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The Unleveled Pathway to Teacher Education

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Abstract: The Commonwealth of Virginia has looked in the mirror and acknowledged the grim reality, the lack of teacher diversity in the Commonwealth reflects that of the nation. Historically, African Americans have been excluded from the standardized test-making process. Since African Americans typically have restricted roles in the development of these types of assessments, the expectation for accomplishment among African American test participants has remained low (McAdoo & Harrison, 2018). This article will address barriers to teacher diversity: the teacher licensure process, assessment requirements, best practices, and relevant statutes and regulations.

Research on implicit bias has found that when individuals of diverse racial and ethnic backgrounds have childhood interactions with individuals of other racial backgrounds, they are less likely to hold implicit biases in adulthood than those who have had less interracial contact in childhood. Furthermore, a shortage of teachers harms students, teachers, and the public education system as a whole (Garcia & Weiss, 2019). Current policies and initiatives to increase teacher diversity have not been effective.

Keywords: inherent barriers, teaching profession, diversity, assessments

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THE UNLEVELED PATHWAY TO TEACHER EDUCATION

The teaching profession is the largest workforce in the United States with an estimated 3.6 million members (Lowenberg Ball & Forzani, 2010; National Center Education Statistics Teacher Characteristics and Trends 2020), 3.3 million of whom teach the nation's 56.4 million students in traditional PK-12 public schools (NCES Enrollment Trends, 2020). Yet, as compared to the racial and ethnic configuration of the K-12 student population, teachers of color remain vastly underrepresented. Currently, half of the school-aged children in the United States represent persons of color, and this student population is expected to increase to 56% by 2024 (Aud, Wilkerson-Flicker, Kristopovich, Rathbun, Wang, & Zhang, 2013). However, the teachers standing before these diverse student populations do not reflect the same level of diversity. According to Hemphill and Vannerman (2011), less than 20 percent of teachers in U.S. public schools were persons of color. Additionally, African American males comprise less than 2 percent of the entire teaching force in the United States. The lack of diversity among the teaching workforce in the Commonwealth of Virginia mirrors that of the nation. "The lack of diversity among our teaching force is significant," Superintendent of Public Instruction James Lane said. "Non-white students now make up nearly 50 percent of Virginia's student population, but only 17 percent of the Commonwealth's teachers are non-white" (VDOE, 2019, p. 1). Dr. Lane purports that the Commonwealth's efforts to provide grants to support the "diversification of our teaching workforce, [will] make strides towards eliminating this glaring disparity and at the same time address the general teacher shortage" (VDOE, 2019, p.1).

In a nation where people of color represent about 40% of the population and 50% of students, the teacher workforce does not indicate these demographics. While states and the nation attempted to address these teacher diversity issues, the percentage of teachers of color has only increased from 12% to 20% (Taie & Goldring, 2017).

Additionally, during this same timeframe, the number of Native American and Black teachers in the workforce declined. Compounding this matter, research has shown that teachers of color have higher turnover rates than White teachers (U.S. Department of Education, 2016), indicating this trend. Reasons for the high turnover include inadequate preparation and mentoring, poor teaching conditions, and leaving high-need schools (Craver-Thomas, 2018). Therefore, policies must address teacher retention efforts in addition to the continuing recruitment efforts.

Diversity is inherently valuable. There are numerous research studies that show that diversity in schools' teacher workforce can provide significant benefits to all students. Research supports that students of color experience higher test scores when taught by teachers of color (Gershenson, Hart, Lindsay, & Papageorge, 2017). Villegas and Irvine's findings reveal that Black teachers positively affect Black students' school attendance, retention, and graduation rates (2010). Furthermore, Darling-Hammond's work reveals that minority students of all ages benefit from having a teacher of color. Students in primary school, community colleges, and even law school experience greater test score gains when taught by a teacher of color. Additionally, students of all races expressed more positive perceptions of their teachers of color (2001). Yet, rather than being perceived as valued educators, Black teachers report feeling as though they were hired to enforce school rules (Griffin, 2015). Unfortunately, there is a higher probability that minority teachers will change school, and this teacher turnover has been associated with lower student test results (Darling-Hammond, 2001). Therefore, in addition to recruitment efforts, procedures for retaining teachers of color are also warranted.

The literature is clear that improving teacher diversity is an asset to all students. All students benefit from teachers of color because they serve as positive role models and help to dispel the negative stereotypes, and prepare students to live and work in a global society. A highly diverse teacher workforce can also augment training in effective culturally responsive teaching practices with today's student populations. Teachers of color relate better to students of color. They foster a community of understanding with the students, which enables the students to achieve more in the classroom. Teachers of color inherently have more positive perceptions of students of color than other teachers as well. This is imperative in achieving equity in education as students of color make up more than 50% of the total student population (Dilworth and Coleman 2014; McNulty and Brown 2009; National Center for Education Statistics, 2017).

According to a recent study published by the Institute of Labor Economics, researchers and university economists found that low socio-economic income black male students in North Carolina in grades 3-5 who were taught by just one black teacher were less likely to drop out of school. The males were also more likely to aspire to attend college. According to the researchers, the high school dropout rate of black males was reduced to 39% if they were taught by one Black teacher in grades 3-5. After being taught by one Black teacher, 29% of the same students expressed an intent to pursue a four-year college degree (Gershenson, Hart, Hyman, Lindsay, & Papageorge, 2018).

According to researchers, the teaching profession has become more diverse in recent years; however, minority teachers are still underrepresented (Ingersoll & Merrill, 2017). The Commonwealth of Virginia mirrors the rest of the country in that it struggles to acquire and maintain high-quality teaching talent. Virginia, however, faces another problem as its population continues to grow and become more and more diverse, while the educating body becomes more racially homogenous. According to the Teacher Diversity Index, a national tool that ranks states by demographic differences between student and teacher populations, Virginia has a greater disparity than its counterparts both nationally and regionally. According to the index, Virginia was ranked at 31meaning there is a 31 percentage point difference between minority teachers and minority students (Boser, 2014).

To remedy this perturbing problem, Virginia has created the Taskforce on Diversifying Virginia's Educator Pipeline (TDVEP, or the Taskforce) due to the significant lack of diversity among Virginia's educator workforce. In 2016, the Taskforce found that Virginia's teaching workforce is disproportionately white in comparison to the student population. In terms of demographics, minority students make up 48.7 percent of Virginia's student population, but only 21.4 percent of Virginia's teachers are minorities (Report on the Recommendations of the Taskforce to Diversify Virginia's Educator Pipeline (TDVEP), 2017). The Taskforce recommended that Virginia seek to acquire more teachers and, most notably, more teachers of color based on the plethora of research which indicates that a racially responsive mix of teachers and administrators yields positive effects for minority students. Consequently, the disproportionate racial composition of Virginia's school staff poses a direct threat to the success of Virginia's increasingly diverse students (VDOE, 2017). To address this issue, Virginia must acknowledge the unique set of challenges faced by minority educators and advance strategies specifically tailored to attract, retain, and support teachers of color (VDOE, 2017). Based on this data compiled

by the VDOE in 2017, the Taskforce identified four key barriers that prevent minority candidates from becoming and remaining teachers.

- 1. The length and cost of the traditional teacher preparation pathway are disproportionate to salary, which is particularly burdensome for first-generation college students and low-income students who are often minorities.
- 2. Students are not exposed to or made aware of pathways into the profession early enough, nor are non-teaching majors aware of potential teaching pathways into the profession.
- 3. The provisional licensing route is underutilized, and teachers of color who are provisionally licensed in Virginia obtain full licensure at lower rates than their peers.
- 4. Teaching suffers from declining respect and interest in the profession.

Declining Respect in the Teacher Profession

High achieving millennials believe that teaching is not a good career option for them, and they believe that the status of the teaching profession is in decline (Hiler & Hatalsky, 2014). This belief is also held by high-achieving students of color. The students tend to choose careers that have more lucrative salaries. The national average salary for a physician in general practice is \$186,320, while for an attorney, that salary is \$133,470. [In stark contrast, an elementary or middle school teacher has an average salary of only \$57,080 (U.S. Department of Labor Bureau of Labor Statistics, 2016). In comparison with other professions, teachers face working conditions that are often very challenging and provide limited opportunities for career promotions. Teaching] can be a hard enticement for talented students capable of entering any of these professions. This is especially true of students of color, many of whom are first-generation students. The low teachers' pay drastically affects their ability to repay student loans, purchase a home, or support a family (National Center for Education Statistics, 2016).

The decline of candidates entering the teacher preparation pipeline contributes to Virginia's teacher shortage. "Nationally, the number of individuals enrolling in teacher preparation programs has declined by 30 percent since 2008" (VDOE, 2017, p.10). The State Council of Higher Education for Virginia (SCHEV) has documented a similar decline in teacher preparation program enrollment in Virginia. Nationally, only 25 percent of individuals enrolled in a traditional teacher preparation program based in an institution of higher education were individuals of color. According to data compiled by the Virginia Department of Education and SCHEV, minority enrollment in Virginia's teacher preparation programs has fallen from more than 50 percent in the 2010-2011 school year to just 33 percent in 2016-2017. (Report from the Task Force on Diversifying Virginia's Educator Pipeline, VDOE 2017, p.6-7)

Virginia, along with ten other states, has formed the Council of Chief State School Officers as a means to address diversity in their respective workplaces as well as receive guidance and support from experts in the field of teaching diversity.

The task to improve teacher diversity is one that will take a monumental effort. It will need to consist of continued commitment and involvement from parties at all levels, local, state, and federal. In the state of Virginia, the Virginia Department of Education, higher education institutions, the Board of Education, and other stakeholders will need to work in unison to

accomplish this task. To monitor progress in this task, it is imperative that the data be tracked over the span of years, as opposed to short-term days and months (VDOE, 2017).

The Teacher Licensure Process and the Assessment Requirements

The new Council for the Accreditation of Educator Preparation (CAEP) criteria for entry into the teaching profession have some experts in the education policy community concerned that these changes may have the unintended consequence of reducing the profession's diversity (Ahmad & Boser, 2014). In Virginia, teacher preparation programs must meet the criteria of the (CAEP) Candidates seeking admissions to a teacher preparation program must have at least a 2.5 Grade Point Average (GPA), pass the VCLA, PRAXIS: Core Academic Skills for Educators Math 5732; never been convicted of a felony or had a teaching licensure revoked in any state, and satisfactorily complete a disposition interview conducted by the Teaching and Learning Committee. The candidates' cohort must also meet CAEP accreditation requirements; the teacher preparation candidate cohort must have a minimum 3.0 GPA or better. The cohort's average group performance must be in the top 50 percent of American College Testing (ACT), Scholastic Aptitude Test (SAT), or Graduate Record Exam (GRE) scores, CAEP "Standard 3: Candidate Quality, Recruitment, and Selectivity," (2017).

The Virginia Education Standards have set the minimum test score for the CORE math assessment at 150. The Virginia Communication and Literacy Assessment (VCLA) has a minimum scale score of 235 on both the reading and writing subtests for a combined score of 470 on the VCLA. Pre-candidates meeting these criteria are welcomed in the teacher preparation program and are now referred to as candidates.

The foundation in academia that prepares pre-service teachers is summative. "Unfortunately, this means that racial disparities in academic opportunities in elementary and secondary schools, high school graduation rates, and scores on entrance exams for postsecondary programs affect not only diversity in postsecondary programs but also diversity in the teaching pipeline" (Boser, 2014, p.9).

Minority candidates endure biases within the standardized testing that is used for entry into the teaching profession. Due to institutional racism and educational inequalities, minority students experience a gap in achievement in comparison to their white peers. This gap begins in primary school and persists through college and beyond.

Bennett, McWhorter, and Kuykendall (2006) conducted a longitudinal study that examined the Praxis I experiences of African American and Latino undergraduates seeking admission into teacher education at a Big Ten University. They concluded that the PRAXIS I used as an admission tool into a teacher education program is inequitable. The test excludes many capable students of color, both because PRAXIS I itself is unfair and P-12 schools do not provide a high quality of education for all students from all ethnic, linguistic, socio-economic, and geographic backgrounds (Bennett, McWhorter, and Kuykendall, 2006, p.567). Tyler, Whiting, Ferguson, Eubanks, Steinberg, Scatton, and Bassett (2011) analysis of first-time Praxis I and Praxis II examinees between November 2005 and November 2009 found that African American students who completed the Praxis I test received approximately over 35% lower passing scores when compared to Caucasian students (2011). The Taskforce to Diversify Virginia's Educator Pipeline found that the Praxis content-knowledge examinations may serve as a barrier for teachers of color. For example, while 76 percent of the white teachers with provisional licenses in 2013 were fully

licensed by 2016, only 63 percent of provisionally licensed black teachers attained full certification after three years (VDOE, 2017). In fact, nationally, the lower passing rates were higher for African Americans than the other minority groups. McAdoo and Harrison (2018) analysis of Praxis I scores revealed the highest disparities were between African American and White test participants, reporting that African Americans scored 41% lower than the White test takers on both reading and math subtests. While the writing results for the Praxis I were less discrepant, McAdoo and Harrison reported that there was a 35%-point difference between white and black test-takers. Furthermore, when comparing other ethnicities to White test-takers; disparities were also reported for Hispanic (21% for math/ 17% reading and math) and Native American (19% on Praxis math, 16% in reading, and in 22% discrepancy in writing (McAdoo & Harrison, 2018).

The achievement gaps in standardized tests used for entry into the teaching profession are significant among the races. As in the findings from Bennett, McWhorter, and Kuykendall (2006), educational inequalities have exacerbated the achievement gap. The unequal distribution of academic resources has exacerbated the achievement gap between black and Latino students and their white peers early in the students' education. The disparities persist on assessments taken in college and beyond. (Bohrnstedt, Kitmitto, Ogur, Sherman, & Chan, 2015). The performance and passing rate of African American and white perspective teachers on the PRAXIS I differs significantly. According to Educational Testing Services, 41 percent, 44 percent, and 37 percent of African Americans pass the reading, writing, and math sections, respectively, the first time they take the PRAXIS I for Licensure, while 82 percent, 80 percent, and 78 percent of white test-takers do so (Nettles, 2011).

The same problematic trend exists for licensure tests; large gaps exist in the passage rates of white and African American potential teachers. On the Praxis II licensure test, African American test takers are much less likely than white test-takers to pass the tests the first time (Partelow, Spong, Brown, & Johnson, 2017). According to Nettles, this finding holds true across various subject and grade level Praxis II tests. 46.4 percent of first-time African American Test-Takers passed the English Content Knowledge section of the PRAXIS II, while 88,7 percent of first-time white test-takers passed. 47.6 percent of first-time African American Test-Takers passed the Social Studies Content Knowledge section of the PRAXIS II, while 83,9 percent of first-time white test-takers passed. 25.3 percent of first-time African American Test-Takers passed the Mathematics Content Knowledge section of the PRAXIS II, while 72.6 percent of first-time white test-takers passed (Nettles, 2011).

Review of Appropriate Researched-based Alternate Assessments

Although there is a myriad of research that identifies discrepancies on the basis of race in educational inequalities, performance on standardized-based assessments, and other criteria for entry into teaching preparation programs, the Commonwealth of Virginia still has explicit standards for teaching licensure that must be met. The requirements for teaching licensure are specifically detailed in the Licensure Regulations for School Personnel. The Board of Education has established the criteria for individuals who seek an initial Virginia Teaching license. The required assessments for an initial license are the Virginia Communication and Literacy Assessment (VCLA), the Praxis Subject Assessments, and the Praxis Series Reading for Virginia Educations (RVE): Elementary and Special Education (5306).

"The Advisory Board on Teacher Education and Licensure (ABTEL) advises the Board of Education and submits recommendations on policies applicable to the qualifications, examination,

licensure, and regulation of school personnel including revocation, suspension, denial, cancellation, reinstatement, and renewals of licensure, fees for processing applications, standards for the approval of preparation programs, reciprocal approval of preparation programs and other related matters as the Board of Education may request, or the Advisory Board may deem necessary. The final authority for licensure of school personnel remains with the Board of Education, (VDOE, 2019, p.1)."

Bennett, McWhorten, and Kuykendall (2006) recommend that if the candidate scores 1000 or above on the SAT or the equivalent on the ACT, then the PRAXIS I should be waived. The rationale for this recommendation is that both assessments measure the candidates' general knowledge that should have been acquired during their K-12 years.

A similar recommendation to PRAXIS II can be made based on the promising practice of edTPA. The edTPA, a performance-based assessment, is a promising practice to reduce dependency on standardized test scores and the consequent racial disparities among the teacher workforce. Currently, approximately more than 600 college campuses across 40 states utilize the edTPA to evaluate teaching candidates employing a universal standard set of content pedagogical strategies. After analyzing the portfolios of the 2014 teacher candidates', the data yielded little performance differences among various ethnic and racial subgroups. In addition, gaps among the aforementioned subgroups decreased from 2013-2014. (Hemphill & Vannermann, 2011).

Relevant Research and Best Practice

The phrase teacher pipeline, which is often used in policy conversations and research, reflects the linear progression where future teachers go from high school to licensure into the profession. It can be summarized by the following: interest in the profession, acceptance to a teaching program, retention in that program, mastering licensure requirements for certification, and ultimately employment as a teacher (Education Trust-West, 2017; Ingersoll & May, 2011a, 2011b; Putman, Hansen, Walsh, & Quintero, 2016).

The Grow Your Own Program is another practice that is yielding great success across the country. (Hunter-Boykin, 1992; Yopp, Yopp, & Taylor, 1992). With the Grow Your Own Program, students are recruited while they are in middle or high school. The strength of this program comes through its foundation in the community-based effort. This program primarily focuses on exposing aspiring teachers to a multitude of teaching experiences such as developing lesson plans for younger students, assisting teachers, earning college credit, and participating in on-campus visits to EPPs to meet with teacher candidates and faculty (Goe & Roth, 2019; Valenzuela, 2017).

Relevant Statutes, Regulations, and Data that Influence Retention and Recruitment

According to the National Teacher and Principal Survey (2017-2018), 79 percent of all public-school teachers were non-Hispanic White, 7 percent were non-Hispanic Black, and 9 percent were Hispanic. Among these teachers, the largest percentage of Black teachers (13.5%) and Asian teachers (2.9%) were teaching at schools where more than 75% of the student population qualifies for free and reduced lunch. Bednar and Gicheva (2017) reported similar results, finding that teachers of color are more likely to teach in inner cities with large minority student populations. Moreover, recruitment and retention issues are worse in high-poverty schools. In fact, high-poverty schools had more vacancies, and 10.5 percent of these schools report difficulty

in filling teaching positions in at least one field; meanwhile, only 7.2 percent of low-poverty schools report similar issues. Sutcher, Darling-Hammond, and Carver-Thomas recommended targeted incentives to the schools and subjects where shortages are particularly severe and chronic (2016). Virginia has already enacted Hard to Staff School policies and incentives, but the efficacy of the efforts has not been examined.

The problem of teacher recruitment and retention has forced policymakers to create strategies such as the revising of certification requirements, the improvement of recruitment efforts, and the funding of mentoring programs. (Gaytan, 2008; Ingersoll, 2001). However, these attempts have not led to a solution. Johnson and Birkeland (2003) state that one of the main reasons for this lack of success is that policymakers do not have a complete understanding of teachers' concerns about the profession and their places of employment.

There must be defined goals and objectives in order to reach the target of increasing the number of teachers of color in the workforce. Simply having a deliberate approach will still not be enough to achieve this target, as continued assistance is required to overcome the hurdles of recruitment and retention. As a result, dual efforts for recruitment and retention must be implemented. Retention efforts need to address the reasons for the high turnover rates, including inadequate preparation and mentoring, poor teaching conditions, and leaving high-need schools. National programs and initiatives provide evidence that an intentional and sustained approach to recruiting and retaining teachers of color can be successful.

Teacher recruitment and retention efforts are also challenged by the reduced pipeline of new teachers as fewer people have entered teacher preparation programs in recent years. In the 2017 -2018 school year, Sutcher, Darling-Hammond, and Carver-Thomas (2016) estimated a shortage of about 110,000 teachers nationally. In fact, teacher vacancies have tripled from the 2011–2012 to 2015–2016 school years (increasing from 3.1 percent to 9.4 percent), and in this same time frame, the share of schools that reported it was very difficult to fill a vacancy nearly doubled (from 19.7 percent to 36.2 percent). "These difficulties are also shaped by a dwindling pool of applicants to fill vacancies. From the 2008–2009 to 2015–2016 school years, there was a 15.4 percent drop in the number of education degrees awarded and a 27.4 percent drop in the number of people who completed a teacher preparation program" (Garcia & Weiss, 2019, p.1).

Research indicates that the first step to improving teacher retention is providing high-level teacher preparation. Teaching candidates who receive comprehensive preparation are two to three times more likely to remain in the teaching profession than the candidates who receive little training. Unfortunately, however, current data trends show that teachers of color are more likely to complete alternative routes into the teaching profession. This should not come as a surprise as the cost of traditional teacher preparation programs (TPPs) leads to resulting debt. Virginia should examine the barriers to recruitment into teacher preparation programs, the cost, scholarships and other financial supports, subsidies, K-12/Higher Education partnerships, and community college and K-12 pipelines. Furthermore, Grow Your Own Programs and effective teacher residency programs should be analyzed. Pre-service preparation programs like Grow Your Own support high school students and other community stakeholders to pursue the teaching profession and then teach in their respective communities. Thus, helping to develop the pipeline of well-prepared teachers in hard-to-staff schools located in urban and rural school divisions (Podolsky, Kini, Bishop, & Darling-Hammond, 2016). The Pathways to Teaching Careers Program is an excellent example of the Grow Your Own. This program financially supports paraprofessionals and other non-certified

employees in their quest to become teachers. An analysis of the program yielded that 74 percent of the paraprofessionals recruited were people of color, and 91 percent of the paraprofessionals became employed by hard-to-staff schools (Carver-Thomas & Grayson, 2017).

Teaching conditions and administrative support are also key to retaining teachers; therefore, principal preparation programs should be evaluated. Schools and division hiring and retention processes should also be analyzed and evaluated, and successful efforts should be documented and described. Moreover, research utilizing surveys and focus groups should be conducted to identify and further investigate promising and effective practices. Related policies, initiatives, and programs such as Title II funding, effective induction and mentoring programs, and programs with successful retention efforts, as identified by the national and state survey data, should also be examined and recommendations provided.

Research on implicit bias has found that when individuals of diverse racial and ethnic backgrounds have childhood interactions with individuals of other racial backgrounds, they are less likely to hold implicit biases in adulthood than those who have had less interracial contact in childhood. Furthermore, a shortage of teachers harms students, teachers, and the public education system as a whole (Garcia & Weiss, 2019). Current policies and initiatives have not been effective; therefore, a comprehensive review should be conducted, recommendations provided, and research-based best practices implemented.

References

- Ahmad, F. & Boser, U. (2014). America's leaky pipeline of teachers of color: Getting more teachers of color into the classroom. Washington: Center or American Progress. https://cdn.americanprogress.org/wp-content/uploads/2014/05/Teachers Of Color-report.pdf.
- Aud, S., Wilkinson-Flicker, S., Kristapovich, P., Rathbun, A., Wang, X., and Zhang, J. (2013). The Condition of Education 2013 (NCES 2013-037). U.S. Department of Education, National Center for Education Statistics. Washington, DC. Retrieved [date] from http://nces.ed.gov/pubsearch
- Ball, D. L., & Forzani, F. M. (2010). What Does It Take to Make a Teacher? *Teacher Education, Kappanmagazine.org*, 1-12.
- Bednar, S., & Gicheva, D. (2017, August 02). Retaining minority teachers in schools where most of their colleagues are white. https://www.brookings.edu/blog/brown-center-chalkboard/2017/08/02/retaining-minority-teachers-in-schools-where-most-of-their-colleagues-are-white/.
- Bennett, C.L., McWhorter, L.M., & Kuykendall, J.A. (2006). Will I ever teach? *American Educational Research Journal*, 43(3), 531-575.
- Bohrnstedt, G., Kitmitto, S., Ogut, B., Sherman, D., and Chan, D. (2015). School Composition and the Black–White Achievement Gap (NCES 2015-018). U.S. Department of Education, Washington, DC: National Center for Education Statistics. Retrieved March 9, 2021 from http://nces.ed.gov/pubsearch.
- Boser, U. (2014). Teacher diversity revisited: A new state-by-state analysis. Center for American Progress. Available at https://cdn.americanprogress.org/wp-content/uploads/2014/05/TeacherDiversity.pdf.
- Brown, C., & Boser, U. (2017, September 28). Revisiting the Persistent Teacher Diversity Problem {Press Release}. https://www.americanprogress.org/press/release/2017/09/28/439735/release-cap-releases-state-state-analysis-teacher-diversity/.
- Carver-Thomas, D. (2018). Diversifying the teaching profession: How to recruit and retain teachers of color. Palo Alto, CA: Learning Policy Institute.
- Carver-Thomas, D & Grayson, K. (2017). Strategies for Recruiting and Retaining a Diverse, High Quality Teacher Workforce. https://www.idra.org/resource-center/strategies-recruiting-retaining-diverse-high-quality-teacher-workforce/
- Council for the Accreditation of Educator Preparation, "Standard 3: Candidate Quality, Recruitment, and Selectivity". http://caepnet.org/standards/ standard-3 (May 2017).
- Darling-Hammond, L. (2001). Inequality in Teaching and Schooling: How Opportunity Is Rationed to Students of Color in America. National Academy of Sciences. Available at

- https://www.ncbi.nlm.nih.gov/books/NBK223640/.
- Dilworth, M.E., & Coleman, M. J. (2014). Time for a Change: Diversity in Teaching Revisited (Washington: National Education Association). https://www.nea.org/assets/docs/Time_for_a_Change_Diversity_in_Teaching_Revisited_(web).pdf.
- Education Trust-West. (2017). Hear my voice: Strengthening the college pipeline for young men of color in California. https://west.edtrust.org/wp -content/uploads/sites/3/2015/11/Ed-TrustWest-Hear-My-Voice-Report-FINAL-June-2017.pdf.
- Feistritzer, C. (2011). Profile of teachers in the U.S. National Center for Education.
- Information.http://www1.kdsi.org/strategicpd/wp-content/uploads/2014/09/Profile-of-US-Teachers-2011.pdf.
- Garcia, E., & Weiss, E. (2019). U.S. schools struggle to hire and retain teachers: The second report in "the perfect storm in the Teacher Labor Market" series. Economic Policy Institute. https://www.epi.org/publication/u-s-schools-struggle-to-hire-and-retain-teachers-the-second-report-in-the-perfect-storm-in-the-teacher-labor-market-series/.
- Gaytan, J. (2008). Teacher recruitment and retention: An Essential step in the development of a system of quality teaching. *Career and Technical Education Research*, 33(2), 117-132. doi: http://doi.org/10.5328/CTER33.2.117
- Gershenson, S., Hart, C. M., Lindsay, C. A., & Papageorge, N.W. (2017). The long-run impacts of same race teachers. IZA: Institute of Labor Economics Initiated by Duetsche Foundation, Discussion Paper Series (IZA DP No. 10630), 1-62. doi: http://ftp.iza.org/dp10630.pdf.
- Goe, L., & Roth, A. (2019). Strategies for supporting educator preparation programs' efforts to attract, admit, support, and graduate teacher candidates from underrepresented groups (Research Memorandum No. RM-19-03). Princeton, NJ: Educational Testing Service.
- Golden, D. (2007). The price of admission: How America's ruling class buys its way into elite colleges-and who gets left outside the gates. New York: Penguin Random House.
- Griffin, A. (2015). Black teachers are leaving the teaching profession at staggering rates. but why? The Education Trust. https://edtrust.org/the-equity- line/black-and-latino- teachers-are-leaving-the-teaching-profession-at-staggering-rates-but-why/.
- Hemphill, F.C., & Vannerman, A. (2011). Achievement Gaps: How Hispanics and White students in the public schools perform in mathematics and reading on the National Assessment of Educational Progress. National Center for Educational Science, U.S. Department of Education, Washington, DC.
- Hiler, T. & Hatalsky, L.(2014). Teaching: The next generation. Washington: Third Way. http://www.thirdway.org/report/teachingthe-next-generation

- Hunter-Boykin, H. S. (1992). Responses to the African American teacher shortage: "We grow our own" through the teacher preparation program at Coolidge High School. *The Journal of Negro Education*, 61, 483–495.
- Ingersoll, R. M., (2001). Teacher turnover and teacher shortages: An organizational approach. *American Educational Research Journal*, 38(3), 499-534.
- Ingersoll, R. M., & May, H. (2011a). The minority teacher shortage: Fact or fable? *Phi Delta Kappan*, 93(1), 62–65.
- Ingersoll, R.M., & May, H. (2011b). Recruitment, retention and the minority teacher shortage. Consortium for Policy Research in Education, CPRE Research Report #RR-69, retrieved from http://repository.upenn.edu/gse_pubs/.
- Ingersoll, R., & Merrill, L. (2017). A quarter century of changes in the elementary and secondary teaching force: From 1987 to 2012. Statistical analysis report. (NCES 2017-092). Washington, DC: National Center for Education Statistics.
- Johnson, S., & Birkeland, S. (2003). Pursuing a "Sense of Success": New Teachers Explain Their Career Decisions. *American Educational Research Journal*, 40, 581-617.
- Loewenberg Ball, D., & Forzani, F. M. (2010). Teaching Skillful Teaching. *Educational Leadership*, 68, 40-45.
- McAdoo, T. & Harrison, D. (2018). "Praxis Core: A systemic approach to helping minority students. *Journal of Research Initiatives*, 4(1).
- McNulty, C. & Brown, M. Help Wanted: Seeking the Critical Confluence of Minorities in Teaching. *Childhood Education* 85(3), 179.
- National Center for Education Statistics (2020). Fast facts: Enrollment trends (65). Retrieved March 1, 2021 from https://nces.ed.gov/fastfacts/display.asp?id=65.
- National Center for Educational Statistics (2019). U.S. Department of Educational Statistics, National Center for Educational Statistics, Retrieved March 1, 2021 from Fast Facts: Enrollment trends (65) (ed.gov)
- National Center for Education Statistics (Ed.), Digest of Education Statistics (2016). https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017094.
- Nettles, M., Scatton, L., Steinberg, J., & Tyler, L. (2011). Performance and Passing Rate Differences of African American and White Prospective Teachers on PRAXIS Examinations: A Joint Project of the National Education Association (NEA) and Educational Testing Service (ETS). ETS Research Report Series, 2011(1), i-82. doi: 10.1002/j.2333-8504.2011.tb02244.x.
- Partelow, L., Spong, A., Brown, C. & Johnson, S. (2017). America needs more teachers of color and a more selective teaching profession. https://www.americanprogress.org/issues/education-k-

- 12/reports/2017/09/14/437667/america-needs-teachers-color-selective-teaching-profession/
- Podolsky, A., & Kini, T. (2016). How effective are loan forgiveness and service scholarships for recruiting teachers? Palo Alto, Calif.: Learning Policy Institute.
- Podolsky, A., Kini, T., Bishop, J., & Darling-Hammond, L. (2016). Solving the teacher shortage: How to attract and retain excellent educators. Palo Alto, Calif.: Learning Policy Institute.
- Putman, H., Hansen, M., Walsh, K., & Quintero, D. (2016). High hopes and harsh realities: The real challenges to building a diverse workforce. https://www.brookings.edu/research/high-hopes-and-harsh-realities-the-real-challenges to-building-a-diverse-teacher-workforce/
- Sutcher, L., Darling-Hammond, L., & Carver-Thomas, D. (2016). A coming crisis in the supply, demand, and shortages in the U.S. Palo Alto, CA: Learning Policy Institute.
- Taie, S., & Goldring, R. (2017). Characteristics of public elementary and secondary school principals in the United States: Results from the 2015–2016 National Teacher and Principal Survey First Look. (NCES 2017-070). Washington, DC: National Center for Education Statistics, U.S. Department of Education.
- U.S. Attorney District of Massachusetts (2020). Investigations of College Admissions and Testing Bribery Scheme. Igor Dvorskiy, charged by indictment 19-CR-10081, retrieved from https://www.justice.gov/usao-ma/investigations-college-admissions-and-testing-bribery-scheme.
- United States Department of Education (2016). The state racial diversity in the educator workforce. Office of Planning Evaluation and Policy Development. Washington, DC. Retrieved from https://www.2.ed.gov.
- U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), (2016). "State Nonfiscal Survey of Public Elementary and Secondary Education," 1995-96 through 2017-18; and National Elementary and Secondary Enrollment by Race/Ethnicity Projection Model, 1972 through 2029.
- Valenzuela, A. (2017). Grow your own educator programs: A review of the literature with an emphasis on equity-based approaches. http://www.idraeacsouth.org/wp-content/uploads/2017/12/Grow-Your-Own-Educator-Programs-Lit-Review-IDRA-EACSouth-2017.pdf.
- Villegas, A. M., & Irvine, J. J. (2010). Diversifying the teaching force: An examination of major arguments. *Urban Review*, 42, 175-192.
- Virginia Board of Education (2014). First review of recommendations of the advisory board on teacher education and licensure. Richmond, VA: Virginia State Department of Education. http://www.doe.virginia.gov.

- Virginia Department of Education, ABTEL (2020) https://www.doe.virginia.gov/boe/committees advisory/teacher ed licensure/meetings.shtml.
- Virginia Department of Education (2017). Licensure. https://www.doe.virginia.gov/teacher/licensure.
- Virginia Department of Education (2019). Announces grants to help create a more diverse teacher workforce. https://doe.virginia.gov/news/news_releases/2019/02-feb28.docx.
- Virginia Department of Education (2017). Report from the task force on diversifying Virginia's educator pipeline.

 https://www.education.virginia.gov/media/governorvirginia.gov/secretary-of-education/pdf/final/final-tdvep-report.pdf
- Yopp, R. H., Yopp, H. K., & Taylor, H. P. (1992). Profiles and viewpoints of minority candidates in a teacher diversity project. *Teacher Education Quarterly*, 19(3), 29–48.