

Bridging the Gap Between Asian- American and Pacific Islander Student- Teacher Populations



Source: PBS

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On my honor as a student, I have neither given nor received aid on this assignment.

TEACHFORAMERICA

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Disclaimer

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Acronyms and Abbreviations

AAPI – Asian Americans and Pacific Islanders

ACS – American Community Survey

GYO – Grow Your Own

HS – High School

TFA – Teach for America

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Executive Summary

Through this report, I attempt to remedy the mismatch in Asian American and Pacific Islander (AAPI) student and teacher populations in America, which is problematic because minority students typically perform better under teachers that resemble them. The AAPI student population is growing at a consistent rate much faster than the AAPI teacher population's growth, which was stagnant for the first decade of the 21st century. It is important that AAPIs are represented in the teacher workforce too because not all AAPIs are high-achieving and high-performing students from middle- to upper-middle-socioeconomic statuses. Some barriers to AAPIs pursuing teaching is that teaching is a relatively low-paying job that requires extensive education and certification; negative perceptions of teaching; and the lack of minority mentors. I briefly looked into some past initiatives to increase teacher diversity, including: financial incentives, alternative certification programs, and grow-your-own (GYO) programs.

Based off my findings in my preliminary research, I developed three alternatives that Teach for America (TFA) can take in order to increase the future numbers of AAPI teachers in their Teacher Corps. These alternatives were evaluated by four criteria: effectiveness, cost, cost-effectiveness, and administrative feasibility. My three alternatives are:

- 1) Let present trends continue
- 2) Place AAPI teachers at schools with higher AAPI student populations
- 3) Develop a pipeline at an earlier age by partnering with "Pathways2Teaching" program in high school

Following my analysis of each of the options based on the criteria and projected outcomes, I recommend that Teach for America sorts AAPI cohort members to schools with higher AAPI student populations.

I conclude my report with strategies on how to implement this alternative and future considerations that TFA should keep in mind to continue growing the AAPI teacher population.

Context of the Problem

Problem Statement

Asian Americans and Pacific Islanders (AAPIs) are the fastest growing minority group in the United States and made up 5.1% of the U.S. population in 2017; but they only made up 2.5% of the teacher population in 2016. This gap is problematic because AAPI students perform better when taught by a teacher of color. The gap in proportions between AAPI students and teachers is problematic as students, especially students of color, perform better when taught by a teacher of color (Cherng & Halpin, 2016). Eubanks and Weaver (1999) claimed that “children of color need teachers who look like them, who share similar cultural experiences and who can be role models to demonstrate the efficacy of education and achievement,” (Eubanks & Weaver, 1999, 452). Other minority groups, such as African American and Hispanic, have seen increases in their proportion of the teacher population; however, AAPIs have had stagnant growth.

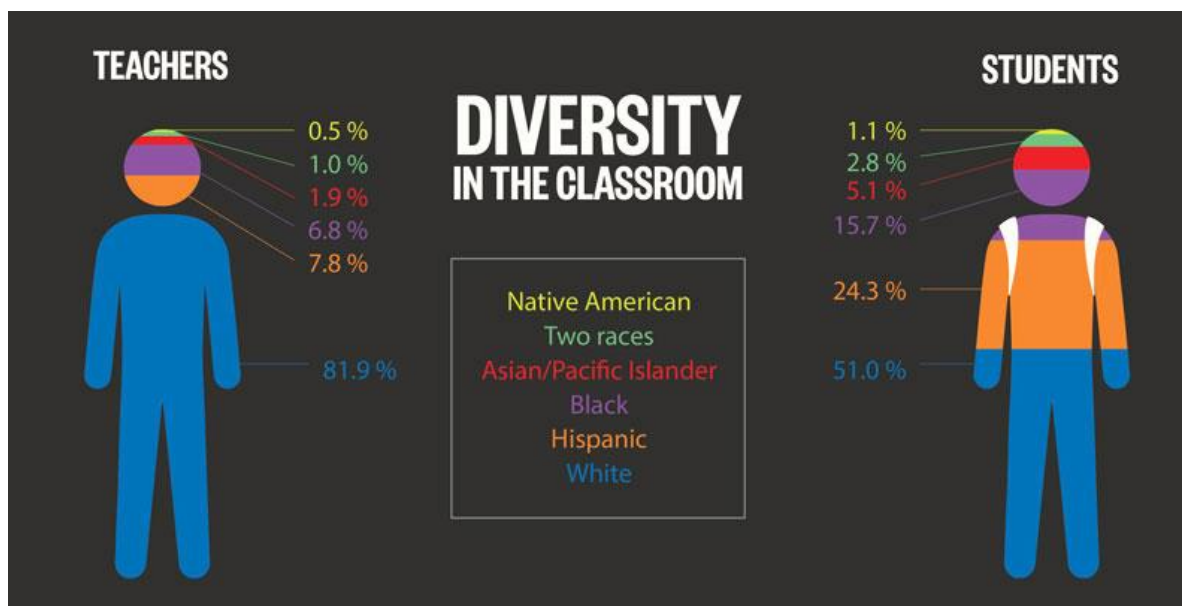


Figure 1: Diversity of Teachers in 2014. Reproduced from Nationswell, Data from National Center for Education Statistics, 2014

Background on AAPI Students and Teachers

Asian Americans and Pacific Islanders may currently comprise a small percentage of the nation's population, but they are a rapidly growing minority group in the U.S. The AAPI student population will reach 6% of the student population by 2026 (National Center for Education Statistics, 2017). In comparison, the Hispanic student population is predicted to grow from 25% of the student population in 2014 to 29% by 2026. The black student population is actually expected to decrease from 16% in 2014 to 15% in 2026. Figure 2 gives a graphical representation of projected changes from 2004 to 2026 in the percentage distribution of public school students in K-12.

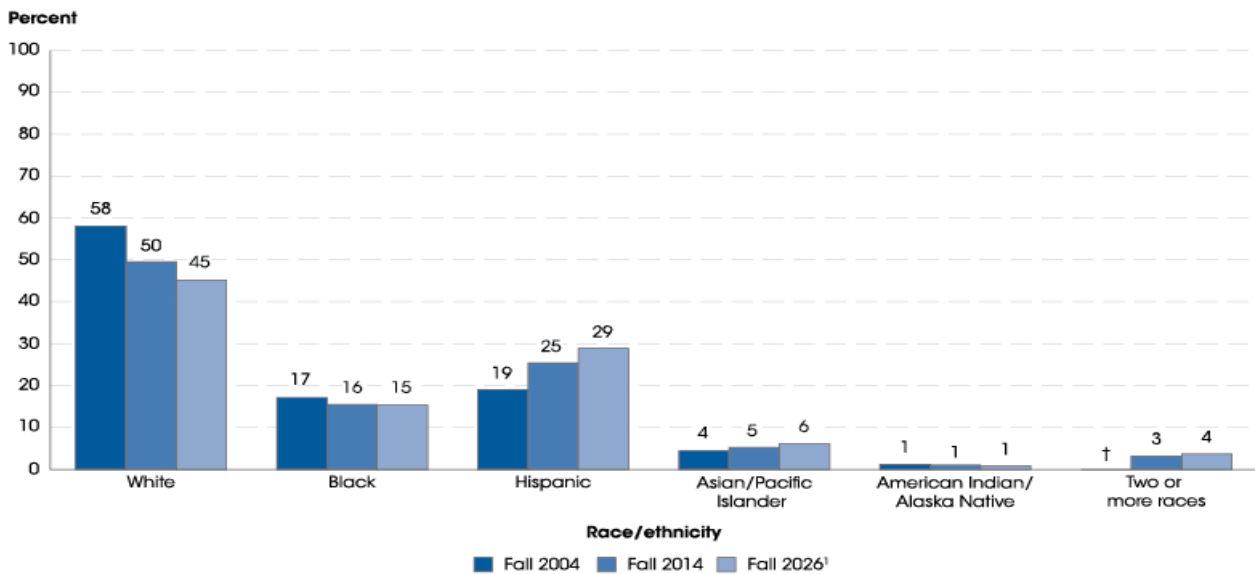


Figure 2: Percentage distribution of students enrolled in public elementary and secondary schools, by race/ethnicity: Fall 2004, fall 2014, and fall 2026. Reproduced from NCES, 2017.

Table 1 gives a numerical breakdown and percentage distribution of race for public school students from 1995 to 2025. It also shows an increase in the AAPI and Hispanic student populations with an overall decrease in the black student population. The AAPI public school student population went from 1.67 million in 1995 to 2.65 million in 2014, an increase of 59%. The Hispanic student population went from 6.07 million in 1995 to 12.81 million in 2014, which is an increase of 111%. Excluding 1995, the black student population had an overall decrease of 3% from 8.1 million in 2000 to 7.81 million in 2014.

Region and year	Enrollment (in thousands)							Percentage distribution						
	Total	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Two or more races	Total	White	Black	Hispanic	Asian/ Pacific Islander	American Indian/ Alaska Native	Two or more races
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
United States														
1995	44,840	29,044	7,551	6,072	1,668	505	—	100.0	64.8	16.8	13.5	3.7	1.1	†
2000	47,204	28,878	8,100	7,726	1,950	550	—	100.0	61.2	17.2	16.4	4.1	1.2	†
2001	47,672	28,735	8,177	8,169	2,028	564	—	100.0	60.3	17.2	17.1	4.3	1.2	†
2002	48,183	28,618	8,299	8,594	2,088	583	—	100.0	59.4	17.2	17.8	4.3	1.2	†
2003	48,540	28,442	8,349	9,011	2,145	593	—	100.0	58.6	17.2	18.6	4.4	1.2	†
2004	48,795	28,318	8,386	9,317	2,183	591	—	100.0	58.0	17.2	19.1	4.5	1.2	†
2005	49,113	28,005	8,445	9,787	2,279	598	—	100.0	57.0	17.2	19.9	4.6	1.2	†
2006	49,316	27,801	8,422	10,166	2,332	595	—	100.0	56.4	17.1	20.6	4.7	1.2	†
2007	49,291	27,454	8,392	10,454	2,396	594	—	100.0	55.7	17.0	21.2	4.9	1.2	†
2008	49,266	27,057	8,358	10,563	2,451	589	247 ¹	100.0	54.9	17.0	21.4	5.0	1.2	0.5 ¹
2009	49,361	26,702	8,245	10,991	2,484	601	338 ¹	100.0	54.1	16.7	22.3	5.0	1.2	0.7 ¹
2010	49,484	25,933	7,917	11,439	2,466	566	1,164	100.0	52.4	16.0	23.1	5.0	1.1	2.4
2011	49,522	25,602	7,827	11,759	2,513	547	1,272	100.0	51.7	15.8	23.7	5.1	1.1	2.6
2012	49,771	25,386	7,803	12,104	2,552	534	1,393	100.0	51.0	15.7	24.3	5.1	1.1	2.8
2013	50,045	25,160	7,805	12,452	2,593	523	1,511	100.0	50.3	15.6	24.9	5.2	1.0	3.0
2014	50,313	24,923	7,807	12,805	2,646	519	1,612	100.0	49.5	15.5	25.4	5.3	1.0	3.2
2015 ²	50,485	24,814	7,848	13,178	2,685	516	1,444	100.0	49.2	15.5	26.1	5.3	1.0	2.9
2016 ²	50,625	24,613	7,916	13,382	2,718	511	1,485	100.0	48.6	15.6	26.4	5.4	1.0	2.9
2017 ²	50,710	24,398	7,953	13,574	2,756	506	1,523	100.0	48.1	15.7	26.8	5.4	1.0	3.0
2018 ²	50,759	24,189	7,950	13,778	2,783	502	1,557	100.0	47.7	15.7	27.1	5.5	1.0	3.1
2019 ²	50,843	24,064	7,955	13,909	2,825	492	1,598	100.0	47.3	15.6	27.4	5.6	1.0	3.1
2020 ²	50,996	23,951	7,973	14,074	2,865	485	1,648	100.0	47.0	15.6	27.6	5.6	1.0	3.2
2021 ²	51,152	23,840	7,995	14,240	2,902	479	1,696	100.0	46.6	15.6	27.8	5.7	0.9	3.3
2022 ²	51,301	23,737	8,019	14,391	2,939	473	1,743	100.0	46.3	15.6	28.1	5.7	0.9	3.4
2023 ²	51,455	23,655	8,024	14,538	2,981	468	1,789	100.0	46.0	15.6	28.3	5.8	0.9	3.5
2024 ²	51,562	23,565	8,001	14,671	3,028	463	1,833	100.0	45.7	15.5	28.5	5.9	0.9	3.6
2025 ²	51,632	23,465	7,962	14,791	3,078	459	1,876	100.0	45.4	15.4	28.6	6.0	0.9	3.6

Table 1: Enrollment and percentage distribution of enrollment in public elementary and secondary schools, by race/ethnicity and region: Selected years, fall 1995 through fall 2018. Reproduced from NCES, 2016.

Table 2 provides the percentage distribution of race for public school teachers from 1987 to 2016. There is missing data on Pacific Islanders until 2003. Teacher populations for these groups follow a pattern relatively similar to the student population. The AAPI teacher percentage distribution remained relatively flat from 1999 until 2012, when it increased to 1.9% of the total teacher population. In 2016, it increased to 2.5%, an increase of 56% from 1999. The Hispanic teacher percentage increased from 5.6% in 1999 to 8.8% in 2016, an increase of 57%. The black teacher percentage decreased like the student population. The black teacher population decreased from 7.6% of the total teacher population in 1999 to 6.7% of the total teacher population in 2016, a decrease of 11%.

Selected teacher characteristic	Percentage distribution of teachers													
	1987-88		1990-91		1999-2000		2003-04		2007-08		2011-12		2015-16	
1	9		10		11		12		13		14		15	
Public schools														
Total	100.0	(†)	100.0	(†)	100.0	(†)	100.0	(†)	100.0	(†)	100.0	(†)	100.0	(†)
Race/ethnicity														
White\1\	86.9	(0.24)	86.5	(0.29)	84.3	(0.30)	83.1	(0.53)	83.1	(0.53)	81.9	(0.53)	80.1	(0.34)
Black\1\	8.2	(0.19)	8.3	(0.25)	7.6	(0.19)	7.9	(0.34)	7.0	(0.45)	6.8	(0.31)	6.7	(0.21)
Hispanic\1\	3.0	(0.11)	3.4	(0.17)	5.6	(0.20)	6.2	(0.34)	7.1	(0.46)	7.8	(0.37)	8.8	(0.22)
Asian\1,2\	0.9	(0.05)	1.0	(0.06)	1.6	(0.09)	1.3	(0.08)	1.2	(0.21)	1.8	(0.21)	2.3	(0.09)
Pacific Islander	---	(†)	---	(†)	---	(†)	0.2	(0.03)	0.2	(0.04)	0.1	(0.04)	0.2	(0.03)
American Indian/ Alaska Native\1\	1.0	(0.06)	0.8	(0.05)	0.9	(0.06)	0.5	(0.04)	0.5	(0.06)	0.5	(0.08)	0.4	(0.04)
Two or more races	---	(†)	---	(†)	---	(†)	0.7	(0.07)	0.9	(0.09)	1.0	(0.11)	1.4	(0.07)

Table 2: Percentage distribution of public school teachers, by race: Selected years 1987-2016. Reproduced from NCES, 2017.

According to the overall percentage increase, it seems that AAPI and Hispanic teacher populations are growing at similar rates, at nearly 60%. However, Figure 3 demonstrates that the Hispanic teacher population has been growing consistently since the 1999-2000 school year, whereas the AAPI teacher population only really started to increase in the 2007-2008 school year.

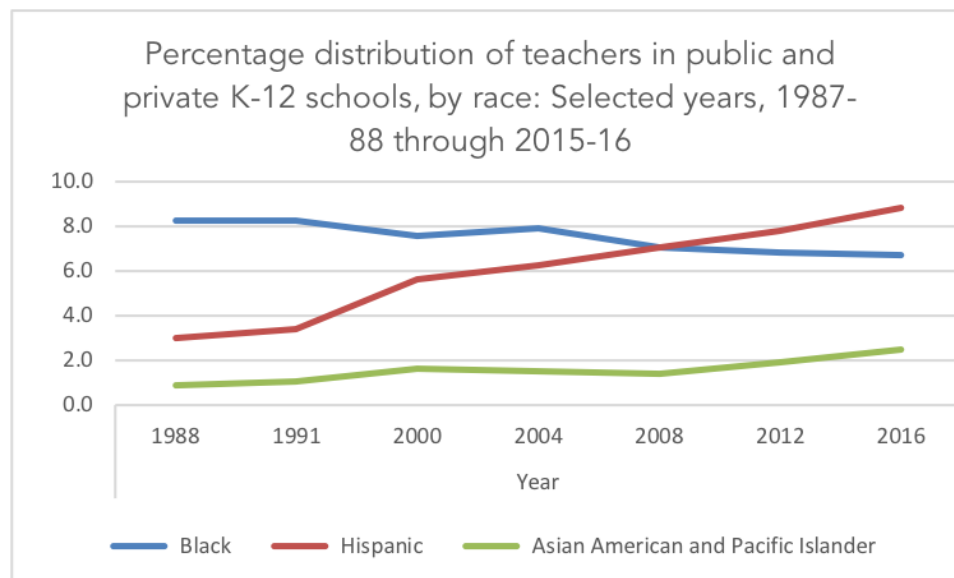


Figure 3: Percentage distribution of public school teachers, by race: Selected years 1987-2016. Source: NCES 2017

Naysayers may argue that Asian Americans and Pacific Islanders students are performing well and there is not a pressing need for AAPI teachers. AAPI students are viewed as a “model minority” or hardworking overachievers and are generally associated with “positive intrinsic talents and characteristics,” (Kiang, Witkow, and Thompson, 2015). In fact, when looking at statistics of AAPIs as a whole, they typically have higher test scores and grades, are more likely to graduate high school and college, and get into more selective schools compared to White Americans and other racial groups (Liu & Xie, 2016). However, there are over 30 different ethnic groups that fall under the label of Asian American and Pacific Islanders and the model minority myth fails to take into account the ethnic and class differences amongst AAPIs. Certain Asian American and Pacific Islander ethnic minorities are not receiving the resources they need in order

to thrive in school or find careers that will lift themselves out of poverty. As evident by Figure 3 below, Southeast Asians, on average, tend to attain less education compared to East Asians. According to data from the U.S. Census Bureau in 2010, over 30% of Cambodian, Laotian, and Hmong adults over the age of 25 do not have a high school diploma or equivalent and less than 15% of them obtain bachelor's degrees or higher (SEARAC, 2013). Given the statistics above, it is clear that Asian American and Pacific Islander students could also benefit from having teachers that come from similar cultural backgrounds to them.

Educational attainment by Asian national origin

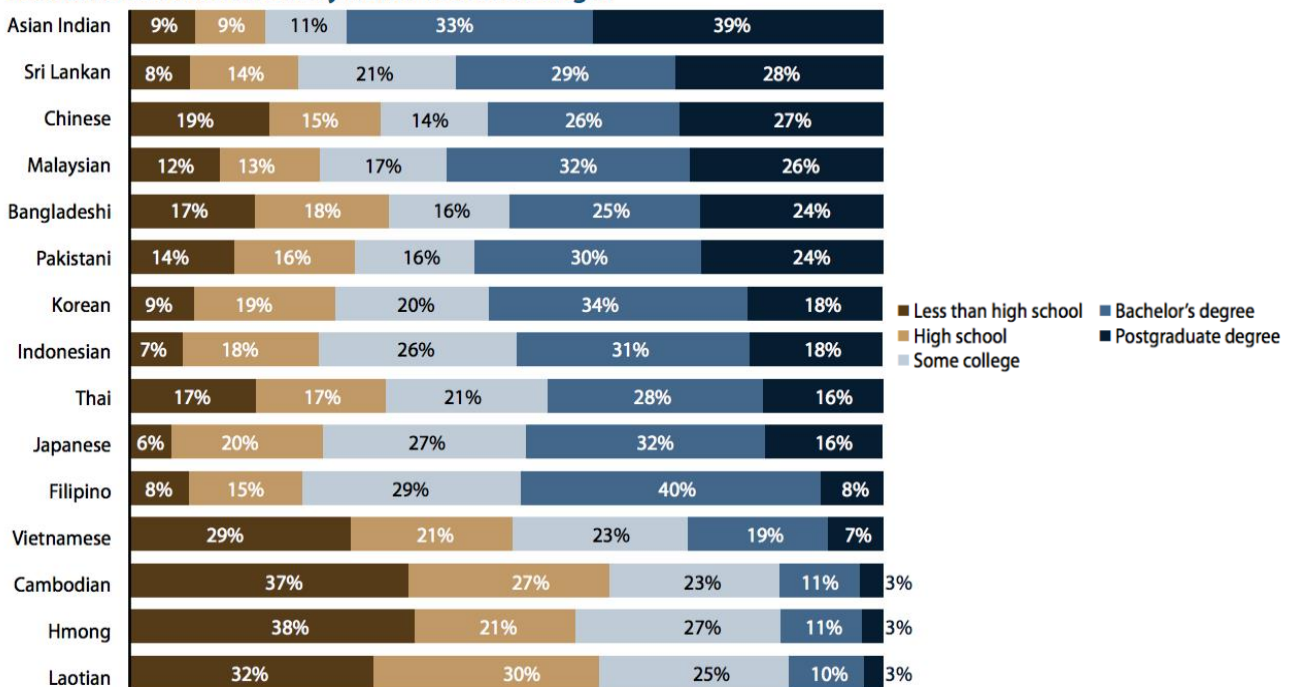


Figure 4: Educational attainment by AAPI subgroup, 2014. Reproduced from Center for American Progress, 2015 using Microdata Sample from Bureau of the Census, “2008–2012 American Community Survey 5-year Estimates.”

Importance of Having Minority Teacher Populations Reflect Student Populations

Villegas, Strom, and Lucas (2012), Cole (1986), Riley (1989), Irvine (1988), Dee (2005), Hess and Leal (1997), Klopfenstein (2005), and Pitts (2007) all claim that minority teachers serve as role models for all students. Cole (1986) reported that having successful teachers of color that resembled students of color gave them higher career aspirations, especially when the students came from more impoverished backgrounds. Teachers of color can help increase the self-worth of students of color and motivate them to work hard academically and pursue higher education and professional endeavors (Villegas et al., 2012). Teachers of color are also in a better position to encourage learning amongst students of color because they can better relate to the “students’ cultural backgrounds and experiences,” (Villegas et al., 2012, 286). The Center for American Progress (2014) found that teachers of color increase academic achievement of students from similar backgrounds.

Barriers to Successful Minority Teacher Recruitment

High schoolers interested in education and enrollment in teacher preparation programs have decreased from 2008 to 2014 from nearly 720,000 to a little over 465,000 (Aragon, 2016).

Teaching, in the eyes of most students, is not a very glamorous profession, especially for Asian Americans and Pacific Islanders (AAPIs), whose parents often push them to pursue better-paying jobs. Barriers to successful recruitment include negative perceptions of teaching as a profession, lack of minority mentors and support, and the lack of multicultural curriculum in teaching programs (Martin, 2011). Another major barrier to minorities pursuing education include passing teacher competency assessments (Justiz & Kameen, 1988). Justiz and Kameen (1998) found a correlation between rapidly increasing competency testing requirements and decreasing minority teacher population. Eubanks and Weaver (1999) agree that there seems to be too much emphasis on competency testing and not enough on teacher preparation. Eubanks and Weaver (1999) reported that teachers of color tend to score lower on standardized entry tests for teacher preparation and licensure.

Literature Review

I will address some strategies including financial incentives, alternative certifications, and “grow your own” programs that some states have used for teacher recruitment in general and for minorities specifically.

Past Policy Initiatives

Majority of the literature on teacher diversity recruitment provided policy recommendations or mentioned past initiatives, but there is not much information on the cost, effectiveness, and political feasibility at the time of those recommendations and initiatives. However, in 2016, sixteen governors addressed increasing teacher quality, recruitment, and compensation in their State of the State addresses, indicating that efforts to increase teacher diversity has high political feasibility (Aragon, 2016b). Villegas, Strom, and Lucas (2012) found that 31 states have some sort of minority teacher recruitment policy. The most common form of policy that states used to encourage minorities to pursue education was financial incentives. Other popular policy strategies for teacher recruitment included alternative certifications and specific recruitment programs. Although some states do not have any specific minority-targeted policy, Villegas et al. (2012) postulated that such policy’s absence does not necessitate that these states are apathetic about racial or ethnic diversity in their teaching force.

Financial Incentives

Financial incentives include scholarships, grants and forgivable loans. In 2003, 19 states provided financial incentives to minority students who participated in teacher enrollment programs (Martin, 2011). Often, the recipients of scholarships and grants are required to teach in a certain district or discipline for a set amount of time (Villegas, Strom, & Lucas, 2012). Most states that offer financial incentives target minorities going into teaching specifically, but some states offer money to qualified, interested individuals more broadly.

The Education Commission of the States sorts financial incentives into three main categories: salary requirements, diversified pay, and pay for performance. Salary requirements include both minimum salary requirements and salary schedules. Salary schedules require teachers be paid based on their years of experience and credentials (Aragon, 2016a). Diversified pay involves paying teachers more to teach in high-needs schools or subject areas. Pay for performance can either be based on student performance or evaluation.

However, according to Piercynski, Matranga, and Peltier (1997), financial incentives in the form of recruitment dollars, did not have a significant part in attracting minority teachers to Nevada rural communities. Piercynski, Matranga, and Peltier (1997) posited, based on their qualitative study, that it would be more beneficial than raising salaries to develop programs encouraging minority students to become teachers and have teachers’ aides and substitute teachers become full-time licensed teachers.

Alternative Certification

Alternative certification programs are expedited teacher preparation programs that provide training to individuals who already have bachelor’s degrees (Woods, 2016). They are provided by schools of education, both non-profit and for-profit organizations, and sometimes by school districts as well. Alternative certification programs make it easier for college graduates and mid-career professionals to pursue education without having to pursue an advanced degree (Boser, 2011). Boser believed that if more avenues were created to enter education and there were

more credentialing organizations, it would reduce the cost of becoming a teacher. Alternative certificate programs focus more on “on the job” training rather than teaching about theory, and most start working in classrooms at the beginning or throughout their training rather than at the very end like many traditional programs (Woods, 2016).

Alternative certificate programs often attract prospective teachers who are looking to transition from the professional world to the teaching profession. These potential teachers often have backgrounds in hard-to-staff subjects, which may allow them to bring additional context and application of classwork into the students’ daily lives (Woods, 2016). Also, another attractive aspect to alternative certificate programs is that some of them offer either a salary or stipend while completing the program, which greatly helps mid-career professionals who cannot afford to stop working in order to pursue teaching. However, Eubanks and Weaver (1999) push back on the benefits to alternative certification programs by claiming that alternative pathways may “open the floodgates for underqualified, unprepared individuals to enter teaching” (Eubanks & Weaver, 1999, 451). Alternative certificate programs, like TFA, also may result in higher teacher turnover because the teachers leave after their time commitment to the program is over. A plus side to alternative certificate programs is they often attract more minorities than traditional teaching pathways as evidenced by Figure 5 below.

Teachers Of Color Are More Likely To Come To Teaching Through Alternative Routes

Teacher race by preparation route, 2011*

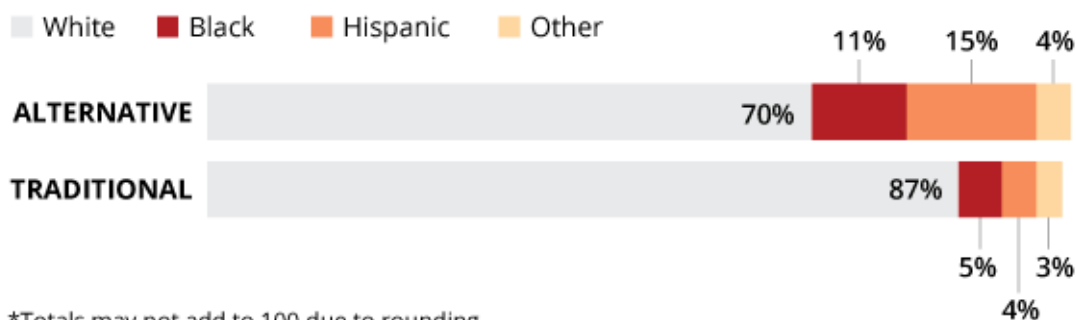


Figure 5: Alternative vs. Traditional Teacher Preparation. Reproduced from Huffington Post, 2017. Source: National Center for Education Information

Alternative certification programs may produce more teachers, especially minority teachers; but there are mixed results on whether these programs produce effective teachers. Several studies have found negative effects of alternatively certified teachers on student outcomes. For example, in 2002, Laczko-Kerr & Berliner looked in Arizona at alternative certification programs, like TFA, and found that students taught by these uncertified teachers, did worse on academic tests than those taught by certified teachers with comparable experience. Darling-Hammond, Holtzman, Gatlin, & Heilig (2005) also found that students in Houston taught by TFA teachers, on average, performed worse on the Stanford Achievement Test-9 and Aprenda Tests in both reading and math. Uncertified teachers have significantly negative effects on student achievement, even after controlling for student characteristics and prior achievement, and teacher experience (Darling-Hammond et al., 2005). Darling-Hammond et al. also claimed that uncertified TFA teachers have a greater negative effect on test scores than having an uncertified teacher not recruited from TFA.

However, Xu, Hannaway, & Taylor (2011) claimed that high school TFA teachers are more effective than the teachers who would have otherwise taught them based on analysis they conducted in North Carolina high schools.

“Grow Your Own” Programs

Grow Your Own (GYO) programs are programs devoted to strengthening the education pipeline and supporting students of color with preparation and deciding future placement. Fluckinger and Thompson (2000) and Schmitz, Nourse and Ross (2012) both suggested that “grow your own” programs are indeed successful in generating further interest in the teaching profession. Some “grow your own” programs start as early as middle school. South Carolina and Oklahoma’s middle school programs offer curriculum about teaching and developing leadership skills that will be useful as a teacher (Martin, 2011). High school programs also offer practical experience through internships and shadowing opportunities for interested students. The Today’s Students, Tomorrow’s Teachers program gives scholarships to students who attend one of the 22 partner schools in exchange for the student teaching in one of the districts for a year following their teaching accreditation. Pasternak and Longwell-Grice (2010) argued that the close mentoring relationships fostered between students and faculty from these pre-college programs is what attracts minority students to the teaching profession. However, there is not much longitudinal research on whether or not these students actually pursue teaching.

There are also teacher recruitment collaborations between universities and school districts. In Nebraska, the University of Nebraska at Omaha teamed up with Omaha Public Schools to increase the number of racial and ethnic minority teachers through their Minority Intern Program (Fluckinger & Thompson, 2000). Their graduating students are not required to work for Omaha Public Schools but 90% of them in 2000 were hired. The MIP hires made the teacher population look more representative of the diverse student population in Omaha. The program seemed to be self-sustaining as former interns could best market the program and encourage future interns to become teachers by providing them with minority role models (Fluckinger & Thompson, 2000). Central Washington University partnered up with the Renton School District to create a “Future Teacher Academy.” All of the students who went through the program graduated high school on time and went on to either community college or a four-year university. Schmitz, Nourse and Ross (2012) believed that these two achievements indirectly pushed students to entering teaching preparation programs and ultimately teaching in the classroom. Both of these programs had strong working relationships between the school district and the university, which will help in long-term sustainability of the programs. However, it is uncertain if these programs would be sustainable or replicable in areas where universities do not have strong working relationships with the surrounding school districts.

Evaluative Criteria

The following criteria of effectiveness, cost, cost-effectiveness, and administrative feasibility will be used to evaluate the expected outcomes of each program option.

Effectiveness

The program proposals all aim to reduce the gap between Asian Americans and Pacific Islander teacher and student populations. This criterion will be measuring how Teach for America, as an organization, can try to bridge the gap through their Teacher Corp Program. Effectiveness will measure the increase in Asian American and Pacific Islanders teachers produced through actions taken by TFA specifically. Effectiveness estimates will be based on prior literature and estimations from experts in the field of teacher diversity efforts.

Cost

The cost measure will project how much each program will cost Teach for America in implementation. Costs to Teach for America will include administrative costs to develop and run programs, potential fundraising and publicity costs, and projected costs of the programs themselves. There will also be additional time costs spent on recruiting new members as well. Only costs to Teach for America will be considered for this criterion as potential Corps members do not have to pay an application fee. All costs in this analysis are in 2017 USD. The calculations were rebased using the average CPI in 2017.

Cost Effectiveness

Cost effectiveness is a quantitative measure. Cost effectiveness will examine the total cost to Teach for America divided by the increase in AAPIs teachers produced by Teach for America Corps. The most cost-effective alternative will yield the greatest increase in AAPi applicants for the lowest relative cost.

Administrative Feasibility

This criterion evaluates whether or not Teach for America can actually implement the program as an organization. It is important to account for feasibility because a program might be effective but not possible due to administrative constraints. Some factors to consider include whether there are existing relationships with future partners and sponsors, and if the program is logistically possible. This criterion will also include whether or not TFA has enough staff and whether they are trained well enough to manage these programs. This criterion will also measure whether or not people within TFA will support the program. This criterion will be scored by low, medium, and high.

Alternatives

This section describes and evaluates the three program alternatives available to Teach for America. All of the options aim to increase the number of AAPI teachers in TFA's Teacher Corps program.

Alternative 1: Let present trends continue

Currently, programs like TFA and University of Colorado Denver's NxtGEN teacher residency program offer practical experience for those interested in education. Teach for America specifically already has an initiative to recruit more Asian Americans and Pacific Islanders (AAPIs). Through their initiative and recruiting efforts, Teach for America could potentially see an increase in AAPI applicants and prospective teachers in their cohorts, which could translate to more AAPIs in the teacher population nationwide.

Teach for America's Asian American and Pacific Islander Initiative works to recruit AAPIs through "advocating for data disaggregation for AAPI teachers and students, hosting summits for corps members, alumni, staff, and undergraduate students; and expanding the network of AAPI teachers to include individuals who are Deferred Action for Childhood Arrival (DACA) recipients," (Ha, 2015). TFA would use disaggregated data to better recruit and retain AAPI teachers as well as better support students and close achievement gaps. Their summits, hosted four times a year, encourage AAPI undergraduate students to work with local and national organizations to serve the AAPI community through advocacy for educational equity. These summits help to further spark interest in teaching and raises awareness of TFA for this student population.

Effectiveness

TFA's most recent cohort had 220 members that identify as AAPI. This cohort was 6% AAPI compared to the national percentage of 2.5%.

Cost

This option would result in the least change in spending by TFA because they would not be spending more than they already are as part of their initiative. The costs for this alternative will not differ much from current costs except for the annual increases due to inflation. The most recent reported spending on general teacher recruitment and selection in 2016 was \$52,364,255 in 2017 USD. Because AAPI cohort members make up 6% of the incoming corps, spending on AAPI corps members would have cost TFA around \$3,142,000.

Cost-Effectiveness

Based on the current number of AAPI cohort members (220) and the cost above, this alternative cost TFA approximately \$14,280 per cohort member.

Administrative Feasibility

This alternative has high administrative feasibility because it would not increase spending more than what is already spent on recruiting AAPIs. TFA would not have to hire additional staff and current staff would not have to take on additional responsibility, which means that there is likely to be high support for this option.

Alternative 2: Placing AAPI teachers in schools with higher AAPI student populations

By placing more AAPI teachers in schools with higher AAPI student populations, these students will have more positive role models to look up to in the education field. A contributing factor to AAPI

students not pursuing education is that they do not see many teachers that look like them which reinforces the idea that AAPIs do not become teachers. With positive role models that look like them, AAPI students may be more encouraged to pursue becoming a teacher. These teachers are also more likely to guide students that they believe would make great teachers towards education as well. This will better bridge the proportion gap between AAPI student and teacher populations. Teach for America could affect the number of future AAPIs entering their cohorts if Teach for America sent AAPI cohort members to schools with higher AAPI student populations. This alternative may be more cumbersome to implement but will not likely increase costs too much to TFA.

Effectiveness

The evidence for having a minority teacher resulting in a minority student becoming a teacher is mainly anecdotal. This makes it difficult to estimate how many students would ultimately be influenced to becoming a teacher due to having a teacher that looks like them. Knowing that TFA served 390,000 students in the past year and that 5.5% of those students are likely to identify as AAPI, I estimate that TFA served 21,450 AAPI students. Of these students, only 33% of them, or a little over 7000, attend schools with over 25% AAPI student populations. Given that only 1.8% of AAPI students are interested in teaching, that means only 127 of them would be interested in pursuing education. However, this does not mean that all 127 of them would becoming TFA Corps members. Based on TFA's acceptance rates, I estimate that only 10% of them, or 13 of them, would ultimately join the Teaching Corps.

Cost

This alternative requires finding out where the districts with higher AAPI students are and then placing AAPI teachers at those schools. Collecting this data is a cost but luckily the National Center of Education Statistics already has this information in one location and would only require a research assistant to comb through the districts and identify the schools with over 20% AAPI students. These schools would receive priority for being matched with AAPI teachers. Given that a graduate student research assistant normally costs about \$20/hour and there are 11,307 districts in the U.S., it would cost about \$4000 if each district took about a minute to find the information for and another \$1000 to create a report to present which schools are of high need.

Cost-Effectiveness

If there is an increase of 13 teachers to the cohort and the additional cost is only \$5000 to TFA, the cost per teacher would be approximately \$13,500. Thus, this is the most cost-effective alternative for TFA.

Administrative Feasibility

This option would also have high administrative feasibility. It would have high internal support because staff would not have to take on too much additional responsibility or undergo additional training. It also would not cost much more than letting current trend continue. This alternative also might have more support than the first alternative because it has the additional benefit of improving student outcomes by matching the race of the students and teachers and increases the number of AAPI teachers with low additional cost.

Alternative 3: Develop the pipeline at an earlier age by partnering with “Pathways2Teaching” program in high school

Exposing teens about teaching and education would make students more aware about the profession, while providing practical experience and possibly changing perceptions about teaching. These pipeline programs also would help to develop the skills they would need in order to be effective teachers. They would also better inform students of postsecondary options in order to pursue teaching, such as Teach for America. Pipeline programs are associated with higher graduation and matriculation rates, which ultimately could result in more AAPI students pursuing education later. This alternative may not be administratively or internally feasible for TFA because it is beyond their scope as TFA primarily works with students who have already earned a degree from a higher education institution. However, program managers in the high schools could help to increase awareness of TFA to interested high school students, which may ultimately increase AAPI representation in their cohorts at a relatively low cost to TFA.

Effectiveness

TFA served approximately 390,000 students in the past year. Based on the 2018 NCES data, high school students made up approximately 30% and AAPI students made up 5.5% of the public-school population. Thus, TFA served approximately 117,000 high school students, with a little over 6,400 of those students identifying as AAPI. According to the National Center for Education Statistics (2016), 33% of AAPI students attended public schools with over 25% of the school being made up of AAPI students. Given this statistic, only 2100 AAPI students served by TFA would be attending a high school with greater than 25% AAPI student population. Out of these students, only 1.8% of them will already be interested in teaching (ACT, Inc., 2015). Thus, at the lower extreme, I estimate that the program is guaranteed to have at least 40 students served by TFA participating in a Pathways2Teaching type program. On the upper extreme, I estimate that 10% of all AAPI high school students served by TFA, or approximately 210 students, would be interested in a Pathways2Teaching type program.

At maximum, the students already interested in teaching prior to the Pathways program would be very likely to join Teach for America corps, so the cohort could potentially have an additional 40 AAPI teachers. A lower estimate is that only 2% of the 210 students, or approximately four AAPI high school students, would ultimately join TFA’s Teacher Corps. For the outcomes matrix, I will take the average of these two numbers, for an estimated increase of 22 teachers.

Cost

This alternative would be costlier as it would involve the creation of a new partnership with high schools. There would need to be several staff members or volunteers to meet with teachers to identify student with potential. The recruitment associate on average makes about \$20 per hour (Glassdoor, 2018). This would probably require at least 40 hours to identify and recruit potential students across TFA schools for the program. Thus, the recruitment associate would need to be paid at least an additional \$800 for recruiting the students. Pathways2Teaching offers training that varies in cost based on how many people there are. The costs for this training would be split between the high schools and TFA as both would have staff in the program. Pathways2Teaching, and similar Grow-Your-Own programs typically have high start-up costs. I estimate that each school would cost about \$10,000 to start the program for materials, curriculum, and training. I estimate that there would be at least 5 high schools with enough students interested in the program. Thus, it would cost TFA around \$50,000 to start this program in those schools.

There would also need to be incentives for the students to join this program, which would be around \$35/student. Incentives could include apparel for program members, which they could wear to program events. The total cost of incentives for students in the program, if there are 210 students, would be \$7,350. If there are only 40 students in the program, it would cost significantly less at \$1400.

To encourage these students to continue pursuing teaching, TFA should also offer scholarships to these students to go towards going to college. TFA would need to hire a grant writer temporarily for this funding. According to Payscale, the average grant writer made about \$46,000/year. Given this is a short-term need, I would estimate the grant would only take a week and cost approximately \$920. The awarded scholarship would be given out to students based on need, with the average amount being \$3800 (\$3500 in 2011), based on Mark Kantrowitz's calculations for average scholarship amount received by AAPI students (FinAid, 2011). This scholarship will go to students in need. Based on 2011 poverty rates for AAPIs, 12.6% of AAPIS live under the poverty line; thus, if there are 210 students in the program, about 25 students in this program would be eligible for scholarships. This would cost TFA an additional \$95,000.

Cost-Effectiveness

After adding all of the cost estimates from the above criterion, the total is \$3,296,720. The predicted increase in teachers would be 242. Thus, the estimated cost per additional teacher would be \$13,260. This option is more cost-effective than continuing the status quo.

Administrative Feasibility

Despite this alternative looking promising, due to a lower cost-effectiveness ratio, this option is the least administratively feasible of all three of the options. It would require giving additional responsibilities to current staff and would require additional training to recruitment staff. It also involves offering a class to the students participating, which might stretch their school's already limited resources. Even with grant funding, it is uncertain whether or not TFA would be able to receive sufficient funds to sustain such a program.

Recommendation & Implementation

The outcomes matrix below summarizes how each alternative scored on each of the evaluative criteria. An assumption maintained throughout projecting effectiveness is that TFA will sustain recruitment numbers of at least 220 AAPI teachers. Another assumption was that TFA would not spend more on recruitment in the future, barring adjustments for inflation.

It is recommended that TFA pursue Alternative 2: Place AAPI Teachers in Schools with Higher AAPI Student Populations, because it would increase the number of AAPI teachers in the cohort from the current numbers and would not cost much more per teacher recruited for TFA. This option has the additional benefit of increasing student outcomes, such as higher graduation and college attainment rates, thus potentially increasing the number of teachers recruited in the long-run.

Outcomes Matrix

Alternative	Effectiveness	Cost	Cost Effectiveness	Administrative Feasibility
1. Let Present Trends Continue	220 teachers	\$3,142,000	\$14,280 per teacher	High
2. Place AAPI Teachers in Schools with Higher AAPI Student Populations	233 teachers	\$3,147,000	\$13,500 per teacher	High
3. Develop the pipeline at an earlier age by partnering with “Pathways2Teaching” program in high school	242 teachers	\$3,296,720	\$13,620 per teacher	Low

It is not possible for TFA to implement both alternatives 2 and 3 because implementing both would stretch TFA thin both administratively and fiscally. Thus, Alternative 2 is our best option for several reasons. Although it is not the most “effective” alternative, it is the most cost-effective alternative. Alternative 3 has higher effectiveness for an additional \$120 per teacher; however, it has low administrative feasibility and would likely be hard to implement in identified schools. TFA would need to have strong relationships with the schools implementing Pathways2Teaching. This is difficult when TFA may not continue serving the same schools after the placed teachers’ two-year commitments end. Setting up a program like Pathways2Teaching might not be worth it; if once the TFA teacher leaves, there is no longer a trained staffed member to run the program. In addition to the administrative uncertainty, there is also not enough longitudinal evidence on the effectiveness of a grow-your-own program like Pathways2Teaching. Many states are starting to implement GYO, but there is no literature on whether these programs actually work to create more teachers. It is difficult to justify the spending on developing such a program when there is no conclusive evidence on whether these programs are worth their high start-up costs.

Alternative 1, letting present trends continue, is also an improvement compared to the nationwide AAPI teacher population because TFA already recruits AAPIs at a much higher rate, 6% compared to 2.5%. It was difficult to project how many additional AAPI teachers would come about due to my other two options. However, I was ultimately able to make projection estimates on how many additional teachers would be produced and came to the conclusion that Alternative 2 is actually my best option. Alternative 2 might actually have more internal support than maintaining the status quo, given Teach for America's goal of increasing diversity in their Teaching Corps. In addition to increasing the potential number of AAPI teachers in the cohort by 13, these AAPI teachers have the additional benefit of potentially improving their students' academic and social outcomes.

Implementation

As mentioned in the evaluation of Alternative 2 in the Alternatives section, the first steps towards implementing this option is to identify schools with high AAPI student populations. Teach for America already has population demographic breakdowns for the 53 communities served. The report should first identify districts with higher AAPI student populations and then look into specific schools. Once schools have been identified, they should be presented in list form from highest AAPI student populations in proportion to the total student population to lowest AAPI student populations in proportion to the total student population. If multiple schools have similar proportions of AAPI students, the absolute number of AAPI students will be taken into consideration, with higher numbers of AAPI students receiving higher priority for AAPI teachers. For the purpose of projecting teacher increases, I defined high as 25% AAPI students or higher. However, in practical application, I recommend giving priority to schools with 20% AAPI students or higher first as Corps members' rankings need to be kept in mind when placing teachers. If there are additional teachers after schools with 20% or higher have been filled, then TFA can go down the list and fill the schools below 20% in the order of the list.

Future Considerations

This option addresses the recruitment of AAPI teachers. However, in order to continue increasing the number of AAPI teachers, steps must also be taken to retain these teachers past their TFA commitment. Retention past the second year of teaching for TFA cohort members drops significantly, which is worrisome if we are trying to increase the teacher workforce. Ronfeldt, Loeb & Wyckoff (2012) suggested that teachers leaving the classroom are disruptive for their students, especially the student populations that TFA typically serves – high-poverty, high-minority, and high-risk students. Not only does the teacher departure adversely affect the students that the leaving teacher taught but also students who were taught by other teachers in the same school (Ronfeldt, Loeb, & Wyckoff, 2012).

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