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### Texas Elementary School Teacher and Student Demography: A Multiyear Investigation

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**Texas Elementary School Teacher and Student Demography: A Multiyear Investigation**

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**Abstract**

In this longitudinal descriptive investigation, an analysis of the ethnic/racial diversity of teachers and of students in Texas public elementary schools from the 2010-2011 school year through the 2018-2019 school year was conducted. Descriptive statistics revealed decreases in the average percentages of White teachers and of White students in Texas public elementary school over 9 school years of data examined herein. The average percentages of Asian, Black, and Hispanic student and teachers increased from 2010-2011 to 2018-2019. Through comparisons of the ethnic/racial diversity of teachers and of students, clear disparities were evident. Higher percentages of White teachers were present than percentages of teachers of color and percentages of students of color. Implications for policy and for practice, as well as recommendations for future research, were discussed.

**Keywords:** Asian, Black, Elementary Schools, Hispanic, Race/Ethnicity, Texas Academic Performance Report, Texas Education Agency, White

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## INTRODUCTION

Ethnic/racial minorities constitute 41% of the elementary, middle, and high school student population across the United States, yet only 16.5% of the teachers in those same school levels are ethnic/racial minorities (Wright, Gottfried, & Le, 2017). In the State of Texas, the state of interest in this article, the diversity of the public school student population has been undergoing dramatic demographic transformations and growth throughout the past decade (Kauffman, 2019). Over a 10-year span (i.e., 2008-2009 to 2018-2019), Texas had a student enrollment increase of 14.4%, or 682,339 students across all grade levels (Texas Education Agency, 2019b). In the 2018-2019 school year, Texas public elementary schools had 295,063 Black students, 12.42% of the Texas student population; 1,235,337 Hispanic students, 52.02% of the student population; and 658,139 White students, 27.75% of the student population (Texas Education Agency, 2019b). In the same school year, but across all grade levels, not just elementary grades, 358,450 teachers were present, of which 10.6% were Black, 27.7% were Hispanic, and 58.4% were White (Texas Education Agency, 2019a).

According to the U.S. Census Bureau (2016), the population of Texas has increased by 12.7% which can also be reflected as a growth to a total population of 28 million individuals. Currently, in Texas, no one ethnic/racial group comprises more than 50% of the State's total population (U.S. Census Bureau, 2019). This rapid statewide change is reflected in greater numbers in ethnic/racial demographic groups than what has traditionally been represented. With respect to the total Texas population, Hispanics make up 39%, White non-Hispanics make up 42%, Blacks comprise 13%, and Asians make up 5% (U.S. Census Bureau, 2019).

In two previously conducted studies, Bone (2011) and Khan (2014) described the ethnic/racial composition of Texas public elementary school teachers and students. Bone (2011) reviewed demographic data which spanned 11-school years (i.e., 1999-2000 through 2009-2010), whereas Khan (2014) documented teacher demographic data across an 11-school year time period as well (i.e., 2002-2003 through 2012-2013). Both researchers (Bone, 2011; Khan, 2014) obtained similar results of a growing and diversifying population in Texas.

With respect to the grade levels of interest in this investigation, elementary school, in the most comprehensive analysis to date, Bone (2011) analyzed the ethnic/racial characteristics of Texas elementary school teachers and elementary school students for an 11-year period. Bone (2011) established that, for the 11-year span, between 79.29% and 85.30% of Texas elementary school teachers were White. Over this time period, the percentage of White Texas public elementary teachers decreased from 70.84% to 66.68% (Bone, 2011). During the same time period, the average percentage of White public elementary students in Texas also decreased from 42.20% to 32.00%. Bone (2011) established that the percentage of Hispanic public elementary school teachers increased over this 11-year time period from 5.70% to 8.82%. This increase in the percentage of Hispanic elementary school teachers coincided with the growth of Hispanic elementary student percentages from 30.80% to 41.10%. Though small, an increase was also observed in the percentage of Black elementary school teachers over this 11-year time period from 1.90% to 2.56%, and Black elementary student percentages grew from 5.90% to 6.90% (Bone, 2011).

In efforts to provide a more complete description of the ethnic/racial demography of Texas public school teachers, Khan (2014) completed a follow up study to Bone's (2011) analysis. Khan (2014) reviewed data regarding the ethnic/racial makeup of Texas public elementary school teachers from the 2002-2003 through the 2012-2013 school years. From 2002-2003 to 2012-2013, Khan (2014) established that the percentage of Black public school teachers declined from 8.1% to 7.7%. Hispanic public elementary school teachers, during this same time period, experienced an increase from 21.6% to 29.9%. Khan (2014) also

documented a decrease in the percentage of White public elementary school teachers from 69.4% in 2002-2003 to 61.3% in 2012-2013. As Bone (2011) also concluded, Khan (2014) determined that the diversity of Texas public elementary school teachers remained relatively unchanged, and mostly White, for the 11 school years of data which were analyzed.

An important finding that Bone (2011) documented was the presence of a slight increase in the Black elementary public-school teacher population. In contrast, Khan (2014) established the presence of a slight decrease in that population for the subsequent 11-year span. This ebb and flow of the percentages of Black public-school elementary teachers has merit for further analysis in Texas as ethnic/racial minority populations continue to grow. The individuals who stand to be most affected academically by the rapid change in population diversity are Black and Hispanic students, especially as the ethnic/racial demography of Texas teachers is not diversifying as quickly as the student population (Bone, 2011; Khan, 2014).

Many of the ethnic/racial differences which accompany rapid school population growth, and can cause academic issues, potentially can be addressed by teachers of color who may share similar cultural traits with students of color. Teachers who are sympathetic to cultural issues of students of color are increasingly difficult to find (Bristol & Martin-Fernandez, 2019; Fitchett & Heafner, 2017; Rasheed, Doyle, Brown, & Jennings, 2019; Verkuyten, Thijs, & Gharaei 2019). Boser (2014) noted that teachers of color comprise less than 20% of the teachers in the profession; yet, over one half of the students in public schools are students of color (Maxwell, 2014).

Rasheed et al. (2019) contended that Black and Hispanic students face difficulties at a very early point in life. These early difficulties create cause for concern when campus leaders and school district administrators encounter teacher staffing decisions which determine when Texas public elementary students will have an opportunity to be educated by teachers of a similar ethnicity/race, who share their cultural beliefs, have had similar life experiences, and have the potential to become positive role models (Plachowski, 2019; Wang, Leary, Taylor, & Derosier, 2016). Though non-White teacher recruitment has been a point of emphasis across the nation for more than a decade, educational leaders need to develop policies which increase the ethnic/racial matching of teachers and students in classrooms (Rasheed et al., 2019).

Researchers (Amos, 2016; Gollnick & Chinn, 2017; Wright et al., 2017) of public-school policy and demographics have recognized that school populations in the United States have become a near mirror image of American society, becoming much more racially/ethnically diverse. However, research investigations are essential to determine if educational staffing is maintaining pace with the reflection that is visible in public schools, particularly in Texas public elementary schools. Ingersoll and May (2011) detailed three aspects of teacher and student ethnic/racial demography matching in public schools that have potential positive benefits for ethnic/racial minority students. The first benefit was related to parity of demography as teachers of color can be positive role models and serve as ambassadors of diversity to both students of color and White students (Ingersoll & May, 2011).

The argument of cultural synchronicity was Ingersoll and May's (2011) second pillar in which they touted that ethnic/racial minority students benefit, due to cultural similarities, from being assigned to ethnic/racial minority teachers. Bristol and Martin-Fernandez (2019) also supported cultural synchronicity when they explained that Hispanic teachers who have Hispanic students assigned to them, and share similar cultural experiences, can create classrooms for Hispanic students which cultivate positive socioemotional support. Public education researchers, such as Wright et al. (2017) and Ingersoll and May (2011), have conducted studies regarding ethnoracial matching, or cultural synchronicity, and how the two concepts facilitate quality student-teacher relationships at the individual level (Banerjee, 2018). Finally, Ingersoll and May (2011) established humanistic commitment as a benefit of teacher

matching, meaning that minority teachers are more likely to be motivated in making differences in lives of ethnic/racial minority students.

Tyler (2016) explained that these demographic changes increase the likelihood of teachers, in both rural and suburban areas, to encounter students of a different racial/ethnic groups. If these encounters are not appropriately handled or understood, racial discrimination experiences could potentially become detrimental to student academic success (Leath, Mathews, Harrison, & Chavous 2019). In addition to potential academic shortcomings, Verkuyten et al. (2019) concluded that students of color can experience social identity issues when they perceive and experience ethnic/racial discrimination. Even though relationships between academic engagement, success, and social discrimination have been investigated, less information is present regarding which grade level academic outcomes are most substantially influenced (Verkuyten et al., 2019). Students of color who have little to no sociocultural support, experience decreased levels of academic perseverance (Plachowski, 2019). Elementary school teachers are positioned to have an immediate influence on academic engagement and can assist families as they integrate into their child's educational career (Frost & Goldberg, 2019).

## METHOD

### Statement of the Problem

In addition to nationwide teacher shortages, gaps in the racial/ethnic demography between teachers and students are increasing (Carothers, Aydin, & Houdyshell, 2019). Aydin, Ozfidan, and Carothers (2017) detailed in their literature, that for the first time in 2014 California, Texas, New York, and Florida had student enrollments that were mostly students of color. Even with the United States population growth slowing to an increase of only 0.07% from 2015-2016, Texas has experienced tremendous changes in demography and population size in that time (U.S. Census Bureau, 2016). Hispanic students accounted for the largest percentage of total enrollment in Texas public schools in 2018-19 at 52.6% of the Texas student population, followed by White students at 27.4%, Black students at 12.6%, and Asian students at 4.5% (Texas Education Agency, 2019b). The current incoming immigration population has serious implications for educators in classrooms in the United States (Goodwin, 2017).

The willingness to combat racial inequities in public schools with teaching staffs who are ethnically and racially matched to a school's student population, may provide students of color with mentors and advocates who are necessary for academic success (Plachowski, 2019). Considering current Texas demographic statistics, it is important to acknowledge that the evolving body of evidence in which public school students benefit from being assigned to a teacher who shares similar racial and ethnic demography (Egalite & Kisida, 2018). In efforts to expand on the research of Bone (2011), who examined staff and student demographic changes in Texas from the 1999-2000 school year through the 2009-2010 school year, it is necessary to update the study as Texas public school diversity continues to increase. Also, reviewing data related to the relationship between the ethnic and racial demography of Texas elementary teachers and elementary students can assist school and district administrators in ensuring that their hiring practices are best serving the social and academic needs of their students.

### Purpose of the Study

The overall purpose of this study was to examine the racial/ethnic demographic characteristics of teachers and students in Texas public elementary schools. The first specific

purpose was to describe the ethnic/racial demographic characteristics (i.e., Asian, Black, Hispanic, and White) of teachers in Texas elementary public schools for the 2010-2011 through the 2018-2019 school years. A second purpose was to examine the ethnic/racial diversity of students in Texas public elementary schools for each school year from the 2010-2011 school year through the 2018-2019 school year. A third purpose was to identify any trends that were present in the ethnic/racial diversity of teachers in Texas public elementary schools from the 2010-2011 to the 2018-2019 school year. A fourth and final purpose was to determine the extent to which trends were present in the ethnic/racial diversity of students in Texas public elementary schools from the 2010-2011 school year through the 2018-2019 school year.

### **Significance of the Study**

Historically, school leaders have depended on educational legislation when determining their leadership practices; however, legal frameworks have shortcomings because they have been developed by policymakers who do not reflect the ethnic/racial demography of Texas's current student population (Allen & Liou, 2019). Since the 1700s, racial biases have prevailed over ethnic/racial minority student educational experiences and opportunities (Miller, 2013). Teachers who do not match the racial/ethnic demography of their students often focus on implied/stereotypical deficits, which can have damaging consequences (Utt & Tochluk, 2020).

Negative consequences have been documented of students of color having mostly White teachers who have little depth of understanding related to ethnic and/or racial culture and experiences (Utt & Tockluk, 2020). Due to the crucial period of development that is elementary education, findings from this multi-year statewide analysis can be used to review campus and district teacher hiring practices to ensure that Texas is meeting the needs of more than half of its elementary students. Bone (2011) and Khan (2014) documented for the Texas educational community how difficult demography matching can be for Texas public schools due to the rapid and diverse population growth of the state. Because of the increase in diversity in the Texas student population, it was important that both researchers' findings be updated.

### **Research Questions**

The following research questions were addressed in this investigation: (a) What is the ethnic/racial diversity (i.e., Asian, Black, Hispanic, and White) of teachers employed in Texas public elementary schools for each school year from the 2010-2011 school year through the 2018-2019 school year?; (b) What is the ethnic/racial diversity (i.e., Asian, Black, Hispanic, and White) of students enrolled in Texas public elementary schools for each school year from the 2010-2011 school year through the 2018-2019 school year?; (c) What trend is present in the ethnic/racial diversity of teachers in Texas public elementary schools from the 2010-2011 to the 2018-2019 school year?; (d) What trend is present in the ethnic/racial diversity of students in Texas public elementary schools from the 2010-2011 to the 2018-2019 school year?; and (e) What is the relationship between teacher ethnic/racial diversity and student ethnic/racial diversity in Texas elementary schools for each school year from the 2010-2011 school year through the 2018-2019 school year?

### **Research Design**

To answer the research questions previously described, a longitudinal descriptive research design was present (Burke-Johnson & Christensen, 2020). In this study, archival data were downloaded from the Texas Academic Performance Report. Given that archival data had already occurred, the variables were not able to be manipulated (Johnson & Christensen, 2020).

**Participants and Instrumentation**

Two sets of participants were present in this investigation. The first set of participants were all Texas teachers who were employed in Texas public elementary schools for the 2010-2011 through the 2018-2019 school years. The second set of participants were students who were enrolled in a Texas public elementary schools for 2010-2011 through the 2018-2019 school years. Data on the ethnic/racial characteristics of students and teachers were obtained from the Texas Academic Performance Reports website.

The Texas Education Agency annually collects and archives data from Texas public school districts concerning a myriad of demographic and academic accountability categories. The collected data were disaggregated for public consumption by the Texas Education Agency and divided by individual school district and made available for analysis, for state/local district comparisons, and for the general information of the public. The acquired data for this study were representative of 100% of the student and teacher population in the Texas public schools.

**FINDINGS**

The first research question regarding the ethnic/racial composition of the Texas teacher workforce was addressed through descriptive statistics. Specifically calculated were the M, Mdn, and SD. Descriptive statistics for the four major ethnic/racial groups of Texas public elementary school teachers are respectively represented in Tables 1, 2, 3, and 4.

**Table 1.** Descriptive Statistics for the Percentages of White Teachers in Texas Public Elementary Schools from the 2010-2011 School Year Through the 2018-2019 School Year

School Year	<i>n</i> of schools	<i>Mdn</i>	<i>M%</i>	<i>SD%</i>
2010-2011	2,584	63.35	56.77	32.54
2011-2012	2,598	63.34	56.16	32.52
2012-2013	2,664	60.80	55.29	32.45
2013-2014	2,685	60.16	54.76	32.19
2014-2015	2,708	58.95	53.98	31.89
2015-2016	2,761	57.50	53.47	31.85
2016-2017	2,809	56.80	52.90	31.84
2017-2018	2,820	55.70	52.41	31.90
2018-2019	2,879	54.70	51.68	31.93

**Table 2.** Descriptive Statistics for the Percentages of Hispanic Teachers in Texas Public Elementary Schools from the 2010-2011 School Year Through the 2018-2019 School Year

School Year	<i>n</i> of schools	<i>Mdn</i>	<i>M%</i>	<i>SD%</i>
2010-2011	2,584	21.45	32.12	31.35
2011-2012	2,598	22.86	32.93	31.40
2012-2013	2,664	24.10	33.57	31.21
2013-2014	2,685	24.90	33.91	31.22
2014-2015	2,708	24.85	34.48	31.30
2015-2016	2,761	26.40	35.05	31.21
2016-2017	2,809	26.70	35.17	31.12
2017-2018	2,820	27.10	35.70	31.35
2018-2019	2,879	28.10	36.30	31.22

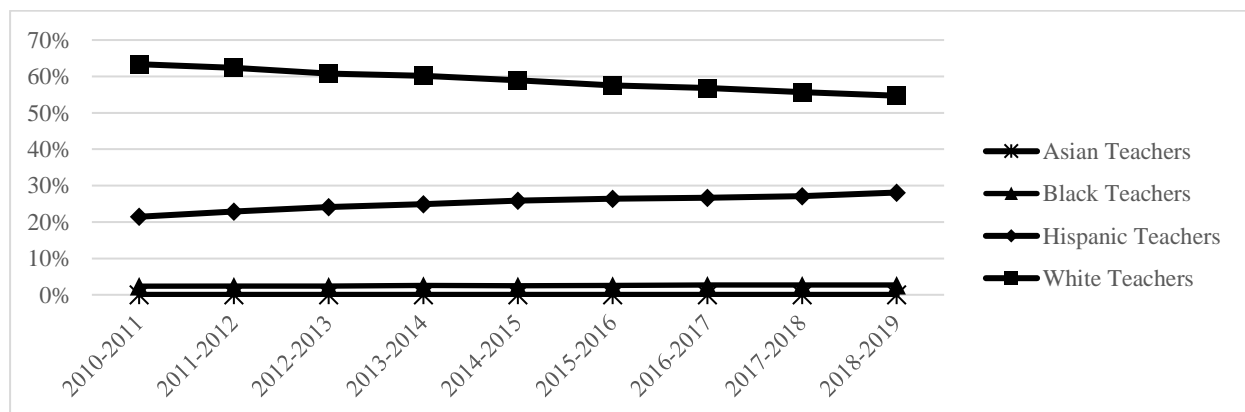
**Table 3.** Descriptive Statistics for the Percentages of Black Teachers in Texas Public Elementary Schools from the 2010-2011 School Year Through the 2018-2019 School Year

School Year	<i>n</i> of schools	<i>Mdn</i>	<i>M%</i>	<i>SD%</i>
2010-2011	2,584	2.37	8.67	16.86
2011-2012	2,598	2.38	8.51	16.35
2012-2013	2,664	2.40	8.64	16.19
2013-2014	2,685	2.54	8.90	16.34
2014-2015	2,708	2.50	8.89	16.14
2015-2016	2,761	2.60	8.83	16.05
2016-2017	2,809	2.70	8.93	16.12
2017-2018	2,820	2.70	8.97	16.05
2018-2019	2,879	2.70	9.16	16.22

**Table 4.** Descriptive Statistics for Percentage of Asian Teachers in Texas Public Elementary Schools from the 2010-2011 School Year Through the 2018-2019 School Year

Year	<i>n</i> of schools	<i>Mdn</i>	<i>M%</i>	<i>SD%</i>
2010-2011	2,584	0.00	1.12	2.81
2011-2012	2,598	0.00	1.10	2.77
2012-2013	2,664	0.00	1.21	2.98
2013-2014	2,685	0.00	1.21	2.55
2014-2015	2,708	0.00	1.25	2.64
2015-2016	2,761	0.00	1.31	2.78
2016-2017	2,809	0.00	1.30	2.46
2017-2018	2,820	0.00	1.35	2.71
2018-2019	2,879	0.00	1.42	2.61

The majority of teachers in Texas public elementary schools were White, with their percentages ranging from 51.68% to 56.77% over the 9 school years of data that were analyzed. The percentage of Hispanic teachers increased steadily from 32.12% in 2010-2011 to 36.30% in 2018-2019. Black teacher in Texas public elementary schools were employed at an average percentage of 8.67% in 2010-2011 school year and an average percentage of 9.16% in 2018-2019. Asian teacher percentages ranged from 1.12% in the 2010-2011 school year to 1.42% in the 2018-2019 school year. The median percentages of White, Hispanic, Black, and Asian Texas public elementary teachers are delineated in Figure 1.



**Figure 1.** Median percentages of teachers in Texas public elementary schools from the 2010-2011 school year through the 2018-2019 school year.



The median percentage for White teachers was 63.35% in 2010-2011 and 54.70% in 2018-2019. The next highest median percentage was for Hispanic teachers who had a median percentage of 21.45% in 2010-2011 and 28.10% in the 2018-2019 school year. From 2010-2011 through 2018-2019 the median percentage of Black teacher increased minimally, from 2.37% to 2.70%. The median percentage for Asian teachers in Texas over the 9 years of data was 0.0%.

To answer the second research question, descriptive statistics were calculated for the four major ethnic/racial groups of students in Texas elementary schools. These statistics were generated for the 2010-2011 school year through the 2018-2019 school year. Descriptive statistics for Asian, Black, Hispanic, and White Texas public elementary school students are contained, respectively, in Tables 5, 6, 7, and 8.

**Table 5.** Descriptive Statistics for the Percentages of Hispanic Students in Texas Public Elementary Schools from the 2010-2011 School Year Through the 2018-2019 School Year

School Year	<i>n</i> of schools	<i>Mdn</i>	<i>M%</i>	<i>SD%</i>
2010-2011	2,585	54.00	54.99	31.64
2011-2012	2,599	55.50	55.56	31.29
2012-2013	2,668	55.80	56.16	31.05
2013-2014	2,687	57.00	56.51	30.88
2014-2015	2,713	57.20	56.65	30.76
2015-2016	2,770	57.00	56.62	30.43
2016-2017	2,810	55.90	56.14	30.30
2017-2018	2,821	55.40	55.79	30.29
2018-2019	2,880	55.95	56.11	30.01

**Table 6.** Descriptive Statistics for the Percentages of White Students in Texas Public Elementary Schools from the 2010-2011 School Year Through the 2018-2019 School Year

School Year	<i>n</i> of schools	<i>Mdn</i>	<i>M%</i>	<i>SD%</i>
2010-2011	2,585	17.50	27.32	27.00
2011-2012	2,599	17.10	26.75	26.51
2012-2013	2,668	16.30	26.25	26.21
2013-2014	2,687	15.30	25.56	25.83
2014-2015	2,713	14.80	25.17	25.52
2015-2016	2,770	15.30	24.94	24.91
2016-2017	2,810	15.70	24.94	24.66
2017-2018	2,821	16.40	25.09	24.67
2018-2019	2,880	15.50	24.59	24.31

**Table 7.** Descriptive Statistics for the Percentages of Black Students in Texas Public Elementary Schools from the 2010-2011 School year Through the 2018-2019 School Year

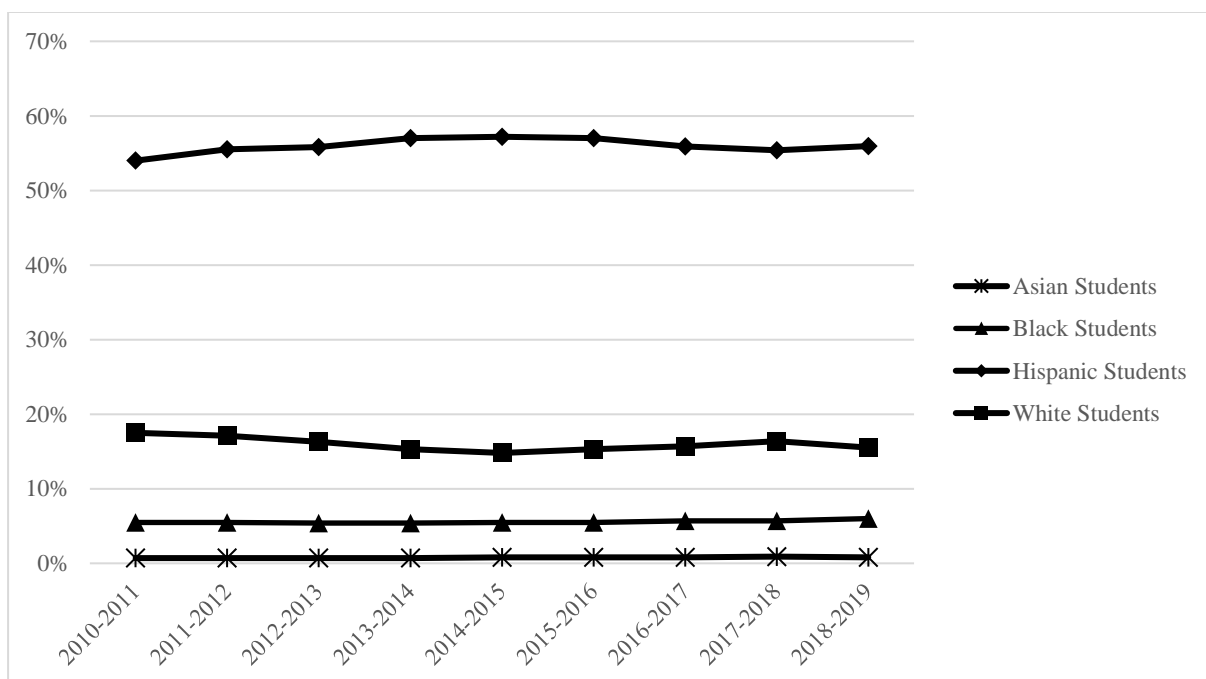
School Year	<i>n</i> of schools	<i>Mdn</i>	<i>M%</i>	<i>SD%</i>
2010-2011	2,585	5.50	12.08	17.54
2011-2012	2,599	5.50	11.95	17.14
2012-2013	2,668	5.40	11.75	16.79
2013-2014	2,687	5.40	11.87	16.85
2014-2015	2,713	5.50	11.84	16.64
2015-2016	2,770	5.50	11.86	16.56
2016-2017	2,810	5.70	12.02	16.47

2017-2018	2,821	5.70	11.95	16.35
2018-2019	2,880	6.00	12.00	15.95

**Table 8.** Descriptive Statistics for Percentage of Asian Students in Texas Public Elementary Schools from the 2010-2011 School Year Through the 2018-2019 School Year

Year	<i>n</i> of schools	<i>Mdn</i>	<i>M%</i>	<i>SD%</i>
2010-2011	2,585	0.70	3.44	7.15
2011-2012	2,599	0.70	3.50	7.41
2012-2013	2,668	0.70	3.52	7.60
2013-2014	2,687	0.70	3.63	7.83
2014-2015	2,713	0.80	3.79	8.27
2015-2016	2,770	0.80	3.91	8.60
2016-2017	2,810	0.80	4.08	8.90
2017-2018	2,821	0.90	4.23	9.19
2018-2019	2,880	0.80	4.27	9.43

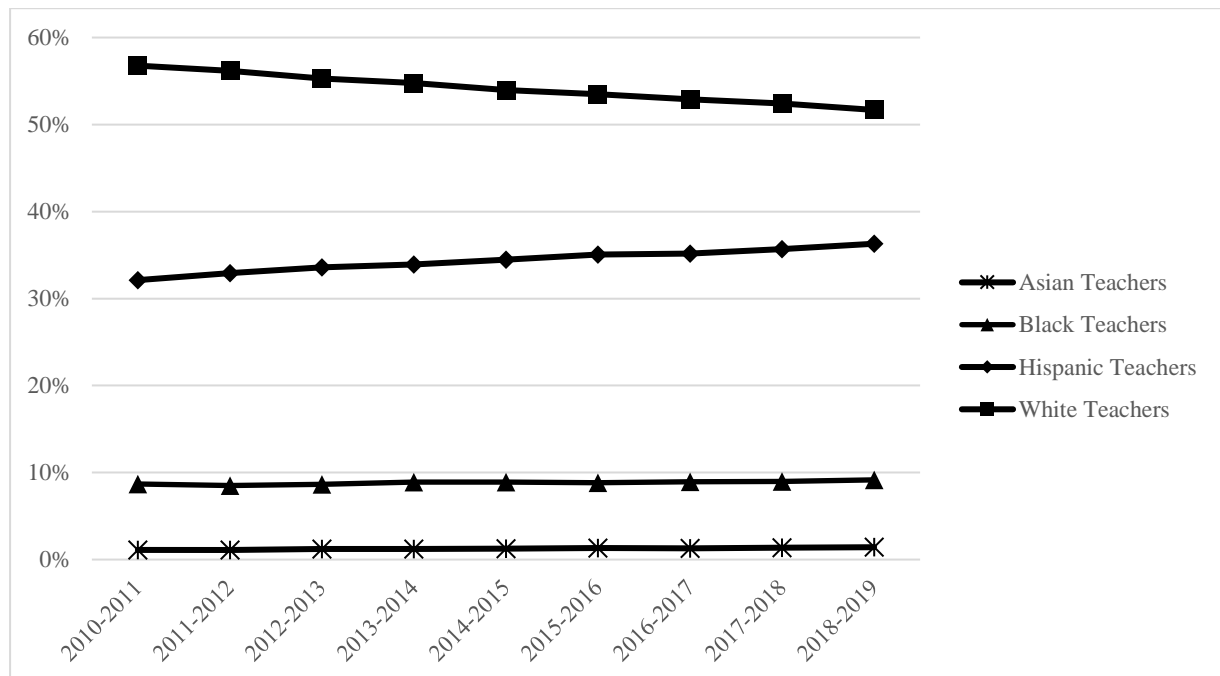
From 2010-2011 through 2018-2019, Hispanic students made up the largest average percentage of Texas public elementary school students. Hispanic student percentages ranged from 54.99% to 56.62%. White students had the second highest percentages, percentages that consistently decreased over the 9 school years that were examined. A decline of 2.73% was documented for the average percentages of White Texas public elementary school students from 27.32% in 2010-2011 to 24.59% in 2018-2019. The average percentages for Black students fluctuated between 12.08% in 2010-2011, and 11.75% in 2012-2013. The percentage of Asian students ranged from 3.44% in 2010-2011 to 4.27% in 2018-2019. The median percentage of White, Hispanic, Black, and Asian Texas public elementary students are delineated in Figure 2.



**Figure 2.** Median percentages of students in Texas public elementary schools from the 2010-2011 school year through the 2018-2019 school year.

The median percentage of Hispanic students ranged from 54.00% in 2010-2011 to 55.95% in 2018-2019. The second highest median percentages belonged to White students in Texas public elementary schools who had a median percentage high of 17.50% in 2010-2011 school year to a low of 14.80% in 2014-2015. For the most recent school year examined, 2018-2019, a median percentage of 15.50% was documented for White students. The lowest median percentage for Black students in Texas public elementary schools was 5.40% in 2012-2013 school year, and the highest documented median percentage for Black students was 6.00% in 2018-2019. Finally, Asian students in Texas public elementary school represented the lowest median percentage of the four ethnic/racial groups in this article. For each school year from 2010-2011 through 2013-2014, the median percentage for Asian students was 0.70%. The highest documented median percentage for Asian Texas public elementary students was 0.90% in 2017-2018.

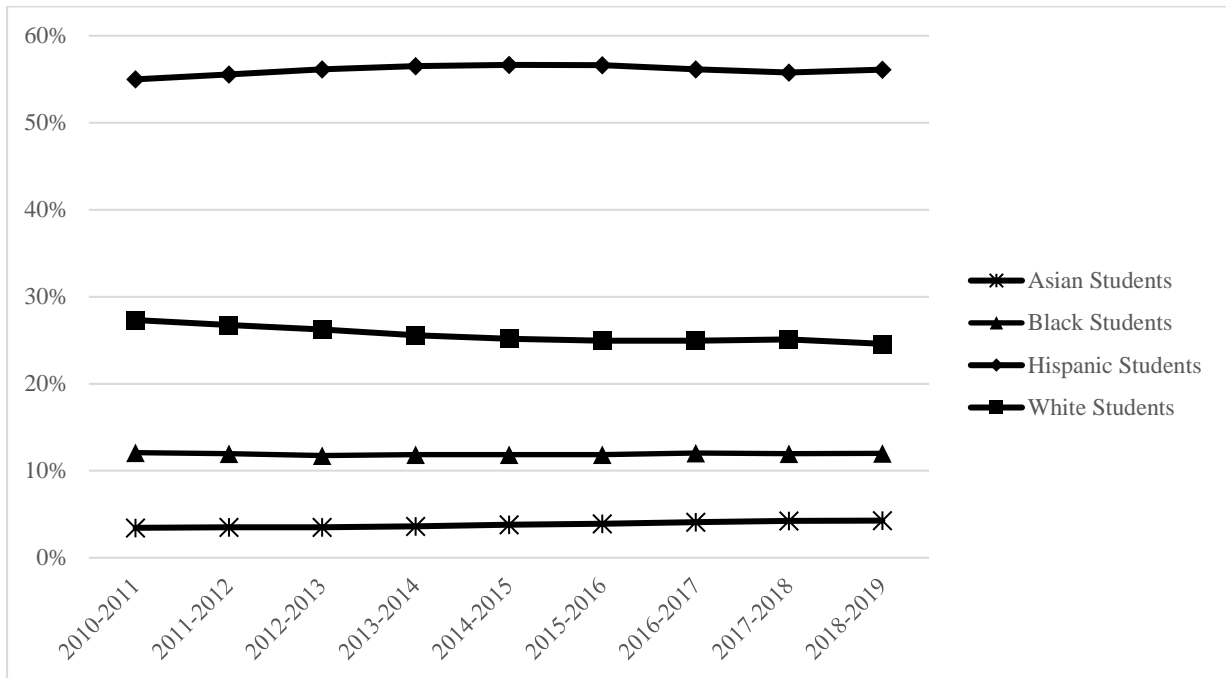
In addressing the third research question concerning the extent to which a trend was present in the ethnic/racial diversity of teachers in Texas public elementary schools, the previously discussed descriptive statistics were used to generate Figure 3. In this figure, readers can see that the percentage of White teachers consistently decreased over the 9 school years. A consistent increase was documented for the percentage of Hispanic teachers. With respect to the percentage of Black teachers, a flat line was present and reflective of consistent percentages over time. A small increase was determined for the percentage of Asian teachers employed over the 9 school years.



**Figure 3.** Percentages of teachers in Texas public elementary schools from the 2010-2011 school year through the 2018-2019 school year.

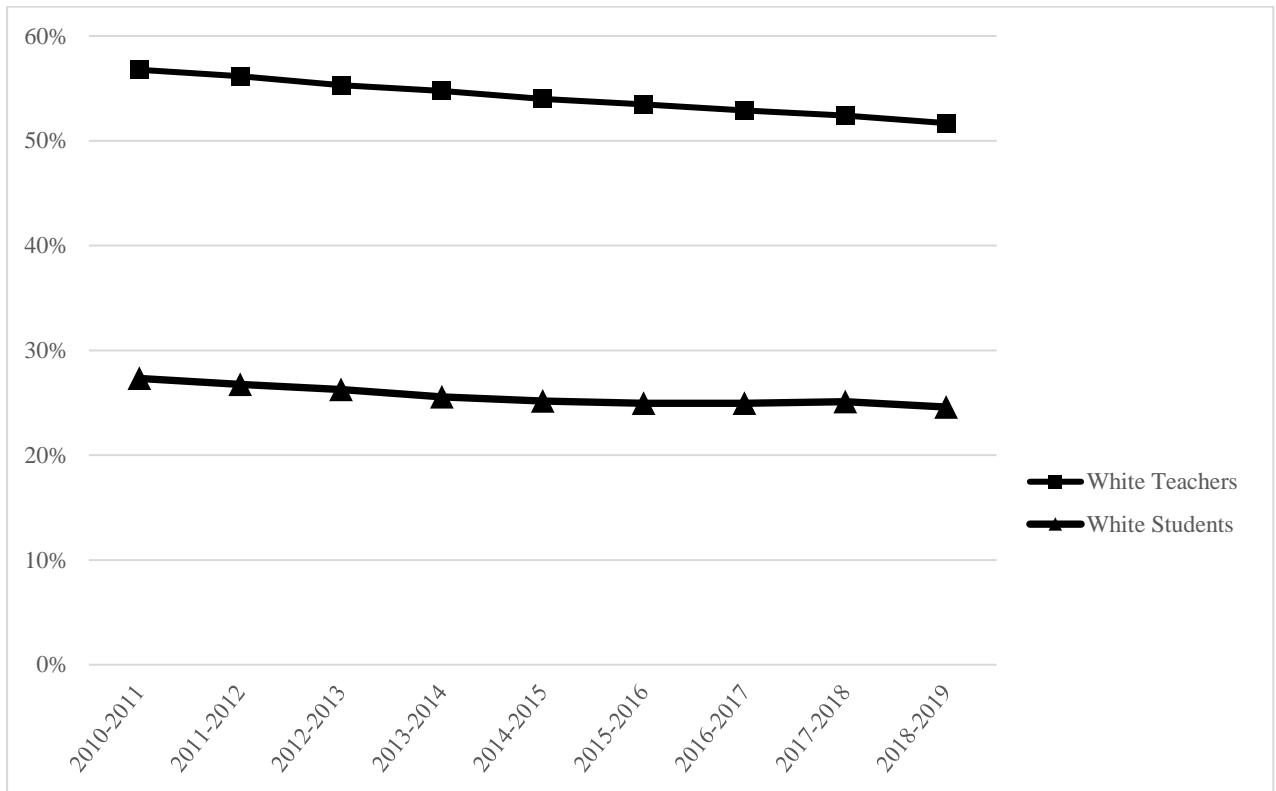
To determine the extent to which a trend was present in the ethnic/racial composition of student enrollment in Texas public elementary schools, descriptive statistics over the 9 year time period were reviewed. The average percentage of White students showed a steady decline, 2.73%, over the 9 years. A slight increase of 1.63% was observed in the percentage of Hispanic students over the 9 years. Though the average percentage of Black students fluctuated slightly over the time period, their figure remained flat over the time period. The percentage of Asian students enrolled in Texas public elementary schools increased slightly over this time period,

0.83%. Visible in Figure 4 is the rapidly increasing gap between the growing average percentages of Hispanic students and the decreasing average percentages of White students, a slowly decreasing gap between the shrinking percentages of White students and the fluctuating average percentages of Black students, and consistently small and growing average percentages of Asian students.

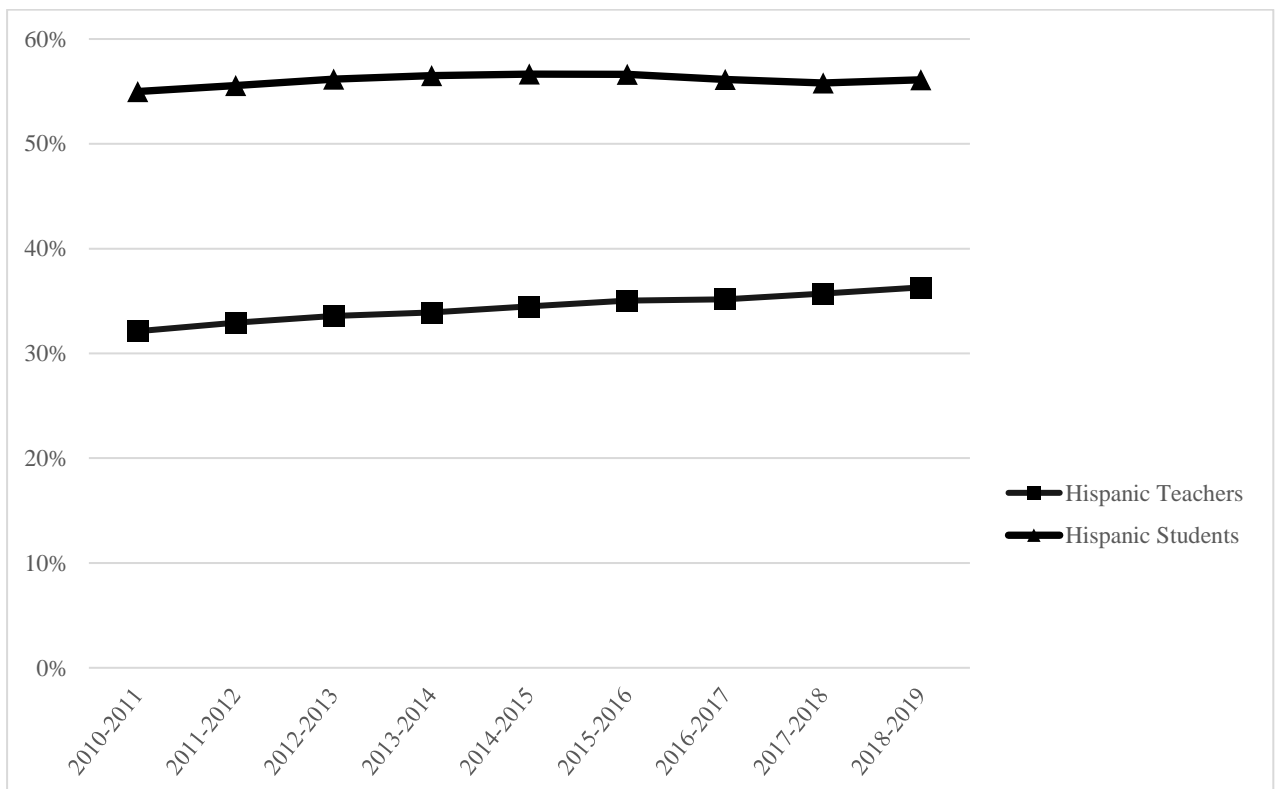


**Figure 4.** Percentages of students in Texas public elementary schools from the 2010-2011 school year through the 2018-2019 school year.

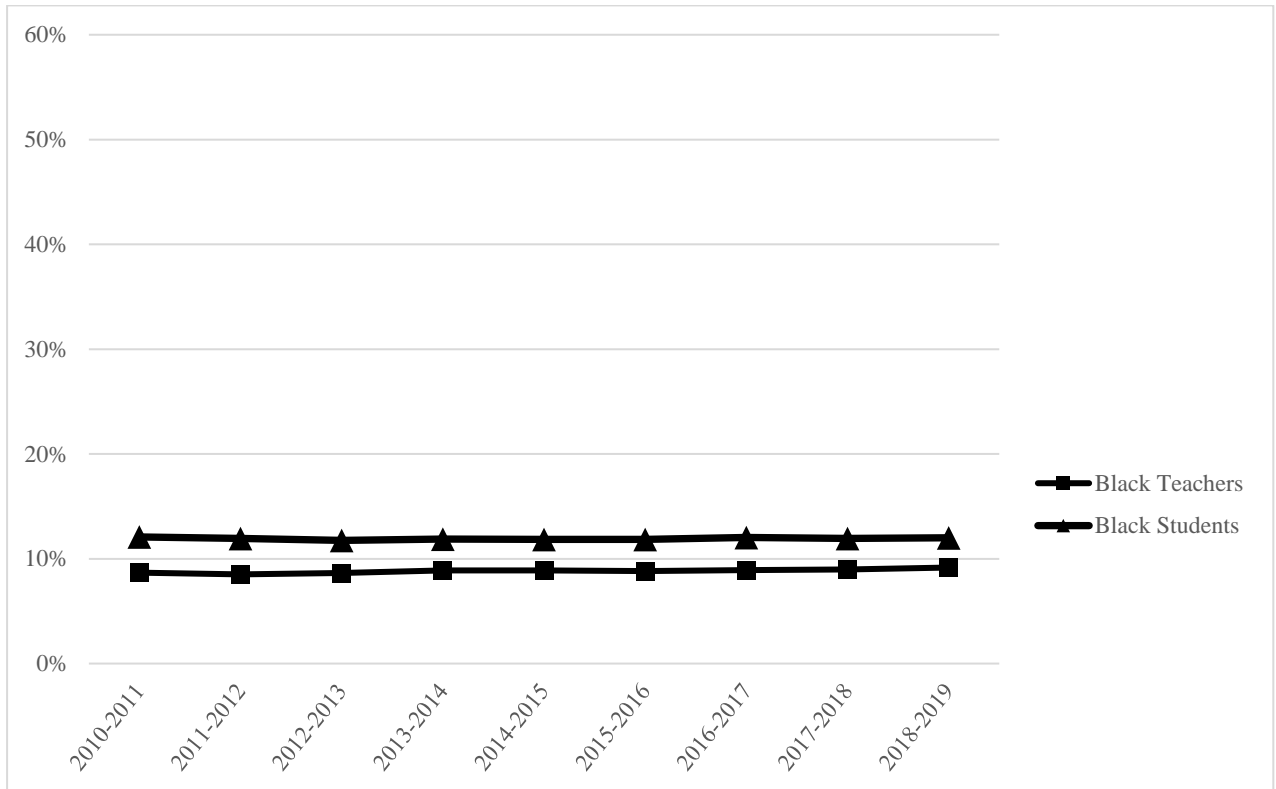
To answer the fifth research question on the relationship between the ethnic/racial diversity of teachers and the ethnic/racial diversity of students in Texas public elementary schools, the previously discussed descriptive statistics were examined. Readers should note that the percentages of White teachers and White students both decreased over the 9 years of this study. The percentages of White teachers were the only ethnic/racial group in which teacher percentages were greater than the student percentages, with teacher percentages being an average of 28.53% greater over the 9 school years. The percentages of both Hispanic teachers and Hispanic students both reflected increases of note. The percentages of Hispanic students were consistently larger than the percentages of Hispanic teachers by an average of 21.81%. Black students and teachers also experienced a slight increase of their average percentages, but Black student percentages were, on average, 3.07% larger than Black teachers. Asian students and teachers both reflected small consistent growths, and they had an average percentage difference of 2.56% over the 9 school years with Asian students having a higher average percentage each school year. Depicted respectively in Figures 5, 6, 7, and 8 are the relationships between the percentages of teachers and students by their ethnicity/race in Texas public elementary public schools.



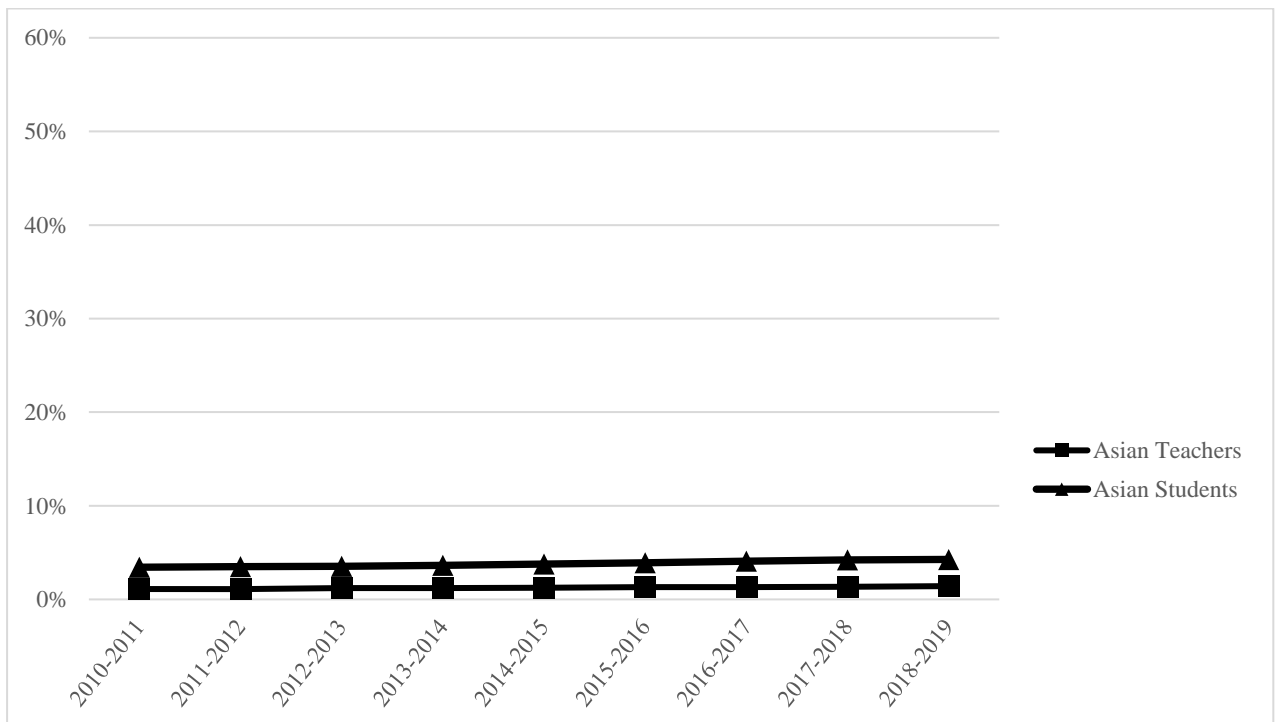
**Figure 5.** Relationship of the percentages of White teachers and White students in Texas public elementary schools from the 2010-2011 school year through the 2018-2019 school year.



**Figure 6.** Relationship of the percentages of Hispanic teachers and Hispanic students in Texas public elementary schools from the 2010-2011 school year through the 2018-2019 school year.



**Figure 7.** Relationship of the percentages of Black teachers and Black students in Texas public elementary schools from the 2010-2011 school year through the 2018-2019 school year.



**Figure 8.** Relationship of the percentages of Asian teachers and Asian students in Texas public elementary schools from the 2010-2011 school year through the 2018-2019 school year.

## DISCUSSION AND RESULT

In this multiyear study, the ethnic/racial diversity of teachers and students in Texas public elementary schools was examined for 9 school years (i.e., 2010-2011 through 2018-2019). The only ethnic/racial group in which teacher percentages were greater than student percentages was White. Even with persistent decreases documented between each school year for White students and teachers, White teachers still had represented percentages that were on average 28.53 percentage points higher than the average percentages of White students. White teacher percentages decreased from 56.77% in 2010-2011 to 51.68% in 2018-2019 and White student percentages decreased from 27.32% in 2010-2011 to 24.59% in 2018-2019. Though the average percentage gap closed slightly between White and Hispanic teachers, readers should note a lack of growth in the average percentages of Black and Asian Texas public elementary school teachers. For the 9 school years of data that were examined here, the percentages of Hispanic, Black, and Asian students and teachers all increased. Hispanic students were the ethnic/racial student group with the highest percentages in each of the 9 school years.

### Connections to Existing Literature

Findings of this multiyear descriptive analysis were consistent with the results of Bone (2011) and Khan (2014) who also examined the ethnic/racial characteristics of teachers and students in Texas public schools. Bone (2011) and Khan (2014) documented increases in the percentages of teachers and students in each ethnic/racial group, except for White teachers and students. Kauffman (2019) expounded on the growth in diversity in which Texas public schools are experiencing. Such growth in diversity was supported by the results delineated in this study. The percentages of students of color are increasing and becoming larger as state demographics change. Boser (2014) established that less than 20% of teachers are teachers of color. Revealed in this study were growing percentages of teachers of color to an extent which a divergence from the Boser (2014) statistic was present, at least in Texas public elementary schools. Tyler (2016) reported that the diversifying student populations are creating educational environments in which teachers of color are now, more than ever, likely to encounter students of ethnic/racial backgrounds than themselves. As evidenced by the consistent statistical increases of both students of color and teachers of color, Tyler's (2016) statement is becoming increasingly true in Texas public elementary schools

Regarding teachers, the persistent leading average percentages of White teachers, even while realizing gradual declines in their overall average percentages, supports the presence of Social Closure Theory. The slow pace of decline of the average percentages of White teachers also suggest that educational leaders are still finding comfort in teachers of ethnic/racial similarity as outlined by Homosocial Theory (Kanter, 1977). That ethnic/racial similarity and the closing of opportunities for teachers of color are often revealed in the hiring of White teachers; currently, in the state of Texas, 60.12% of Texas public school principals are White (Smith, 2020). Even though identified differences among subpopulations are slowly becoming less of a constraint for ethnic/racial minority groups entering the profession, statistics in this study were interpreted to mean that even with the documented growth, much ground remains to be made up (Simi & Matusitz, 2016).

### Implications for Policy and Practice

Based upon the results of this investigation, several recommendations can be made for policy and for practice. With respect to policy, the information provided in this multiyear

statewide study should induce conversations regarding the necessity to develop hiring practices which diversify teacher populations more quickly in Texas public elementary schools. Most importantly a review of research which details how important it is for the academic development for students of color to be educated by teachers of color at an early age should be conducted by district and campus leaders. Emphasized by Bristol and Martin-Fernandez (2019) and Plachowski (2019) was the need for a diverse teacher workforce which can benefit students of color by providing congruence in teacher-student relationships, and by providing an early introduction to academic experiences beyond, and outside, of elementary schools.

Regarding implications for practice, when district/campus hiring procedures do not support or promote the need for diverse ethnic/racial hires, it perpetuates a message that ethnic/racial diversity is not a necessary focus and that teachers and students of color are not valued. Because of the information contained in this study, state and local education agencies should develop and enforce standards which ensure the adequate recruitment and hiring of teachers of color. In addition to developing procedures and processes which measure the impact of established recruitment and hiring standards, a means of accountability should be developed to ensure that district/campus teaching staffs are approaching or commensurate with student demographics.

Plachowski (2019) and Wang, Leary, Taylor, and Derosier (2016) all detailed how students of color can benefit academically by being taught in academic environments which are led by teachers of color. Texas public elementary administrators need to ensure that they are hiring the appropriate individuals to educate their student demography based on Texas academic success standards. Although a political response may be evoked as a response to this study, a concentrated focus must remain on the academic success of students and determining which teachers are best suited to educate the state's growing population of students of color.

### **Recommendations for Future Research**

Based upon the results of this Texas statewide investigation, several recommendations for future research can be made. First, provided that teacher and student ethnic/racial matching can influence student academic performance, this topic must be thoroughly examined on a myriad of levels. Researchers are encouraged to extend this study within the state of Texas. It would be beneficial to Texas educators and lawmakers to know the outcomes of this descriptive study for public middle and public high schools across the state. A second recommendation would be for researchers to extend this study to private and charter schools at the elementary, middle, and high schools. The degree to which the results delineated herein on Texas public elementary school teachers and students would extend to private schools or to charter schools is not known. An additional recommendation would be to replicate this investigation in other states. The extent to which the results obtained in this investigation, solely on Texas public elementary school teachers and students, would generalize to other states is unclear.

Being able to determine if gender matching among students and teacher has a relationship with student academic performance would create a more robust understanding of the teachers that should be hired to better academic and socioemotional outcomes for students. Because potential academic benefits related to public school teacher and student gender matching are unknown, a study on gender diversity of students and teachers in Texas public elementary, middle, and high schools would benefit Texas public school administrators and lawmaker. The degree to which gender matching may influence the academic success of public school students in other states is also unclear and merits study. Similarly, educational



researchers are encouraged to review gender diversity of students and teachers at both private and charter schools across Texas and other states.

## CONCLUSION

In this longitudinal descriptive analysis, which spanned the 2010-2011 school year through the 2018-2019 school year, the ethnic/racial diversity of students at teachers in Texas public elementary schools was examined. Percentages of White teachers and students declined over the 9 school years. Even with a documented decrease in White teacher percentages from 56.77% to 51.68%, White teachers still had the highest percentage of all four ethnic/racial teacher groups reviewed. Hispanic students and teachers also experienced increases of their average percentages. Hispanic students were the largest student group with percentages which ranged 56.99% to 56.62%. Black students and teacher experienced minimal, but sustained growth. However, Black students, whose percentages ranged from 11.75% to 12.08%, displayed higher percentages than Black teachers for each year of the study. Finally, Asian teachers and student represented the lowest percentages, but both parties had documented growth. Even though Asian teacher percentages increased from 1.10% to 1.42%, they still trailed the percentages of Asian students for the 9-year period. As such, efforts to improve the diversity of the teaching workforce in Texas are warranted.

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