



THE STATE OF THE NEW JERSEY
EDUCATOR WORKFORCE

JERSEYCAN EDUCATOR WORKFORCE REPORT SERIES

PART ONE

The State of the New Jersey Educator Workforce

JERSEYCAN EDUCATOR WORKFORCE REPORT SERIES

PART ONE

This State of the Educator Workforce Report was made possible by a grant from Carnegie Corporation of New York. The statements made and views expressed are solely the responsibility of the author.

We are grateful to the JerseyCAN Board and the many partners, organizations and colleagues who have supported our efforts in completing this work.

JerseyCAN The New Jersey Campaign for
Achievement Now www.jerseycan.org

Design & Layout Six Half Dozen Design Studio

FOREWORD

When the 2019-20 school year began, no one could have anticipated that a global pandemic would disrupt the delivery of education in such a profound way. In March 2020, the robust exploratory learning, career exploration and in-person instruction that educators were delivering in classrooms was abruptly halted. Brick and mortar school systems turned digital overnight. Districts without digital resources made learning packets and scrambled for devices and internet solutions for their school community. The duties, demands and expectations on our educators transformed to ensure the continued delivery of educational services to students.

Even before COVID-19, JerseyCAN planned a research and policy series highlighting the educator workforce in New Jersey and how the roles and expectations of educators in our classrooms are changing. Indeed, the responsibility of educating students today for college, career and future life success is vastly different than thirty years ago. This series was initially designed to explore the current state of the educator workforce in New Jersey and whether our educators today are being prepared, developed and retained to meet the needs of the students and our broader economy. Now, with the education landscape having shifted so dramatically, there is an opportunity to rethink the preparation of teachers for this changed world. Education leaders must now reimagine the roles of educators to support students in both digital and in-person instruction, revisit the timing of school days and schedules and reevaluate the most ideal learning environments and supports for students and staff.

In the face of COVID-19, this first report will serve as a foundational piece, detailing the landscape of the educator workforce before the pandemic, with a focus on the mismatch between the supply and demand of New Jersey teachers. A significant lack of consistent data and information on these issues prevents us from knowing how to best retain, prepare and attract teachers during and after a crisis. As called for in the report, New Jersey will need a solid data foundation to build the predictive analytic tools to better inform the educator pipeline and address potential vacancies post-pandemic. The next report will build on the current landscape and present a framework of key questions for education leaders, policy makers and educator preparation programs to consider during these changing times.

This series will demonstrate that New Jersey is committed to ensuring the educator workforce is responsive to the needs of students and families, and to reimagining a system that is agile enough to provide all students with an equitable education. New Jersey can continue to be an education leader, but to do so we must lead in this moment of crisis and work to build the best educator workforce to solve the evolving needs of our students.

JANE OATES

Jane Oates is a thought leader in education and transition to careers issues. She is a teacher who also worked as a higher education researcher and in leadership positions in legislative and executive branches at the state and federal levels. Specifically in New Jersey, Jane was the Executive Director of the Higher Education Commission and senior advisor to Governor John Corzine.

The coronavirus global pandemic has highlighted two critical aspects of our education system in New Jersey: (1) We have some of the most dedicated and innovative educators in the world stepping up to serve our students in creative and responsive ways during this time of disruption; and (2) Now, more than ever, we must focus on how we retain, prepare and recruit educators to address our present and future challenges and ensure that every New Jersey student receives an excellent and equitable public education.

Before this pandemic hit, JerseyCAN was conducting a deep dive into our statewide educator workforce and planning a multi-report series that would explore its current state and identify areas of need and opportunity in building the workforce of the future. In the past few months, education has changed immeasurably due to COVID-19, making this work all the more urgent. Now, as one of the hardest hit states, we must consider how the needs of our students and educators are evolving day by day as we envision a different path forward.

Educators and school leaders are grappling with a host of new issues as they prepare to close out buildings and remote learning for the 2019-20 school year, while also confronting an endless list of needs for summer and fall. In a time of growing confusion, the only thing that seems certain is that education will look different in the 2020-21 school year and beyond. Anticipating reductions in state and local revenue, school leaders are struggling to define a new normal and plan for diverse staffing needs in the face of social distancing, the potential for additional school closures and ongoing remote instruction.

In New Jersey and across the country, recent trends have shown a decrease in the number of teachers prepared each year, especially for critical shortage areas identified by the New Jersey Department of Education (NJDOE). Complicating matters even further, we lack uniform district demand data to provide a current, accurate picture of our areas of greatest need. **With schools in New Jersey having been closed for in-person learning for several months, it has become more clear that our teachers are the most important links between our students and their school communities. In this time of significant disruption to our learning communities, it is critical that all students have a teacher when the 2020-21 school year resumes.**

Given this unique moment in time, JerseyCAN is reimagining this educator workforce report series. This first report outlines the most recent picture of our educators across the state, highlights our challenges in fully understanding supply and demand needs across districts prior to COVID-19 and identifies related policy recommendations. Future installments will build on this foundation by outlining a framework for understanding the new needs brought on by COVID-19, as well as recommendations for the smartest approach state leaders can take to create a more agile educator pipeline in this context. This framework will include major elements like educator supports, staffing and benefits including seniority-based personnel decisions; preparation and recruitment; economic impacts influencing supply and demand; accountability; and opportunities for innovation.

The goal of this report series is help guide state leaders as we respond to the educational and economic crisis we now face and, ultimately, to build a stronger educator pipeline for the future of education in New Jersey.

Key Highlights of New Jersey's Public School Educator Workforce

1. OVERVIEWⁱ

New Jersey is home to many different school and district environments.

1



2



2. FINANCIAL

New Jersey makes a significant investment in education and is well above the national average in per pupil expenditures and educator salaries.

3. TEACHER SUPPLY^{vii}

The supply of teachers prepared in New Jersey is declining and teacher and student demographics do not match.

3



4



4. TEACHER DEMAND

New Jersey does not collect or report district demand or open position data.

Key Highlights of New Jersey's Public School Educator Workforce (cont.)



1. OVERVIEWⁱ

1.37M students in **2,500** schools across approximately **600** school districts

117,000 teachers

9,300 administratorsⁱⁱ



2. FINANCIAL

Historically, **~\$28 billion** annual expenditure on education, including **~\$11.4B** (~40%) from state funding, **\$15.7B** (~56%) local, and **\$1.2B** (~4%) federalⁱⁱⁱ

\$18,920 annual per pupil expenditure^{iv}

\$68,606 median annual teacher salary^v

\$127,000 median annual principal salary^{vi}



3. TEACHER SUPPLY^{vii}

In-state supply dropped by **18%** from school years 2013-14 to 2015-16.

Only **23%** of our educator preparation providers across the state have produced Bilingual educators^{viii} and **18%** had less than **10** candidates per program.

In 2018, the NJDOE^{ix} reported that teachers with zero to four years of experience are **78.6%** White compared to **85.5%** of teachers with five or more years of experience.

Between school years 2013-14 and 2015-16:

10,700 new teachers were prepared in traditional NJ preparation programs.

8,800 new teachers were prepared in alternate route NJ preparation programs.

The majority of all career and technical education (CTE) endorsements are earned in the alternate route pathway.

Currently, **84%** of our teacher workforce is White, compared to **43%** of our students.^x



4. TEACHER DEMAND

The NJDOE has confirmed teacher shortage areas in **Science, Math, Bilingual, English as a Second Language, Special Education, World Languages and CTE.**

While many districts have seen a significant increase in English language learners, these districts are often struggling to provide the Bilingual teachers required by law. **Last year, eight New Jersey counties could not meet Bilingual teacher requirements for 10 or more of their classrooms.**

2018 state reports show some of the content areas with the highest teacher employment rates statewide were: **Technology, Physics, Bilingual, World Languages and Biology.**

The New Jersey Education to Earnings Data System (NJEEES) is a data warehouse that combines data from a variety of state agencies, and, in partnership with the Heldrich Center, **can produce educator workforce projections to inform state staffing needs.**

Policy Recommendations

This multi-report series will highlight policy opportunities both for initial and longer-term systemic change for New Jersey’s educator workforce. Mindful of the need to prioritize the necessary policy changes in response to COVID-19, JerseyCAN presents these recommendations as opportunities to create a more responsive workforce that can meet our educational and future workforce needs in a rapidly changing environment. These opportunities are grouped into three key areas, and policy recommendations will be added with future reports.



RECOMMENDATION 1:

Require Local Demand Data from Districts and Annual Educator Workforce Projections

- Through the current state-operated data collection system, NJSMART, New Jersey districts should annually report all for all staff:
 - Open positions;
 - New positions;
 - Removed positions; and
 - Anticipated retirements.
- This data should be transmitted from NJDOE on an annual basis to the state’s statewide longitudinal data system, NJEEDS; in turn, NJEEDS should be charged with producing annual reports projecting the needs of New Jersey’s educator workforce over the next three to five years.
- The NJEEDS Data Stewards Work Group should be utilized to define the education workforce projections and the vacancy data elements reported by districts.



RECOMMENDATION 2:

Subsidize the Cost of Certification Tests for Shortage Areas

- The state should subsidize testing costs for any teaching candidate or teacher pursuing certification in a shortage area, as reported by the NJDOE to the federal government, including the following exams for teaching candidates going into shortage areas: Praxis CORE, Praxis II Content, WPI/OPT and edTPA.

RECOMMENDATION 3:

Create a Seal of Biliteracy High School Pathway Program for Bilingual and ESL Teachers

- New Jersey should explore opportunities for leveraging the High School Seal of Biliteracy program to allow graduates with the Seal to become Bilingual and English as a Second Language (ESL) Teachers. Opportunities could include offering college credit for the Seal, financial incentives for those with the Seal to pursue language studies and/or a teaching degree or allowing those who have successfully navigated the pathway to earn higher starting teacher salaries.

RECOMMENDATION 4:

Create a Co-Certificate Bridge Program for Bilingual Teachers

- New Jersey should allow current teachers with a standard license to enroll in a program specifically designed to equip them with the content and applicable skills necessary to gain a Bilingual co-certificate endorsement.
- Participating teachers could begin teaching bilingual students upon passing their language proficiency exams and, throughout the year, complete relevant coursework required for their co-certificate.

RECOMMENDATION 5:

Equip Our Educator Workforce with Culturally Responsive Teaching Practices

- We should provide teachers with professional learning about culturally responsive teaching practices and demonstrate how they can infuse those practices into their classrooms, digitally or in-person.
- We should ensure program faculty and coursework in teacher preparation programs are using culturally responsive practices when training our future educators.



RECOMMENDATION 6:

Establish a Coalition to Define an Agile School System

- We should establish a group of diverse leaders to guide a coordinated effort to make the educator workforce more agile and responsive to our state's evolving future.
- This group could set ambitious targets. Examples of those targets could include:
 - Shifting to competency-based learning;
 - Determining how and when to continue distance learning in the 2020-21 school year;
 - Requiring formative assessments that build and measure progress to state standards; and
 - Ensuring all districts have 1:1 devices by 2021.

As stated above, this report offers a foundation of data on our educator workforce prior to COVID-19 with initial recommendations that could address the most glaring gaps in our current system. The next report will explore national and New Jersey leaders' perspectives on how best to support, attract and retain educators in these unprecedented times. **By focusing on the lifeblood of our education system and working to develop solutions for our pressing challenges, together we can ensure that all New Jersey students have an opportunity to achieve, despite our changing world.**

CONTENTS

- 10 OVERVIEW
- 10 NEW JERSEY'S PUBLIC SCHOOLS AND EDUCATOR WORKFORCE
- 12 THE COMPOSITION OF OUR EDUCATOR WORKFORCE AND STUDENT BODY
- 15 NEW JERSEY TEACHER WORKFORCE: SUPPLY & DEMAND
- 24 POLICY OPPORTUNITIES FOR OUR EDUCATOR WORKFORCE
- 28 LOOKING AHEAD
- 29 APPENDIX A: EXISTING STATE-LEVEL EDUCATION DATA SYSTEMS OR REPORTS



Overview

New Jersey is a national leader in education. We are regarded for our high academic proficiency rates, our significant investments in school funding and nation-leading high school graduation rates. Leading the way are the educators, administrators and local community members that support our students in their educational journeys every day.

In many ways, educators are the heart of our education system. Research continues to show classroom teachers are the number one in-school influencer of student achievement.¹ The education field is also unique, as it is responsible for development and learning for infants to adults for occupations across all industries. Educators' jobs grow increasingly complex every day, especially in the face of the monumental shift to online instruction due to COVID-19.

Educators and school leaders are grappling with a host of new issues as they prepare to close out buildings and remote learning for the 2019-20 school year, while also confronting an endless list of needs for summer and fall. In a time of growing confusion, the only thing that seems certain is that education will look different in the 2020-21 school year and beyond. Anticipating reductions in state and local revenue, school leaders are struggling to define a new normal and plan for diverse staffing needs in the face of social distancing, the potential for additional school closures and ongoing remote instruction.

To remain a leader in education and to ensure every student has an opportunity to succeed, the needs of all our students must be met on a consistent basis in a rapidly changing world. To do this, we must assess the state of our number one resource – the educator workforce – and what we are doing to prepare the next generation of educators.

This first report outlines the most recent picture of our educators across the state. Future reports will build on this foundation by outlining a framework for understanding the new needs brought on by COVID-19, as well as recommendations for the smartest approach state leaders can take to create a more agile educator pipeline in this context.

This report provides a picture of New Jersey's educator workforce by:

- Describing and comparing the composition of our public school students and educators;
- Reporting on the current supply and demand of our teacher workforce;
- Exploring potential trends underlying current gaps and potential shortages;
- Highlighting where there are promising initiatives across the state through “Bright Spots”; and
- Offering policy recommendations that are designed to offer short-term solutions to help close our current gaps, address shortages and create a more responsive educator workforce.

New Jersey's Public Schools and Educator Workforce

To understand the needs of our educator workforce, it is important to understand the broader public school system in New Jersey. This system serves approximately 1,370,000 students in 2,500 public schools across approximately 600 districts.² New Jersey public school students can attend:

- A traditional public school;
- A public charter school or renaissance school;
- An approved private school for students with disabilities;
- A county vocational school; or
- Schooling provided by the Juvenile Justice Commission or Department of Children and Families.

The most recent and comprehensive information from the Census Bureau indicates that in 2015, New Jersey spent about \$28 billion on education. This included about \$11.4 billion (~40%) from state funding, \$15.7 billion (~56%) from local sources and \$1.2 billion (~4%) from federal sources. In 2015, New Jersey had an average per pupil expenditure of \$18,235, compared to a national average of \$11,392.³ In 2018, New Jersey had an average annual per pupil expenditure of \$18,920, compared with a national average of \$12,201.⁴

New Jersey students are served by approximately 117,000 teachers⁵ and 9,300 administrators.⁶ As reported by the New Jersey Department of Education (NJDOE), in the 2018-19 school year, the median salary for a New Jersey teacher was \$68,606⁷ and by comparison, the novice teacher starting salary in 2017-18 was \$53,125.⁸ In 2018, the Learning Policy Institute reported, based on data from 2016-17, that the national average for new teachers was \$38,617 and New Jersey's was \$51,179.⁹

FIGURE 1: NJ EDUCATOR SALARIES, 2018-2019^{xi}

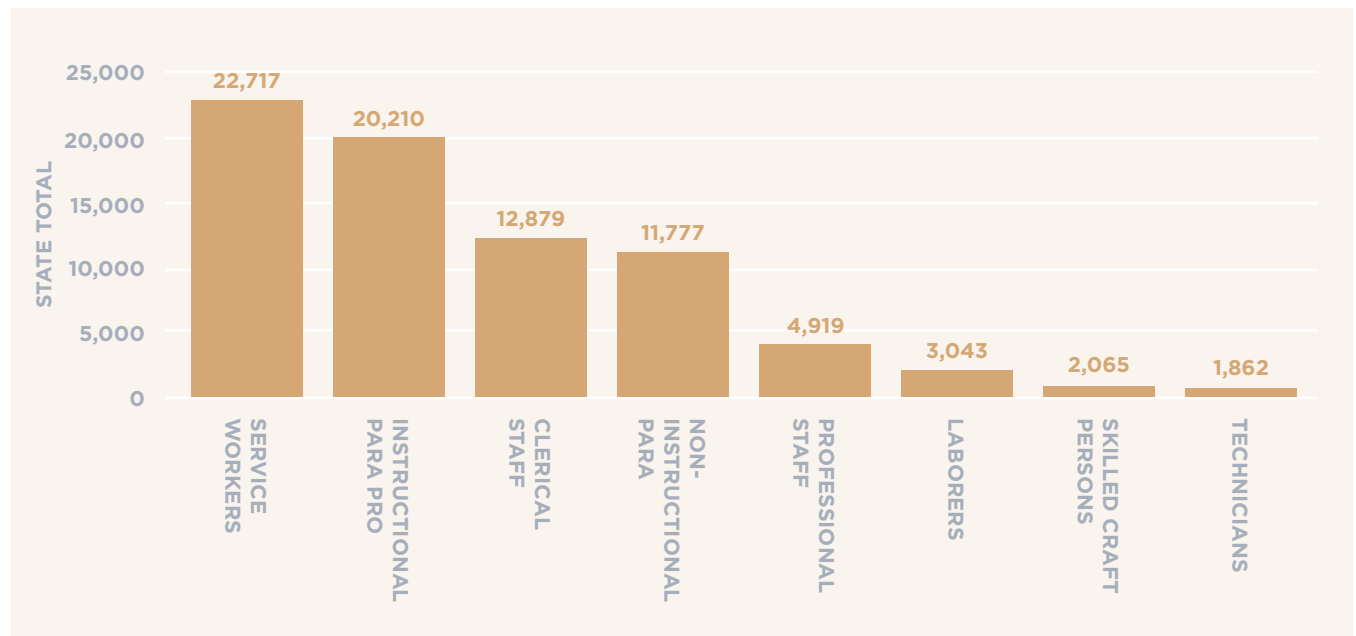
Roles in NJ Pk-12 Educator Workforce	Median Salary
District Superintendents	\$168,000
Principals	\$127,000
Administrators and Supervisors	\$125,000
Classroom Teachers	\$68,606

Data source: NJDOE Public Schools Fact Sheet

According to the New Jersey School Performance Reports, for the 2017-18 school year, New Jersey retained 90% of its teachers and 86% of administrators in the same school district.¹⁰ These retention rates are slightly higher than the national average of about 84%¹¹ for teachers and about 82% for administrators.¹² On average, our educators stay in our classrooms, schools and districts for over 10 years. Specifically, teachers average 12 years in their schools and 75% stay in their district for more than four years. New Jersey administrators average 16 years in their school and 76% stay in their district for more than four years.¹³

Educators are the lifeblood of our system, but they make up just one portion of the workforce in New Jersey's elementary and secondary schools, with other roles ranging from paraprofessionals to custodial staff to guidance counselors and cafeteria aides (see Figure 2 for a breakdown of the operational staff serving

FIGURE 2: NJ OPERATIONAL STAFF STATEWIDE, 2018-2019^{xii}



Data source: NJDOE Non-Certificated Staff Data

schools). Additionally, each district has a school board that approves budgetary, staffing and curriculum decisions. While all of these roles are critical to the operations of our public education ecosystem, this report focuses largely on the teacher workforce given that data related to the additional roles is limited.

Examining the composition and quality of our teacher workforce is necessary as we identify the human capital needs of our public school system, the various changes in delivery of education due to the coronavirus pandemic and the future needs of our state economy. New Jersey’s most recent educator evaluation report¹⁴ shows teachers generally earn an Effective rating on a four-category scale. However, data also shows that economically disadvantaged and minority students are more likely to be taught by teachers who are out-of-field (lack the requisite certifications for the given position) or inexperienced (less than four years teaching):¹⁵

According to the NJDOE School Performance Reports:¹⁶

- In 2016, 6.9% of all NJ students were taught by one or more out of field teacher and by the 2018-19 school year that number grew to 13.6%;
- In 2016, 8.6% of students in Title I schools were taught by one or more out of field teacher and by the 2018-19 school year that number more than doubled to 17.6%; and
- Over the past three years, 77% of all New Jersey students were taught by one or more inexperienced teacher and this figure grew slightly higher to 79% for low income students by 2018-19.¹⁷

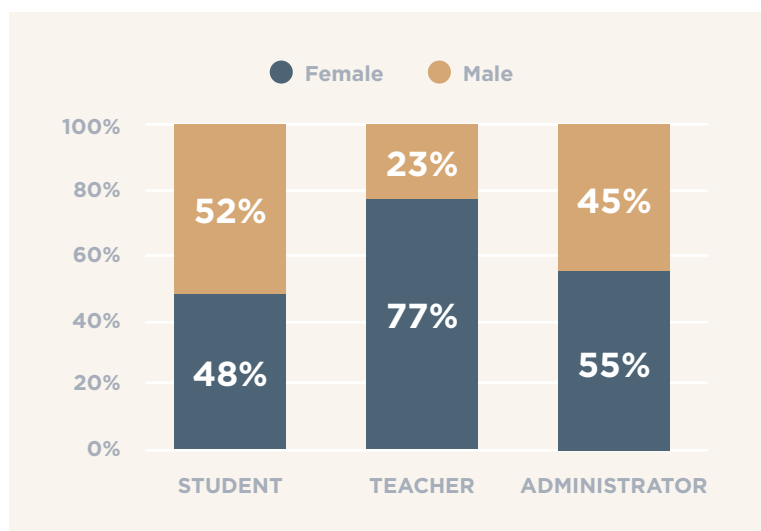
These are challenges we must remedy to provide a future educator workforce that can serve all students.

The Composition of Our Educator Workforce and Student Body

New Jersey is one of the top five most diverse states nationally and this is reflected in our student body.¹⁸ Our demographics have been shifting for several years and student diversity is increasing each year, but the diversity of the educator workforce has not kept pace.¹⁹

When looking across the state, our educator workforce by and large is not reflective of the gender and racial diversity of our student population. Figure 3 illustrates the gender composition of our educator workforce, showing that 48% of students are female, as compared to 77% of teachers. Figure 4 demonstrates the disparity in racial diversity between our students and educators. Our current students’ racial composition is approximately 57% non-White and 43% White,²⁰ and New Jersey has seen our number of limited English proficient students increase by approximately one third since 2010.²¹ Comparatively, 84% of our teacher workforce is White, while 7% of teachers are Black and 7% are Hispanic.²²

FIGURE 3: NJ GENDER DISPARITY: STUDENT AND EDUCATOR POPULATIONS, 2017-2018^{xiii}

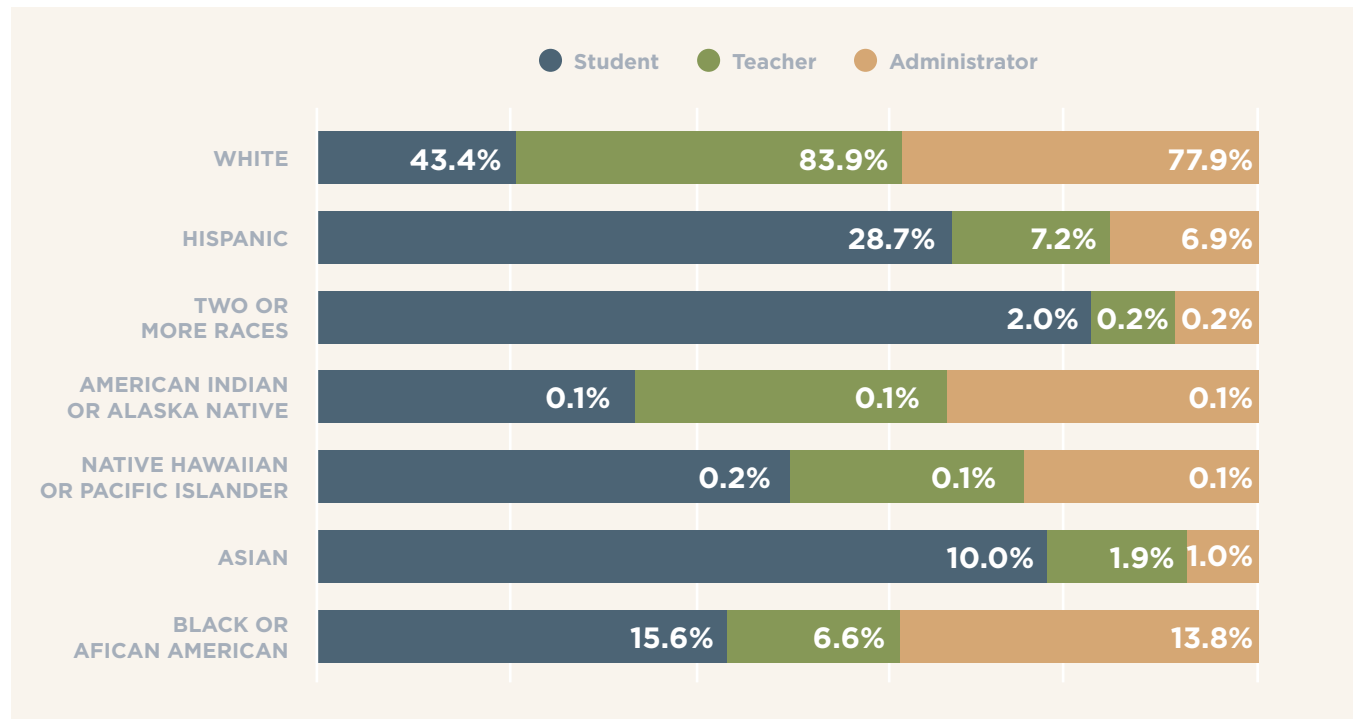


Data source: NJDOE, 2017-18, School Performance Reports.

Why should we aim to build an educator workforce that is more reflective of our student population? **National research shows that all students can benefit from a diverse educator workforce**, identifying the following positive outcomes for students who have been exposed to diverse teachers:

- “Teachers of color help close achievement gaps for students of color and are highly rated by students of all races.”²³

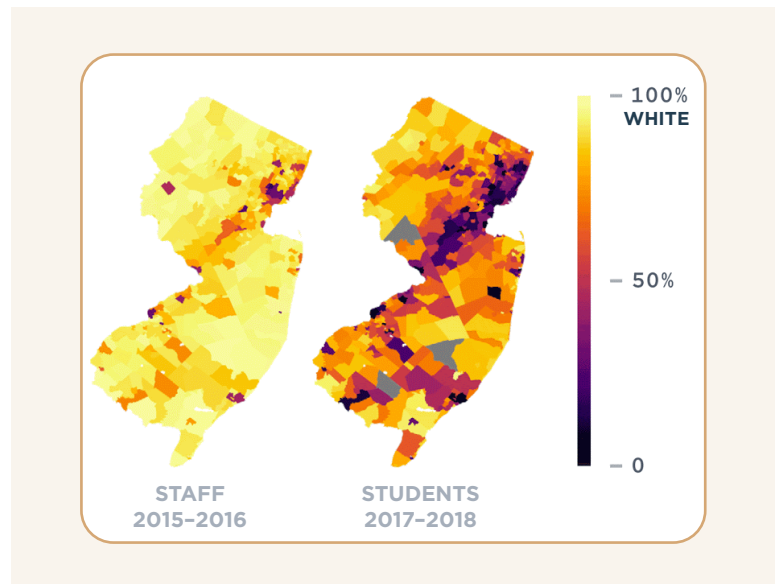
FIGURE 4: NJ RACIAL DISPARITY: STUDENT AND EDUCATOR, 2017-2018^{xiv}



Data source: NJDOE 2017-2018 School Performance Reports.

- Students who are exposed to diversity have improved cognitive, critical thinking and problem-solving skills.²⁴
- Students of color taught by at least one teacher of color in grades K-5 have increased graduation rates and standardized test scores.²⁵
- Regular interactions with a variety of racial and ethnic groups help students debunk stereotypes and reduce unconscious bias inside and outside of the classroom.²⁶
- Black students who have at least one same-race teacher in the elementary grades are less likely to drop out of high school.²⁷

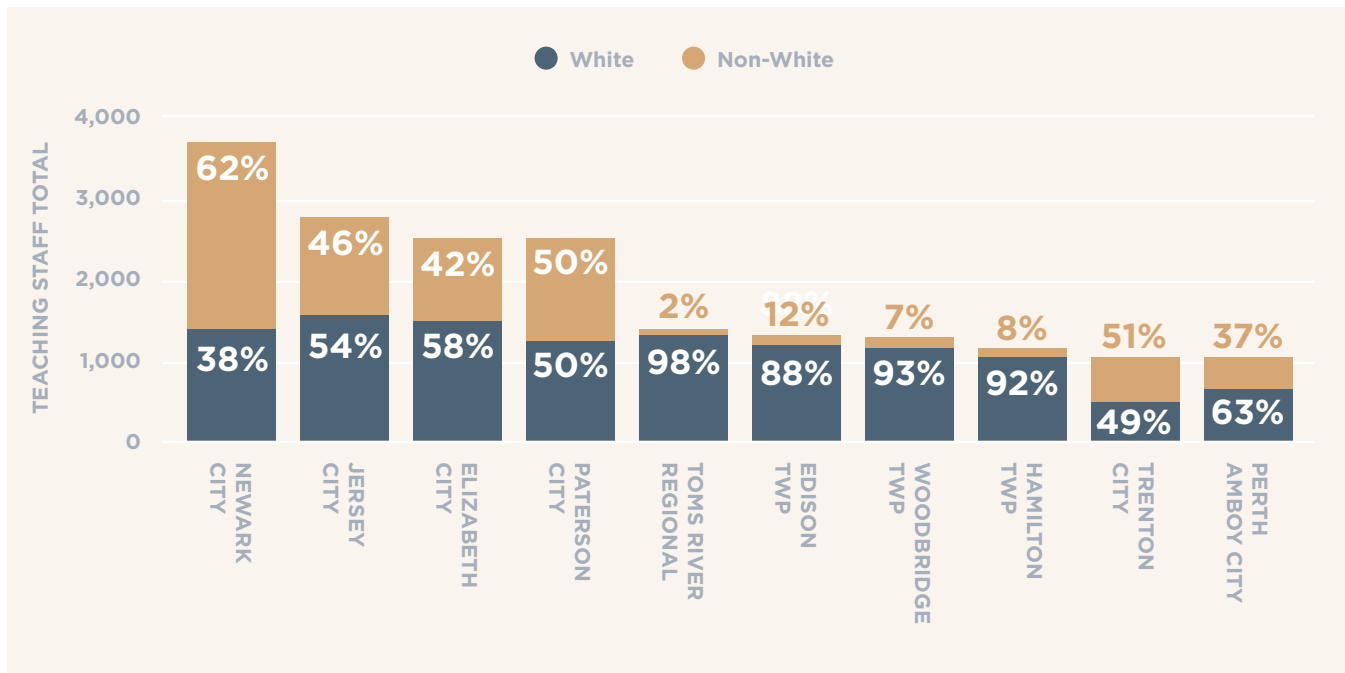
FIGURE 5: NJ WHITE AND NON-WHITE TEACHER AND STUDENT COMPARISON, 2017-2018^{xv}



Data source: Obtained from NJDOE

Figure 5 compares non-White teacher and student populations across New Jersey. In 2016-17, one in five schools employed no teachers of color.²⁸ **This racial disparity results in 163,000 students that see zero non-White teachers in their schools and 121,500 students that never see a teacher of their same race in their school.**²⁹ Even amongst the 10 largest school districts, there is a wide disparity of diversity in their current workforce (see Figure 6); four of these districts have fewer than 25% non-White teachers.³⁰

FIGURE 6: NJ WHITE VS NON-WHITE TEACHING STAFF, 10 LARGE DISTRICTS, 2018-2019^{xvi}



Data source: *NJDOE Certificated Staff Data*.

Educator preparation providers and the NJDOE have been working together closely to identify strategies that work to diversify the profession and recent trends show that diversity among our novice teachers is growing. In 2018, the NJDOE³¹ reported that teachers with zero to four years of experience are 78.6% White compared to 85.5% of teachers with five or more years of experience. We must build upon this progress in order for our teacher workforce to become truly reflective of our students and communities.

The promise of prioritizing racial and ethnic diversity in the teacher workforce becomes even more persuasive when considering New Jersey’s persistent achievement gap. For while our public schools have been among the highest performing nationally, Asian, White and wealthier students typically far outperform their peers of other racial/ethnic, socioeconomic and special needs populations. In English Language Arts (ELA), for example, 82% of Asian students and 66% of White students performed at or above grade level compared to 43% of Hispanic students, 37% of African American students, 27% of English language learners and 22% of students with disabilities in 2017-18.³² Fortunately, our teachers, students and communities have demonstrated a strong commitment to improving outcomes for all students. From 2015-2018, New Jersey led the nation in closing achievement gaps for African American and Hispanic students in ELA; this holds promise that with the appropriate commitment and support, we can continue to achieve needed gains.³³



BRIGHT SPOT:

Central Jersey Program for the Recruitment of Diverse Educators is a grassroots association of district hiring managers created to better support each other in finding and hiring diverse candidates in their districts.

With New Jersey schools closed for the remainder of the 2019-20 school year and with looming uncertainty as to whether districts might need to continue remote and virtual learning, at least for some period of time next year, there is a strong likelihood that our achievement gaps will not only persist, but grow larger. To mitigate what many are calling the “COVID slide,” we should be supporting teachers in upskilling their abilities by equipping them with culturally responsive teaching practices,³⁴ including those that can be utilized during remote or virtu-

al instruction. Providing our future educators with these supports during their preparation programs will be essential in reaching our diverse learners in the weeks, months and years to come.



BRIGHT SPOT:^{xv}

The NJDOE awarded multiple grants totaling approximately \$1.6 million between 2018 and 2019 to partners looking at supply issues and created the hashtag #TeachLikeMeNJ to learn more about the other work happening statewide to increase educator diversity.

New Jersey Teacher Workforce: Supply & Demand

To gain a comprehensive view of New Jersey’s teacher workforce, JerseyCAN reviewed available quantitative data on the supply and demand of New Jersey teachers and administrators and gathered qualitative information from several districts and educational organizations. Based on this review, we see a steady decline in the supply of certified teachers coming from traditional and alternative educator preparation programs and not enough available data on our administrator pipeline.

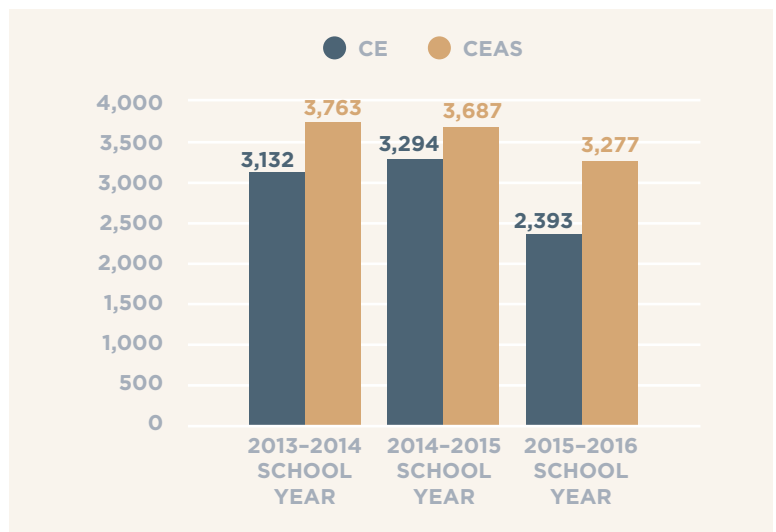
As shown below, NJDOE reports and testimony from school districts indicate that demand for certain types of teachers is growing as districts are facing increased challenges in finding candidates to fill vacant teaching positions. **Quite simply, it appears that in certain endorsement areas, New Jersey is not preparing enough teachers to meet districts’ demands.**

Supply Data and Information

Every year, new teachers enter the workforce and help replenish the positions of teachers who retire or leave the profession. The NJDOE reports on these newly minted teachers each year by releasing the number of teacher candidates that complete a New Jersey educator preparation program and become employed in a New Jersey public school. This information, collected in partnership with educator preparation programs, is contained in what are known as Educator Preparation Provider Reports (EPPRs).³⁵ Figures 7 and 8 reflect the information contained in those reports, which show the certificates earned between school years 2013-14 and 2015-16.

Figure 7 shows that the largest supplier of novice teachers in New Jersey is the traditional pathway, which allows a teacher to earn a Certificate of Eligibility with Advanced Standing (CEAS).³⁶ The CEAS pathway prepared approximately 10,700 new teachers between 2013-14 and 2015-16. Comparatively, the alternative pathway, or Certificate of Eligibility (CE), supplied approximately 8,800 between 2013-14 and 2015-16 with a notable drop in 2015-16. Further, the number of teachers entering the profession from either pathway declined. A total of 6,895 new teachers were prepared in school year 2013-14, but in school year 2015-16, that number dropped to 5,670 teachers – a drop of 18% over three school years. This decline was before the pandemic shuttered the post-secondary schools responsible for training the next wave of teachers. With economic conditions indicating a looming recession, current teacher shortages could be further amplified or exacerbated.

FIGURE 7: NJ TEACHER SUPPLY BY PREPARATION PATHWAY^{xvii}



Data source: NJDOE Educator Preparation Provider Performance Reports.

CEAS: *Candidates from approved preparation providers earn this initial certificate to seek employment in New Jersey. These are awarded to graduates of a traditional teacher preparation program.*

CE: *Candidates apply for this initial certificate to seek employment and are teaching while completing their teacher preparation programming.*

Figure 8 shows the counts of certified individuals prepared with a CE or CEAS by endorsement areas as reported on the EPPRs from 2016 to 2018.

Current supply data must be further examined in light of the fact that not all teachers are prepared to teach every subject. Rather, a teacher must hold a specific endorsement to be able to teach a specific grade span or content area, and in some cases, a teacher must obtain a co-certificate to teach a specific class. For example, a high school Special Education teacher must meet specific requirements to teach the specific high school content and must meet additional requirements in order to serve as the Special Education teacher in a classroom serving students with disabilities. Accordingly, simply preparing a specific quantity of teachers to replenish our workforce is not enough – New Jersey must

prepare an adequate supply of teachers in the specific grade spans and content areas that are in demand across New Jersey's school districts.

FIGURE 8: NJ ENDORSEMENT SUPPLY BY PREPARATION PATHWAY^{xviii}

TOTAL PREPARED

ENDORSEMENT	CEAS Pathway (traditional route)			CE Pathway (alternate route)		
	2015–2016	2014–2015	2013–2014	2015–2016	2014–2015	2013–2014
BILINGUAL	18	19	32*	127	122	93
BIOLOGY	82	94	154**	72	103	117
CHEMISTRY	23	22	31**	37	49	60
CTE (ALL)	7	2	12**	234	271	273
ELEMENTARY K6	1451	1582	3777**	402	502	464
ENGLISH	270	294	661**	109	163	125
ESL	112	123	165**	211	258	207
HEALTH AND PHYS.ED	178	279	702**	12	25	28
MATH	176	179	461**	64	94	117
MIDDLE SCHOOL (ALL)	190	224	686**	164	251	217
PHYSICS	17	13	27**	13	32	28
PRE-K-3	440	433	945**	302	482	459
SOCIAL STUDIES	239	310	690**	82	132	135
SPECIAL EDUCATION	1036	1065	2100**	701	904	812
TECHNOLOGY	14	7	12**	7	16	11
WORLD LANGUAGES (ALL)	48	69	125**	81	184	139
ART	*	90	216**	39	53	64
MUSIC	*	181	310**	21	32	32

*= Data unavailable **= 2 year cohort

Data source: NJDOE, Educator Preparation Provider Performance Reports and Obtained from NJDOE.

Another challenge is presented when the rules around collecting or reporting supply data are changed, and therefore the information used to define trends year-over-year is not consistent. On the 2016 reports, for instance, the NJDOE changed its reporting years from a two-year cohort to a one-year cohort.³⁷ As a result, the numbers reported in 2016 are higher because the reporting time period was longer, not because more teachers were prepared.

A review of the number of certified program completers by endorsement area demonstrates that there are wide variations in the numbers of teachers being prepared for each area. These wide variations suggest, and the NJDOE has confirmed, “that while New Jersey certifies thousands of teachers each year, there are specific content areas like science, math, bilingual education, English as a second language and career and technical education that are very challenging or relatively challenging for districts to staff as that supply does not match that demand.”³⁸

While it appears that the supply in these key areas is likely insufficient to meet demand, without detailed demand information to compare to this supply data, it is unclear how many more teachers should be trained, and in what endorsement areas, to adequately meet statewide demands. The U.S. Department of Education requires each state to report annually the shortage areas they have identified. New Jersey has reported that our shortage areas are in Science, Math, English as a Second Language (ESL), Bilingual, World Languages, Special Education and Career and Technical Education (CTE) endorsements.³⁹

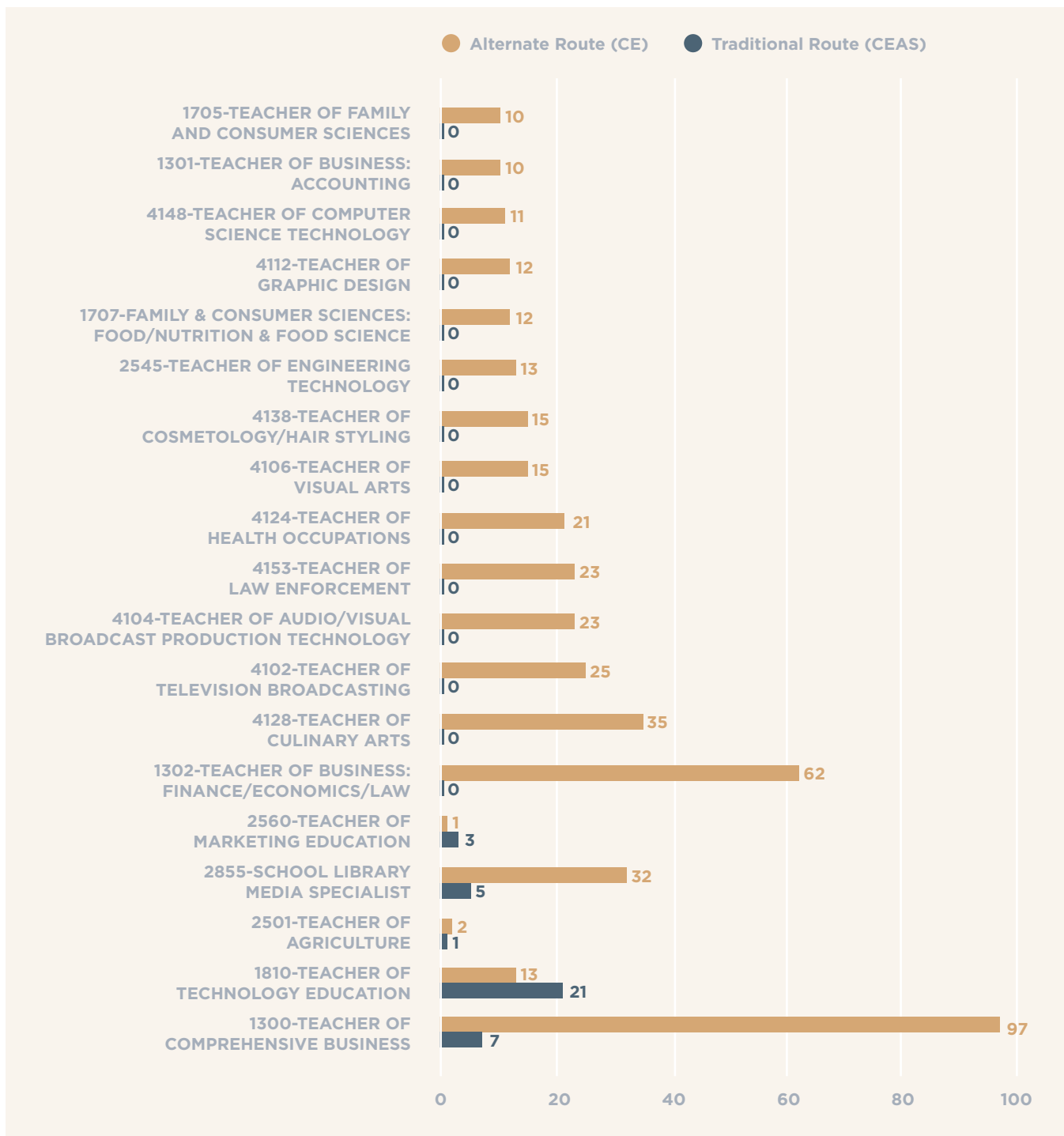
Looking at these shortage areas further, Figures 9-12 reflect the number of candidates each New Jersey approved preparation provider prepared by certification area in the 2016-17 academic year. These charts point out the current state of New Jersey teacher preparation for these hard-to-staff content areas. Each is briefly described along with a depiction of the most recent new teacher supply. This data comes from the Federal Title II reports,⁴⁰ which are only required for teacher preparation programs and not principal or administrator programs. The following two sections of this report further explore these data challenges and offer related policy recommendations.

- **CTE:** The CTE grouping of endorsements ranges across many different industries. There are 75 endorsement areas for future teachers to choose from and new post-secondary programs would need to be created to increase the supply of these endorsements. Figure 10 shows the top 10 endorsements in CTE based on reported enrollment numbers.
- **Special Education:** Special Education teachers are required to hold a co-certificate, which means a teacher is skilled in content and in special education strategies. Finding secondary Special Education teachers with both is challenging, as the number of teachers holding secondary Math, Science and ELA endorsements is already low.
- **Science and Math:** These teachers include Physics, Chemistry, Biology, Physical Science, Algebra I and II, middle school teachers who specialize in Science or Math, Calculus and Statistics. The figures below focus only on Math and Physics.
- **ESL, Bilingual and World Languages:** These in-demand jobs include teachers who are supporting English-language development, teachers who are bilingual and teach subject matter in two languages and all the specific world language courses like French, Chinese, Latin, German, Arabic and more.

From a supply perspective, it is not ideal to have one preparation provider supplying the majority of our in-demand teaching areas. Program capacity and geographic location are two reasons why the supply of critical endorsements needs to be more robust across all preparation pathways.

Further, school boards are required to make reductions in staff by following seniority guidelines, which are set forth by the Commissioner of Education.⁴¹ As a result, when school districts must reduce staff, current guidelines require the consideration of a teacher’s years of service but not the teacher’s classroom performance. This practice ultimately leads to the dismissal of educators that are new to the classroom rather than veteran teachers. As leaders are preparing for budget challenges in the face of COVID-19, the seniority guidelines that govern these staffing decisions should be carefully considered.

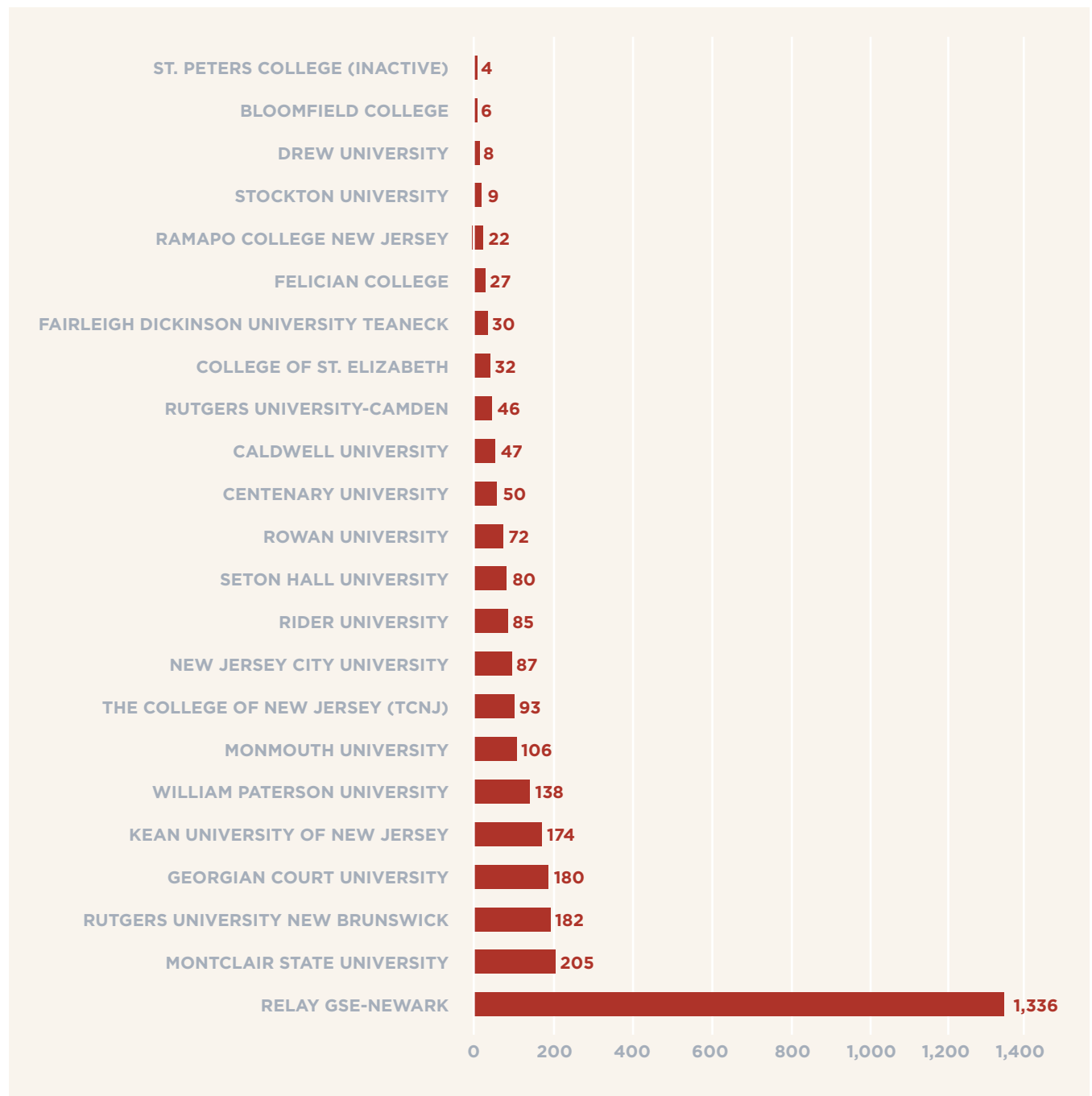
FIGURE 9: NJ PREPARED SELECT CTE TEACHERS, 2018 REPORT^{xix}



The figure above shows the number of candidates each approved preparation provider prepared by certification area in the 2016-2017 academic year, as included in the Federal Title II Reports.

Data source: *Title II Federal Reports, 2018.*

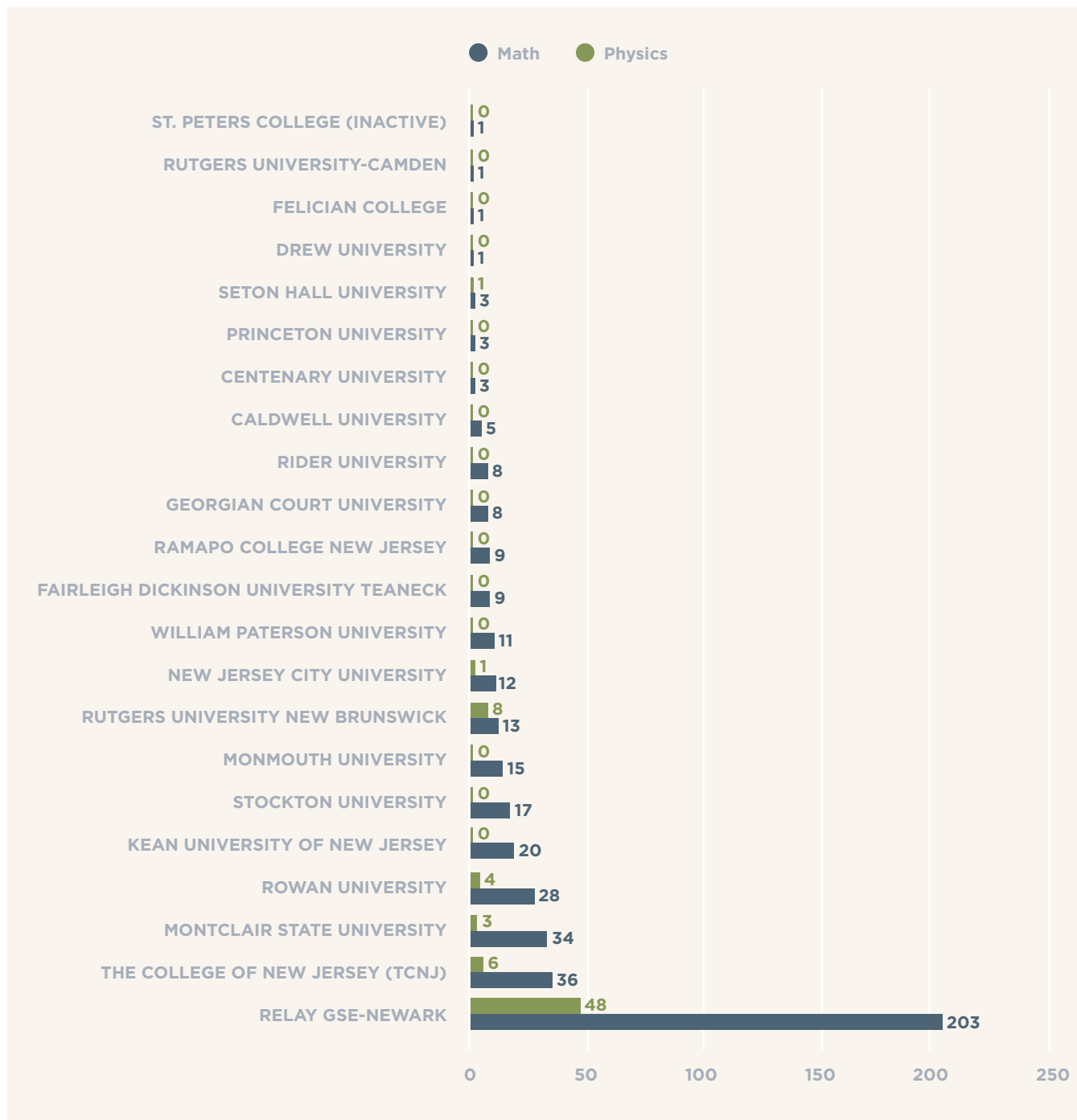
FIGURE 10: NJ PREPARED SPECIAL EDUCATION TEACHERS, 2018 REPORT^{xx}



The figure above shows the number of candidates each approved preparation provider prepared by certification area in the 2016-2017 academic year, as included in the Federal Title II Reports. Not all New Jersey CE providers are included in these reports.

Data source: *Title II Federal Reports, 2018*

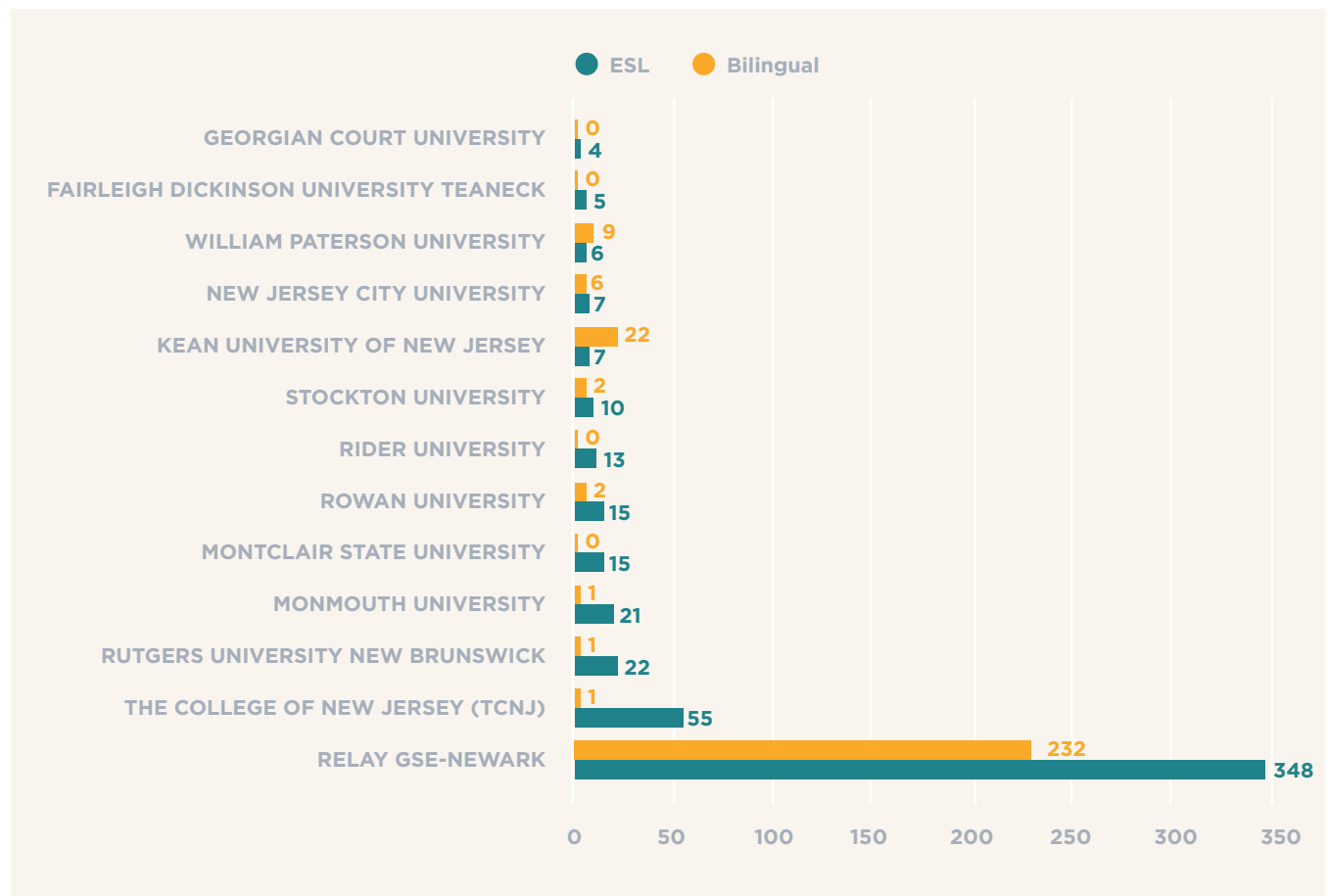
FIGURE 11: NJ PREPARED MATH AND PHYSICS TEACHERS, 2018 REPORT^{xixi}



The figure above shows the number of candidates each approved preparation provider prepared by certification area in the 2016-2017 academic year, as included in the Federal Title II Reports. Not all New Jersey CE providers are included in these reports.

Data source: Title II Federal Reports, 2018.

FIGURE 12: NJ PREPARED ESL AND BILINGUAL TEACHERS, 2018 REPORT^{xxii}



The figure above shows the number of candidates each approved preparation provider prepared by certification area in the 2016-2017 academic year, as included in the Federal Title II Reports. Not all New Jersey CE providers are included in these reports.

Data source: Title II Federal Reports, 2018.

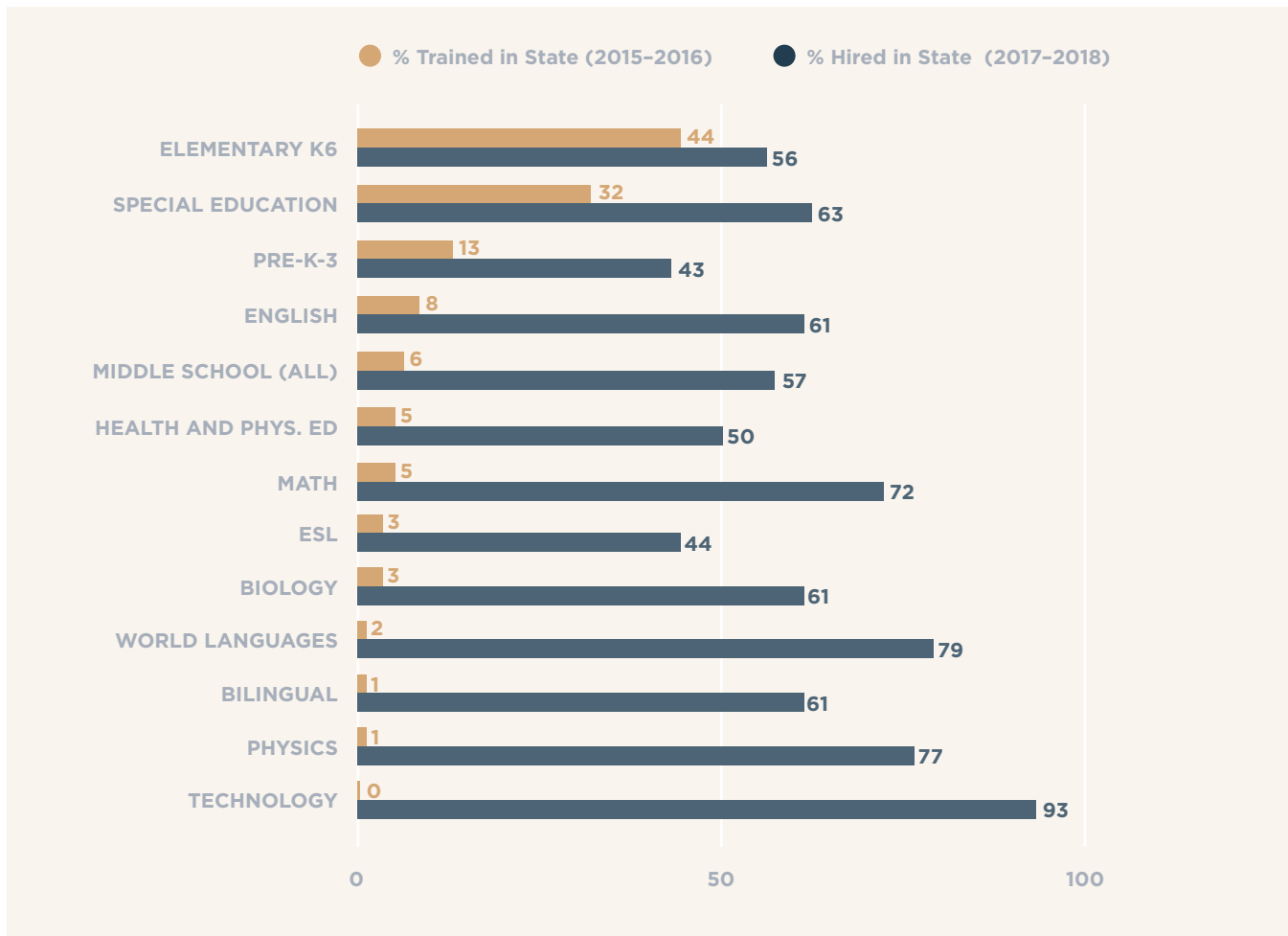
Demand Data and Information

Vacancy data is critical for determining whether we are preparing enough teachers to fill needed subject areas and specialties. **Currently, New Jersey does not collect information from school districts on the number of teachers needed across the state by endorsement area.** Vacancy data could include an open position, an anticipated retirement or a contemplated addition of a new position within a district. In the absence of such vacancy data, New Jersey’s EPPRs provide the closest data element we currently have to approximate supply and demand. However, this is only a rough proxy. Figure 13 shows the percentage of teachers trained in New Jersey CEAS preparation programs only in 2015-16, as well as the percentage of that cohort of CEAS teachers hired in 2017-18.

The 2018 statewide CEAS report shows that the teacher endorsement areas with the highest hire rates in 2017-18 were as follows:⁴²

- Technology (93%);
- World Languages (79%);
- Physics (77%);
- Math (72%);
- Special Education (63%); and
- Bilingual, Biology and English (61%).

FIGURE 13: CEAS TEACHERS TRAINED AND HIRED IN NJ, 2018 REPORT^{xliii}



Data source: NJDOE Educator Preparation Provider Performance Reports.



BRIGHT SPOT:

Other states, including Florida and South Carolina, provide reports that share vacancy information from the state level to understand the current needs of school districts and inform the supply. New Jersey does not report educator workforce data inclusive of vacancies at the state level and we can learn from other states that do collect and report this information.

While we cannot make exact comparisons with this data, and while we must acknowledge that CE prepared teachers are not included, we can still see some troubling gaps. Endorsement areas like Technology, World Languages and Physics showed the highest hire rates, and yet New Jersey CEAS preparation programs prepared very few of these teachers in that time period.

Obtaining district-level vacancy data will help us to more accurately predict teacher demand and ultimately address the necessary shifts in the pipeline. Nationally, The Learning Policy Institute is a leader in this work and uses current workforce reports provided by states to understand how severe a shortage may be in that state.⁴³

A closer look at the vacancy information shared by some of our largest school districts shows that their demands are greater than current supply. In fact, Newark had 105 open positions at the start of the 2019-20 school year, including eight newly created Bilingual positions.⁴⁴ And yet, state data shows a decrease in the number of Bilingual teachers prepared by the traditional pathway between 2013 and 2016. The alternate route pathway saw an increase in Bilingual teachers prepared during that same time. In Paterson, the district spent \$26,000 over two years recruiting 26 ESL

FIGURE 14: BILINGUAL TEACHER WAIVERS, 2016–2019^{xxiv}

2015-2016		2016-2017		2017-2018		2018-2019	
COUNTY	TOTAL: 157	COUNTY	TOTAL: 179	COUNTY	TOTAL: 178	COUNTY	TOTAL: 192
BERGEN	28	BERGEN	32	BERGEN	32	BERGEN	34
MIDDLESEX	13	MIDDLESEX	12	MIDDLESEX	10	MIDDLESEX	16
MERCER	6	MERCER	7	MERCER	4	MERCER	3
MONMOUTH	14	MONMOUTH	21	MONMOUTH	17	MONMOUTH	18
CHARTERS	7	CHARTERS	12	CHARTERS	12	CHARTERS	15
ESSEX	9	ESSEX	9	ESSEX	11	ESSEX	12
MORRIS	11	MORRIS	13	MORRIS	11	MORRIS	15
ATLANTIC	10	ATLANTIC	11	ATLANTIC	8	ATLANTIC	10
CAMDEN	9	CAMDEN	5	CAMDEN	10	CAMDEN	9
OCEAN	6	OCEAN	8	OCEAN	8	OCEAN	10
SOMERSET	6	SOMERSET	8	SOMERSET	9	SOMERSET	8
UNION	6	UNION	7	UNION	9	UNION	7
BURLINGTON	6	BURLINGTON	5	BURLINGTON	6	BURLINGTON	7
HUDSON	6	HUDSON	7	HUDSON	6	HUDSON	4
CAPE MAY	3	CAPE MAY	4	CAPE MAY	4	CAPE MAY	4
HUNTERDON	2	HUNTERDON	3	HUNTERDON	3	HUNTERDON	3
WARREN	2	WARREN	2	WARREN	2	WARREN	3
GLOUCESTER	5	GLOUCESTER	4	GLOUCESTER	4	GLOUCESTER	2
CUMBERLAND	2	CUMBERLAND	2	CUMBERLAND	2	CUMBERLAND	2
PASSAIC	6	PASSAIC	6	PASSAIC	9	PASSAIC	8
SUSSEX	0	SUSSEX	1	SUSSEX	1	SUSSEX	1
SALEM	0	SALEM	0	SALEM	0	SALEM	1

Data source: NJDOE, *Bilingual Waivers*.

teachers to come from Puerto Rico to teach.⁴⁵ Similarly, Camden still had 29 full time positions vacant in the middle of the 2019-20 school year.⁴⁶ If this data was collected uniformly at the state level, New Jersey’s educator preparation providers could advise incoming cohorts of future teachers as to the areas of greatest need in districts and provide pathways for certification in those areas.

The result of our state’s lack of matching supply and demand data for the educator workforce can have significant implications for our vulnerable students, such as our English language learners (ELLs). Since 2010, some districts have seen an increase of ELLs by almost 33%.⁴⁷ New Jersey regulations require a district to create a Bilingual program when they have 20 students of the same language.⁴⁸ When districts cannot find a Bilingual teacher, they may submit waivers to the state indicating an inability to support bilingual students in accordance with the law.⁴⁹ Without demand data aligned to student characteristics, these waivers serve as one proxy for vacancy data.

Figure 14 captures the number of districts by county with approved Bilingual waivers, illustrating the significant number of these waivers needed to address a lack of Bilingual teachers. The top two counties remain relatively constant (Bergen and Middlesex). However, between 2016 and 2019, Ocean and Morris counties saw an increased need for waivers, and Salem needed a waiver for the first time in four years.

We know this waiver solution is not working when examining the student achievement of our ELL population. According to state data, 86% of ELL students that have been in the state for over five years are still not proficient in English. What’s more, 90% of ELL students that have been in the state between zero and two years have even larger gaps in proficiency.⁵⁰

As a state, we were not meeting the needs of many students because we are not adequately informing the supply of these needs. New Jersey educator preparation providers and aspiring teachers are unable to see potential employment opportunities without better, more readily available data.

One of the biggest impacts we anticipate that COVID-19 will have on our students is increasing achievement gaps like we see in our ELL population. How do we move forward to ensure our most vulnerable students have an opportunity to get back on track? One solution explored in the policy recommendations below is tapping into our existing talent: educators who are bilingual and high school students who earn the Seal of Biliteracy. **We must use this critical time as an opportunity to improve the data systems that illuminate the strengths and the gaps in our workforce so we can seek improvements like these.**

Policy Opportunities for our Educator Workforce

A major goal of this report series is to highlight the opportunities both for initial and longer-term systemic change for New Jersey’s educator workforce. Since this first report is focused on our current teacher workforce, our recommendations are focused on solutions that are designed to both lay the foundation for the longer-term development of a responsive teacher pipeline and fill critical shortages and in-demand positions as quickly as possible. These policy opportunities can be grouped into three key areas, and policy recommendations will be added with future report releases:

- Using data as a foundation to drive the future educator workforce;
- Building a responsive education sector; and
- Creating the environment for an agile education system.

JerseyCAN is aware and appreciative of the efforts of the education community in prioritizing necessary policy changes in response to COVID-19. These recommendations are presented as opportunities to create a more responsive educator workforce that can meet the educational and future workforce needs of students in a rapidly changing environment.



Across the United States and most of the world today, there is more data collected, reported and analyzed faster than ever before. This is true of both the private and public sectors, including our education system. JerseyCAN sees a greater opportunity to identify, connect and analyze critical data points that can inform, influence and drive the future development and composition of our state’s educator workforce.

Indeed, Governor Murphy’s [Jobs NJ Plan](#), released in January 2020, underscores the power of collecting and utilizing such data to fuel our state’s workforce, announcing that the “Office of the Secretary of Higher Education (OSHE), Department of Labor and Workforce Development (LWD), and other relevant state agencies will collaborate to ensure that institutions align their career-oriented programs with labor market demand and that students and institutions alike can access the information needed to make strong decisions.”⁵¹ More specifically, the plan references the need to better utilize New Jersey’s Education to Earnings Data System (NJEEDS), noting: “The administration is committed to leveraging this powerful longitudinal dataset that provides the basis for monitoring and evaluating New Jersey’s talent development programs.”⁵² See [Appendix A](#) for an overview of this and other existing state data systems and reports.

A [national study from the Center for American Progress](#) examining declining enrollment in educator preparation programs also supports efforts around utilizing data, recommending: “In the absence of better na-

tional data, state policymakers should publish thorough reports on their teacher supply and demand to better understand local teacher labor markets, determine whether they are meeting demand, and project future needs and shortages. States can also use this information to determine whether they are meeting goals such as increasing the number of teachers from diverse racial and ethnic backgrounds.”⁵³

In March 2018, the New Jersey Chamber of Commerce Foundation and the John J. Heldrich Center for Workforce Development partnered and authored a report: *Building the Pipeline: Assessing New Jersey’s Talent Supply and Demand*.⁵⁴ This report echoes our call and makes the following recommendation:

“Support and promote the use of education and workforce data to better inform students, teachers, and state policy, and to evaluate public and private investments. In order for state policy makers to address employer hiring challenges and any skills gaps reported by New Jersey employers, better information and analysis is vital on where to make investments.”

Accordingly, the following recommendations have the power to transform the pipeline of the educator workforce as well as inform future incentives and policy decisions.

RECOMMENDATION 1:

Require Local Demand Data from Districts and Annual Educator Workforce Projections

Demand data from our school districts is necessary to inform the educator pipeline and statewide incentives. Educator preparation programs are required by regulation and national accreditation to meet the educator needs of the state;⁵⁵ however, without district or state demand data, it is virtually impossible to ensure a single program or our education preparation system as a whole is meeting those needs or requirements – especially in the face of the ever-shifting environment in the COVID-19 era.

New Jersey education partners, including policymakers and education preparation providers, need district demand data to create a responsive supply and to determine how many teachers we need to be recruiting, training and retaining. This data will identify our critical shortage areas and allow for the potential application of incentives to attract new talent to shortage areas. For example, if data demonstrates the need for more STEM teachers to increase P-12 programming, the state can consider offering financial incentives to teachers going into those shortage positions. Without a full picture of statewide demand by endorsement area, there is no way to know if financial incentives are efficient or effective.

Accordingly, JerseyCAN recommends that school districts be required to submit local demand data to the NJDOE. Through the current state-operated data collection system, NJSMART, New Jersey districts should annually report all for all staff:

- Open positions;
- New positions;
- Removed positions; and
- Anticipated retirements.

JerseyCAN also recommends that this data be transmitted from NJDOE on an annual basis to NJEEDS, which, in turn, will be charged with utilizing their data warehouse to produce annual reports projecting the needs of New Jersey’s educator workforce for the next three to five years. These projections should also include an analysis and consideration of the current and forecasted in-demand jobs in New Jersey. For the inaugural report, it is recommended that NJEEDS produce its projections within six months of receiving

the data. The questions these annual education workforce projections should answer could include the following:

- What education jobs are in high demand in New Jersey and where are they located?
- How many Bilingual teachers does New Jersey need to provide adequate programming to 1.37 million students statewide?
- How many Computer Science teachers does New Jersey need to prepare to ensure all students have access to computer science coursework?
- What classes and programs will no longer exist in the next three years, if teachers are not prepared?
- In what areas must teachers and school leaders be trained so they can prepare students for the future economy?

Finally, JerseyCAN recommends that the data governance group known as the NJEEDS Data Stewards Work Group prioritize defining the education workforce projections and vacancy data elements reported by districts. This group should present the progress on completing the projections and defining vacancy elements to the NJEEDs Executive Leadership Council within three months. The Executive Leadership Council should report progress on implementing the bill, upcoming projections and any other general updates to the legislature on a bi-annual timeline, January 15th and July 15th.



Dr. Suzanne McCotter, Dean of The College of New Jersey’s School of Education, testified before the New Jersey Assembly Education Committee on May 16, 2019: “The shortage of teachers that is endemic in other states has not yet hit New Jersey as an overall crisis, but we can see predictors of that crisis in several key areas.” Assemblywoman and Assembly Education Committee Chairwoman Pamela R. Lampitt also echoed the reach of this challenge, stating: “Unfortunately many New Jersey Schools are facing teacher shortages in various areas, with some of the deepest shortages in STEM subjects, ESL and Special Education.”⁵⁶

A responsive educator workforce is a workforce that can meet the current and future needs of all students regardless of their training or past experience. Leaders like the National Center on Teacher Quality (NCTQ), Educators 4 Excellence, TNTP and the Center for American Progress all identify that institutional changes are necessary to attract, train and retain diverse and responsive educators into the profession. However, such changes will take time to implement and scale.

Accordingly, as the educator workforce projections are built out to better inform the long-term preparation of our pipeline, the following recommendations are meant to incentivize the education profession in the short term to immediately respond to the needs of New Jersey students.

RECOMMENDATION 2:

Subsidize the Cost of Certification Tests for Shortage Areas

To incentivize the short-term supply of our current pipeline of teachers, the state should subsidize all testing costs for any teachers pursuing the shortage areas as reported by the NJDOE to the federal government. This would include subsidizing the cost of the following exams for teaching candidates going into shortage areas: Praxis CORE, Praxis II Content, WPI/OPT and edTPA.

Currently it appears that most of our post-secondary institutions do not allow federal student aid to be used to pay for licensure tests. For those candidates who are already financially struggling through college, this initiative will incentivize them to pursue shortage area endorsements. For our ESL and Bilingual teacher candidates, the additional cost of the OPT/WPI exams, which measure language proficiency, can be a deterrent. Subsidizing these costs will defray the financial hurdles of pursuing a career in education.

RECOMMENDATION 3:

Create a Seal of Biliteracy High School Pathway Program for Bilingual and ESL Teachers

Two of our greatest shortage areas in New Jersey are Bilingual and ESL teachers. We have a unique opportunity to create a pipeline of teachers to fill these shortage areas by creating a specialized pathway for students that have earned the Seal of Biliteracy upon high school graduation to become Bilingual or ESL teachers. In 2017, approximately 3,500 New Jersey students graduated with a Seal of Biliteracy and 5,600 earned the Seal of Biliteracy in 2018.⁵⁷ This means in the last two years, 9,100 students have met a level of proficiency in two languages and incentivizing these students to continue their language studies to become Bilingual teachers could be a short-term solution to two of our shortage areas.

New Jersey should explore opportunities for leveraging the High School Seal of Biliteracy program to encourage those with the Seal to become Bilingual and ESL Teachers. Opportunities could include offering college credit for the Seal, financial incentives for those with the Seal to pursue language studies and/or a teaching degree or allowing those who have successfully navigated the pathway to earn higher starting teacher salaries.

RECOMMENDATION 4:

Create a Co-Certificate Bridge Program for Bilingual Teachers

It should be our collective goal to have every bilingual student in front of a fully certified Bilingual teacher. However, given the shortfall, thousands of students across New Jersey do not have access to a teacher that speaks their primary language. To bridge this urgent need for our students, and as a way to retain and upskill our current educator workforce, JerseyCAN recommends the creation of a Co-Certificate Bridge Program. There is untapped potential among our current teachers across the state, who may actually be bilingual speakers, but do not hold the co-certificate required to be a Bilingual teacher. This program would allow fully certified teachers with a standard license to be eligible to enroll in a “bridge program,” specifically designed to equip them with the content and applicable skills necessary to gain a Bilingual co-certificate endorsement.

What makes this program unique is that participating teachers could begin teaching bilingual students upon passing their language proficiency exams and throughout the year complete relevant coursework required for their co-certificate. Ultimately, bridge program completers could earn their standard certificate upon receiving an effective or highly-effective rating in their new content area.

RECOMMENDATION 5:

Equip Our Educator Workforce with Culturally Responsive Teaching Practices

The NJDOE currently has two goals around teacher diversity: (1) by 2025, the incoming novice teachers will be more diverse than the experienced workforce; and (2) by 2025, 100% of all current educators will be using culturally responsive teaching practices. Culturally responsive teaching practices are defined as “using the cultural knowledge, prior experiences, frames of reference and performance styles of ethnically diverse students to make learning encounters more relevant to and effective for them.”⁵⁸

As we face learning disruptions that require remote instruction, the need for culturally responsive practices that can adapt to an online environment is particularly acute. We should provide all current educators, as well as the postsecondary preparation programs training future educators, with professional development in culturally responsive teaching practices. This would ensure current educators gain exposure to the concept and demonstrate how they can infuse these practices into their classrooms both digitally and in person.



CREATING THE ENVIRONMENT FOR AN AGILE EDUCATION SYSTEM

An agile education system is one that can be nimble and respond to change quickly, that leverages technology for operational improvements and that uses its teacher talent for student connection and achievement. Across the country, there are models for education systems moving towards agility, but these are small and have not been scaled at the state level. These models include flexible scheduling, a blend of distance learning and in-classroom instruction as well as reimagined school facilities that mirror future workplace environments. The following recommendation is a start to ensure New Jersey is able to create an agile education system for the future that is responsive to the changing school climate and economy.

RECOMMENDATION 6:

Establish a Coalition to Define an Agile School System

In response to the COVID-19 disruption, JerseyCAN recommends the formal establishment of a coalition to guide a coordinated effort to make the education workforce more agile and responsive to our state's evolving future. Due to the highly complex nature of this work, a group of diverse leaders should be assembled to work together to drive the necessary policy, operational and mindset changes.

Ideally, this group would set ambitious targets for each part of the education industry to work towards an agile system. Examples of those targets could include:

- Shifting to competency-based learning;
- Determining how and when to continue distance learning in the 2020-21 school year;
- Requiring formative assessments that build and measure progress to state standards; and
- Ensuring all districts have 1:1 devices by 2021.

Looking Ahead

Without current, accurate data from our school districts showing local demand for educators, we cannot respond adequately as a state to meet the needs of all our students. **Especially in the face of the global pandemic and this unprecedented disruption to education and the economy, our most vulnerable populations feel the effects of an inequitable system the most acutely. We must take the time now to better understand the gaps in our data and work collaboratively to advance policies and programs that can close these gaps and create a better environment for educator preparation and placement across New Jersey.**

The goal of this series is help guide state leaders as we respond to the educational and economic crisis we now face and, ultimately, to build a stronger educator pipeline for the future of education in New Jersey. Future installments will outline a framework for understanding the new needs brought on by COVID-19, as well as recommendations for the smartest approach state leaders can take to create a more agile educator pipeline in this context. This framework will include major elements like preparation and recruitment, staffing and benefits – including seniority-based personnel decisions, educator supports, accountability, economic impacts influencing supply and demand and opportunities for innovation. The next report will explore national and New Jersey leaders' perspectives on how best to support, attract and retain educators in these unprecedented times.

JerseyCAN envisions a day when all of our students have access to the educators they need to learn and advance on the pathway to a successful future. Working together, we can reach that day.

Existing State-Level Education Data Systems or Reports

New Jersey Department of Education

Systems

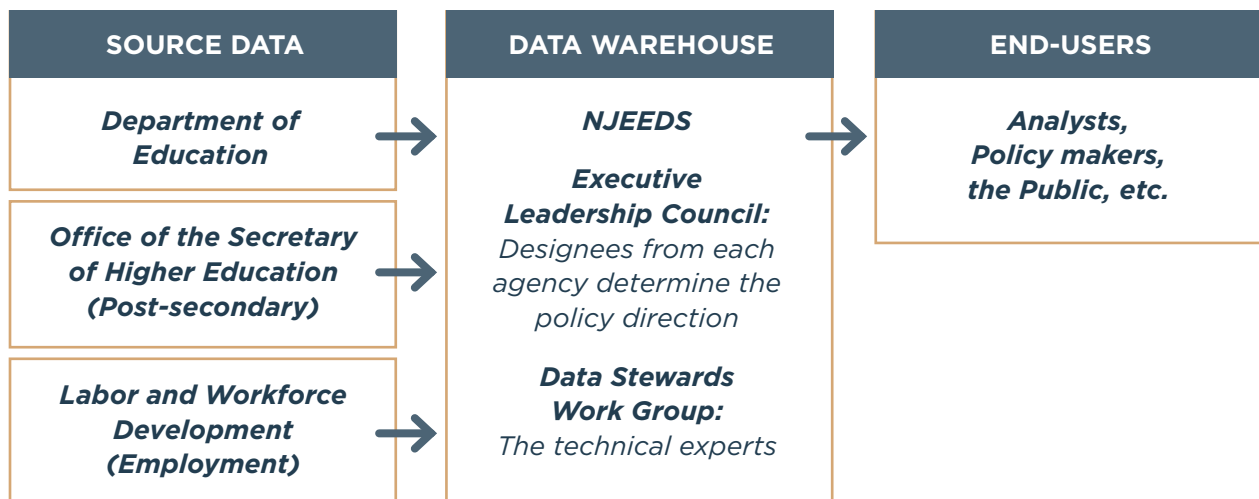
- **NJSMART:** A data warehouse managed by PCG in order to collect and clean data from districts, support LEAs in reporting accurate information to NJDOE and provide other reporting as requested
- **Homeroom:** The home of NJDOE applications or portals to collect data from districts. Some examples of homeroom data collections are: QSAC, Emergency Aid Applications, Seal of Biliteracy, CDS
- **TCIS:** The Teacher Certification Information System collects certification information for certified staff across New Jersey or individuals looking to become certified in New Jersey

Reports

- **Educator Preparation Provider Reports:** The merger of data from NJSMART, TCIS and Programs to share the most recent information on educators entering the workforce in New Jersey
- **NJ School Performance Reports:** These reports pull data from NJSMART, TCIS, various Homeroom applications and any other source at the NJDOE to share the most recent information on the progress of students in New Jersey schools

State Longitudinal Data System

The **New Jersey Education to Earnings Data System (NJEEEDS)** is a centralized longitudinal data system, developed in 2012 through a grant from the U.S. Department of Education and maintained as a collaboration between the NJ Office of the Secretary of Higher Education, Department of Labor and Workforce Development, NJDOE and Rutgers. It brings together data from New Jersey’s P-12 system into a more comprehensive statewide system that maintains information for K-12 students from their exit from high school through entry into higher education and the workforce. NJEEEDS provides valuable information and data to help calculate the outcomes of New Jersey students as they progress from pre-K through post-secondary education and training and as they enter the workforce. The source data includes de-identified, individual-level K-12 student demographics, program participation, assessments, performance, financial aid and interventions; postsecondary enrollment, remediation, degrees, certificates and completion; and information about students’ future wages, industry and employment location, among other data elements.



Endnotes

- 1 Goldhaber, D. (2016). In schools, Teacher Quality matters most. *Education next*, 56-62.
- 2 New Jersey Department of Education Public School Fact Sheet. (2020, January). Retrieved from New Jersey Department of Education: <https://www.state.nj.us/education/data/fact.htm>
- 3 U.S. Census Bureau, Public Education Finances: 2015, G15-ASPEF, U.S. Government Printing Office, Washington, DC, 2017.
- 4 US Census Bureau. (2019, May 21). *US Census Newsroom*. Retrieved from Press Releases: <https://www.census.gov/newsroom/press-releases/2019/school-spending.html>
- 5 New Jersey Department of Education Public School Fact Sheet. (2020, January). Retrieved from New Jersey Department of Education: <https://www.state.nj.us/education/data/fact.htm>
- 6 Education, N. J. (2019, December 15). DOE Data & Reports. Retrieved from Certificated Staff: <https://www.nj.gov/education/data/cs/>
- 7 New Jersey Department of Education Public School Fact Sheet. (2020, January). Retrieved from New Jersey Department of Education: <https://www.state.nj.us/education/data/fact.htm>
- 8 NJDOE Educator Preparation Provider Reports (EPPR). (2019, December). Retrieved from Educator Program Performance Reports: <https://eppdata.doe.state.nj.us/LearningPolicyInstitute>. (2018, August 24). *Understanding Teacher Shortages: 2018 Update*. Retrieved from Learning Policy Institute.org: <https://learningpolicyinstitute.org/product/understanding-teacher-shortages-interactive>
- 9 Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 10 Carver-Thomas, D., & Darling-Hammond, L. (2017). *Teacher Turnover: Why it matters and What we can do about it*. Palo Alto: Learning Policy Institute.
- 11 Levin, S., & Bradley, K. (2019). *Understanding and Addressing Principal Turnover: A Review of the Research*. Reston VA: National Association of Secondary School Principals.
- 12 Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 13 Education, N. J. (2015-2016). *Staff Evaluation, NJDOE*. Trenton: New Jersey Department of Education. Retrieved January 2020, from <https://www.nj.gov/education/data/staff/>
- 14 Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 15 Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 16 Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 17 Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 18 InsiderNJ. (2018, September 18). Retrieved from News: <https://www.insidernj.com/new-jersey-ranks-countrys-4th-diverse-state-according-study/>
- 19 Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 20 Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 21 Comlay, E. (2017, May 4). *Education*. Retrieved from South Jersey News and Information: Schools Under Pressure As Demand Increases for Bilingual ESL Classes: <https://rtforty.com/new-jersey-schools-under-pressure-as-demand-increases-for-bilingual-esl-classes/>
- 22 Education, N. J. (2019, December 15). DOE Data & Reports. Retrieved from Certificated Staff: <https://www.nj.gov/education/data/cs/>
- 23 Carver-Thomas, D. (2018). *Diversifying the Teaching Profession: How to Recruit an Retain Teachers of Color*. Palo Alto: Learning Policy Institute.
- 24 Warner, S. R., & Duncan, E. (2019). *A Vision and Guidance for a Diverse and Learner ready Teacher Workforce*. Council for Chief State School Officers.
- 25 Carver-Thomas, D. (2018). *Diversifying the Teaching Profession: How to Recruit an Retain Teachers of Color*. Palo Alto: Learning Policy Institute.
- 26 Warner, S. R., & Duncan, E. (2019). *A Vision and Guidance for a Diverse and Learner ready Teacher Workforce*. Council for Chief State School Officers.
- 27 Gerhenson, S. (2017). The Long-run Impacts of Same-Race Teachers. *IZA institute of Labor Economics*, 65.
- 28 Education, N. J. (2019, December). *Diversifying the Teacher Workforce*. Retrieved from Diversity Convening: https://nj.gov/education/rpr/Diversity%20Convening%20PPT%20Accessible_v2.pdf
- 29 Education, N. J. (2019, December). *Diversifying the Teacher Workforce*. Retrieved from Diversity Convening: https://nj.gov/education/rpr/Diversity%20Convening%20PPT%20Accessible_v2.pdf
- 30 Education, N. J. (2019, December 15). *DOE Data & Reports*. Retrieved from Certificated Staff: <https://www.nj.gov/education/data/cs/>
- 31 Education, N. J. (2019, December). *Diversifying the Teacher Workforce*. Retrieved from Diversity Convening: https://nj.gov/education/rpr/Diversity%20Convening%20PPT%20Accessible_v2.pdf
- 32 New Jersey Department of Education Performance Reports. (2017-2018). *New Jersey Department of Education Data*. Retrieved from: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 33 Collaborative for Student Success. (2019, April 16). Retrieved from Success is Trending: High academic standards advancing equity in education: <https://forstudentsuccess.org/success-is-trending-high-academic-standards-advancing-equity-in-education/>
- 34 Gay, G. (2010). *Culturally Responsive Teaching Theory, Research and Practice 2nd Edition*. New York: Teachers College Press Columbia University. Retrieved March 15, 2020, from https://www.cwu.edu/teaching-learning/sites/cts.cwu.edu/teaching-learning/files/documents/CulturallyResponsiveTeaching_TheoryResearchandPractice,%20Geneva%20Gay.PDF
- 35 NJDOE Educator Preparation Provider Reports (EPPR). (2019, December). Retrieved from Educator Program Performance Reports: [https://eppdata.doe.state.nj.us/NJDOE_Educator_Preparation_Provider_Reports_\(EPPR\)](https://eppdata.doe.state.nj.us/NJDOE_Educator_Preparation_Provider_Reports_(EPPR)).
- 36 NJDOE Educator Preparation Provider Reports (EPPR). (2019, December). Retrieved from Educator Program Performance Reports: [https://eppdata.doe.state.nj.us/NJDOE_Educator_Preparation_Provider_Reports_\(EPPR\)](https://eppdata.doe.state.nj.us/NJDOE_Educator_Preparation_Provider_Reports_(EPPR)).
- 37 NJDOE Educator Preparation Provider Reports (EPPR). (2019, December). Retrieved from Educator Program Performance Reports: [https://eppdata.doe.state.nj.us/NJDOE_Educator_Preparation_Provider_Reports_\(EPPR\)](https://eppdata.doe.state.nj.us/NJDOE_Educator_Preparation_Provider_Reports_(EPPR)).
- 38 Pasculli, D. (2019, May 16). Teacher Shortage: Bilingual Education. (Assembly Education Hearing, Testimony)
- 39 USED Teacher Shortage. (2020, January). *USED Teacher Shortage Areas*. Retrieved from TSA Reports: <https://tsa.ed.gov/#/reports>
- 40 Higher Education Act, Title II. (2018). *Title2.ed.gov*. Retrieved from National Teacher Preparation Data: <https://title2.ed.gov/Public/Home.aspx>
- 41 N.J.S.A. 18A:28-9: <https://lis.njleg.state.nj.us>
- 42 NJDOE Educator Preparation Provider Reports (EPPR). (2019, December). Retrieved from Educator Program Performance Reports: <https://eppdata.doe.state.nj.us/LearningPolicyInstitute>. (2016). *Learning Policy Institute*. Retrieved from Uncertified Teachers and Teacher Vacancies by State: <https://learningpolicyinstitute.org/uncertified-teachers-and-teacher-vacancies-state>
- 43 Wall, P. (2019, October 16). *Chalkbeat*. Retrieved from Newark Chalkbeat: <https://chalkbeat.org/posts/newark/2019/10/16/newark-schools-are-short-dozens-of-teachers-leading-to-bigger-classes-and-more-substitutes/>
- 44 Barone, S., Rojas, L., & Garcia, L. (2019, May 16). Assembly Education Hearing: Teacher Shortage: Bilingual Education. (Assembly Education Committee, Testimony)
- 45 Rodas, S. (2020, February 21). *Tap into Camden Education*. Retrieved from Tap Into Camden: <https://www.tapinto.net/towns/camden/sections/education/articles/camden-schools-continue-to-wrestle-with-teacher-vacancies>

- 47 Comlay, E. (2017, May 4). *Education*. Retrieved from South Jersey News and Information: Schools Under Pressure As Demand Increases for Bilingual ESL Classes: <https://rtforty.com/new-jersey-schools-under-pressure-as-demand-increases-for-bilingual-esl-classes/>
- 48 N.J.A.C. 6A:15-1.5: <https://www.nj.gov/education/code/current/title6a/chap15.pdf>
- 49 New Jersey Department of Education, Title III & Bilingual/ESL. (2019, December 15). *Approved Bilingual Waiver Requests*. Retrieved from Title III & Bilingual/ESL Education: <https://www.nj.gov/education/bilingual/policy/ApprovedWaiverRequests.htm>
- 50 Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 51 Murphy Administration. (2020, January 15). *JobsNJ Developing Talent to Grow Business in the Garden State*. Retrieved 2020, from NJ Economic Development Authority: https://www.njeda.com/pdfs/JobsNJ_FullPlan.aspx
- 52 Murphy Administration. (2020, January 15). *JobsNJ Developing Talent to Grow Business in the Garden State*. Retrieved 2020, from NJ Economic Development Authority: https://www.njeda.com/pdfs/JobsNJ_FullPlan.aspx
- 53 Partelow, L. (2019, December 3). *Center for American Progress: What to make of declining enrollment in teacher preparation programs*. Retrieved from Education K-12: <https://www.americanprogress.org/issues/education-k-12/reports/2019/12/03/477311/make-declining-enrollment-teacher-preparation-programs/>
- 54 Holcomb, S., Heidkamp, M., Krepico, K., & Mabe, W. P. (2018). *Building the Pipeline: Assessing New Jersey's Talent Supply and Demand*. New Jersey Chamber Foundation. Retrieved from <http://www.njchamberfoundation.org/images/landing-pages/NJCCF-Building-the-Pipeline-Full-Report-compressed.pdf>
- 55 *Ch 9A New Jersey Department of Education*. (2020, December). Retrieved from [nj.gov/education/code/current/title6a/chap9a.pdf](https://www.nj.gov/education/code/current/title6a/chap9a.pdf)
- 56 Mcotter, D. S. (2019, May 16). *Teacher Shortage*. (P. L. Education Chair, Testimony)
- 57 Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- 58 Gay, G. (2010). *Culturally Responsive Teaching Theory, Research and Practice 2nd Edition*. New York: Teachers College Press Columbia University. Retrieved March 15, 2020, from https://www.cwu.edu/teaching-learning/sites/cts.cwu.edu/teaching-learning/files/documents/CulturallyResponsiveTeaching_TheoryResearchandPractice,%20Geneva%20Gay.PDF

Figure Endnotes

- i *New Jersey Department of Education Public School Fact Sheet*. (2020, January). Retrieved from New Jersey Department of Education: <https://www.state.nj.us/education/data/fact.htm>
- ii Education, N. J. (2019, December 15). *DOE Data & Reports*. Retrieved from Certificated Staff: <https://www.nj.gov/education/data/cs/>
- iii U.S. Census Bureau, Public Education Finances: 2015, G15-ASPEF, U.S. Government Printing Office, Washington, DC, 2017.US Census Bureau. (2019, May 21). *US Census Newsroom*. Retrieved from Press Releases: <https://www.census.gov/newsroom/press-releases/2019/school-spending.html>
- iv United States Census Bureau. (2019, May 21). *US Census Press Releases*. Retrieved from US School Spending Per Pupil Increased for Fifth Consecutive Year: <https://www.census.gov/newsroom/press-releases/2019/school-spending.html>
- v *New Jersey Department of Education Public School Fact Sheet*. (2020, January). Retrieved from New Jersey Department of Education: <https://www.state.nj.us/education/data/fact.htm>
- vi *New Jersey Department of Education Public School Fact Sheet*. (2020, January). Retrieved from New Jersey Department of Education: <https://www.state.nj.us/education/data/fact.htm>
- vii *NJDOE Educator Preparation Provider Reports (EPPR)*. (2019, December). Retrieved from Educator Program Performance Reports: <https://eppdata.doe.state.nj.us/>
- viii Higher Education Act, Title II. (2018). *Title2.ed.gov*. Retrieved from National Teacher Preparation Data: <https://title2.ed.gov/Public/Home.aspx>
- vix Education, N. J. (2019, December). *Diversifying the Teacher Workforce*. Retrieved from Diversity Convening: https://nj.gov/education/rpr/Diversity%20Convening%20PPPT%20Accessible_v2.pdf
- x Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- xi *New Jersey Department of Education Public School Fact Sheet*. (2020, January). Retrieved from New Jersey Department of Education: <https://www.state.nj.us/education/data/fact.htm>
- xii Education, N. J. (2020). *DOE Data: Non certificated staff*. Retrieved from New Jersey Department of Education: <https://www.nj.gov/education/data/ncs/>
- xiii Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- xiv Education, N. J. (n.d.). *NJDOE 2017-2018 School Performance Reports*. Retrieved from NJ School Performance Reports: <https://rc.doe.state.nj.us/SearchForSchool.aspx>
- xv Obtained from NJDOE
- xvi Fig 6 Education, N. J. (2019, December 15). *DOE Data & Reports*. Retrieved from Certificated Staff: <https://www.nj.gov/education/data/cs/>
- xvii *NJDOE Educator Preparation Provider Reports (EPPR)*. (2019, December). Retrieved from Educator Program Performance Reports: <https://eppdata.doe.state.nj.us/>
- xviii *NJDOE Educator Preparation Provider Reports (EPPR)*. (2019, December). Retrieved from Educator Program Performance Reports: <https://eppdata.doe.state.nj.us/>
- xix Higher Education Act, Title II. (2018). *Title2.ed.gov*. Retrieved from National Teacher Preparation Data: <https://title2.ed.gov/Public/Home.aspx>
- xx Higher Education Act, Title II. (2018). *Title2.ed.gov*. Retrieved from National Teacher Preparation Data: <https://title2.ed.gov/Public/Home.aspx>
- xi Higher Education Act, Title II. (2018). *Title2.ed.gov*. Retrieved from National Teacher Preparation Data: <https://title2.ed.gov/Public/Home.aspx>
- xii Higher Education Act, Title II. (2018). *Title2.ed.gov*. Retrieved from National Teacher Preparation Data: <https://title2.ed.gov/Public/Home.aspx>
- xiii *NJDOE Educator Preparation Provider Reports (EPPR)*. (2019, December). Retrieved from Educator Program Performance Reports: <https://eppdata.doe.state.nj.us/>
- xxiv New Jersey Department of Education, Title III & Bilingual/ESL. (2019, December 15). *Approved Bilingual Waiver Requests*. Retrieved from Title III & Bilingual/ESL Education: <https://www.nj.gov/education/bilingual/policy/WaiverRequests.htm>
- xxv New Jersey Department of Education, OGM. (2019). *Office of Grants Management*. Retrieved June 7, 2020, from 2019 NGOs- Diversifying the Teacher Pipeline-Competitive: <https://www.nj.gov/education/grants/opportunities/2019/19-TE01-G03.shtml>

About JerseyCAN

JerseyCAN: The New Jersey Campaign for Achievement Now advocates for all students across the state to have access to high-quality schools. We work to improve policies and programs to support equity and excellence in New Jersey education.

www.JerseyCAN.org

