs and the cost of training staff who are new to a school or district.<sup>6</sup> Furthermore, high movement of teachers across schools and districts can undermine school improvement efforts and make instructional progress and teacher collaboration more challenging.<sup>7</sup>

## Inappropriately Filled Vacancies in Missouri Are Particularly Prevalent in Rural School Districts But Also Create a Challenge For City and Suburban Districts.

Between 2021 and 2023, five certification areas (Middle School Science, Earth Science, Business, Industry Technology and Agriculture Education) were consistently in the top ten certification areas to have vacancies filled inappropriately, indicating a lack of available appropriately certified teachers in these subjects.

When looking across all certification areas, the **highest percentage of vacancies filled inappropriately** are in rural geographic locales. In 2023, 32 percent of all vacancies in remote rural districts and 23 percent of all vacancies in distant rural districts were filled inappropriately.

Percent of All Vacancies Filled Inappropriately by Geographic Locale



4 Missouri Department of Elementary and Secondary Education (2024)  
5 LPI (2024)  
6 Ibid.  
7 Ingersoll (2001); Guin (2004); Carver-Thomas & Darling-Hammond (2019)

**TOP 10 DISTRICTS BASED ON NUMBER OF INAPPROPRIATELY FILLED VACANCIES**

District	Geographic Locale	Vacancies	Vacancies Filled Inappropriately	% of Vacancies Filled Inappropriately
Kansas City 33	City: Large	228	41	18%
Jefferson City	City: Small	95	31	33%
KIPP St. Louis Public Schools	City: Large	70	29	41%
Normandy Schools Collaborative	Suburb: Large	25	25	100%
Raytown C-2	Suburb: Large	173	22	13%
Marshall	Town: Remote	46	19	40%
St. Joseph	City: Small	117	16	14%
KIPP: Endeavor Academy	City: Large	25	14	56%
Moberly	Town: Distant	34	13	38%
Doniphan R-I	Rural: Remote	18	11	61%

However, the top ten districts with the **highest number of vacancies filled inappropriately** are in cities and suburbs. These city and suburban districts in the top ten also tend to serve a higher proportion of students of color and students from low-income backgrounds as compared to Missouri’s overall student population.

While staffing shortages are an acute and pressing issue in smaller rural districts, urban and suburban districts face a different yet equally urgent challenge. The sheer volume of vacancies in these larger districts, combined with their higher populations of students from diverse backgrounds and low-income communities, makes addressing these gaps even

more essential. This dual challenge reveals the complexity of the teacher shortage crisis, with distinct but significant implications for both rural and urban-suburban districts.

“Our teacher workforce is skewed to the left [in terms of years of experience]. We’ve been running a relatively high vacancy rate, and so we’ve been tapping into our substitute talent pool a lot.”

—District Human Capital Leader

**Rural Districts Face Particularly High Vacancy Rates, With the Most Affected Replacing Over a Third of Their Teaching Staff Each Year.**

**PERCENTAGE OF VACANCIES IN TERMS OF TOTAL TEACHERS**

District	Geographic Locale	Total Vacancies	Total FTE Teachers	% Vacancies
Kingston 42	Rural: Distant	3	6	50%
Atlas Public Schools	City: Large	7	16	44%
Winston R-VI	Rural: Distant	10	23	43%
Spickard R-II	Rural: Distant	3	7	43%
Mirabile C-1	Rural: Distant	3	7	40%
Crossroads Charter Schools	City: Large	41	103	38%
Orearville R-IV	Rural: Distant	3	8	38%
Roscoe C-1	Rural: Remote	3	8	38%
BONCL R-X	Rural: Distant	3	8	38%
Golden City R-III	Rural: Distant	9	25	36%

When examining vacancies through the lens of **vacancy rates**—the number of district vacancies divided by the total number of district teaching roles—districts that face the highest percentages of vacancies were primarily rural. All the top ten districts based on vacancy rates had to replace over a third of

their teaching staff in 2023. While the raw number of vacancies in these districts may be relatively small, they represent a large percentage of the overall teaching workforce in each district. This can translate into the important potential inconsistencies in the learning of students as they face relatively large shifts

in the trusted adults in their schools year-over-year. This level of teacher turnover can cost districts financially

and affect the lived experiences of students who face turnover of the trusted adults within their schools.

## Teacher Vacancies Have a Particular Impact on Students of Color and Students From Low-Income Backgrounds.

The top ten districts with the highest number of vacancies are located in the suburbs or cities, and they tend to enroll a higher proportion of students of color and low-income students as compared to the state overall. While most of the positions ultimately get filled at the start of the school year, replacing a large number of teachers every year takes time and resources that could be redirected toward supporting teachers and

students. This teacher turnover can also result in inconsistency in learning environments for students.

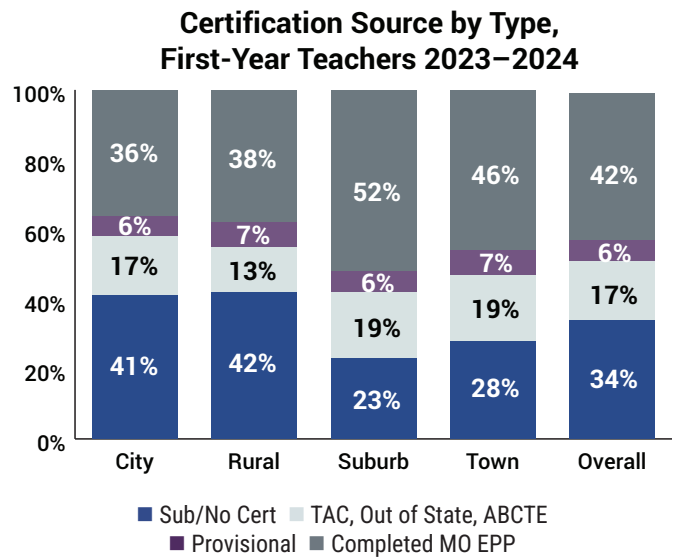
Between 2021 and 2023, the top four certification areas with the **highest overall number of vacancies** were Elementary Education, Mild/Moderate Cross-Categorical, Mathematics and Social Science in part due to the large number of overall teaching positions in these areas across the state.

## In the 2023-24 School Year, Almost A Third of First-Year Teachers had Substitute Certifications or No Certification.

During the academic year of 2023-24, 24 percent of first-year teachers had substitute certification while another 6 percent had no certification. An additional 23 percent of first-year teachers were certified through alternative certification routes, ABCTE or out of state. When disaggregating by geography, only a little over third of first-year teachers in city (36 percent) and rural (38 percent) districts completed a Missouri EPP.

The majority of first-year teachers in these districts have completed paths that have little or varying board oversight, and may not have received the same level of foundational instruction and support as candidates who go through a Missouri EPP. While suburban and town districts also face challenges, the dearth of comprehensively prepared new teachers is particularly acute in rural and city districts, which aligns with earlier findings regarding challenges with vacancies and shortages.

First-year teachers with no certification or substitute certification have not passed Board-approved subject area content exams and may not have participated in key learning opportunities such as student teaching. Additionally, the State Board has less oversight of alternative certification rates and preparation experiences of those teachers originally certified out of state.



Over the past few years, the Missouri Department of Elementary and Secondary Education (DESE) has piloted and is continuing to scale up the TeachNow Alternative Certification Institute to provide additional supports to those entering the teaching profession without having completed a comprehensive Missouri EPP program. This program is a three-day institute that covers a range of topics such as lesson planning strategies, aligning objectives to curriculum, classroom management strategies and other information relevant to new teachers.<sup>8</sup> Early implementation of the program has been promising, and DESE hopes to continue to grow enrollment in the coming years.

8 Missouri Department of Elementary and Secondary Education (2024)

# RECRUITMENT

## Personal Motivations Continue To Drive Entry Into the Teaching Profession.

Stakeholders interviewed for this report shared that individuals in Missouri often become teachers because they desire to give back to their community and support future generations. Qualitative interviews as well as the teacher candidate survey that Education First distributed to current and former educator preparation program (EPP) candidates from June 27 to July 19, 2024, of which there were 148 responses, highlighted intrinsic and altruistic motivations for becoming a teacher, including a commitment to contribute to the greater good and a desire to follow in the footsteps of family members who became educators. These findings emphasize that many teachers' personal and emotional connections with their students and communities are what drive their interest in and commitment to becoming a teacher.

"I think that [my desire to be a teacher] stems from my cousin, my parents, my grandparents, all of them being teachers and hearing about their experiences and just wanting to do that myself."

*-Current EPP Candidate*

## Negative Narratives Hamper Current Efforts To Recruit Candidates Into EPPs.

Missouri offers some financial incentives to attract aspiring teachers into the profession. For example, the Teacher Recruitment and Retention State Scholarship Program covers tuition and fees for attending a four-year EPP in Missouri in exchange for a service commitment.<sup>9</sup>

However, the negative perception of the teaching profession impedes the state's efforts to expand access to teaching. Interviewees highlighted narratives that suggest teaching is no longer financially sustainable nor respected as a career. Additionally, stakeholders shared that some current educators advise young people to avoid pursuing a teaching career. This discouragement reinforces the negative perception and exacerbates recruitment challenges.

"We're not seeing the encouragement from those who are current teachers as much. [Teachers] used to encourage high school students or college students to pursue the career that they themselves have chosen."

*-Teacher Association Leader*

<sup>9</sup> [Missouri Senate \(2024\)](#)

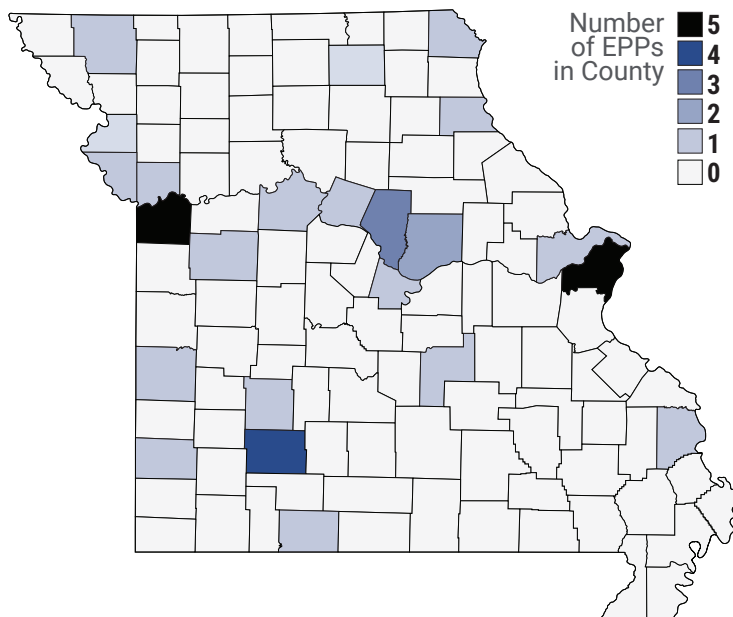


## EPPs Are Primarily Located in Non-Rural Areas, Concentrating Educator Preparation Efforts in Cities and Suburbs.

While the perception around the teaching profession can impede efforts to recruit candidates, the concentration of EPPs in non-rural areas also impacts the pipeline. The majority of Missouri EPPs—69 percent—are located in cities or suburbs. As a result, EPPs within cities and suburbs have a larger number of program completers than their rural peers. This is due in large part to the fact that the majority of four-year institutions of higher education are located in non-rural areas. The dearth of EPPs in rural communities, such as central northern and much of southeastern Missouri, may be one of the factors influencing the comparatively higher percentage of roles filled inappropriately in rural districts.

Further, EPPs located in midsize cities produce the largest number of completers in the highest-need certification areas and the greatest number of teachers of color. Over the past three years, EPPs located in midsize cities produced more than 1,200 completers across all high-needs certification areas, including Elementary Education and Mathematics, and more than 200 educators of color.<sup>10</sup>

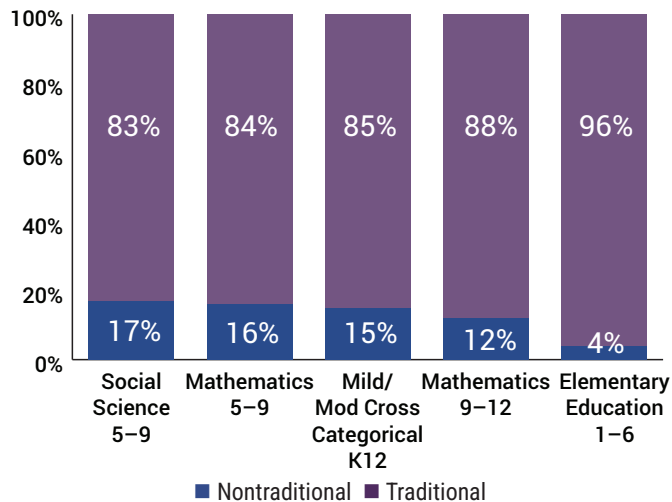
Missouri EPPs by County



## EPPs Are Finding New and Creative Solutions To Address the Growing Pipeline Need in Missouri.

Several EPPs and districts across the state utilize models that go beyond the traditional bachelors-level program approach. For example, Missouri State University’s (MSU) Pathways for Paraprofessionals Program allows aspiring educators to work full-time in their current paraprofessional role while concurrently completing coursework to earn a teaching certification.<sup>11</sup> According to stakeholder interviews, this approach spurred significant growth in MSU’s Special Education Certification Program, creating an affordable, paid pathway for candidates while addressing a high-needs area across the state. Teacher residencies, like the Educator Academy in Kansas City, also provide a paid pathway to certification, paying candidates a \$25,000 stipend for their clinical experience.<sup>12</sup>

Completer by Program Type and Subject Area 2021–2023




<sup>10</sup> Missouri Department of Elementary and Secondary Education (2024)

<sup>11</sup> Missouri State University (2024)

<sup>12</sup> The Educator Academy (n.d.)



About half of all EPPs offer traditional and nontraditional routes, ensuring multiple options for candidates who may want access to a variety of pathways into the teaching profession. Access to both traditional and nontraditional EPP program types can be found across all geographic locales but are less prevalent in rural communities due to the smaller number of overall programs in those locales. When looking at high-needs subject areas over the past three years, the majority of completers still come from traditional programs.<sup>13</sup>



“We ended up understanding that not only do you have critical shortages of teachers in general, there’s a [particular challenge] with preparing enough special education teachers ... my classes are now replete with paraprofessionals, and they’re in this Pathways to Paras that’s going to directly lead them in their current role as a paraprofessional into a role as a teacher in a district where they desperately need the help.”

—EPP Leader

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<sup>13</sup> Missouri Department of Elementary and Secondary Education (2024)

# PREPARATION

## Missouri Sets High Standards for EPPs.

A growing body of research has found connection between teacher preparation experiences and early-career retention, underscoring the importance of high-quality preparation.<sup>14</sup> The research for this report included looking at a set of research questions focused on the specific challenges or barriers candidates face within the EPP preparation experience and how EPPs ensure the effectiveness of first-year teachers. This included identifying how EPPs adjust curriculum to adapt to the needs of local education agencies (LEAs) and the instructional practices they implement to prepare candidates to teach literacy. To answer these questions, EPP Annual Performance Report (APR) data along with 148 responses to Education First's teacher candidate survey were analyzed. Twenty-five stakeholders from across the state, including early career teachers, principals, district leaders, EPP leaders and faculty, state association leaders and policy leaders, offered their insights as well.

An analysis of these data sources concluded that Missouri has established rigorous standards for EPPs

to ensure graduates are well-prepared for teaching.<sup>15</sup> EPPs must equip candidates with strong content knowledge and teaching skills, provide meaningful field experiences and implement strategies to recruit and retain diverse teachers. It should be noted that the non-random sampling of respondents to the teacher candidate survey and the fact that most respondents were current EPP candidates limited the insight of EPP completers and non-completers. In addition, leaders and faculty from a subset of EPPs in Missouri rather than all EPPs were interviewed.

DESE's standards align strongly with those nationally advanced by the Council for the Accreditation of Educator Preparation (CAEP). For example, both standards require the provider to ensure candidates develop strong content and pedagogical knowledge of their chosen discipline.<sup>16</sup> While these standards outline expectations for the experience candidates have while completing an EPP, research surfaced additional areas that may strengthen an aspiring educators' preparation.

## Candidates Surveyed Shared a Desire for More Training To Support Stronger Instructional Practices and Student Engagement.

Research nationally indicates that many teachers report feeling underprepared to manage challenging student behaviors that could impact teaching and learning.<sup>17</sup> The teacher candidate survey Education First conducted aligns with this research. Of those surveyed, new teachers reported often feeling underprepared in classroom management and differentiating instruction to meet diverse student needs. Research points to a strong link between the quality of instruction and student behavior.<sup>18</sup> High-quality instruction often reduces disruptive student behaviors.<sup>19</sup> Further, quality instruction can increase student engagement and

connection to school, underscoring the importance of

**"Managing behavior in high-needs areas. Many other new teachers who come into our district also struggle with managing behaviors in the classroom."**

*—Current Teacher*

<sup>14</sup> [Vivani, Brantlinger & Grant \(2023\); Ronfeldt \(2021\)](#)

<sup>15</sup> [Missouri Department of Elementary and Secondary Education \(2023\)](#)

<sup>16</sup> [CAEP \(2022\)](#)

<sup>17</sup> [Flower et al. \(2019\)](#)

<sup>18</sup> [IRIS Center \(n.d.\)](#)

<sup>19</sup> [Ibid.](#)

robust preparation in these areas.<sup>20</sup>

Missouri prioritizes evidence-based reading instruction, however similar to nationwide trends, students in the state struggle with literacy proficiency. According to the 2022 National Assessment of Educational Progress (NAEP), in Missouri, 30 percent of fourth-graders and 29 percent of eighth-graders were proficient or above in reading.<sup>21</sup> The state implements several initiatives that ensure all Missouri students access evidenced-based reading instruction. For example, the state has made progress incorporating the science of reading-aligned instruction through its Read, Lead, Exceed initiative, which enabled K5 teachers to complete Language Essentials for Teaching Teachers of Reading and Spelling (LETRS) training at no cost.<sup>22</sup> DESE also funded 114 EPP faculty to complete LETRS training.<sup>23</sup> Further, according to a recent study by O'Daniels and Kerkhoff of the University of Missouri– St.Louis, the

majority of Missouri EPPs have recently made changes to strengthen candidates' knowledge and application of evidence-based reading instruction.<sup>24</sup>

Initial data indicate early success of DESE's evidenced-based reading initiatives. For example, in a first-year teacher survey receiving 551 responses, 96 percent felt prepared to use knowledge of vocabulary and comprehension to effectively teach reading.<sup>25</sup> Moreover, as of July 1, 2024, the Elementary Education: Teaching Reading Praxis has an 86 percent pass rate.<sup>26</sup> Although limited, data from the teacher candidate survey Education First conducted indicates that some teachers may need additional support. DESE continues to spearhead programs and data collection that support candidates and early-career teachers in implementing evidence-based reading instruction.

## Aspiring Educators Experience Challenges That Can Lead Them To Exit the Pipeline During Their Preparation Experience.

Candidates face financial barriers throughout their preparation process. Overall, the cost of college tuition continues to rise, with Missouri public four-year colleges and universities experiencing a 37 percent increase from 2016 to 2024.<sup>27</sup> This cost, alongside the fees associated with the certification process like the Praxis, fingerprinting and background checks, can place financial strain on candidates and force them to exit their EPP.

Missouri also ensures all teacher candidates complete an immersive field experience, which research has shown to be an element of a high-quality preparation experience.<sup>28</sup> However, unpaid field experiences can place additional financial hardship on aspiring educators. Currently, 16 districts in Missouri offer incentives to student teachers such as stipends and mileage reimbursement.<sup>29</sup> However, no statewide policy exists to compensate candidates during their field experiences.

Some states, like Michigan, do pay student teachers, which can bolster the teacher pipeline. A nationwide

**“Financial challenges have been the most significant barrier to my teacher candidacy. Even within my well-resourced EPP, the difficulties of attending school full-time and working to not only support myself month-to-month but also to save money for future student teaching has been challenging at best and impossible at worst.”**

*–Current EPP Candidate*

survey found that districts would like support from their state to compensate student teachers because

<sup>20</sup> Klem, A. & Connell, P. (2004)

<sup>21</sup> NAEP (2022)

<sup>22</sup> Missouri Department of Education and SEcondary Education (n.d.)

<sup>23</sup> Missouri Department of Elementary and Secondary Education (2024)

<sup>24</sup> O'Daniels & Kerkhoff (2024)

<sup>25</sup> Missouri Department of Elementary and Secondary Education (2024)

<sup>26</sup> Ibid.

<sup>27</sup> Department of Higher Education & Workforce Development (n.d.)

<sup>28</sup> Francies, Glover & Jamieson (2021)

<sup>29</sup> Missouri State University (2024)

paid clinical experiences could be used to recruit more educators into the profession.<sup>30</sup>

## Coursework Requirements May Also Be Driving Enrollment Challenges.

Coursework requirements for certification appear to influence the number of EPP completers in middle and secondary math, resulting in fewer high school math teachers.

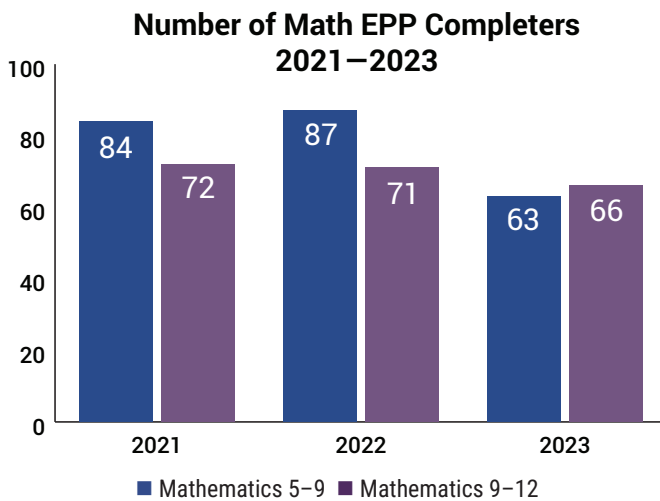
To earn a secondary math certification, teacher candidates often must complete upper-level courses like Calculus III, differential equations and linear algebra.<sup>31</sup>

In the past three years, Missouri has seen fewer

“We’ve had a lot of students who will start up as secondary education math majors and then really struggle with the upper-level math courses. And sometimes what they’ll do is they’ll change majors to our middle school math program.”

—EPP Leader

completers in high school math than middle school. These data suggest that the number of challenging upper-level courses might drive candidates to switch to middle school math.



<sup>30</sup> Putman, H. (2024)

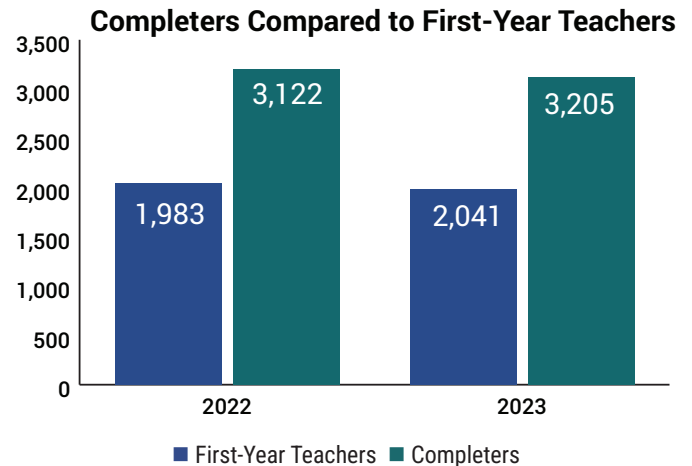
<sup>31</sup> Missouri S&T University (n.d.)

# RETENTION IN THE FIELD

## A Key Leak in the Pipeline Exists Between Program Completion and Entrance as a First-Year Teacher.

When considering retention, it is important to consider retention in the field rather than just retention of those who enter as first-year teachers and then stay in the profession.

Data on program completion shows that not all EPP completers become first-year teachers following graduation. Over the past two years, approximately 64 percent of completers became teachers.<sup>32</sup> Completers may choose not to enter the teaching profession for a variety of reasons, such as difficult student teaching experiences or a change in career interests toward the end of their higher education experience. Additional qualitative research exploring what informs completers decisions not to enter the teaching field in Missouri could help inform targeted strategies to mitigate this leak in the pipeline.



## Missouri Faces Competition for Teachers From Its Many Neighboring States.

Analysis of district vacancies based on approximate distance from bordering states shows that those districts within 50 miles of a border tend to have slightly higher median vacancies—about 11 to 11.5—compared to the overall average of 10 across the state. Additionally, data show that districts whose closest neighboring state is Arkansas or Illinois tend to have slightly higher vacancies than those whose closest neighboring state is Iowa, Kansas, Kentucky or Nebraska.

Missouri offers comparable average starting salaries with some, but not all, neighboring states. However, Missouri does not offer any incentives targeting aspiring educators of color to become teachers, a practice utilized by a number of neighboring states. Ultimately, Missouri may benefit from considering incentives for teachers of color to attract and retain educators.

MEDIAN VACANCIES BY DISTRICT DISTANCE FROM BORDER	
APPROX. DISTANCE FROM BORDER	MEDIAN VACANCIES
Missouri	10
0–24 miles	11
25–49 miles	11.5
50– 4 miles	6.5
75–100+ miles	10

“We see that a lot because we’re on the border of three states so we’re right there at this intersection, and we lose a lot of students out of state. I would say a lot of it has to do with how things are changing so quickly in regard to state requirements.”

—EPP Leader

<sup>32</sup> Missouri Department of Elementary and Secondary Education (2024)

## Supporting the Retention of Current Teachers Is Key To Addressing Teacher Shortages.

Since the pandemic, Missouri has seen an increase in the number of new and veteran teachers considering leaving the profession. In a member survey conducted in 2024 by the Missouri State Teachers Association, 70 percent of respondents noted they sometimes, often or very often seriously consider leaving the profession. Teachers cited stress (63 percent), burnout (42 percent) and workload (40 percent) as factors influencing their decision to leave.<sup>33</sup> National trends indicate that teacher turnover can lead to schools with underprepared staff.<sup>34</sup> This can further affect students' educational experiences, especially in schools serving students from low-income backgrounds and students of color, where turnover is more likely to occur.<sup>35</sup>

Robust mentoring and induction for early career teachers can help combat the retention challenges in Missouri. Research indicates that effective induction promotes teacher retention. For example, a study of Connecticut's Teacher Education and Mentoring Program found that participating teachers were more likely to stay in the teaching profession after one and three years.<sup>36</sup>

"Anything DESE can do to support schools in making those induction programs as strong as they can possibly be [is so important], because we really [have] to make those first two, three years good on-ramping for our young teachers."

—EPP Leader

To support mentoring and induction for early career teachers, Missouri implements the Beginning Teacher Assistance Program (BTAP), which provides professional development, networking and relationship-building skills to help support new teacher retention.<sup>37</sup> Participation in BTAP is a requirement for teachers to upgrade from their initial certificate to a continuous certificate.<sup>38</sup> Participation in BTAP is also required for teachers who want to participate in the Career Ladder program, which supports salary supplements for teaching staff who take on additional responsibilities.<sup>39</sup> This requirement incentivizes teachers to receive early-career mentoring, which can lead to additional compensation and ultimately promote retention.

<sup>33</sup> [Missouri State Teachers Association \(2024\)](#)

<sup>34</sup> [Carver-Thomas, D. & Darling-Hammond, L. \(2017\)](#)

<sup>35</sup> [Hunt Institute \(2022\)](#)

<sup>36</sup> [Institute of Education Sciences \(2020\)](#)

<sup>37</sup> [Missouri Department of Elementary and Secondary Education \(2024\)](#)

<sup>38</sup> [Missouri Department of Elementary and Secondary Education \(2024\)](#)

<sup>39</sup> [Missouri Department of Elementary and Secondary Education \(2024\)](#)



# RECOMMENDATIONS



This analysis has informed six key recommendations for strengthening the teacher pipeline in Missouri:

RECOMMENDATION	SUPPORTING EVIDENCE
<p><b>1:</b> Launch <b>targeted communications campaigns</b> that elevate the value proposition of becoming a teacher in Missouri and increase awareness about the pathways into the profession.</p>	<ul style="list-style-type: none"> <li>■ Stakeholders highlighted that communication about the preparation experience can impact whether an aspiring educator enrolls in an EPP and that communication can vary widely.</li> <li>■ More broadly, the increasingly negative perception of the teaching profession is impeding the state's efforts to expand the teacher workforce.</li> </ul>
<p><b>2:</b> Define the essential components of <b>high-quality teacher preparation experiences</b> and work to ensure all first-year teachers have those experiences.</p>	<ul style="list-style-type: none"> <li>■ While Missouri has rigorous teacher preparation standards focused on essential areas (content, field experiences and quality), educators still cite a need for stronger preparation experiences, particularly around instructional practices and student engagement.</li> <li>■ Stakeholders noted that new teachers are often underprepared in classroom management and need more training to appropriately differentiate instruction to meet the diverse needs of students.</li> </ul>
<p><b>3:</b> Expand <b>financial strategies</b> to support candidates to and through preparation programs.</p>	<ul style="list-style-type: none"> <li>■ Teacher candidates face several financial barriers, such as the impact of increasing tuition and fees and unpaid clinical experiences. Overall, the cost of college tuition continues to rise, with Missouri public four-year colleges and universities experiencing a 37% increase from 2016 to 2024.<sup>40</sup></li> <li>■ These financial barriers can be particularly difficult for candidates as they consider entering a profession with a relatively low salary, and they may deter some students who would otherwise be interested in entering the teaching profession.</li> </ul>
<p><b>4:</b> Address <b>structural barriers</b> that prevent aspiring educators from accessing and persevering through teacher preparation programs.</p>	<ul style="list-style-type: none"> <li>■ Data show that less than half of first-year teachers in recent years have completed a comprehensive Missouri EPP program.</li> <li>■ Potential EPP candidates currently face several potential barriers to entering and persevering through their programs, including access to varying program types that meet their contextual needs, geographic locales of EPPs and challenges understanding potential pathways and requirements.</li> <li>■ In terms of geographic barriers, 69% of Missouri EPPs are located in cities and suburbs, which decreases local access to EPPs for those located in rural communities.</li> </ul>
<p><b>5:</b> Improve how teachers experience the profession through increased focus on <b>effective leadership</b> and <b>professional learning</b>.</p>	<ul style="list-style-type: none"> <li>■ Alongside shortages, current teachers in Missouri cited stress, burnout and workload as challenges that make them more likely to leave the profession. The COVID-19 pandemic also increased the demands on teachers without commensurate increases in support.</li> <li>■ Research on teacher retention indicates that some of the strongest predictors of whether a teacher stays in their position is the administrative support they receive.<sup>41</sup></li> <li>■ A focus on professional learning and effective leadership is essential to promote teacher retention.</li> </ul>
<p><b>6:</b> Develop and implement <b>systems that provide transparent and accessible data</b> to inform actors across the educator ecosystem and build capacity for use of that data.</p>	<ul style="list-style-type: none"> <li>■ No singular system links preparation program data systems to teacher licensure and K12 data systems, which leaves stakeholders across the ecosystem without the full context they need to know if they are distinctly addressing the state's greatest needs.</li> <li>■ Solutions that address teacher vacancies and shortages tend to lack the specificity needed to surmount associated challenges.</li> </ul>

<sup>40</sup> Department of Higher Education & Workforce Development (n.d.)

<sup>41</sup> Rebora (2023)

## RECOMMENDATION

## 1

Launch **targeted communications campaigns** that elevate the value proposition of becoming a teacher in Missouri and increase awareness about the pathways into the profession.

## Rationale

Stakeholders highlighted that communication about options for teacher preparation experiences can affect whether an individual chooses to enroll in an EPP, and individuals may currently be receiving varying levels of information. In addition, the increasingly negative perception of the teaching profession in the state is likely impeding Missouri's efforts to expand the teacher workforce.

Targeted communications campaigns can help tackle two separate but related challenges the state

currently faces. A communications campaign focused on elevating the value proposition for the teaching profession can help attract potential candidates into the profession and underscore the impact that teachers have on their community. An additional communications campaign focused on outlining the pathway options candidates can pursue will help individuals better understand the range of opportunities available and how to access them.

## Strategies

#### Initiate a targeted communications campaign focused on elevating the value proposition of teaching.

- DESE can utilize both digital (social media/web-based platforms) and in-person (community events) channels to share materials that highlight the lived experiences of teachers. Emphasizing the significant impact teachers have on their communities and the enticing aspects of the role is crucial. These aspects should include but are not limited to the flexibility of a school-year schedule, strong retirement benefits, effective leadership structures, professional development and career advancement opportunities.
- This campaign could also benefit from elevating recent changes made to improve teacher experience within the state, such as increased beginning teacher salaries and restored funding for the Career Ladder system. Any potential future updates regarding effective leadership and professional learning (see Recommendation 5) and addressing unnecessary structural barriers for aspiring educators (see Recommendation 4) should also be elevated.

- Campaign development should include a variety of teachers in terms of tenure in the profession, content areas, geographic locales, race/ethnicity and geographic locales to demonstrate the range of teachers working across the state. As part of the development, stakeholders across the state should be engaged to inform the campaign design and delivery that will best resonate with a broad swath of potential future teachers.



The U.S. Department of Education, TEACH.ORG and One Million Teachers of Color partnered on a public service awareness campaign called “Teachers: Leaders Shaping Lives” that could serve as a model for a state-specific campaign. The PSA campaign celebrated the roles of teachers and sought to inspire talented people, particularly Black and Latino individuals, to become teachers.\*

\*TEACH.org (2023)

**Clarify pathways into teaching, how to pursue them and available financial incentives.**

- The state can invest in creating an interactive tool that lets individuals easily identify the pathway requirements to becoming a teacher that best fits their individual needs and context. One example is partnering with a technical assistance provider to build upon previous efforts to create an interactive website or app that allows individuals to answer a series of questions. The questions (and their responses) guide the individuals to best-fit programs and include information on entry requirements, program components and scholarships.<sup>42</sup>
- A future feature of this tool could incorporate specific local workforce needs by district and aligned EPP programs available (see data infrastructure Recommendation 6). This context-specific information would allow individuals to understand the general pathways and programs available to them and to hone their focus based on their personal subject area interest, commitment to a particular geographic locale or pathway type.
- DESE and other partner organizations across the state could then utilize social media platforms to disseminate information and host webinars and workshops to provide detailed information about financial incentives.



The Virginia Department of Education launched the Become a Teacher campaign in 2022, which included a microsite that offered a simplified overview of the pathways to licensure as well as an interactive tool to help individuals understand what options best fit their context. The campaign also included paid media, such as ads on social media and Google. The site sees between 300–500 visitors per day.\*

\*[Virginia Department of Education \(2024\)](#)

42 [Virginia Department of Education \(2024\)](#)

## RECOMMENDATION

## 2

Define the essential components of **high-quality teacher preparation experiences** and work to ensure all first-year teachers have those experiences.

## Rationale

Missouri has in place a vision for teacher preparation that is grounded in rigorous standards and aimed toward producing talented teachers for Missouri students. While these standards are focused on essential areas (content, field experiences and quality), educators still cite a need for stronger preparation experiences. Stakeholders we heard from in our research noted that new teachers are often underprepared in classroom management and need more training to appropriately differentiate instruction to meet students' diverse needs. Identifying the experiences within a teacher preparation program that can aid in bolstering these specific competencies can help strengthen candidates' preparation and increase their confidence as they enter the classroom.

Research shows a strong link between teacher preparation quality and retention. Teachers with more high-quality training, especially those with extended

student teaching, feel better prepared for the classroom and are more likely to stay in the profession.<sup>43</sup> These teachers, having invested time and money in their education, deserve programs that prepare them to meet student needs from day one. While districts rely on preparation programs to supply effective teachers, these programs must align with the state's vision for quality.

Missouri has already established a foundation but can go further by examining where opportunities exist to improve candidates' learning and better prepare them as effective teachers on day one. This includes considering opportunities to embed more research-backed training approaches. Missouri can ensure there is shared vision and understanding of the components of high-quality teacher preparation that are practice based, context based and make explicit connections between practice and coursework.

## Strategies

### Craft an updated definition and framework for high-quality teacher preparation in Missouri.

- Aligning programs with the state's vision for quality requires the state to make sure the definition and framework for education program experiences line up to their vision for a thriving and effective teacher workforce. To do this, the state can elevate and define more clearly the approaches teacher preparation programs should take to reach state standards. These approaches should align to programs and structures that have proven the most effective in preparing effective teachers. A particular focus can be placed on identifying experiences that support strong instruction and student engagement.<sup>44</sup> Examples of potential high-impact preparation experiences that could be elevated through this process include
  - emphasizing the importance of mentorship and feedback for candidates and the benefits of residency experiences. In addition, underscoring the importance of access to HQIM and aligned professional learning can help ensure first-year teachers enter the classroom and are supported to use strong instructional practices.
- The state must also evaluate how to further support those who are entering the classroom without having completed a preparation experience. In 2023–24, the majority of teachers were not comprehensively prepared in a Missouri EPP, underscoring the need for supports for these first-year teachers, particularly those who enter as a substitute or with no certification.
- State leaders should engage a working group and conduct a design process to examine strengths

<sup>43</sup> Ronfeldt, M. (2021)

<sup>44</sup> Arkansas Department of Elementary and Secondary Education (2024)



Arkansas recently revamped their state framework to set a shared vision for what high-quality educator preparation looks like in the state, with a focus on continuous improvement. Their new framework outlines key program experiences that align with the state's vision for high-quality preparation of teachers, including highlighting coursework and clinical experiences.\*

\*Arkansas Department of Elementary and Secondary Education (2024)

and gaps in the current standards. Working group members can be identified by DESE and represent a diverse range of stakeholders including state chiefs, IHE deans and system leaders, among others. Engagement with the working group should be grounded in data relevant to understanding Missouri preparation quality, pipelines and district needs while also bringing in relevant research to build awareness of research-backed approaches and the science of learning. A series of four working group meetings would help build awareness around this work and invite input into the revised definition and framework.

- Establishing regular methods for collecting qualitative data from teacher candidates helps gain insights into their preparation experiences. This ongoing feedback can inform recommendations for a high-quality preparation framework and support continuous improvement

efforts. By incorporating candidate perspectives, teacher preparation programs can remain aligned with best practices and the evolving needs of future teachers. (Also see Recommendation 6.)

**Review current teacher preparation standards and revise as necessary to align to the updated definition and framework.**

- Providing support to Missouri teacher preparation programs to ensure they are aware of and have access to resources that include the defined experiences for a high-quality preparation experience is crucial. The state should provide a clear roadmap for programs to reach the Missouri standard for quality preparation. This is best facilitated through revisions and updates to existing standards and requirements, ensuring clear and purposeful alignment to the vision and framework.
- The state should also consider ways to incentivize teacher preparation programs to lead in early adoption of new standards or expectations. As an example, identification of exemplary literacy programs in K6 schools could serve as a training ground for teacher preparation program faculty, teacher educators or shared curriculum and professional learning materials.

## RECOMMENDATION

## 3

Expand **financial strategies** to support candidates to and through preparation programs.

## Rationale

Teacher candidates face several financial barriers, such as increased tuition and fees and unpaid clinical experiences. These financial barriers can be particularly difficult for candidates as they consider entering a profession with a relatively low salary, and they may deter some students who would otherwise be interested in entering the teaching profession.

Although the state recently passed a notable increase in teacher salaries, particularly for beginning teachers,

additional increases in overall compensation and the value proposition for teachers are needed to ensure the profession can attract high-quality candidates.<sup>45</sup> Building out financial supports for candidates can provide future teachers the opportunity to enter the teaching profession with little or no student debt, making a relatively low beginning salary potentially less of a challenge or hindrance.

## Strategies

#### Consider opportunities to expand financial support for candidates.

- The financial burden candidates must take on in comparison to compensation for teaching positions is a real concern for many current, past and prospective candidates. Opportunities to provide financial incentives for those committed to going into teaching help broaden the potential pipeline of candidates.
- Potential financial supports could go beyond the current focus on high-needs schools to include certification areas with shortages and/or teachers that would diversify the teaching workforce. These could include state-funded scholarships, loan

repayment programs, reimbursement programs and/or paid student teaching opportunities.

#### Continue to support the provision of the retirement benefit system for teachers.

- While salary is an important consideration for teachers, it is not the only piece within a comprehensive compensation package. One key financial support currently offered to teachers is the retirement benefit system.
- Several interviewees noted that retirement benefits can be a key attraction for those committed to working in the field long-term. Sustaining and continuing those benefits in their current form and more explicitly communicating them as a benefit or piece of overall compensation will help attract and retain teachers.



Illinois has appropriated \$975,000 in both FY 2024 and FY 2025 to support the Illinois Teachers Loan Repayment Program. The program matches the federal Teacher Loan Forgiveness Program to provide up to an additional \$5000 to qualifying teachers to repay their student loan debt after five years of teaching in a low-income school.\*

\*Illinois Student Assistance Commission (2024); Federal Student Aid (2024)



Michigan offers a state stipend for student teaching. Candidates can receive up to \$9,600 per semester for their full-time required student teaching semester and that amount is not counted towards regular financial aid eligibility.

MI Student Aid (2024) \*

45 Missouri Office of the Governor (2024)



## RECOMMENDATION

## 4

Address **structural barriers** that prevent aspiring educators from accessing and persevering through teacher preparation programs.

## Rationale

Teacher candidates currently face several potential barriers to entering and persevering through their programs. These barriers can include access to varying program types that meet their contextual needs, geographic locales of teacher preparation programs and challenges understanding potential pathways and requirements.

For those candidates who are already working in schools or are unable to take on unpaid teaching experiences, programs such as Grow Your Own and registered apprenticeships provide additional paths to certification that allow candidates to pursue their future career while meeting the needs of their own personal context. These programs often decrease the financial burden a candidate may need to take on.

Registered apprenticeships and Grow Your Own programs also combat structural and academic barriers that aspiring educators may face during their preparation. For example, many of these programs include services to support test preparation so that teacher candidates pass their state certification exams.<sup>46</sup> Further, these programs include clinical training both under the guidance of a mentor teacher within a district and aligned to the coursework a candidate completes while enrolled at their teacher

preparation program.<sup>47</sup> These integrated structures can help teacher candidates understand and implement their district's instructional materials, build content knowledge and complete their preparation program positioned to succeed in the classroom.

In terms of geographic barriers, 69 percent of Missouri EPPs are located in cities and suburbs, which leaves decreased local access to EPPs for those located in rural communities. Data also show that less than half of first-year teachers in recent years have completed a comprehensive Missouri EPP program.<sup>48</sup> Expanding programs that provide comprehensive preparation for teacher candidates can help better ensure that all teachers begin their first year in the classroom ready to succeed.

In addition, a bolstered support system—such as through a regional counselor model—can help ensure that candidates have the resources they need to determine which pathway is the best fit for them and how to see that experience through to completion. A regional counselor who can support students to and through programs could also ensure that candidates have the information they need to successfully enter and complete their programs.

## Strategies

### Continue to grow investment in Grow Your Own pathways.

- There has been considerable interest and uptake from districts in the state's recently implemented state-funded Grow Your Own grants. Increasing the funding available to districts for this type of programming can help build a pipeline of teachers

that are representative of the communities they seek to serve.<sup>49</sup> To address challenges for individuals who may be interested in becoming teachers but are seeking a pathway other than the traditional EPP program, bolstering options such as Grow Your Own provide an important opportunity to continue working and stay connected to the district they are already working in.

<sup>46</sup> Reddig, et al. (2024)

<sup>47</sup> Garcia, A. (n.d.)

<sup>48</sup> DESE (2024)

<sup>49</sup> Mahler (2024)

- Prioritizing funding resources for programs that target high-need regions or certification areas could help address those challenges. Some studies have also found that teachers who go through Grow Your Own programs have a deeper understanding of local contexts and student backgrounds, which can increase student achievement.<sup>50</sup> Additional research has also found that Grow Your Own programs can help support teacher retention.<sup>51</sup>
- While state funding can help bolster these efforts, exploring opportunities for collaboration with philanthropic funders could be another pathway to seed and scale these programs across the state.

### Build upon and scale up registered apprenticeship and pre-apprenticeship opportunities.



Tennessee has made significant investments in apprenticeships and had the largest number of teacher apprentices across all states in 2023 with 678 apprentices. As part of their apprenticeship efforts, the state launched the [Tennessee Grow Your Own Center](#) to lead apprenticeships across the state with a \$20 million investment.\*

\*Melnick (2024); University of Tennessee (2024)

- Registered apprenticeships can also open opportunities for individuals seeking a pathway other than the traditional EPP program while potentially reducing their financial burden.
- The state should consider avenues for funding partnerships between specific institutes of higher learning (IHEs) and districts to create aligned apprenticeships that meet local needs, particularly those outside of cities. This would build upon the work Missouri State University has been contracted with DESE to do to help increase knowledge across the state on how to establish registered apprenticeship programs.<sup>52</sup>
- Developing opportunities for pre-educator (high school to teaching) programs can increase career exposure and help shift the narrative around teaching with high school students. This approach will be twofold: it will build increased interest in

<sup>50</sup> Blazar, Gershenson & Goings (2024)

<sup>51</sup> Melnick (2024); University of Tennessee (2024)

<sup>52</sup> Missouri Department of Elementary and Secondary Education (2024)

<sup>53</sup> IPEDS (2023)

teaching as a profession and cultivate positive experiences around teaching even if the individuals do not return to the classroom.

### Enhance opportunities for those already working in schools to become certified teachers.

- DESE and other state-level stakeholders could also work with institutions to leverage policies that allow universities to award prior learning credit and recognize the value of the on-the-job experiences of paraprofessionals, teacher aides and substitute teachers. This acknowledges their professional experience, reduces the amount of additional credits needed and helps reduce the program cost for students.

### Explore partnerships with community colleges as potential teacher preparation programs.

- Few EPPs are located in rural geographic locales across the state, so access to these programs for individuals living in rural communities is often more limited. One way to consider expanding access to teacher preparation programs in rural communities could be to explore the creation of teacher preparation programs at community colleges.
- Missouri is home to 13 public two-year institutions, 10 of which are located in rural or town geographic locales.<sup>53</sup>
- Ozarks Technical Community College and St. Louis Technical Community College are authorized to provide BA degree programs (in respiratory therapy). Likewise, authorizing targeted community



In 2019, [Dallas College](#) got approval from the Texas Higher Education Coordinating Board to offer a bachelor's degree in early childhood education and teaching and gained accreditation later that year for the program. Unlike many traditional models, which typically require students to complete a full-time courseload as well as clinical experiences, Dallas College takes a competency-based education approach and focuses on mastery of key identified competencies. Students are in the classroom full-time and receive support from both a mentor teacher and a faculty member.\*

\*Educate Texas (2024)

colleges across the state to become BA providers in support of teacher preparation efforts, similar to the Dallas College EPP program in Texas, could be explored.<sup>54</sup>

#### **Evaluate the feasibility of a regional counselor role.**

- Navigating current teacher preparation program requirements, from recruitment into programs through continuation and meeting GPA and coursework requirements, can be challenging for candidates. In addition, districts can benefit from having a dedicated resource who helps make connections between local needs and preparation pipelines.
- One regional counselor could be assigned for each Regional Professional Development Center (RPDC) region. This counselor could work with districts to conduct assessment of personnel across classrooms and identify personnel to support to become teachers, such as paraprofessionals or substitute teachers, and identify what pathways or programs are the best fit for their needs.
- This regional counselor, working closely with high school counselors and teacher preparation program staff, could be responsible for coordinating and advising potential teacher candidates to help them find the right pathway, aligning funding opportunities and identifying wraparound support to ensure candidates persist through certification.

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54 [Educate Texas \(2024\)](#)

## RECOMMENDATION

## 5

Improve how teachers experience the profession through increased focus on **effective leadership** and **professional learning**.

## Rationale

As districts across the state grapple with teacher shortages, current teachers also express dissatisfaction with teaching conditions. In a recent survey, teachers in Missouri cited stress, burnout and workload as critical challenges that make them more likely to leave the profession.<sup>55</sup> Following the pandemic, demands on teachers have also grown without commensurate increase in support.<sup>56</sup> Strategies that address teacher needs and increase retention are therefore particularly important for the state to consider when addressing its challenges with attrition.

Research on teacher retention indicates that one of the strongest predictors of whether a teacher stays in their position is the administrative support they receive.<sup>57</sup> Missouri has put in place several initiatives to increase support for teachers and improve retention. Among these are the Beginning Teacher Assistance Program (BTAP), which provides professional development,

networking and relationship-building skills for new teachers. Additionally, the state developed and funds the Missouri Career Development and Teacher Excellence Plan (Career Ladder Program), supporting salary supplements for teaching staff that provide compensation for additional responsibilities and voluntary efforts performed for which a teacher does not already receive compensation.<sup>58</sup> Supporting districts in expanding strategic staffing models that offer teachers leadership roles, allowing them to grow professionally and earn additional compensation without leaving the classroom, will build on these initiatives. Additionally, the state should invest in strengthening both the preparation and ongoing development of school leaders to ensure they can effectively support and retain high-quality teaching staff.

## Strategies

### Expand leadership pathways and strategic staffing models to improve teacher retention and instructional quality.

- The Career Ladders Program can be leveraged to expand leadership pathways that increase teacher quality and retention. DESE can support districts in adopting strategic staffing models that shift from the conventional one teacher, one classroom configuration toward organizational structures that better reflect the professional environments and working conditions of other highly skilled, sought-after professions.<sup>59</sup> When implemented with fidelity, these models provide the infrastructure for the diffusion of best practices like Science of Reading and most importantly better support student academic outcomes and well-being. By

incorporating elements like distributed leadership, innovative teaming structures and compensation differentiated by role, districts and schools can create and embed support systems for novice and struggling teachers while easing principals' workloads and improving instructional quality. DESE can provide guidance to districts, including sample job descriptions for roles such as lead teacher, extended reach teacher, teacher resident; sample staffing structures that incorporate these differentiated roles and protect time for collaboration, feedback and coaching; and examples of differentiated compensation strategies aligned with the Career Ladder Program. Missouri is also developing a Master Teacher Certificate that can fit within a strategic staffing model.

<sup>55</sup> [Missouri State Teachers Association \(2024\)](#)

<sup>56</sup> [Rebora \(2023\)](#)

<sup>57</sup> Ibid..

<sup>58</sup> [Missouri State Code \(2024\)](#)

<sup>59</sup> [Best NC \(2022\)](#)

- Mentorship programs like BTAP and TeachNow can be enhanced to ensure consistent support



North Carolina's Advanced Teaching Roles model elevates effective teachers

to positions of leadership. These teachers take on additional responsibilities and/or extend their reach, usually by teaching larger numbers of students or by providing embedded professional development to teams of teachers, and receive corresponding increased pay.\*

\*Best NC (2022)

in a teacher's first two years. BTAP, provided by an education association, regional service center or school district, supports new teachers in their first two years through mentoring and high-quality professional learning. TeachNow is a summer institute providing tailored support to those entering the profession through alternative certification. Mentoring is a high-impact professional learning strategy; ensuring that implementation is consistent across all programs offered will help make sure all teachers are beginning their teaching career with strong support.

### Enhance preparation and development programs for school leaders.



Louisiana created a framework and associated set of competencies for mentors as part of the Louisiana Mentor Teachers Program. This framework helped ensure that all mentor teachers were prepared consistently and effectively across the state.\*

\*Louisiana Department of Education (2024)

- The Office of Educator Quality should aim to increase participation in the Missouri Leadership Development System (MLDS) so more principals benefit from its programming. DESE, under the Office of Educator Quality, offers MLDS programming, whose purpose is to develop and support aspiring and current effective school

leaders, ultimately impacting the quality and retention of principals. For example, a 2023 MLDS participant survey concluded that “principals and superintendents were highly positive about the program’s impact on principals’ instructional leadership, classroom instruction and student achievement.”<sup>60</sup> Further, approximately 90 percent of principals indicate that MLDS increases their likelihood of remaining a school leader in the state.<sup>61</sup> In 2022–2023, MLDS supported 863 principals and 552 assistant principals.<sup>62</sup> However, this represents about 39 percent and 43 percent of principals and assistant principals, respectively.<sup>63</sup> Therefore, leveraging current partnerships such as with the RPDCs, Missouri Association of Elementary School Principals (MAESP) and Missouri Association of Secondary School Principals (MoASSP) to increase participation in MLDS will impact more teachers and students and promote retention of talented school leaders in Missouri.

### Provide targeted support for rural and high-poverty districts.

- Collecting data through annual evaluations of MLDS will determine the extent to which its content tailors to the unique needs of rural schools. Making data-informed adjustments to MLDS to ensure it continues to provide professional learning tailored to rural school needs—such as multi-grade teaching strategies, community engagement and remote learning methods—can empower leaders to better support their teachers and mitigate the challenges that lead to attrition.<sup>64</sup> School leaders who demonstrate success in retaining high-quality teachers and supporting their professional development can be offered incentives. Principals would receive bonuses or grants for retaining highly effective teachers, especially in high poverty districts and schools. Creating these incentives will help promote a leadership culture that prioritizes the well-being, growth and development of teachers.
- High-poverty districts experiencing teacher shortages should receive additional resources for leadership development and teacher professional

60 Liang, G. & Slotnik, W. (2023)

61 Ibid..

62 Espinoza, Saunders, Kini, Darling-Hammond. (2018)

63 Ibid..

64 Teach for America (2024)

growth, including increased funding and support for professional learning. The state could offer grants or targeted funding to ensure teachers in these districts have access to high-quality professional development and leadership opportunities, thus increasing retention in the areas where they are needed most.



Through Teach For America's Rural School Leadership Academy (RSLA),

rural educators who are aspiring or current school leaders complete three cycles of professional development focused on building school leadership competencies; participate in in-person gatherings and school visits in participating districts; and receive one-on-one leadership coaching twice monthly.\*

\*Teach for America (2024)



## RECOMMENDATION

## 6

Develop and implement **systems that provide transparent and accessible data** to inform actors across the educator ecosystem and build capacity for use of that data.

## Rationale

The distribution of teacher vacancies and inappropriately filled positions across the state points to inequities in student access to appropriately certified teachers. Vacancy data make clear the state's teacher need, while inappropriately filled positions simultaneously indicate ongoing teacher shortage challenges. We also know from our research that these challenges are not experienced evenly across the state. Districts with a higher number of inappropriately filled positions often serve more students of color and more low-income communities and have larger class sizes overall. Districts with the highest percentage of teacher

vacancies and highest percentage of inappropriately filled vacancies are primarily rural.

While emerging program options are expanding their reach, without a singular system that links preparation program data systems to teacher licensure and K12 data systems, we have no way of knowing if we are distinctly addressing the state's greatest needs. The state's current data systems are not connected, and existing data sources are not easily accessible for all decisionmakers. As a result, solutions identified for teacher vacancies and shortages tend to lack the specificity needed to address nuanced teacher vacancy and shortage challenges.

## Strategies

**Invest in the development of systems that provide transparent and accessible educator preparation enrollment data, state licensure data and K12 workforce data across the state.**

- In fall 2023, DESE began collecting standardized EPP data. This practice should be continued, and the state should consider policies or structures that would allow collection of disaggregated data that can increase understanding of staffing needs. While not exhaustive, a list of data points to prioritize when creating transparent and accessible systems includes: teacher preparation program completer data by licensure area and geographic region, K12 first-year teacher placement data, K12 teacher retention and turnover data. All these data should have the ability to be disaggregated by teacher preparation program, school district, race/ethnicity, gender identity and certification identity.
- In addition, developing systems to gather qualitative data on candidate experiences, such as the gap between number of completers and those who go on to become first-year teachers in Missouri, can help provide crucial insights into leaks at key points in the timeline.
- Shorter-term steps can also increase access and use of timely data that can help inform decisionmaking for stakeholders across the educator ecosystem. Some initial steps could include:
  - + Reviewing and standardizing data submission formats
  - + Conducting regular data audits
  - + Sharing more frequent updates of relevant data, such as quarterly district and school workforce reports
- In the longer term, the development of an interactive dashboard can serve as a north star. DESE can ultimately work to develop a strategy and implementation plan for a publicly facing, interactive dashboard that connects key data elements across systems. The dashboard should be designed with the users in mind—state leaders, district leaders, educator preparation program leaders, legislators, parents and business leaders—

and provide data to help inform answers to key supply and demand questions such as, “Do we have enough new teachers coming into the profession to fill available positions?” or “Where do teacher shortages exist, and how is the shortage disaggregated by district, school or certification area(s)?”



The Georgia Department of Education’s [Educator Pipeline Dashboard](#) includes

a series of interactive reports on the teacher pipeline that can be used by stakeholders at the state, regional and district levels to understand pipeline trends and inform practices.\*

\*[Georgia Department of Education](#) (2024)

**Provide support and resources to district and EPP leaders to promote deeper understanding of trends from the data and foster collaboration on key pipeline and data strategies.**

- A tiered approach to address data system challenges should also include fostering early investment and knowledge for system and teacher preparation program leaders around how to use available data. When provided access to timely, reliable data that outlines the teacher pipeline from recruitment into teacher preparation programs through entry to and retention in the workforce, both teacher preparation program and district leaders are better equipped to make data-informed decisions.<sup>65</sup>
- DESE can use available data to produce static district workforce reports at strategic points in the academic year (such as fall and spring) and for particular audiences. Alongside providing those reports to districts, support may also be needed on how to use and act on the data available. This could be facilitated through regional data coaching workshops for teacher preparation program leaders, RPDC directors and district talent leaders to elevate trends and needs that lead to solutions that are targeted toward addressing key areas of need over time. Such workshops may be facilitated by DESE, or DESE may consider engaging a partner to provide this service to districts and their teacher preparation program partners.

65 [Louisiana Department of Education](#) (2024)

66 [Louisiana Department of Education](#) (2024)

- A partner organization could be contracted with to support local district and teacher preparation program partnerships to build stronger connections between graduates and employment opportunities. This would be intended to foster collaboration and build capacity in regions to develop data-driven strategies that can better attract, recruit and retain teachers for the content areas, regions and schools experiencing the greatest need. This work could include a community-specific analysis of current district staffing needs, projected future demands and alignment with teacher preparation program enrollment and projected enrollment and building out relationships to support immersive field experiences.<sup>66</sup>



The Louisiana Department of Education’s [EdLink360 Workforce Dashboard](#) was

launched in May 2022 and makes workforce data available to district and school leaders in real time to support data-driven decisions around the recruitment and retention of teachers.\*

The state provides ongoing support to districts to build their capacity to understand and use the data included in this dashboard, including:

- Monthly webinars
- Weekly office hours
- Weekly newsletters
- On-demand ticketing system for additional questions or issues
- A dedicated [EdLink 360 support page](#)

\* [Louisiana Department of Education](#) (2024)

# CONCLUSION

Strengthening the teacher pipeline in Missouri is not simple, and doing so will require a combination of approaches that address challenges at each phase of a teacher's experience. The recommendations laid out in this executive summary represent a combination of approaches, provide a roadmap for addressing some of the most pressing needs in the educator ecosystem and build upon the foundation the state has been creating over the past few years. By implementing evidence-based strategies and increasing support for the teacher profession, Missouri can work toward ensuring that all students have an appropriately certified, effective educator to help them succeed and help Missouri thrive.

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## Works Cited

- Arkansas Division of Elementary & Secondary Education. (2015). Arkansas State Review of Educator Preparation Programs (EPPs). [dese.ade.arkansas.gov](https://dese.ade.arkansas.gov). <https://dese.ade.arkansas.gov/Offices/educator-effectiveness/educator-preparation-programs-in-arkansas/arkansas-state-review-of-educator-preparation-programs-epps>
- BEST NC. (2022). Advanced Teaching Roles in North Carolina: Meaningful Career Pathways for Education Professionals, A Policy Brief from BEST NC 2022. <https://www.bestnc.org/wp-content/uploads/2022/07/Advanced-Teaching-Roles-Policy-Brief-2022.pdf>
- Blazar, D., Gershenson, S., & Goings, R. B. (2024, July 12). The Educational and Labor Market Impacts of Maryland's Grow-Your-Own Teacher Recruitment Program, An Essay for the Learning Curve. Urban Institute. <https://www.urban.org/research/publication/educational-and-labor-market-impacts-marylands-grow-your-own-teacher>
- Council for the Accreditation of Educator Preparation. (n.d.). 2022 CAEP Standards. [Caepnet.org](https://caepnet.org/standards/2022-ityp/introduction). <https://caepnet.org/standards/2022-ityp/introduction>
- Carver-Thomas, D., & Darling-Hammond, L. (2017, August 16). "Teacher Turnover: Why It Matters and What We Can Do about It." Learning Policy Institute. <https://learningpolicyinstitute.org/product/teacher-turnover-brief>
- Educate Texas. (2024). Case Study: Innovations in Teacher Preparation at Dallas College [Review of Case Study: Innovations in Teacher Preparation at Dallas College]. Educate Texas. [https://issuu.com/educatetexas0/docs/dallas\\_college](https://issuu.com/educatetexas0/docs/dallas_college)
- Espinoza, D., Saunders, R., Kini, T., & Darling-Hammond, L. (2018). Taking the Long View: State Efforts to Solve Teacher Shortages by Strengthening the Profession. Learning Policy Institute.
- Federal Student Aid. (2024). "Teacher Loan Forgiveness." Federal Student Aid. <https://studentaid.gov/manage-loans/forgiveness-cancellation/teacher>
- Flower, A., McKenna, J. W., & Haring, C. D. (2016). Behavior and classroom management: Are teacher preparation programs really preparing our teachers? *Preventing School Failure: Alternative Education for Children and Youth*, 61(2), 163–169. <https://doi.org/10.1080/1045988X.2016.1231109>
- Francies, C., Glover, S., & Jamieson, C. (2021). Enhancing Teacher Preparation through Clinical Experience. [Policy Brief]. Education Commission of the States. <https://files.eric.ed.gov/fulltext/ED615164.pdf>
- Garcia, A. (n.d.). *A Starter Guide to Grow Your Own Educator Programs*. Retrieved from [https://d1y8sb8igg2f8e.cloudfront.net/documents/GYO\\_A\\_Starter\\_Guide\\_to\\_Programs-FINAL.pdf](https://d1y8sb8igg2f8e.cloudfront.net/documents/GYO_A_Starter_Guide_to_Programs-FINAL.pdf)
- Georgia Department of Education. (2024). "Educator Pipeline – Teachers." [georgiainsights.gadoe.org](https://georgiainsights.gadoe.org). <https://georgiainsights.gadoe.org/Dashboards/Pages/EducatorPipeline-Teachers.aspx>
- Hanita, M., Bailey, J., Khanani N., Bocala, C., Zweig, J., & Bock, G. (2020). "Investigating the Relationship between Adherence to Connecticut's Teacher Education and Mentoring Program Requirements and Teacher Retention." Institute of Education Sciences. <https://files.eric.ed.gov/fulltext/ED607767.pdf>
- Illinois Student Assistance Commission. (2024, July 8). Illinois Teachers Loan Repayment Program. Illinois Student Assistance Commission. <https://www.isac.org/faas/other-programs/loan-repaymentforgiveness-programs/illinois-teachers-and-child-care-providers-loan-repayment-program/>
- Ingersoll, R. M. (2001). Teacher Turnover and Teacher Shortages: An Organizational Analysis. *American Educational Research Journal*, 38(3), 499–534.
- Integrated Postsecondary Education Data System. (2023). "IPEDS Data Center." [nces.ed.gov](https://nces.ed.gov/ipeds/datacenter/InstitutionList.aspx?goToReportId=5&sid=d1ee3533-d85c-4731-8205-35776356195b&rtid=5). Retrieved September 20, 2024, from <https://nces.ed.gov/ipeds/datacenter/InstitutionList.aspx?goToReportId=5&sid=d1ee3533-d85c-4731-8205-35776356195b&rtid=5>
- IRIS Center. (n.d.). What should teachers understand about effective classroom behavior management? <https://iris.peabody.vanderbilt.edu/module/beh1/cresource/q1/p02/#content>
- Javornik, Š., & Klemenčič Mirazchyski, E. (2023). Factors Contributing to School Effectiveness: A Systematic Literature Review. *European Journal of Investigation in Health, Psychology and Education*, 13(10), 2095–2111.
- Stronge, J. H. (2018). Qualities of effective teachers. ASCD. [https://files.ascd.org/staticfiles/ascd/pdf/siteASCD/publications/books/QualitiesOfEffectiveTeachers3rdEd\\_Stronge\\_0318.pdf](https://files.ascd.org/staticfiles/ascd/pdf/siteASCD/publications/books/QualitiesOfEffectiveTeachers3rdEd_Stronge_0318.pdf)
- Klem, A. M., & Connell, J. P. (2004). "Relationships Matter: Linking Teacher Support to Student Engagement and Achievement." *Journal of School Health*, 74, no. 7. [https://osse.dc.gov/sites/default/files/dc/sites/osse/page\\_content/attachments/Klem\\_and\\_Connell\\_2004\\_JOSH\\_article.pdf](https://osse.dc.gov/sites/default/files/dc/sites/osse/page_content/attachments/Klem_and_Connell_2004_JOSH_article.pdf)
- Learning Policy Institute. (2024, September 13). *What's the cost of teacher turnover?* Retrieved on September 25, 2024, from <https://learningpolicyinstitute.org/product/2024-whats-cost-teacher-turnover>
- Louisiana Department of Education. (2014). "Believe and Prepare." [Louisianabelieves.com](https://www.louisianabelieves.com). <https://www.louisianabelieves.com/teaching/believe-and-prepare>
- Louisiana Department of Education. (2014). "Louisiana Mentor Teachers." [Louisianabelieves.com](https://www.louisianabelieves.com). <https://www.louisianabelieves.com/teaching/louisiana-mentor-teachers>
- Mahler, B. (2019). *Grow Your Own Teachers: A Case Study of Strategies Used by Rural Texas Schools to Produce and Retain Qualified Teachers*. [Doctoral Dissertation, Texas Tech University]. TTU DSpace Repository. <https://ttu-ir.tdl.org/server/api/core/bitstreams/082038dc-8872-4b21-8519-e9eb7f3d1b74/content>
- Melnick, H. (2024, March 1). *How States Can Support Apprenticeship: The Case of Tennessee*. Learning Policy Institute. [https://learningpolicyinstitute.org/media/4203/download?inline&file=TN\\_Teacher\\_Apprenticeship\\_BRIEF.pdf](https://learningpolicyinstitute.org/media/4203/download?inline&file=TN_Teacher_Apprenticeship_BRIEF.pdf)
- Missouri Department of Elementary & Secondary Education. (2024). "Beginning Teacher Assistance Program." [Dese.mo.gov](https://dese.mo.gov). <https://dese.mo.gov/educator-quality/educator-development/emerging-level-I-BTAP>

- Missouri Department of Elementary & Secondary Education. (2024, April 1). "Career Ladder Program Guidance: School Year 2024–25." Dese.mo.gov. <https://dese.mo.gov/media/pdf/career-ladder-guidance-2024-25-final-revised-4124>
- Missouri Department of Elementary & Secondary Education. (2024). "DESE's Literacy Initiatives & Efforts." Dese.mo.gov. <https://dese.mo.gov/college-career-readiness/literacy>
- Missouri Department of Elementary & Secondary Education. (2024). Path Forward Project Accomplishments.
- Missouri Department of Elementary & Secondary Education. (2024). "Educator Vacancy May 2024." Dese.mo.gov. Retrieved September 20, 2024, from <https://dese.mo.gov/media/pdf/educator-vacancy-report-2024-1>
- Missouri Department of Elementary & Secondary Education. (2020). "MTDS Program Registration." Dese.mo.gov. Retrieved September 20, 2024, from <https://dese.mo.gov/educator-quality/educator-development/MTDS-program-registration>
- Missouri Department of Elementary & Secondary Education. (n.d.) "Missouri Standards for the Preparation of Educators (MoSPE)." Dese.mo.gov. <https://dese.mo.gov/educator-quality/educator-preparation/mo-standards-preparation-educators>
- Missouri Department of Elementary & Secondary Education. (2024). "Upgrading from Initial Certificate to Career Certificate." Dese.mo.gov. <https://dese.mo.gov/educator-quality/certification/upgrading-initial-certificate-career-certificate>
- Missouri Department of Elementary & Secondary Education. (2024). "Vacancy, Completer, and Placement Data."
- Missouri State University. (2024, July 24). "District Student Teaching Incentives." MissouriState.edu. <https://education.missouristate.edu/Advise/district-student-teaching-incentives.htm>
- Missouri State University. (2024, July 30). "Pathways for Paraprofessionals." MissouriState.edu. <https://education.missouristate.edu/SELPS/SpEd/pathways-for-paraprofessionals.htm>
- Missouri State University. (2024, April 24). "Student Teaching and Practicum." MissouriState.edu. <https://education.missouristate.edu/TLDS/MID/StudentTeaching.htm>
- Missouri State University. (2024, July 11). "Admission to Teacher Education." MissouriState.edu. <https://www.missouristate.edu/EPP/admission-to-teacher-education.htm>
- Missouri S&T University. (2021). "Teacher Education Advisement Worksheet: APPLIED MATHEMATICS, BS." Education.mst.edu. <https://education.mst.edu/media/academic/teachereducation/documents/editsmay2021/Math%20Advisement%20Worksheet%20DESE.pdf>
- Missouri Department of Higher Education and Workforce Development. (2024). Tuition and Fees. Dhewd.mo.gov. <https://dhewd.mo.gov/data/tuition-and-fees>
- Missouri Office of the Governor. (2024, May 8). Governor Parson Signs SB 727 and HB 2287 into Law, Increasing Missouri Teacher Pay. Governor.mo.gov. <https://governor.mo.gov/press-releases/archive/governor-parson-signs-sb-727-and-hb-2287-law-increasing-missouri-teacher-pay>
- Missouri Senate. (2024). SB1013: Establishes the Teacher Recruitment and Retention State Scholarship Program. Senate.mo.gov. [https://www.senate.mo.gov/24info/BTS\\_Web/Bill.aspx?SessionType=R&BillID=833](https://www.senate.mo.gov/24info/BTS_Web/Bill.aspx?SessionType=R&BillID=833)
- Missouri State Teachers Association. (2024). "2024 MSTA Member Survey." Msta.org. <https://msta.org/stories/2024-member-survey>
- National Assessment of Education Progress. (2022). Missouri State Profile. [https://www.nationsreportcard.gov/profiles/stateprofile/overview/MO?cti=P-gTab\\_OT&chort=2&sub=MAT&sj=MO&fs=Grade&st=MN&year=2022R3&sg=Gender:%20Male%20vs.%20Female&sgv=Difference&ts=Single%20Year&tss=2022R3&sfj=NP](https://www.nationsreportcard.gov/profiles/stateprofile/overview/MO?cti=P-gTab_OT&chort=2&sub=MAT&sj=MO&fs=Grade&st=MN&year=2022R3&sg=Gender:%20Male%20vs.%20Female&sgv=Difference&ts=Single%20Year&tss=2022R3&sfj=NP)
- O'Daniels, K., & Kerkhoff, S. (2024). "Reading Preparation in Initial Teacher Preparation Programs in Missouri." *Educator Preparation & Leadership Faculty Works*, 48. <https://irl.umsl.edu/epir/48/>
- Putman, Hannah. (2024, February 8). "Building a Strong Student Teaching Model: Districts and Teacher Prep Programs Share Successes and Challenges." National Council on Teacher Quality (NCTQ). <https://www.nctq.org/blog/Building-a-strong-student-teaching-model-Districts-and-teacher-prep-programs-share-successes-and-challenges>
- Rebora, A. (2023, August 31). To Address Teacher Shortages, Focus on School Leaders. ASCD. <https://ascd.org/blogs/to-address-teacher-shortages-focus-on-school-leaders>
- Casetext Inc. (2024). Section 5 CSR 20-400.370 - Missouri Career Development and Teacher Excellence Plan, Mo. Code Regs. tit. 5 § 20-400.370. Casetext.com. <https://casetext.com/regulation/missouri-administrative-code/title-5-department-of-elementary-and-secondary-education/division-20-division-of-learning-services/chapter-400-office-of-educator-quality/section-5-csr-20-400370-missouri-career-development-and-teacher-excellence-plan>
- Reddig, N., Milling, J., Rasmussen Foster, L., Standafer, E., Rice, O., & Stadd, J. (2024). *Profiles of Educator Registered Apprenticeship Programs*. U.S. Department of Labor. Retrieved on August 1, 2024, from <https://www.apprenticeship.gov/sites/default/files/Profiles%20of%20Educator%20Registered%20Apprenticeship%20Programs.pdf>
- Ronfeldt, M. (2021). Links Among Teacher Preparation, Retention, and Teaching Effectiveness. National Academy of Education Committee on Evaluating and Improving Teacher Preparation Programs. Retrieved on August 1, 2024, from <https://files.eric.ed.gov/fulltext/ED615304.pdf>
- TEACH.org. (2019). "PSA Overview – Teachers: Leaders Shaping Lives." <https://docs.google.com/document/d/1YnFatrVznZwJg6sjG0ucxbQ3dJYIBbzC68iCoTsp2I/edit>
- Teach For America. (2018). Rural School Leadership Academy. <https://www.teachforamerica.org/life-as-an-alum/alumni-resources/rural-school-leaders-academy>
- The Educator Academy. (2024, August 23). Teacher Residency: Our Teacher Residency. <https://educator-academy.org/teacher-residency/>
- The Hunt Institute. (2022). "Strengthening Teacher Recruitment and Retention in Missouri: Blue Ribbon Commission Report to the State Board of Education." [https://hunt-institute.org/wp-content/uploads/2022/12/MO\\_BlueRibbonReport\\_0.pdf](https://hunt-institute.org/wp-content/uploads/2022/12/MO_BlueRibbonReport_0.pdf)
- The University of Tennessee System. (n.d.). Tennessee Grow Your Own Center. <https://growyourown.tennessee.edu/>
- Valenzuela, A. (2017). *Grow Your Own Educator Programs: A Review of the Literature with an Emphasis on Equity-Based Approaches*. Equity Assistance Center Region II. <https://eric.ed.gov/?id=ED582731>
- Virginia Department of Education. (2024). "Become a Teacher." Become a Teacher. <https://becomeateacher.virginia.gov/>
- Virginia Department of Education. (2024). "Become a Teacher Campaign." <https://www.doe.virginia.gov/teaching-learning-assessment/teaching-in-virginia/turning-the-tide/become-a-teacher-campaign>
- Viviani, W., Brantlinger, A., & Grant, A. A. (2023). Teacher Preparedness and Retention. *Teacher Education Quarterly*, 50(3), 54-77.



## About Education First

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This report was authored by Hannah Bartlebaugh, Kelly Kovacic Duran, Jesse Friedman, Celena Siprajim and MeMee Winston. More information about Education First's work, including other research reports and resources on strengthening teacher pipelines, is available at [www.education-first.com](http://www.education-first.com).