



Written testimony of Teach Plus PA before the House Education Committee
Friday, May 2, 2024
West Chester University

Chair Schweyer, Chair Topper, and Members of the House Education Committee:

Thank you for the opportunity to provide testimony on the critical issue of stabilizing, expanding, and diversifying our educator pipeline and workforce. As you know, this is an issue that Teach Plus teacher leaders and staff have been working on for years, both through our Teaching Policy Fellowship and through the #PANeedsTeachers coalition that Teach Plus co-leads with the National Center on Education and the Economy.

This testimony is jointly submitted by:

- Teach Plus Pennsylvania Executive Director Laura Boyce
- Teach Plus Policy Fellow Dr. Jeffrey Lee, Lower Merion School District teacher
- Teach Plus Policy Fellow Stephanie Everhart, South Fayette School District teacher

While we can approach the topic of teacher preparation and pipeline from many angles, today we want to share with you:

- Updated data on the severity and distribution of teacher shortages across Pennsylvania
- Updates on implementation of recent policy wins related to the teacher workforce and recommendations for improved implementation
- Opportunities to remove barriers to becoming a teacher on the regulatory side through recommended changes to Chapter 354, the regulation governing teacher preparation
- Opportunities to strengthen the educator workforce this budget season by fully funding student teacher stipends and investing in grow-your-own programs.

Data on the Severity and Distribution of Teacher Shortages Across Pennsylvania

Thanks to new data from the Pennsylvania Department of Education, we now have a better picture of the state of our educator workforce across Pennsylvania, including the severity of teacher shortages, than we ever have before. The data and analysis below are excerpted from a #PANeedsTeachers report on the severity of teacher shortages across Pennsylvania at the statewide and county levels by Laura Boyce of Teach Plus and Dr. Ed Fuller of Penn State University, included as an appendix.

Below is a summary of data on the number of additional qualified teachers needed in Pennsylvania:

- Local education agencies across the commonwealth reported **2,156 teacher vacancies** as of October 2023, 384 of which were filled by long-term substitute teachers on an emergency permit.
- In addition to the long-term substitutes mentioned above, there were **6,323 teachers on an emergency permit** for the 2023-24 school year.
- When looking at the total number of teacher vacancies and teaching positions filled by an emergency-permitted teacher in Pennsylvania, we estimate that **an additional 8,500 qualified teachers would need to be hired just to fill vacancies and replace emergency-permitted teachers** to ensure every child in the commonwealth is taught by a fully-qualified, certified teacher.
- After taking into account the additional teachers who will be needed to replace teachers who are leaving the teaching profession each year, a conservative estimate suggests that **we need 15,000 additional teachers** to fill vacant positions, replace teachers on emergency permits, and replace teachers who left the teaching profession. This equates to more than two years of newly certified teachers in Pennsylvania.
- This also does not take into account the increased demand for teachers that would likely occur if districts receive potentially historic increases in state education funding in the wake of the school funding lawsuit and Basic Education Funding Commission. Such an infusion of money would likely cause demand for teachers to skyrocket further.

Below is a summary of data on teacher supply, as measured by teacher certification data:

- Since 2012, **the number of certified teachers produced by Pennsylvania’s education programs has fallen precipitously from 16,614 to 5,577 – a 66% decline.**
- When calculating the number of newly-certified teachers relative to teacher attrition, teacher supply is “very low” in the vast majority of school districts, including urban, rural, and suburban parts of the state. Overall, the supply of teachers in Pennsylvania is **woefully inadequate** compared to the demand for teachers. Prior to the shortage of teachers in Pennsylvania, there were at least 90 newly certified teachers for every 100 vacancies created by teacher attrition. In the past two years, for every 100 new vacancies created by teacher attrition, there were only 67 newly certified teachers.
- This lack of supply forces districts to rely on hiring underqualified teachers.

Below is a summary of data on teacher qualifications:

- While no single factor is entirely predictive of teacher effectiveness, the literature suggests that teachers with three or more years of experience, teachers who are teaching in their certification area, and teachers who are fully certified (as opposed to teaching on an emergency permit), are more effective than novice teachers, out-of-field teachers, and uncertified teachers.
- Overall, across the state of Pennsylvania, there were:
 - 16,433 novice teachers (less than four years of experience) in 2021-22, representing 12.1% of all teachers
 - 17,003 out-of-field teachers in 2021-22, representing 14.3% of all teachers
 - 6,323 teachers who were teaching with an emergency permit in 2022-23, representing 5.2% of all teachers
- The number and percentage of novice teachers, teachers assigned out-of-field, and teachers employed on an emergency permit have all increased in recent years, suggesting that **the qualifications and quality of Pennsylvania’s teacher workforce may be declining as shortages have forced more districts to rely on more inexperienced and underprepared teachers.**

Below is a summary of data on teacher diversity:

- A growing body of research has shown that teachers of color improve outcomes for all students, and particularly for students of color.
- Despite the known benefits of teachers of color, Pennsylvania faces an acute shortage of teachers of color, with an educator workforce that is much less diverse than the student population.
- Fewer than 7% of Pennsylvania teachers are people of color, compared to 38% of students who are people of color. In other words, **Pennsylvania’s student population is nearly six times as diverse as its teacher population.**

Below is a summary of data on teacher attrition:

- Across Pennsylvania, preliminary analyses estimate that **approximately 8,300 teachers – 6.6% of the teacher workforce – left the profession** between the 2022-23 and 2023-24 school year.
- This represents an improvement over the previous year, when 9,587 teachers – 7.7% of all teachers – left the workforce. However, it still represents substantially more teachers than the number of new, fully-certified teachers entering the profession annually.
- Teacher attrition varies significantly across the commonwealth and among teacher subgroups, with charter school teachers, teachers of color, and male teachers leaving the profession at higher rates than other subgroups. Attrition is also higher among teachers teaching in more economically disadvantaged schools and schools with higher percentages of teachers of color.

While the teacher shortage crisis is affecting the vast majority of districts due to its severity, it doesn’t affect them all equally. Below is a summary of data on the distribution of teacher shortages across Pennsylvania:

- The teacher shortage crisis is most severe in Philadelphia, where there is a high number of additional qualified teachers needed relative to the current workforce, a low teacher supply relative to attrition, relatively underqualified teachers, and the highest attrition rates in the state.
- The teacher shortage is experienced in districts that are urban, rural, and suburban, with southwestern Pennsylvania generally the least affected by the crisis. In general, the eastern half of the state is more affected by severe shortages than the western half, although this is not universally true.
- In general, districts serving higher percentages of students of color and districts serving higher percentages of economically disadvantaged students are experiencing more severe shortages.
- In general, districts with large adequacy gaps, as measured by the Basic Education Funding Commission, are experiencing more severe shortages.

For more detailed data on the severity of the teacher shortage crisis across Pennsylvania, see Appendix A.

Updates and Recommendations on Policy Implementation

Over the past two years, the General Assembly has passed several measures to expand and diversify the teacher workforce. Below are updates on the progress of each measure and recommendations to support strong implementation.

Teacher Workforce Data Collection

Updates to the school code in 2022 and 2023 filled critical gaps in the state's collection of data related to the educator workforce. Section 1508-K of Act 55 of 2022 called for the annual publication of the following data points:

- (1) Demographics of individuals enrolled in teacher preparation programs and the demographics of individuals who completed a teacher preparation program in this Commonwealth.
- (2) Demographic data relating to pass rates of educator certification test takers.
- (3) Demographic data relating to teaching certificates issued by the department.
- (4) Demographic data relating to new teacher applicants and hires at each school entity by school entity, school district and State level.
- (5) Demographic data relating to annual teacher retention rates by school entity and State level.
- (6) Demographics of individuals enrolled in a superintendent or principal certification program.
- (7) Demographics of individuals who have completed a superintendent or principal certification program.
- (8) The current school year's professional employees, temporary professional employees serving as classroom teachers, principals and nonteaching professional employees as delineated by school entity and State level.
- (9) Other data relating to demographics of the education workforce, if available and already collected by the school entity, as requested by the department.

As of April 2024, most of this data is not currently accessible on the department's website as required. In some cases, there is still new data collection that needs to be initiated to allow for the publication of this data, and in some cases (such as retention data), additional analysis is needed. Teach Plus been working closely with the department to support the timely public release of this data, including by leading the data subcommittee of the Committee on Education Talent Recruitment, and have seen good progress in the past few months; however, there is still much work to be done to make this data available and accessible as required by law.

Section 131 of Act 35 of 2023 requires the department to collect and publish instructional vacancy data for the first time. The department has released the first batch of this data, which was used to calculate some of the figures shared earlier in this testimony. This data is critical and will be invaluable in targeting policy solutions and resources toward the schools and subjects with the most need in the future.

Section 132 of Act 35 of 2023 requires the department, to the extent funding is made available, to create data dashboards that would allow the public and policymakers to access and manipulate data on educator supply and demand, educator preparation program outcomes, and educator retention. It also requires the department to work with L&I to produce an annual report on the educator workforce. These additional data elements are critically important, and it is important that the General Assembly provides ongoing, dedicated funding to the department to ensure there is the capacity and technical expertise needed to comply with these requirements.

Public Job Posting Database

Section 130 of Act 35 of 2023 requires the department to establish and maintain a public job posting database for schools to voluntarily advertise vacancies in an effort to support recruitment and gather data. The department is allowed to contract with a third-party vendor to operate the database. This database has not yet been created.

As the department works to implement this requirement, we recommend that the agency consider partnering with TEACH (not affiliated with Teach Plus), a national non-profit organization founded by the U.S. Department of Education. TEACH has supported several states in developing sustainable teacher talent pipelines through a holistic, research-based recruitment system that involves identification, cultivation, and support of prospective teachers. One component of this system is a job portal, but the system also includes:

- A statewide lead generation campaign, including TV and radio PSAs, social media and digital advertising, search engine optimization, and direct outreach
- A series of cultivation resources including inspirational messaging and multimedia, trial experiences with teaching, social reinforcement, and exposure to role models; these resources are tailored to overcome 10 research-identified hurdles to become teachers
- Support for prospective teachers, including live website support, 1:1 coaching, fee reimbursements, certification test passage resources, and job application resources

TEACH has demonstrated significant, cost-effective impact in addressing teacher shortages in states including North Carolina, Colorado, South Carolina, New York, and Connecticut. As the department considers marketing and recruitment efforts such as the job database, it would be wise to consider a more holistic approach that could yield much greater results in terms of significantly growing the pipeline of educators in Pennsylvania.

Student Teaching Stipends

Article XII-B of Act 33 of 2023 created a new student teacher stipend program, administered by PHEAA, which provides a \$10,000 stipend to student teachers who commit to teaching at least three years in Pennsylvania. Student teachers who teach in a high-need school, as designated by PDE, can receive an additional \$5,000, and cooperating teachers are eligible for a \$2,500 stipend. The program has received broad bipartisan support and was discussed in both the majority and minority reports of the Basic Education Funding Commission as an important step in addressing Pennsylvania's educator workforce challenges.

Teacher candidates who will student teach in fall 2024 or spring 2025 were eligible to apply starting April 11, 2024. Within the first 24 hours, 4,500 student teachers submitted applications, and applications continue to be submitted, with the current total well over 5,000. Unfortunately, the General Assembly only appropriated \$10 million in the 2023-24 state budget for this program, which PHEAA estimates is only enough to support 600-750 student teachers. Student teachers will receive funding on a first-come, first-served basis.

There are numerous problems and inequities that stem from a partially-funded student teacher stipend program. For example, in an instance where two teacher candidates are student teaching in the same school, one student teacher (along with their cooperating teacher) might receive the stipend while the other student teacher (along with their cooperating teacher) would not. Because the application launch date was announced less than 24 hours in advance, the first-come, first-served system privileges those teacher candidates who had the ability to be by their computer on very short notice, and disadvantages those with jobs, classes scheduled at that time, or family commitments. Furthermore, the program can only function as an incentive that will drive behavior by encouraging more students to pursue education as a major or career if it is fully funded and recurring; students are not going to change their behaviors so long as this program seems more like a lottery than a guarantee.

Fortunately, it's not too late for the General Assembly to fully fund the student teacher stipend program for the 2024-25 school year. **An appropriation of \$75 million in this year's state budget (more than the \$15 million proposed by Governor Shapiro) would allow every student teacher who has submitted an application to PHEAA to receive the funding next school year. We strongly encourage the legislature and governor to prioritize full funding of this program in this year's state budget.** \$75 million is a small price to pay to get 5,000 prospective teachers to commit to teach in Pennsylvania, and to begin to attract more future teachers to the profession.

Career and Technical Education Program of Study in General Education

Section 1504-K of Act 55, the 2022 school code, called for the Pennsylvania Department of Education (PDE), in partnership with a new Committee on Education Talent Recruitment created by the same code bill, to establish a CTE program of study in general education. This committee, which Teach Plus served on, completed the design of the program of study in spring 2023.

The 2023-24 school year was the first year in which Pennsylvania public school entities could apply for approval to offer this new CTE program of study in education, which has been designated by the department with the Classification of Instructional Programs (CIP) code 13.0101. Currently, 12 programs serving around 100 students across Pennsylvania have been approved, with 10-15 more programs at various stages of seeking approval. The window is currently open for school entities to apply for next school year.

As with all policy changes, strong and thoughtful implementation is critical. In order for the CTE program of study in education to achieve its intended outcome, the Pennsylvania Department of Education (PDE) will need to take an intentional approach to increasing the visibility, utilization, and effectiveness of the program so that more aspiring educators have access to this pathway and exit from it with a strong foundation to continue pursuing teaching as a career. With this in mind, the Expanding and Diversifying the Teacher Workforce working group of the Teach Plus Pennsylvania Policy Fellowship developed a set of recommendations for the department to guide their immediate implementation and expansion of the program in spring 2024 as well as into the future.

In preparing the recommendations, the fellows, who are all current public school educators in Pennsylvania, researched effective CTE education programs in other states, interviewed staff from newly-approved programs here in Pennsylvania, interviewed administrators and staff from educator preparation programs and K-12 school entities to identify potential barriers and opportunities, and examined best practices from successfully-implemented programs in the commonwealth.

Based on their research, our fellows offer the following recommendations:

1) Proactively market the program.

Many key stakeholders are unaware of the new CTE program of study or the application requirements. With the window for school entities to apply for program approval for the 2024-25 school year rapidly closing, we recommend that PDE build out a robust website to market the program, hold a series of webinars and information sessions (including co-hosting with partner statewide associations), develop a strategy for press and earned media, and develop additional collateral, which are further outlined in our brief.

2) Provide context for and address misconceptions about CTE.

We encountered many misconceptions about CTE – primarily, that CTE is an alternative “track” or pathway for students who do not plan to pursue postsecondary education rather than a potential option for college-bound students – that prevented educators from pursuing the education program of study within their school contexts. In our brief, we outline additional context and clarification that PDE should provide to stakeholders to dispel these misconceptions, as well as several specific myths to debunk in their marketing.

3) Provide related resources to make the CTE program of study in education more accessible.

We also recommend that PDE intentionally develop and share resources to support more school entities in starting and successfully completing the approval process, including sample and exemplar course scope and sequences, sample articulation agreements, and other program design documents. We also recommend that PDE share information with prospective applicants about the Educators Rising program and curriculum, which the Pennsylvania State Education Association (PSEA) has grant funding to offer for free to qualifying districts.

4) Broaden articulation agreements to ensure students earn portable college credits.

To maximize the value and portability of college credits earned through the education program of study, we recommend that PDE utilize its relationships with Pennsylvania institutions of higher education to support the development and broadening of articulation agreements for college credits related to the education program of study. As a long-term goal, the department should work to ensure that all PASSHE universities and public community colleges agree to grant a certain number of credits for completers of the general education program of study.

5) Dedicate funding to support the costs of launching local CTE programs in education.

PDE should ensure prospective applicants are aware of existing potential funding sources for the program, such as Perkins funds and state PDE dollars. In addition to opportunities to access public dollars, the department should also publicize other funding opportunities, such as the grant through PSEA to support districts in purchasing curricula that can be used in programs. The department should also proactively

identify dedicated funding streams to support the launch of new CTE programs of study in K-12 education, for example, by earmarking a portion of dual enrollment, CTE, apprenticeship, pre-apprenticeship, or other grants specifically for approved CIP 13.0101 programs of study and their partner institutions of higher education. Additionally, the \$10 million proposed by Governor Shapiro for Education Talent Recruitment in this year's state budget could be used to support expansion of these programs, and the department should also work with the Department of Labor & Industry (L&I) to identify ways to dedicate or access workforce development dollars to support this program of study, possibly in conjunction with pre-apprenticeship and apprenticeship programs.

For more detail on our implementation recommendations for the CTE program of study in education, see Appendix B.

Opportunities to Improve Teacher Preparation Through Chapter 354 Updates

While we support legislation and budget appropriations to address teacher shortages, we also recognize that there may be regulatory approaches to expanding and diversifying the teacher pipeline as well. In 2022, the State Board of Education finalized updates to Chapter 49, the regulation governing teacher certification, and at that time called for Chapter 354, the regulation governing teacher preparation to also be reopened for updates. We understand that PDE is currently gathering stakeholder input and working on proposed changes to Chapter 354. Fellows from Teach Plus PA's Reimagining Teacher Preparation working group prepared a policy memo with recommended changes to Chapter 354 to remove unnecessary and non-evidence-based barriers to entry into the teaching profession, while increasing the rigor of more evidence-based components of teacher preparation.

The working group's primary recommendations include:

1. **Revise teacher candidate GPA requirements to 1) eliminate the GPA requirement for entry into teacher preparation programs and 2) replace the individual GPA requirement for professional competency (currently 3.0) with a cohort-based GPA requirement of 3.0.** The working group found that the entry GPA requirement is redundant with the exit GPA requirement, not supported by evidence as a predictor of teacher effectiveness, and disproportionately likely to exclude prospective teacher candidates of color. There are still multiple other requirements teacher candidates must meet to demonstrate academic readiness and content knowledge prior to becoming certified, and stringent GPA requirements have been found to perversely drive prospective teachers, particularly teachers of color, into alternative programs or into teaching on an emergency permit, which sets them up for failure. In creating a cohort-based GPA exit requirement of 3.0, programs preserve high standards while being able to retain students who show promise in areas beyond scores and grades.
2. **Expand candidates' full-time student teaching experience from 12 weeks to a full school year of classroom experience.** High-quality and extended student teaching is the component of teacher preparation that is most predictive of future effectiveness and retention. By following the lead of Louisiana and making student teaching a full-year, paid residency experience, Pennsylvania can significantly increase the effectiveness of its teacher preparation programs in preparing diverse candidates to succeed and stay in the classroom.
3. **Revise Section 354.32 (Monitoring and Assessment) of Chapter 354 and the department-created Pennsylvania Statewide Evaluation of Educator Candidates (PDE-430) form to incorporate Culturally Relevant and Sustaining Education (CR-SE).** Chapter 49 was recently amended to require future and current teachers be trained in CR-SE. The CR-SE competencies in Pennsylvania help to ensure equity for all students by seeking to eliminate systemic institutional racial and cultural barriers. As Pennsylvania already mandates that EPPs must include CR-SE competencies in their training of teachers, the evaluation of teacher candidates through the PDE-430 form and the language of Chapter 354 should also incorporate these critical competencies.

For more detail on our recommended updates to Chapter 354, see Appendix C.

Opportunities to Strengthen the Educator Workforce This Budget Season

As discussed previously, the General Assembly has an opportunity in the 2024-25 state budget to **fully fund the student teacher stipend program at \$75 million** for the 2024-25 school year. This is \$60 million more than what Governor Shapiro proposed in his budget proposal, but there is already bipartisan support for full funding, particularly given the overwhelming demand for stipends in the first 24 hours. Full and recurring funding is necessary for the program to have

the intended impact of alleviating financial barriers that deter prospective teachers from entering the profession and incentivizing the next generation of Pennsylvania teachers to pursue education.

Additionally, Governor Shapiro has proposed \$10 million for the Educator Talent Recruitment Account, created by Act 55 of 2022 but never previously funded, to support grow-your-own programs. Grow-your-own programs, which create affordable pathways into teaching for high school students, paraprofessionals, and community members, are a critical tool to solve the teacher shortage crisis and diversify the educator workforce. CTE programs of study in education, discussed previously, are one kind of grow-your-own pathway that could benefit from this additional funding. Support for this **\$10 million for grow-your-own programs** is essential as we work to leverage local talent and rebuild our educator pipeline from the ground up.

Conclusion

Thank you for the opportunity to testify on this critically important topic. As you can see, there is a great deal of policy progress and implementation work that has taken place or is currently underway, but the data also tell us that we can't let up on our collective efforts to address this crisis. We appreciate this committee's leadership in addressing this crisis head-on in recent years, and look forward to continuing to work together to build a stable, strong, diverse teacher workforce, which is the critical foundation of a thorough and efficient public education system for every child in Pennsylvania.

Attachments

- Appendix A - The Severity of the Teacher Shortage Crisis in Pennsylvania: A Statewide and County-Level Analysis
- Appendix B - Growing More of Our Own: Teach Plus Pennsylvania Recommendations to Increase the Visibility, Utilization, and Effectiveness of the Pennsylvania Department of Education's Career and Technical Education Program of Study in General Education
- Appendix C - Reimagining Teacher Preparation: Recommendations for Revising Chapter 354 of the Pennsylvania Code (Preparation of Professional Educators)



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THE SEVERITY OF THE

Teacher Shortage Crisis In Pennsylvania

**A STATEWIDE AND
COUNTY-LEVEL ANALYSIS**



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Introduction

Research is clear that a highly qualified, adequately staffed, and diverse teacher workforce is essential for any thriving educational system, workforce, and economy.¹ But Pennsylvania's teacher shortage has reached crisis levels and has been described as "the biggest threat facing not only our educational system but our future prosperity as a commonwealth."²

The supply of teachers has plummeted by two-thirds over the past decade, and the state now issues more emergency permits – granted to underprepared teachers when schools cannot find qualified teachers – than it issues regular teaching certificates to fully-qualified teachers.³ Teacher attrition also reached an all-time high recently,⁴ so our pipeline is leaking at both ends.

Thanks to new data from the Pennsylvania Department of Education, we now have a better picture of the state of our educator workforce across Pennsylvania, including the severity of teacher shortages, than we ever have before.

This report aims to provide a geographic picture of the supply of and demand for teachers across Pennsylvania, as well as other measures of the strength of our educator workforce. While the teacher shortage crisis is affecting the vast majority of districts due to its severity, it doesn't affect them all equally. So in addition to providing state-level data, we have focused on county-level data in order to provide policymakers, media, and the public at large a better understanding of the regional variations in educator staffing challenges. We hope this gives local leaders a better quantitative understanding of how their communities are being affected by educator staffing challenges, and the ripple effects these challenges may cause across their broader economies and workforces.

This study relies only on data for school districts. It does not include intermediate units, career and technical centers, and charter schools. Inclusion of charter schools would make many of the measures for urban areas, particularly teacher qualifications and attrition, even worse.

Shortage Level (Additional Qualified Teachers Needed)

For years, policymakers and concerned members of the public have asked, "How many more teachers do we need?" Unfortunately, Pennsylvania has not historically collected data on teacher vacancies, so quantifying the scale of Pennsylvania's teacher shortage crisis was difficult. While trends in the numbers of certifications issued, percentages of teachers on emergency permits, and numbers of teachers leaving the profession all suggested a worsening shortage, calculating a total number of additional qualified teachers needed in a given year, either statewide or in a particular region, proved elusive. This is why improving data collection was one of the key recommendations of [#PANeedsTeachers: Addressing Pennsylvania's Teacher Shortage Crisis Through Systemic Solutions](#).



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Fortunately, in response to our advocacy, Pennsylvania recently released [instructional vacancy data](#) for the first time. Altogether, local education agencies across the commonwealth reported **2,156 teacher vacancies** as of October 2023, 384 of which were filled by long-term substitute teachers on an emergency permit.⁵

In addition to vacant positions that remain unstaffed or covered by substitutes, Pennsylvania schools often turn to emergency-permitted teachers, who do not possess a teaching certificate in the subject to which they are assigned, when they cannot find qualified teachers. When calculating the number of additional qualified teachers needed, we include the number of positions being filled by an emergency-permitted teacher, since these positions are not currently filled by a well-prepared and certified teacher. Research tells us that teachers on emergency permits are less effective and much less likely to stay in the profession than those who have been prepared and certified.⁶ In addition to the long-term substitutes mentioned above, there were **6,323 teachers on an emergency permit** for the 2023-24 school year.⁷

When looking at the total number of teacher vacancies and teaching positions filled by an emergency-permitted teacher in Pennsylvania, we estimate that **an additional 8,500 qualified teachers would need to be hired just to fill vacancies and replace emergency-permitted teachers** to ensure every child in the commonwealth is taught by a fully-qualified, certified teacher.

This estimate, however, does not include the additional teachers who will be needed to replace teachers who are leaving the teaching profession each year – which was estimated to be about 9,500 in 2022-23 and about 8,300 in 2023-24. When we include teacher attrition, a conservative estimate suggests that **we need 15,000 additional teachers** to fill vacant positions, replace teachers on emergency permits, and replace teachers who left the teaching profession. This equates to more than two years of newly certified teachers in Pennsylvania.



PHOTO: GETTY IMAGES/ALAMY

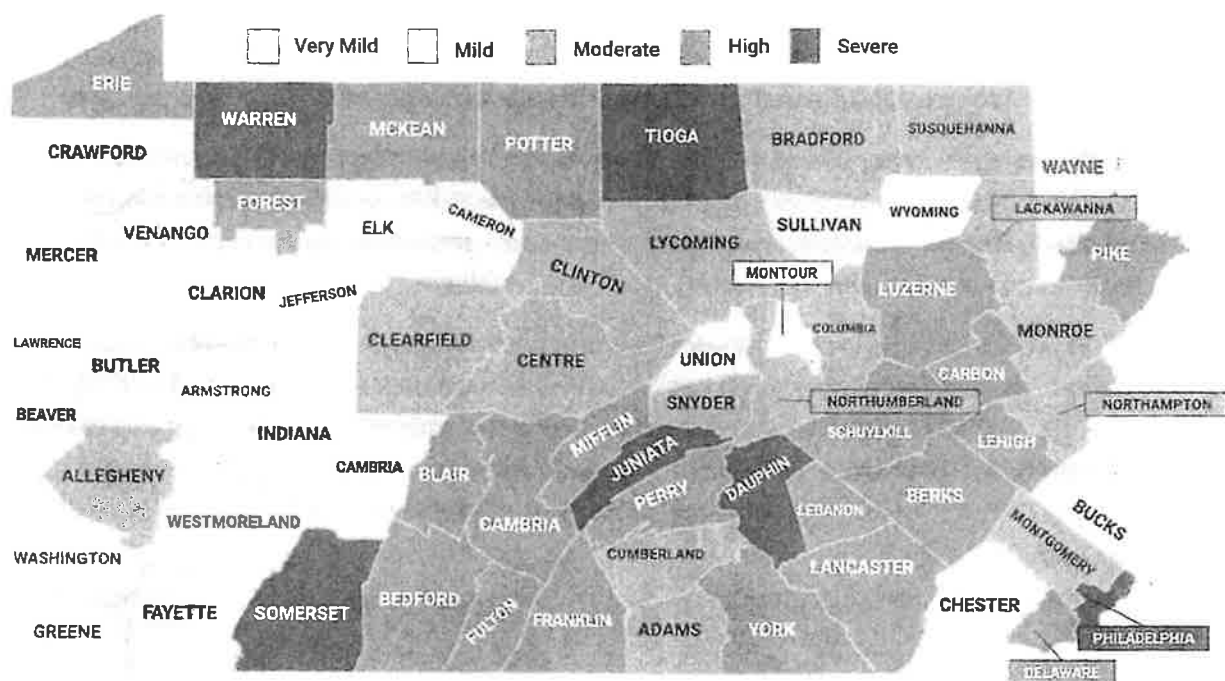


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Further, these estimates do not take into account the increased demand for qualified and certified teachers that would likely occur if districts receive potentially historic increases in state education funding in the wake of the school funding lawsuit and Basic Education Funding Commission. Such an infusion of money would likely cause demand for teachers to skyrocket further.

Figure 1 shows the “shortage level” of each Pennsylvania county, based on the number of additional qualified teachers needed relative to the number of current total teachers.⁸

Figure 1: Shortage Level (Additional Qualified Teachers Needed)



As shown in the figure, shortage levels are rated “severe” in 9% of all Pennsylvania counties: Dauphin, Juniata, Philadelphia, Somerset, Tioga, and Warren. Shortage levels are “high” in 21 counties, representing 31% of all counties. Shortage levels are “moderate” in 24% of counties, “mild” in 31% of counties, and “very mild” in 6% of counties. While counties with more severe shortages of qualified teachers vary in density and geography, shortage levels are generally more severe in much of southeastern Pennsylvania, more moderate in much of northeastern Pennsylvania, and milder in western Pennsylvania.



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Teacher Supply

In addition to understanding the number of additional qualified teachers needed across Pennsylvania – which can be considered an approximation of *demand* – policymakers and the public should have an understanding of the *supply* of certified teachers from the commonwealth’s educator preparation programs. Since 2012, **the number of certified teachers produced by Pennsylvania’s education programs has fallen precipitously from 16,614 to 5,577 – a 66% decline.**⁹

At the statewide level, the supply of teachers in Pennsylvania is **woefully inadequate** compared to the demand for teachers. Prior to the shortage of teachers in Pennsylvania, there were at least 90 newly certified teachers for every 100 vacancies created by teacher attrition. In the past two years, for every 100 new vacancies created by teacher attrition, there were only 67 newly certified teachers. In fact, at current levels of certification, it would take more than two years to certify enough teachers to fill all the vacancies, replace all the teachers on emergency permits, and replace all the new vacancies created by teachers quitting the profession. Thus, districts must rely on hiring former teachers, filling positions with teachers on an emergency certificate, or leaving positions vacant.

How does teacher supply vary across Pennsylvania? To compare teacher supply, we measured the number of individuals obtaining Level I certification from in-state teacher preparation programs within each county in 2023,¹⁰ and divided that by the number of teachers leaving the profession in each county in 2023.¹¹ In other words, this is the number of newly-certified teachers relative to the number of vacant positions created by teacher attrition. We then created a “supply level” scale based on this percentage.¹²



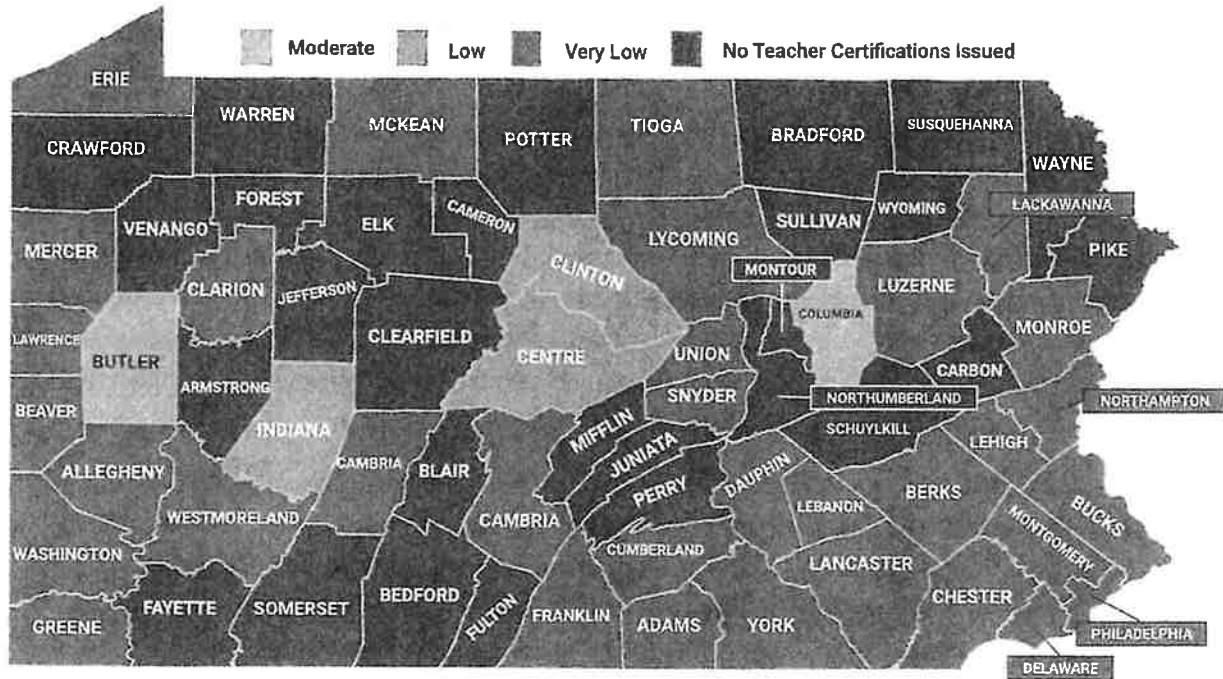
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Figure 2 shows the supply level of each county in Pennsylvania.

Figure 2: Teacher Supply Level



As shown in the figure, 28 counties, or 42%, do not have any local supply of teachers because there is no teacher preparation program located in the county. This is important because research has consistently found that graduates from teacher preparation programs are highly likely to either teach very close to where they attended college or to return to where their family lives. Not having a teacher preparation program in the county often makes recruiting new teachers more difficult for school districts located in such counties. These counties are generally in more rural parts of the northwestern, northeastern, central, and south central parts of the commonwealth.

The supply of teachers was ranked “very low” in 54% of counties. Indeed, of the 38 counties with a teacher preparation program, only three (Clinton, Centre, and Indiana) had a teacher supply ranked “low,” and only Columbia and Butler counties had a teacher supply of “moderate.” **97% of Pennsylvania counties have a teacher supply of “low” or worse.** Importantly, the entire southeast portion of Pennsylvania – where the population is growing overall and also for K-12 students – has counties with a “very low” teacher supply. This suggests that many districts in this area of the commonwealth will continue to have difficulty addressing the shortage of teachers.

Teacher Qualifications

Research is clear that teacher quality is the most important in-school factor affecting student achievement,¹³ and it has also been linked to longer-term outcomes including graduation rates, college attendance rates, and future earnings.¹⁴ While no single factor is entirely predictive of teacher effectiveness, the literature suggests that teachers with three or more years of experience, teachers who are teaching in their certification area, and teachers who are fully certified (as opposed to teaching on an emergency permit), are more effective than novice teachers,¹⁵ out-of-field teachers,¹⁶ and uncertified teachers.¹⁷

Overall, across the state of Pennsylvania, there were:

- 16,433 novice teachers (less than four years of experience) in 2021-22, representing 12.1% of all teachers
- 17,003 out-of-field teachers in 2021-22, representing 14.3% of all teachers
- 6,323 teachers who were teaching with an emergency permit in 2022-23, representing 5.2% of all teachers

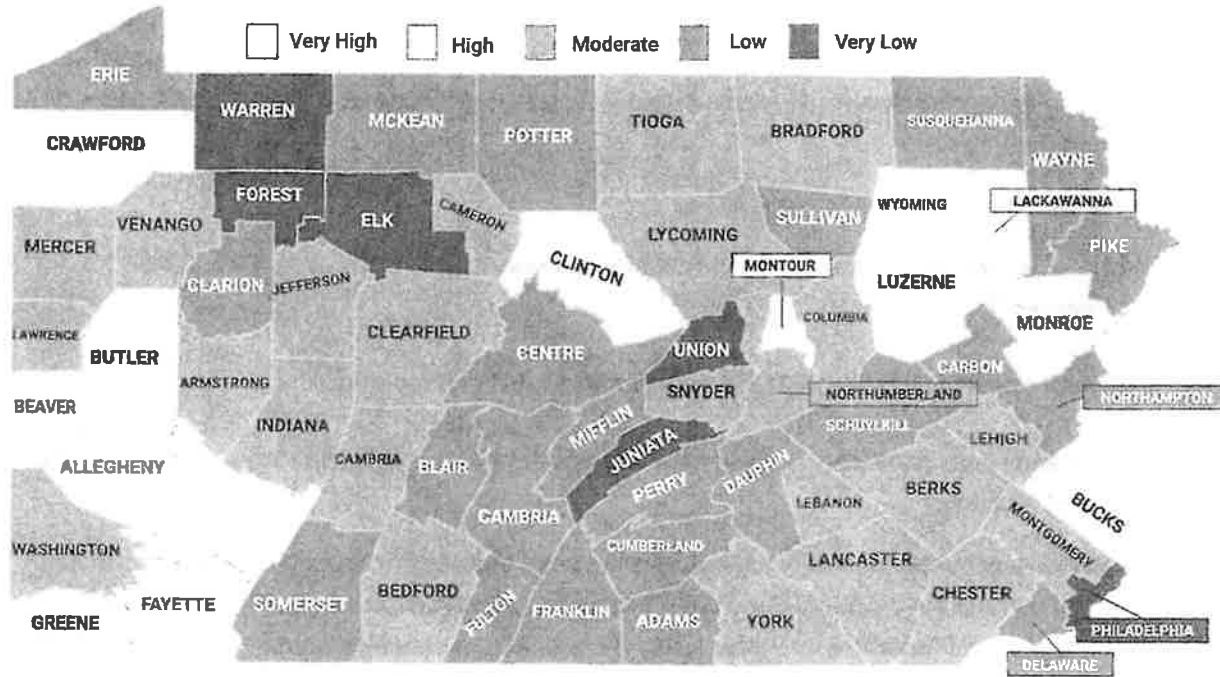
The number and percentage of novice teachers, teachers assigned out-of-field, and teachers employed on an emergency permit have all increased in recent years, suggesting that **the qualifications and quality of Pennsylvania's teacher workforce may be declining as shortages have forced more districts to rely on more inexperienced and underprepared teachers.** However, the number and percentage of novice teachers and teachers on an emergency permit vary significantly from district to district, with wealthier and higher-paying districts often being less reliant on such teachers.¹⁸

How do teacher qualifications vary across Pennsylvania? To create a single measure of teacher qualifications, we used state-published data on the percentages of novice teachers,¹⁹ out-of-field teachers,²⁰ and uncertified, emergency-permitted teachers²¹ for each district. We then combined these three data points into a single "teacher qualification rating" for each district.²²



Figure 3 shows the teacher qualification rating for each Pennsylvania county.

Figure 3: Teacher Qualifications Level



As shown in the figure, teacher qualifications are “very low” in 9% of all Pennsylvania counties: Elk, Forest, Juniata, Philadelphia, Union, and Warren. With the exception of Philadelphia, these counties are rural counties in the central or northwestern parts of the commonwealth. Qualifications are “low” in 34% of counties, which are primarily rural counties in south central, central, northeastern, and northwestern Pennsylvania. Qualifications are “moderate” in 36% of counties, primarily in western, north central, and southeastern Pennsylvania. Finally, teacher qualifications are “high” or “very high” in 21% of counties, primarily in northeastern and western Pennsylvania.

The qualifications and quality of Pennsylvania’s teacher workforce may be declining as shortages have forced more districts to rely on more inexperienced and underprepared teachers



Teacher Diversity

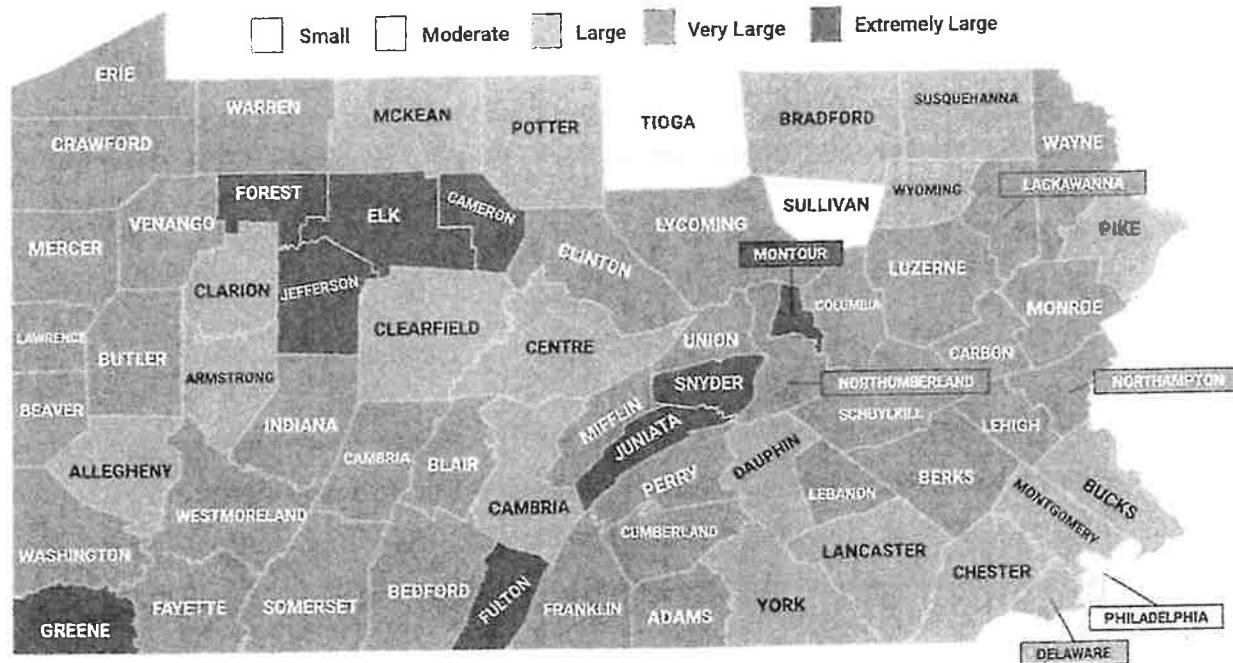
A growing body of research has shown that teachers of color improve outcomes for all students, and particularly for students of color. Students of color reap substantial academic benefits from having even one teacher of color, and also experience improved attendance, engagement, and disciplinary outcomes. More recent work has also found that white students experience academic and non-academic benefits from being taught by teachers of color.²³

Despite the known benefits of teachers of color, Pennsylvania faces an acute shortage of teachers of color, with an educator workforce that is much less diverse than the student population. Fewer than 7% of Pennsylvania teachers are people of color, compared to 38% of students who are people of color.²⁴ In other words, **Pennsylvania's student population is nearly six times as diverse as its teacher population.**

While the diversity of both the student population and the teacher workforce varies across Pennsylvania, we can measure how close the teacher population comes to parity with the student population by calculating a parity ratio. We then used each county's parity ratio to assign a disparity level.²⁵

Figure 4 shows each county's disparity level.

Figure 4: Disparity of Student/Teacher Demographics



As shown above, not a single county had parity in teacher and student diversity. Only one county, Sullivan – which has very low percentages of both students of color and teachers of color – has a “small” disparity level. Philadelphia and Tioga counties were the only two counties with a “moderate” level of disparity. 28% of counties have a “large” disparity, 54% have a “very large” disparity, and 13% of counties have an “extremely large” disparity. The counties with extreme disparities are generally rural counties with 5-15% students of color compared to under 1% teachers of color.

Teacher Attrition

While declining teacher supply can contribute to teacher shortages, teacher attrition also plays a major role in exacerbating the need for additional teachers. Research consistently shows that teacher turnover has a negative effect on student outcomes,²⁶ school climate²⁷, and teacher quality.²⁸ Teacher attrition often results in inexperienced or under-qualified teachers being hired. The churn also disrupts or prevents the formation of strong relationships among adults at the school and between teachers and students, which are necessary for a well-functioning school. Further, teacher attrition is financially costly to districts because of the direct costs associated with finding replacement teachers and the indirect costs of lower student outcomes.²⁹

Across Pennsylvania, preliminary analyses estimate that **approximately 8,300 teachers – 6.6% of the teacher workforce – left the profession** between the 2022-23 and 2023-24 school year.³⁰ This represents an improvement over the previous year, when 9,587 teachers – 7.7% of all teachers – left the workforce. However, it still represents substantially more teachers than the number of new, fully-certified teachers entering the profession annually.

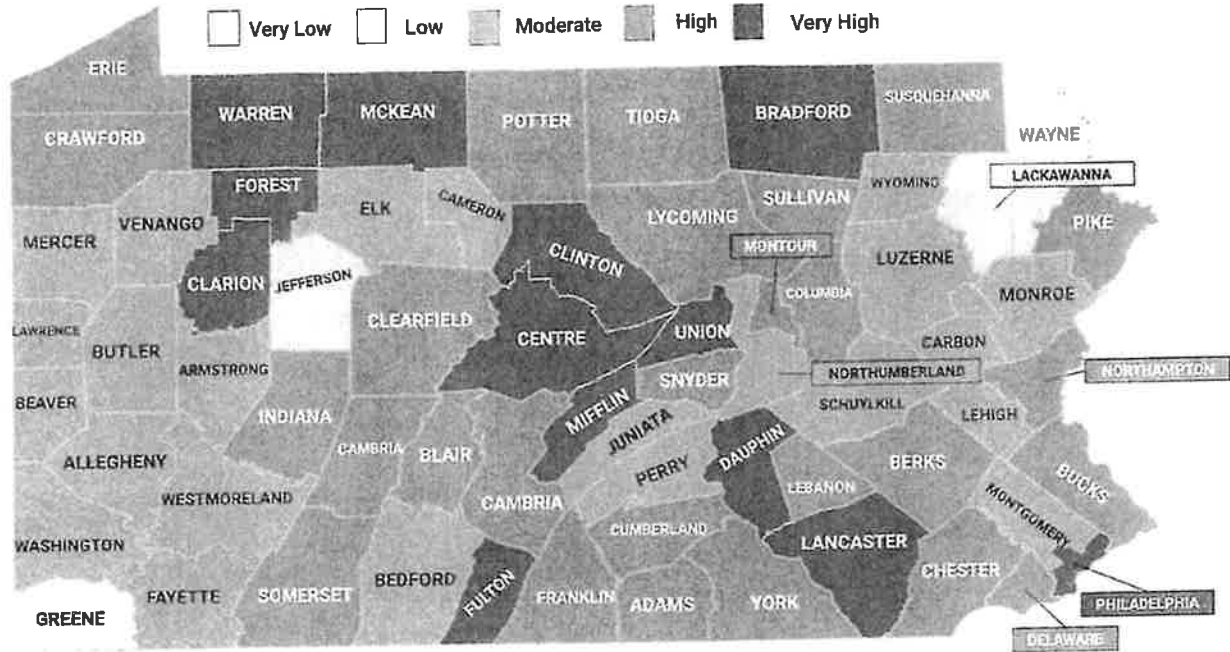
Teacher attrition varies significantly across the commonwealth and among teacher subgroups, with charter school teachers, teachers of color, and male teachers leaving the profession at higher rates than other subgroups. Attrition is also higher among teachers teaching in more economically disadvantaged schools and schools with higher percentages of teachers of color.³¹

*Pennsylvania’s student population is nearly six times as diverse
as its teacher population.*



Figure 5 shows how teacher attrition varies across the commonwealth by county.³²

Figure 5: Teacher Attrition Level



As shown in the figure, attrition is “very high” in 19% of counties. Forest County had the highest attrition rate, 21%, followed by Warren (17%), Philadelphia (14%), and Clinton (13%). With the exception of Dauphin, Lancaster, and Philadelphia counties, all of the counties with “very high” attrition are more rural counties in the central part of the state. Attrition is “high” in 40% of counties, which are scattered throughout southeastern, northeastern, central, and northwestern Pennsylvania. Attrition is “moderate” in 34% of counties, primarily in eastern, central, and western Pennsylvania. Attrition is “low” or “very low” in only 5% of counties: Greene (2%), Wayne (4%), and Lackawanna (5%).

Approximately 8,300 teachers – 6.6% of the teacher workforce – left the profession between the 2022-23 and 2023-24 school year.

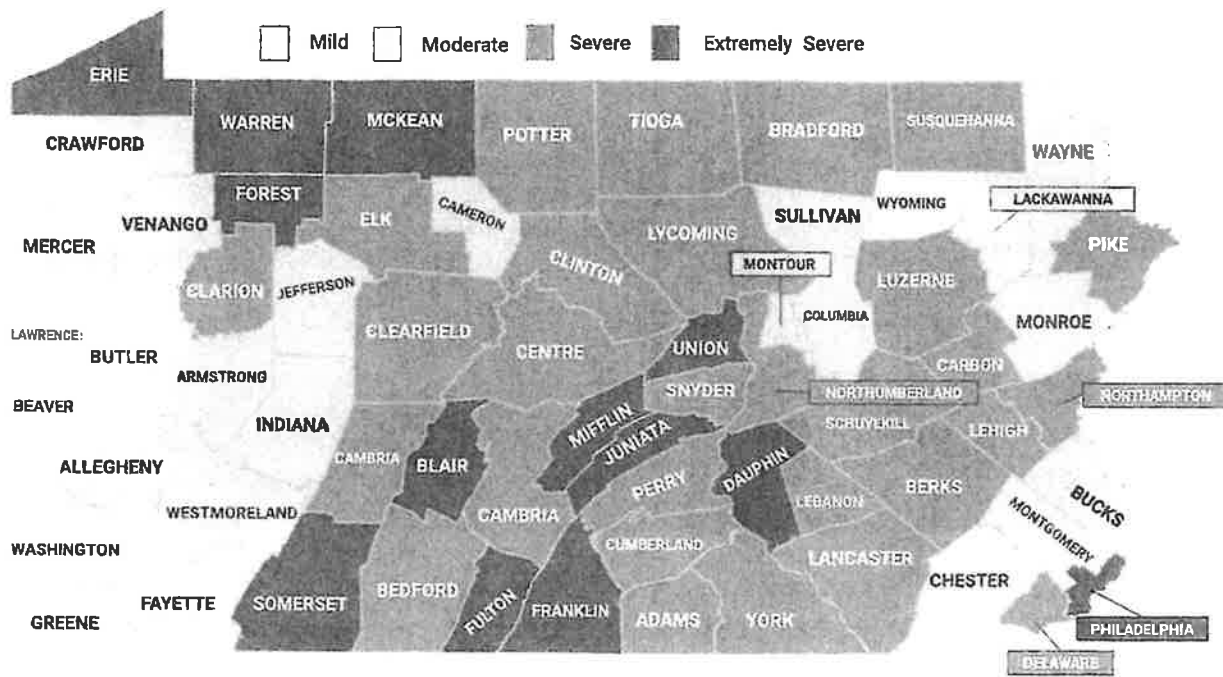


#PANeedsTeachers

Overall teacher shortage rating

All of the previous measures of the strength of the educator workforce in each county were combined into a composite metric to evaluate the overall severity of the teacher shortage crisis in that county. The map of overall teacher shortage ratings is shown in Figure 6.

Figure 6: Overall Teacher Shortage Rating



On the whole, the teacher shortage is “extremely severe” in 19% of Pennsylvania counties. These counties include Philadelphia in southeastern Pennsylvania; Mifflin, Dauphin, Juniata, and Union in central Pennsylvania; Warren, Forest, and McKean in northern Pennsylvania; Erie in northwestern Pennsylvania; and Somerset, Blair, Fulton, and Franklin in south central Pennsylvania. The overall shortage is “severe” in 43% of counties, which are primarily located in southeastern, central, eastern, northeastern, and south central Pennsylvania. The shortage is “moderate” in 34% of Pennsylvania counties, primarily on the western side of the state. Finally, the teacher shortage is relatively “mild” (though not nonexistent) in only two counties in Pennsylvania: Butler and Wyoming.



PA Needs Teachers

Conclusion

Overall, although there are some signs that teacher supply is rebounding slightly and teacher attrition is improving somewhat, the teacher shortage crisis is still a serious threat to the local education system, economy, and workforce in most parts of Pennsylvania. The shortage is at least “moderate” in 97% of all Pennsylvania counties, and it is “severe” or “extremely severe” in 63% – over half – of all districts. Of course, the data also reveal that shortages are most severe in school districts and schools serving large numbers of our most vulnerable students – students of color and economically disadvantaged students.

Across the commonwealth, teacher supply, as measured by newly issued certifications, is failing to keep pace with teacher attrition and demand for new teachers. Additionally, the teacher workforce is not reflective of the diversity of the student population, and a shortage of qualified, experienced teachers has led to an overreliance on less-effective novice, out-of-field, and emergency-certified teachers. If unaddressed, this shortage of well-prepared, highly-qualified, and diverse teachers threatens the long-term economic prosperity of communities across Pennsylvania, particularly those that have been historically underserved.

In order to address these challenges, the #PANeedsTeachers campaign recommends the following steps:

1. In order to reduce the cost of becoming a teacher and make the profession more attractive, **fully fund the student teacher stipend program at \$75 million per year as a recurring appropriation in the state budget.** The program was partially funded at \$10 million in 2023-24, and Governor Shapiro has proposed a \$5 million increase for 2024-25, but full funding is necessary to create the certainty and predictability needed to influence behavior of prospective student teachers.
2. **Appropriate \$10 million for funding for grow-your-own programs and teacher apprenticeships,** as proposed by Governor Shapiro. These programs will create pathways for more high school students, paraprofessionals, and community members from local communities to become teachers, serving to increase the supply and diversity of the educator workforce.



ENDNOTES

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2. Ibid.
3. Fuller, E.J. (2024, April). Turning the Corner? Examining the Increase in the Number of Initially Certified Teachers in Pennsylvania. University Park, PA. Center for Education Evaluation and Policy Analysis; College of Education; Penn State University.
4. Fuller, E.J. (2023, May). Exacerbating the Shortage of Teachers: Rising Teacher Attrition in Pennsylvania from 2014 to 2023. University Park, PA. Center for Education Evaluation and Policy Analysis.
5. This number reflects all vacant positions, whether they are filled by a long-term substitute, filled by a short-term substitute, or not staffed. This does not include positions filled by a teacher on an emergency permit. Data source: PDE educator vacancy data file (2024) based on PIMS data from 2023.
6. Clotfelter, Ladd, & Vigdor (2010). Teacher Credentials and Student Achievement in High School. *Journal of Human Resources* Jul 2010, 45 (3) 655-681.
7. Data sources: PDE emergency permit data file (2024).
8. A shortage percentage for each county was calculated by dividing the number of additional qualified teachers needed by the number of current total teachers and multiplying by 100. Shortage Level Scale: Mild = 0.0-2.9%; Moderate = 3.0-4.9%; High = 5.0-9.9%; Severe = 10.0% or higher.
9. Data source: Act 82 Report from PDE (2024).
10. Data source: Act 82 Report from PDE (2024) and analysis of teacher employment data from PDE by Dr. Ed Fuller.
11. Based on an analysis of PDE employment files from 2021-22 and 2022-23 by Dr. Ed Fuller.
12. A supply percentage for each county was calculated by dividing the number of initial Level I certifications in 2023 by the number of teachers leaving the profession in 2023. Supply Level Scale: Very Low = 0.0-2.9%; Low = 3.0-5.9%; Moderate = 6.0-14.9%; High = 15.0-39.9%; Very High = 40.0% or higher.
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18. Fuller, E.J. (2023, Oct). Consequences of the Inequitable School Finance System in Pennsylvania. University Park, PA. Center for Education Evaluation and Policy Analysis.
19. Percentage calculated by dividing the number of novice teachers (source: PDE educator employment file, 2023) by the number of total teachers (source: PDE ESSA report for 2021-22) and multiplying by 100. "Novice" is defined as having three or fewer years of teaching experience.



#PANeedsTeachers

20. Percentage calculated by dividing the number of teachers assigned out-of-field by the number of total teachers (source for both data points: PDE ESSA report for 2021-22) and multiplying by 100. An "out-of-field" teacher is a certified teacher with an assignment that does not match their certification area.
21. Percentage calculated by dividing the number of teachers teaching with an emergency permit by the total number of teacher FTEs in 2023 (source for both data points: PDE educator emergency permit data file, 2024).
22. Because the research on the relationship between novice teachers and student achievement is strong, the research on the relationship between teachers on an emergency permit and student achievement is not as strong, and the research on the relationship between out-of-field teachers and student achievement is mixed. Dr. Fuller created a teacher qualifications index with the following methodology: $2 * [\text{percentage of novice teachers}] + 1.5 * [\text{percentage of teachers on emergency permits}] + [\text{percentage of teachers assigned out-of-field}]$. Based on this index, districts were placed in groups based on the following criteria: Very High = 0-25; High = 25-35; Moderate = 35-50; Low = 50-75; Very low = 75 or higher.
23. Carver-Thomas, D. (2018). [Diversifying the Teaching Profession: How to Recruit and Retain Teachers of Color](#).
24. Research for Action (2023). [Pennsylvania Educator Diversity Research](#).
25. The parity ratio was calculated by dividing the percentage of students of color within a district by the percentage of teachers of color within a district. This ratio was then used to calculate each district's disparity level: 0-1.5 = parity; 1.5-2.49 = small; 2.5- 3.9 = moderate; 4.0-9.9 = large; 10-100 = very large; greater than 100 = extremely large. Data sources: PDE Educator Employment file, 2023; NCES Elementary and Secondary Information System, 2023.
26. Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). [How teacher turnover harms student achievement](#). American Educational Research Journal, 50(1), 4-36. Carver-Thomas, D., & Darling-Hammond, L. (2019). [The trouble with teacher turnover: How teacher attrition affects students and schools](#). *Education Policy Analysis Archives*, 27(36).
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30. Unpublished analysis by Dr. Ed Fuller (April 2024) based on ___ data files. Forthcoming policy brief by Dr. Fuller using teacher employment data from PDE.
31. Fuller, E.J. (2023, May). [Exacerbating the Shortage of Teachers: Rising Teacher Attrition in Pennsylvania from 2014 to 2023](#). University Park, PA. Center for Education Evaluation and Policy Analysis.
32. Teacher attrition was calculated from the 2021-22 school year to the 2022-23 school year. Attrition is measured by percentage of teachers who were employed in the 2021-22 school year but who were no longer employed as a teacher in Pennsylvania in the 2022-23 school year. Data source: PDE Educator Employment files. Attrition levels were based on the following scale: 0-3.9% = Very Low; 4.0-4.9% = Low; 5.0-6.9% = Moderate; 7.0-8.9% = High; 9.0 or higher = Very High.



#PANeedsTeachers



#PANeedsTeachers
THE FUTURE CAN'T WAIT

#PANeedsTeachers is a statewide coalition of organizations and individuals dedicated to addressing Pennsylvania's teacher shortage crisis and building a stable, well-prepared, and diverse teacher workforce in order to provide students with an education that ensures their future success and the success of our commonwealth. #PANeedsTeachers is led by Teach Plus and The National Center on Education and the Economy.

A handwritten signature in black ink, appearing to be a woman's name, written over a horizontal line.

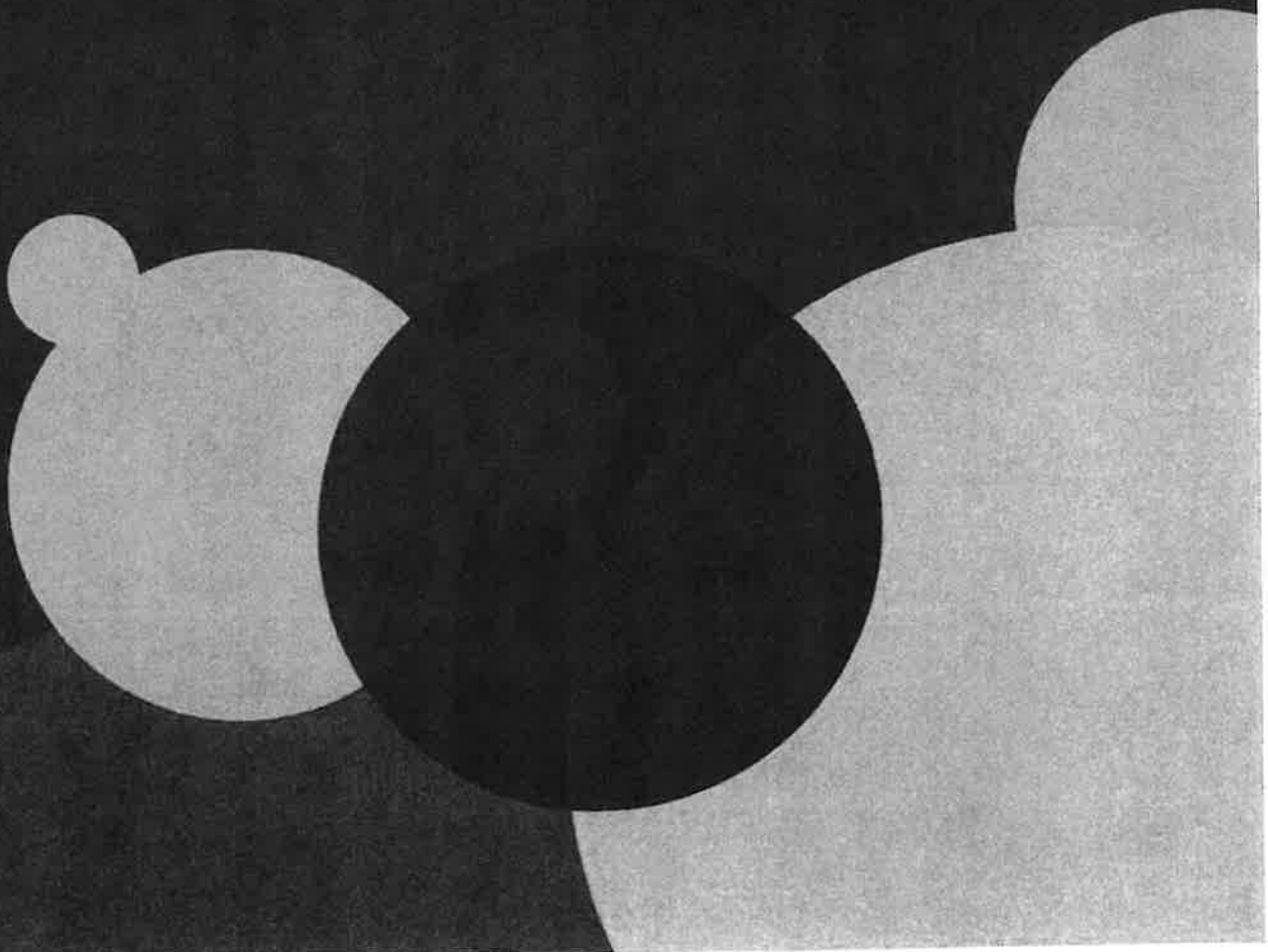
**TEACH
+PLUS**

Teach Plus empowers excellent, experienced, and diverse teachers to take leadership over key policy and practice issues that advance equity, opportunity, and student success.

GROWING MORE OF OUR OWN



Teach Plus Pennsylvania Recommendations to Increase the
Visibility, Utilization, and Effectiveness of the Pennsylvania
Department of Education's Career and Technical Education
Program of Study in General Education





A Policy Memo for the Pennsylvania Department of Education

Prepared by Teach Plus PA Policy Fellows in the Expanding and Diversifying the Educator Workforce Working Group:



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INTRODUCTION

Pennsylvania is currently grappling with a significant teacher shortage crisis, characterized by a staggering decline of over 70% in new Instructional I certifications over the past decade, alongside a climbing teacher attrition rate that recently reached an all-time high of 7.7%. In the 2022-2023 school year alone, 9,587 teachers left the profession, while only 5,101 new teachers received certification. By sheer numbers, this loss of educators is unsustainable.

Moreover, Pennsylvania continues to face an acute shortage of teachers of color, with under 7% teachers of color compared to 38% students of color. The lack of representation of male teachers of color is particularly troubling; they comprise less than 2% of Pennsylvania's teacher workforce, with Black males representing under 1% of Pennsylvania public school teachers. These challenges are compounded by systemic disparities within the teaching profession. Prevailing societal norms tend to steer white women towards teaching careers from an early age, while students of color often encounter limited encouragement until later educational stages, perpetuating the underrepresentation of teachers of color.

However, amidst these challenges lies an opportunity for transformative policy intervention. Grow-your-own pathways for high school students are a promising strategy, tailored to local needs, to both address teacher shortages and diversify the educator workforce by enabling districts to cultivate a diverse pool of future educators reflective of their communities.

In 2022, the Pennsylvania General Assembly established a new career and technical education (CTE) program of study in general (K-12) education, and in 2023, the Pennsylvania Department of Education's Committee for Education Talent Recruitment finalized the program design. The 2023-24 school year was the first year in which Pennsylvania public school entities could apply for approval to offer this new CTE program of study in education, which has been designated by the department with the Classification of Instructional Programs (CIP) code 13.0101. Currently, 13 school entities have applied for department approval.

As with all policy changes, strong and thoughtful implementation is critical. In order for the CTE program of study in education to achieve its intended outcome, the Pennsylvania Department of Education (PDE) will need to take an intentional approach to increasing the visibility, utilization, and effectiveness of the program so that more aspiring educators have access to this pathway and exit from it with a strong foundation to continue pursuing teaching as a career. With this in mind, the Expanding and Diversifying the Teacher Workforce working group of the Teach Plus Pennsylvania Policy Fellowship has developed a set of recommendations for the department to guide their immediate implementation and expansion of the program in spring 2024 as well as into the future.

We are a group of educators from across Pennsylvania, and in preparing these recommendations, we researched effective CTE education programs in other states, interviewed staff from newly approved programs here in Pennsylvania, interviewed administrators and staff from educator preparation programs and K-12 school entities to identify potential barriers and opportunities, and examined best practices from successfully implemented programs in the commonwealth.



Based on our research, we offer the following recommendations:

1. Proactively market the program.
2. Provide context for and address misconceptions about CTE.
3. Provide related resources to make the CTE program of study in education more accessible.
4. Broaden articulation agreements to ensure students earn portable college credits.
5. Dedicate funding to support the costs of launching local CTE programs in education.



RECOMMENDATIONS



1. Proactively market the program

As we interviewed key stakeholders across Pennsylvania to ask them what it would take for them to apply for approval to launch a CTE program in education in their setting, we found that many educators are unaware of this new grow-your-own pathway for high school students. With the end of the window for school entities to apply for program approval for the 2024-25 school year rapidly closing, it will be necessary for PDE to take an aggressive and multifaceted approach to marketing the program to key stakeholders to raise awareness of the program and the application process.

We recommend that the Chief Talent Officer, staff from the Bureau of Career and Technical Education, and staff from the Communications division of the department (potentially with the help of an outside firm) collaborate to develop a comprehensive marketing plan to promote the program of study. Possible elements of the marketing plan are included below.

Webpage

While the department does have a [dedicated webpage for CIP 13.0101](#), it currently only contains a link to the task grid. The webpage does not contain user-friendly information for potential program sponsors or students about what the education program of study is, what value it offers, how school entities can apply to offer the program, or other introductory information. When we have encountered individuals who want to learn more about how to bring the program to their school, we have not had a link to share with them that would contain answers to these questions and more. We recommend developing a simple but attractive webpage that includes:

- + A description of the education program of study in accessible, jargon-free language.

- + The value proposition for both schools and students in offering the program. This section may also include student and staff testimonials from schools offering the program.
 - Sample value proposition message: "Teaching is foundational to our society's success. Pennsylvania's new CTE program in K-12 education is a grow-your-own pathway to help high school students from your community become your future teachers. Through this program, students will gain hands-on experience to spark interest in teaching while earning college credit to save money and time in completing their teaching degree."
- + A concise description of the application process, including who can apply, what the steps are, what the timeline is, and where applicants can obtain additional support and resources (with appropriate links included).
- + A funding section about what sources of funding are available and how they can be accessed, including links to grants and other funding opportunities.
- + A curriculum section with information on curricular requirements, the program's task grid and assessment requirements, sample curricular materials, and additional external resources such as Educators Rising.
- + A list of school entities approved to offer the program.
- + A "Frequently Asked Questions" section clarifying misconceptions about the CTE program, the curricular requirements, and the next steps for students after the CTE program.
- + An "Additional Resources" section with resources such as one-pagers, recorded webinars, links to partner organizations, and contact information for the program of study lead staffer.

For an example of a compelling (though more student-facing) webpage, see [Delaware](#).

Webinars and Information Sessions

The department currently has a single webinar planned to market the education program of study for the 2024-25 school year. In order to ensure more stakeholders have opportunities to gain more information, additional webinars or information sessions should be scheduled, and these sessions should be marketed in many different ways beyond [PENN*LINK](#). Webinars should be offered at varying times, including late afternoon and evening times, in order to allow access for school staff who cannot attend during the school day.

In addition to department-sponsored sessions, the department should partner with key stakeholder groups to co-host information sessions for their members and share out additional resources. Below is a suggested list of key stakeholder groups that should be engaged as partners:

- + Pennsylvania Association of School Administrators (PASA) - this group holds periodic virtual lunch-and-learns, which could be a good venue for presenting
- + Pennsylvania Association of Rural and Small Schools (PARSS)
- + Pennsylvania Educator Diversity Consortium (PEDC)
- + Pennsylvania Principals Association (PPA)

- + Pennsylvania State Education Association (PSEA)
- + American Federation of Teachers Pennsylvania (AFT-PA)
- + Pennsylvania Career and Technical Association (PACTA)
- + Pennsylvania Association of Colleges and Teacher Educators (PACTE)
- + Pennsylvania Association of Intermediate Units (PAIU)
- + Individual intermediate units could also convene their member districts for regional information sessions

Additionally, the department should identify opportunities throughout the year to present in-person at different conferences and other events to spread awareness. For example, many of the above groups host one or more annual conferences and events, and PDE-sponsored conferences such as the SAS conference are also opportunities to spread awareness.

Information sessions should offer similar content to what is suggested on the website, with an emphasis on the value of the program, a clear explanation of the application process and timeline, resources to support schools, and time for questions.

The department should develop a slide deck that can be used for these presentations; these slides could then also be shared with partner organizations to present to their members, and included on the program webpage.

Press and Earned Media

The department should develop a press strategy to generate statewide media coverage of this new program of study. This could include holding press conferences or events at current approved program sites, as Senator Hughes recently did at Science Leadership Academy at Beeber in Philadelphia, to highlight the program and this new approach to grow-your-own. Other tactics might include press releases, pitches to individual news outlets (print and television) for coverage, and working with key messengers to write op-eds and letters to the editor.

Additional Collateral

As part of its marketing plan, the department should also consider developing a communications toolkit that could be shared with partners, including but not limited to the organizations listed previously, to spread awareness about the new program of study and how to apply. This communications toolkit could include:

- + Sample social media graphics and captions
- + Blurbs of different lengths for inclusion in e-newsletters
- + Short videos about the program of study
- + Suggested talking points about the program of study
- + Student- and family-facing materials about the program of study

2. Provide context for and address misconceptions about CTE

When many people think of career and technical education (CTE), they associate it with vocational training for skilled trades such as carpentry, automotive technology, cosmetology, and welding. Because CTE programs of study are required to provide students with an industry-recognized credential upon graduation, which for many trades allows program completers to immediately enter the workforce, many educators view CTE as an alternative “track” or pathway for students who do not plan to pursue postsecondary education, not as a potential option for college-bound students.

While these are outdated misconceptions – many CTE programs offer college credit, and being a CTE student and being college-bound are not mutually exclusive – these misconceptions must be addressed in order to get more schools, particularly traditional high schools, to embrace the education program of study. When speaking with education stakeholders, we encountered confusion about how the teaching profession, which requires a bachelor’s degree for certification, could fit into their perception of what CTE is. It is true that the education program of study is relatively unique among CTE programs in that students graduating from this program won’t be able to earn a terminal credential by the end of high school; they’ll still need to attend college to obtain their bachelor’s degree and teaching certificate.

The education program of study is also unique in that many certified teachers can qualify to teach within this program, whereas most CTE programs of study are taught by teachers with expertise in non-education industries, who may be familiar with the vocabulary and requirements of CTE because they obtained CTE certification. In contrast, a typical secondary English or special education teacher, who could potentially be tapped to lead their high school’s education program of study, would likely be unfamiliar with CIP codes, articulation agreements, or the process for CTE program approval. Many secondary educators also associate CTE programs with Career and Technical Education Centers (CTCs), many of which serve multiple districts, and do not realize that traditional high schools can also host CTE programs.

In order to meet the department’s goals of expanding the education program of study broadly across Pennsylvania, including into traditional high schools, it will be important to provide public school administrators and teachers with additional context around CTE and address misconceptions about CTE being incompatible with the teaching profession. We also recommend that the department articulate to school districts the specific benefits of launching a CTE program in education, as opposed to other grow-your-own program designs for high school students with which they may be more familiar.

In order to make the CTE program of study in K-12 education accessible to educators without previous experience with CTE, the department should be intentional about defining key CTE vocabulary and terms, including but not limited to:

- + Career and technical education (CTE)
- + Classification of Instructional Program (CIP) codes
- + Occupational Advisory Committee (OAC)
- + Competency task list

- + Career and technical student organization (CTSO)
- + Articulation agreement
- + Students Occupationally and Academically Ready (SOAR) program

Additionally, because these terms may not be understood by non-CTE educators and may discourage key stakeholders from engaging in information sessions to learn more about the program of study in an accessible way, the department should be mindful about the use of jargon and acronyms such as those above in initial outreach and marketing materials.

Additionally, to support the expansion of the CTE program of study in K-12 education, the department should provide additional clarification and context around CTE in general, and address these specific points about the CIP 13.0101 program of study:

- + The education program of study (CIP 13.0101) can be offered by a CTC, but it also can be housed at a high school.
- + Whether hosted at a high school or at a CTC, the structure and design of the CTE program of study in education can vary. Students might spend up to half the day in the program learning skills applicable to teaching through both the study of theory and the experience of observing and assisting in other classrooms on-site or off-site. Through articulation agreements and dual enrollment opportunities, some of these courses may be for college credit.
- + Due to the unique nature of the education program of study, hosting the program on-site at a high school may offer particular benefits, such as reducing travel time, allowing students to still engage in college-prep and advanced academic courses and electives, and making it easier to observe and work with a broad range of grade levels and subject areas.
- + Specific benefits of running an approved CTE program in general education include:
 - A coherent program of study: The required content for the program of study is articulated by the department through the [competency task list](#). This task list was developed by education experts, including educator preparation program staff, to ensure that students acquire the knowledge and skills they need to successfully enter an educator preparation program. By designing an instructional sequence based on this task list, schools will ensure their students are set up for success in college and later in the classroom.
 - College credit and financial savings: Students who complete the program of study and enter college as an education major will benefit from the dual-enrollment agreements that their districts form with local colleges and universities. These college credits will offer substantial cost-savings, thus reducing the financial barrier of a college education.
 - Industry-recognized credentials: While high school students will not graduate from the CTE program of study in education fully certified to teach, they will graduate with certain industry credentials that will benefit them as they continue their pathway into the field of education. Those credentials may include ALICE certification, CPR certification, mandated reporter certification, and required clearances. Additionally, while Pennsylvania does not require a certification for paraprofessionals, program completers would be well-qualified and competitive candidates for paraprofessional positions upon graduation, which may allow some to pursue their bachelor's degree and certification while earning a salary and potentially with financial support from their employer to pay for their remaining education costs.

In addition to providing the context and clarification above, the department should directly address the following misconceptions through the use of Frequently Asked Questions documents and in their other marketing materials:

- + **Myth #1:** Students who are college-bound cannot be enrolled in a CTE program.
 - Fact: Students who are college-bound can absolutely enroll in CTE programs. CTE programs develop articulation agreements with local universities and institutions of higher education so that CTE students can earn college credits that will be transferable to many postsecondary institutions, including PASSHE schools.
- + **Myth #2:** CTE programs can only be housed in CTCs.
 - Fact: Some districts are choosing to sponsor the program of study in their traditional high schools, where students can also access honors and advanced courses and an array of electives. Over half of currently approved programs are sponsored by districts, not CTCs.
- + **Myth #3:** Taking on the program and curriculum design for this program of study is overwhelming.
 - Fact: The department has created a competency task list that provides a framework of essential content to cover, while allowing flexibility for school entities to design a program that works in their context. There are also existing curricula, such as Educators Rising, which can be purchased to support teachers in implementing this program. The department will also continue to provide additional support and resources to schools as they develop their programs.
- + **Myth #4:** There is no funding available to support this CTE program.
 - Fact: Schools can access a variety of funding sources to support this program of study. These sources may include federal Perkins funds, state CTE funds, upcoming dual-enrollment and grow-your-own grant opportunities from the department, and specific grants to support schools in purchasing the Educators Rising curriculum. Over time, there may also be opportunities to access workforce development funds by connecting CTE programs to apprenticeship and pre-apprenticeship programs. For more details, see Recommendation #5.

3. Provide related resources to make the CTE program of study in education more accessible.

In addition to supporting educators without a background in CTE in navigating the requirements and vocabulary of CTE and addressing misconceptions specific to the education program of study, we recommend that the Pennsylvania Department of Education intentionally develop and share resources to support more school entities in starting and successfully completing the approval process. Now that there are over a dozen approved programs across Pennsylvania, the department should begin to develop a bank of sample and exemplar artifacts for different components of the program application. For example, prospective applicants would benefit from seeing sample course scope and sequences, sample articulation agreements, and other program design documents.

The General Education program of study (CIP 13.0101) does not have a required curriculum, but instead offers a flexible task grid that can be addressed in many ways. However, many schools may find the task of developing an aligned curriculum from scratch to be a daunting barrier to application. The Pennsylvania State Education Association (PSEA) recently became the official coordinator for Educators Rising in Pennsylvania. Educators Rising is a national organization that has developed a highly regarded high school curriculum for future teachers, and the curriculum is well-aligned with the program of study, as it was consulted in the program's design. Educators Rising is also a career and technical student organization (CTSO), and through its network offers regional, statewide, and national conferences for high school students; linkages to educator preparation programs and programming for college students; and resources for teachers teaching the Educators Rising curriculum and leading grow-your-own programs.

The department should coordinate closely with PSEA to identify ways to share Educators Rising resources with potential program applicants. PSEA was recently awarded a grant to allow them to offer the Educators Rising curriculum for free to underserved districts, and the department should highlight this opportunity to prospective applicants. The department should also consider purchasing a statewide license to Educators Rising, as other states have done, so that it can offer the curriculum free of charge to any school entity that seeks approval.

As the department identifies other barriers to program application or approval, it should continue to develop additional resources to support schools as they consider and engage in the application process. These resources should also include support around dual enrollment and articulation agreements as well as guidance around funding for programs.

4. Broaden articulation agreements to ensure students earn portable college credit

In order to become an approved CTE program of study in general education, school entities must have a dual enrollment agreement with at least one college or university. So far, approved programs have developed agreements with local institutions of higher education, including both community colleges and four-year institutions.

However, there is no required number of college credits that students must earn through the program of study, and students' credits may not transfer to another institution if they choose to enroll in a different educator preparation program after high school graduation.

To maximize the value and portability of college credits earned through the education program of study, we recommend that the department utilize its relationships with Pennsylvania institutions of higher education generally, and educator preparation programs specifically, to support the development and broadening of articulation agreements for college credits related to the education program of study. As a long-term goal, the department should work to ensure that all PASSHE universities and public community colleges agree to grant a certain number of credits for completers of the general education program of study.

This recommendation will take time to fully implement because there are so many institutions of higher education across the commonwealth. However, the department has a unique position of influence as the approver of educator preparation program providers and the agency overseeing higher education for the entire state. The Bureau of Postsecondary Education should be engaged to support this work, which may also complement other efforts to improve articulation and credit transfer across institutions in teacher education pathways and more generally.

5. Dedicate funding to support the cost of launching local CTE programs in education

There are many existing funding sources that schools could access to support the launch and ongoing operation of a program of study in education, such as Perkins funds and state CTE dollars, but many potential applicants may be unfamiliar with these funding sources. It is important that the department includes in its marketing materials, including on the webpage and in information sessions, user-friendly information about existing funding, any requirements or restrictions for using it, and information on how to access it. In addition to opportunities to access public dollars, the department should also publicize other funding opportunities, such as the grant through PSEA to support districts in purchasing curricula that can be used in programs.

Beyond communicating about existing funding, however, the department should proactively identify dedicated funding streams to support the launch of new CTE programs of study in K-12 education. For example, if the department opens up new grant opportunities to support dual enrollment, CTE, apprenticeship, pre-apprenticeship, or postsecondary pathways, it should designate a portion of those resources specifically for approved CIP 13.0101 programs of study and their partner institutions of higher education.

Additionally, Governor Shapiro's proposed 2024-2025 budget allocates \$10 million to the Educator Talent Recruitment Account, presenting an opportunity to support CTE programs in education. The account, created by Article 15-K of Act 55 of 2022, allows the department to spend resources on evidence-based strategies to increase participation in the educator workforce. We recommend that, if allocated, a significant portion of the \$10 million be earmarked specifically to cover essential costs for approved programs of study and their higher education partners, including costs for dual enrollment, curriculum, and teacher professional development.

Finally, the department should continue to explore additional possibilities for increasing funding to support approved CTE education programs, including working with the Department of Labor & Industry to create linkages between the General Education CTE program of study and apprenticeship/pre-apprenticeship programs that may allow programs to draw down workforce development dollars to support training/education costs and even compensation for high school students, as well as the subsidization of their continued education toward their teaching certificate.

Investing dedicated resources toward CTE programs in K-12 teaching is a prudent investment that offers immediate benefits. Districts currently spend up to \$27,000 per teacher vacancy, so investing in the CTE pathway into teaching will save districts money over time. By better preparing and developing future teachers starting at an earlier age, the department will also improve the stability and effectiveness of the teacher workforce and ultimately improve student learning and achievement.

CONCLUSION

In conclusion, with several intentional and strategic adjustments to its current approach, the department can significantly increase the likelihood that the CTE program of study in general education becomes a critical element in solving Pennsylvania's teacher shortage crisis. While our recommendations may require the department to take a more hands-on approach to marketing and supporting the program of study than it has taken with other programs of study, such an approach is warranted due to the critical nature of the current shortage and the department's key role in building a strong and diverse educator workforce. By implementing the outlined recommendations, Pennsylvania can create affordable and high-quality pathways for thousands of high school students into the education profession and cultivate a diverse and sustainable educator workforce, thereby fostering educational equity and improving student outcomes statewide. Teach Plus Pennsylvania stands ready to assist the department in implementing these recommendations and ensuring students in every corner of the commonwealth have access to this promising new grow-your-own pathway into teaching.


ABOUT TEACH PLUS


Teach Plus is dedicated to the mission of empowering excellent, experienced, and diverse teachers to take leadership over key policy and practice issues that advance equity, opportunity, and student success. Since 2009, Teach Plus has developed thousands of teacher leaders across the country to exercise their leadership in shaping education policy and improving teaching and learning, to create an education system driven by access and excellence for all. teachplus.org

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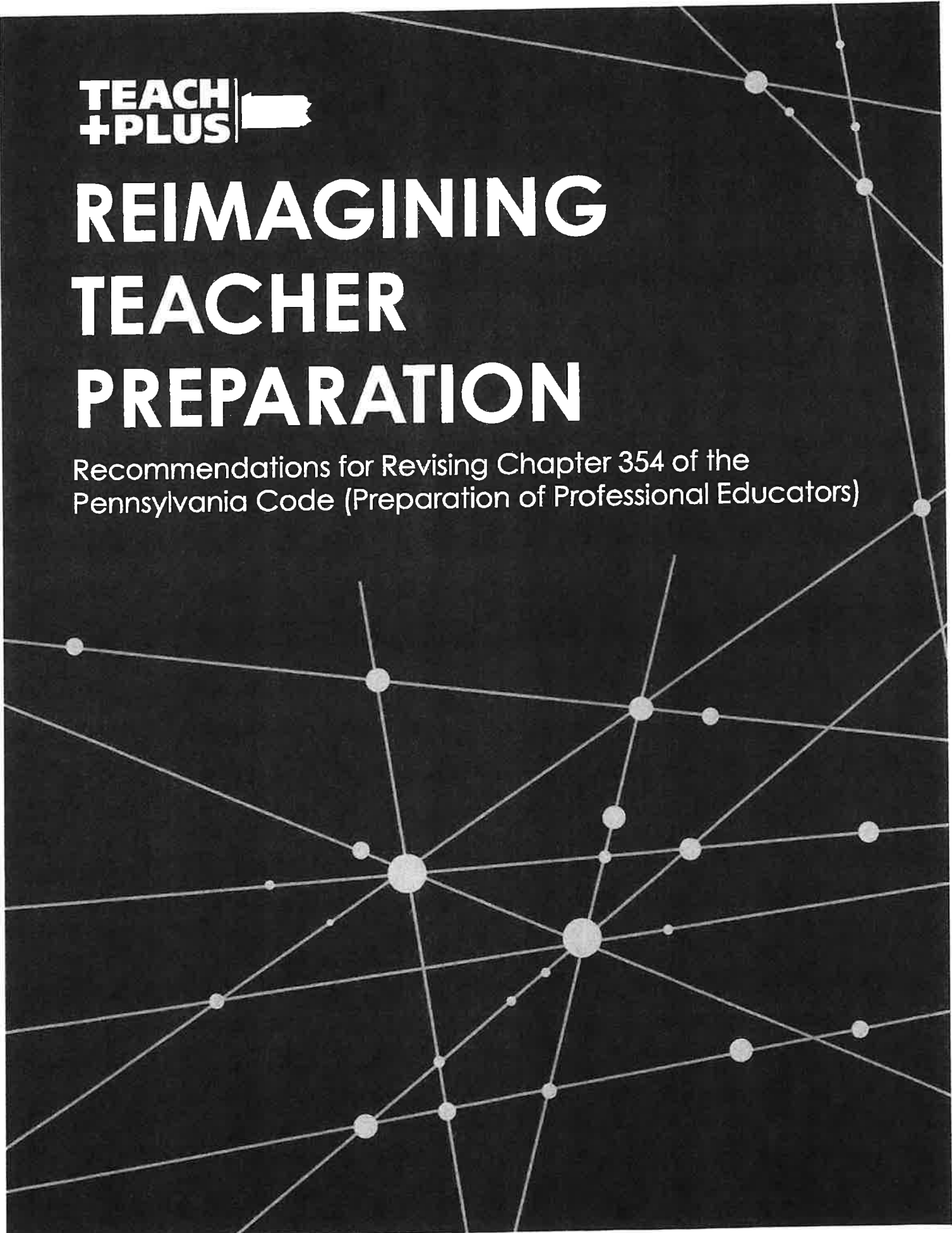
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REIMAGINING TEACHER PREPARATION

Recommendations for Revising Chapter 354 of the
Pennsylvania Code (Preparation of Professional Educators)





INTRODUCTION

Teacher quality matters. Students can only achieve their potential when they have culturally competent, diverse, and knowledgeable teachers. In the last decade, there has been a decline in the number of initial certifications and in enrollment in teacher preparation programs. Pennsylvania now hires more underprepared teachers under emergency permits than it certifies teachers through formal teacher preparation programs (Fuller, 2022).

The current system keeps out too many interested teachers while not effectively preparing candidates for the demands of the classroom. We have too many different, redundant requirements for admission into and graduation from teacher preparation programs: coursework, certification tests, GPA for admission, GPA requirements for graduation, etc. That being said, we are *not* against all requirements. We insist on maintaining high standards for teachers.

Instead, we are against requirements for entry into preparation programs that are redundant or ungrounded in research, especially when they perpetuate racial inequities. In streamlining the requirements, we intend to lower the bar for entry into *programs* while maintaining high standards for entry into the *profession*. Our aim is to increase the number of highly qualified, formally certified professionals. Otherwise, we incentivize potential teachers to take less ideal pathways into the profession (i.e., emergency certification) and/or pathways out of the profession (i.e., choosing other careers with similar training requirements, but less stringent academic requirements).

Our recommendations will ensure that those who want to be teachers can participate in high-quality mentoring programs and achieve a level of cultural competence that prepares them to best work with the commonwealth's increasingly diverse student body. They will be equipped with the tools they need to feel confident—and to *stay*—in the classroom.

Teacher preparation in Pennsylvania is governed by Chapter 354 of the PA Code. Chapter 354 outlines requirements for educator preparation programs (EPPs) and preparing institutions (e.g., universities), as well as applicants, and for the candidate to be certified to become a teacher. Importantly to our recommendations, Chapter 354 requires applicants to have a 3.0 GPA and to have completed a basic skills assessment to enter a program, although the basic skills test requirement is currently waived by Act 55 of 2022. To successfully complete the program and be eligible for certification, candidates must also finish with a 3.0 GPA. Chapter 354 also mandates that candidates receive 12 weeks of full-time student teaching experience in the classroom. Below, we argue for the need to modify these eligibility requirements in the following ways:

Recommendations:

1. Revise teacher candidate GPA requirements to 1) eliminate the GPA requirement for entry into teacher preparation programs **and** 2) replace the individual GPA requirement for professional competency (currently 3.0) with a *cohort-based* GPA requirement of 3.0.
2. Expand candidates' full-time student teaching experience requirement from 12 weeks to a full school year of classroom experience.
3. Revise Section 354.32 (Monitoring and Assessment) and the department-created Pennsylvania Statewide Evaluation of Educator Candidates (PDE-430) form to incorporate Culturally Relevant and Sustaining Education (CR-SE).

RATIONALES

- 1. Eliminate the GPA requirement for entry into teacher preparation programs AND change the individual 3.0 GPA requirement for professional competency into a cohort-based 3.0 GPA requirement.**

Currently, Chapter 354 requires a 3.0 GPA for applicants to enter teacher education programs. We propose eliminating the GPA requirement to address our state's teacher shortage, with a particular focus on increasing the number of teachers of color. The current GPA requirement for entry into teacher education programs serves as a barrier that keeps out many interested candidates, especially potential teachers of color, who continue to be underrepresented in our educator workforce (Van Overschelde & Morren López, 2018). Research consistently shows the importance of teachers of color in the classroom for all students and yet only 6 percent of Pennsylvania's teachers identify as teachers of color (U.S. Department of Education, 2018). Pennsylvania's teaching force is among the least diverse in the country, despite an increasingly diverse student population (Cabral et al., 2022). Further, inflexible GPA requirements present a systemic barrier to candidates of color, as teacher candidates with the lowest academic achievement are primarily Black and brown (Center for Education Statistics, 2015). Our recommendation aims to address this discrepancy.

Additionally, while research has found a correlation between a teacher's content knowledge and student achievement, undergraduate GPA and standardized tests have not proven to be reliable predictors of a future teacher's effectiveness (Partelow et al., 2017). Stringent entry GPA requirements drive teachers of color to alternative programs, which have a higher turnover rate than traditional programs (Redding & Smith, 2016). If we want a qualified, diverse teacher workforce, we must make it more possible for applicants, especially those who have been needlessly excluded from the talent pool, to enter formal EPPs.

Currently, to show professional competency and remain eligible for certification, individual candidates must maintain a 3.0 GPA, or a 2.8 if it is supplemented with adequate scores on professional assessments. To maintain high standards and teacher quality while removing inflexible barriers that turn away candidates of color, Pennsylvania should make the 3.0 GPA exit requirement for teacher preparation programs *cohort-based*, or based on the average GPA of the graduating class. This means a candidate's class or cohort must meet a 3.0 GPA, while an individual candidate may have a GPA above or below the requirement.

While some research has found that a teacher candidate's program GPA correlates slightly with student achievement, recent studies on teacher performance have concluded that mentoring quality and teaching experiences are more reliable and powerful indicators of teacher competency than course grades. For example, Bastian et al. (2022) find that placing teacher candidates with high-quality mentors can "narrow and sometimes close the effectiveness gaps across the GPA distribution."

In creating a cohort-based GPA requirement of 3.0, programs preserve high standards while being able to retain students who show promise in areas beyond scores and grades. While candidates will continue to be expected to pass their courses with a 2.0 in order to receive a degree, a cohort-based requirement enables mentors and professors to properly weigh performance-based assessments such as the PDE-430 and teacher portfolios, rather than less reliable indicators that maintain and perpetuate barriers to Black and brown candidates' pathway into the profession.

In eliminating Pennsylvania's GPA entry requirement for teacher preparation programs while expanding how candidates can show professional competency, our GPA recommendations allow more students in without compromising the high quality of program graduates, and thus the high standard of teacher excellence the commonwealth has earned and continues to appreciate across the nation.

Models for Further Research:

- + According to the National Center for Teacher Quality (Putman & Walsh, 2021), as of 2021, 29 states have no GPA requirement for entry into teacher education programs and another 10 states set the GPA requirement below 2.75.
- + The Council for the Accreditation of Educator Preparation (CAEP) has a similar cohort-based requirement of 3.0 for programs.

2. Expand candidates' full-time student teaching experience from 12 weeks to a full school year of classroom experience.

The student teaching experience is meant to help teacher candidates gain practical classroom experience under the guidance of a mentor teacher and to fully immerse themselves in the teaching environment. However, the revolving door of novice teachers leaving the profession tells us that incoming teachers do not receive enough or appropriate training. To that end, it is our recommendation that teacher candidates should spend one full school year in the classroom before becoming certified for a lead teacher role.

By extending the student teaching experience to a full school year, our teacher candidates across the commonwealth will have opportunities to develop their preparedness in the classroom, work on adapting to a school-building culture, and enhance their ability to build stronger relationships with both students and school professionals. Teacher candidates and students stand to benefit enormously from

such an immersive series of experiences: First-year teachers can be as effective as typical third-year teachers by spending their "clinical practice," or student teaching experience, in a classroom of a highly effective teacher (NCTQ, n.d.). Furthermore, a full-year student teaching experience will allow teacher candidates exposure to all different phases of the school year and provide new opportunities for reflection on their teaching practice throughout those phases. The extension of the student teaching experience to a full year will help to better retain candidates who enter the teaching workforce. In fact, the National Center for Teacher Residencies (NCTR) found that 86% of teachers graduating from their year-long residency programs returned to teach for a third year (National Center for Teacher Residencies, 2023).

We recognize that such a major change may require adjustments by EPPs to their current curricula, course requirements, partnerships with local education agencies, and structuring of earlier field experiences, particularly for some certification areas and for one-year post-baccalaureate programs. As a result, it may be appropriate to phase in this model over time, with teacher candidates entering EPPs in the 2025-26 school year, for example, being the first to experience this shift. Another approach may be to first shift from 12 weeks of student teaching to 16 weeks, prior to making the ultimate shift to a year-long model. Finally, a grant-funded pilot program, as Louisiana started with before making a full statewide shift, is another possibility to consider. Even if the department does not recommend a shift to a full year of student teaching in the upcoming revisions to Chapter 354, it should ensure that action is being taken to strengthen student teaching requirements in terms of both quality and quantity in evidence-based ways.

Models for Further Research:

- + In fall 2016, Louisiana adopted landmark regulations to expand year-long residencies for teacher candidates. By summer 2018, all teacher preparation programs in Louisiana were required to include a year-long residency alongside an expert mentor (Louisiana Department of Education, n.d.). Two years before the Louisiana Board of Elementary and Secondary (BESE) adopted these new regulations in 2016, the Louisiana Department of Education launched a grant-funded pilot program to support closer coordination between EPPs and local education agencies and the development of year-long, competency-based residency experiences. This pilot built buy-in for the shift to longer student teaching and also allowed the state to identify and overcome potential barriers to success before a broader roll-out.
- + New Mexico, through state funding made available by the legislature, has implemented a grant program to support a year-long teacher residency, including a \$35,000 stipend for residents. This approach, similar to Louisiana's approach of starting with a grant-funded pilot, may make sense to implement prior to a mandated shift to year-long residency in regulation (New Mexico Public Education Department, 2024).

3. Revise Section 354.32 (Monitoring and Assessment) and the Pennsylvania Statewide Evaluation of Educator Candidates (PDE-430) form to incorporate Culturally Relevant and Sustaining Education (CR-SE).

On April 23, 2022, amendments to Chapter 49 of Title 22 of the Pennsylvania Code required that the Pennsylvania Department of Education identify competencies and develop associated standards for educator training in culturally relevant and sustaining education (CR-SE). These amendments further required that the CR-SE competencies be integrated into teacher preparation programs, induction programs for new teachers, and continuing professional development programs for certified educators.

The CR-SE competencies in Pennsylvania help to ensure equity for all students by seeking to eliminate systemic institutional racial and cultural barriers. In a recent report, it was found that "positive student-teacher relationships developed through CRSE are associated with better student academic and behavioral outcomes" (Warner & Browning, 2021). By integrating the CR-SE competencies into the Pennsylvania Code, the Pennsylvania legislature, along with PDE, has highlighted how important it is for educators to take a role in dismantling systemic barriers that threaten Pennsylvania's students' opportunities for academic, personal, and economic success.

As Pennsylvania already mandates that EPPs must include CR-SE competencies in their training of teachers, the evaluation of teacher candidates through PDE-430 and the language of Chapter 354 should incorporate these critical competencies. Teacher candidates should be monitored, assessed, and evaluated on their ability to incorporate these competencies into their professional practice. Doing so would contribute to the high standards of professionalism we advocate for above, and assure our increasingly diverse student body that their teachers are equipped and prepared to engage with them in ways that honor their culture and recognize their individual potential so that each child sees a place for themselves in their school.

Means for Inclusion:

- + The Pennsylvania Statewide Evaluation of Educator Candidates (PDE-430) should be revised to include a separate domain that evaluates teacher candidates as either unsatisfactory, emergent, expected, or exemplary in their ability to incorporate the CR-SE competencies in their professional practice.
- + The language in Chapter 354.25 on "Monitoring and Assessment" should be revised to include the CR-SE competencies as one of the "skill dimensions" candidates should be monitored on by the EPP using performance-based assessments.

CONCLUSION

In making these revisions to Chapter 354, we have an opportunity to ensure that first-year teachers have the cultural competencies, evidence-based strategies, and pedagogical support to successfully manage a classroom on day one of their careers. By replacing redundant, unsound entry requirements (such as GPA) with more relevant, supportive protocols (such as high-quality mentoring and longer student teaching experiences), we can expand the teacher pipeline, keep our standards high, and invest in candidates' ability to grow within their profession and communities, encouraging them to stay for the long term, so they can continue to serve our students' ever-evolving and complex needs with the expertise and passion that make teaching, for so many of us, the best profession in the world.

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