

ABSTRACT

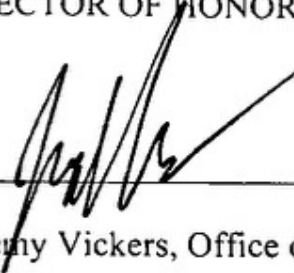
Universal Free Meals: The Effects on Student Participation and Academic Achievement on Low SES Hispanic Students at Waco ISD

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Universal access to free school meals is accessible through the Community Eligibility Provision (CEP), established by the U.S. Department of Education nationwide in 2014. The option allows schools and local education agencies in high-poverty regions to provide free breakfast and lunch to all students during the school year. The policy reduces local administration burdens by eliminating students' annual recertification in need of free meals. In addition, it provides easier access to nutritious meals for low-income students, therefore, incentivizing participation, increasing program revenues, and decreasing the stigma associated with participating in school meal programs. The novel program's goal is to reduce childhood hunger, food insecurity, and poverty in the United States. Many programs, such as Supplemental Nutrition Assistance Program (SNAP), have significantly impacted by improving long-term health and economic outcome. When students see nutritional improvements, schools have found fewer school absences. A healthy, balanced diet is reflective of a student's academic success. Hispanic students account for the most significant and fastest-growing population in school enrollment, especially in Texas, but are more likely to live in poverty. This research primarily assesses how the CEP for free breakfast and lunch positively impacts reading scores of low SES Hispanic third to fifth-grade students attending schools at Waco ISD. Waco ISD enacted the CEP policy during the 2018-19 school year (SY); therefore, the goal is to provide a comparative case study of how the CEP has affected Waco ISD elementary schools.

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UNIVERSAL FREE MEALS: THE EFFECTS ON STUDENT PARTICIPATION AND
ACADEMIC ACHIEVEMENT ON LOW SES HISPANIC STUDENTS AT WACO ISD

A Thesis Submitted to the Faculty of
Baylor University
In Partial Fulfillment of the Requirements for the
Honors Program

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April 2022

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AKNOWLEDGMENTS

I want to thank God for his guidance and blessings throughout my Baylor undergraduate career. I would like to thank Dr. Vickers for the opportunity to conduct this project and his guidance throughout this process, the principals at Alta Vista and Kendrick Elementary School for their encouragement and advice, and my parents for their endless support. Lastly, I want to thank the Baylor University Honors College and Mrs. Moore for their support during my undergraduate career.

CHAPTER ONE

Introduction

This section aims to provide detailed descriptions of food insecurity and poverty. The author further analyzes poverty and its relationship to Federal Programs, such as the Child Nutrition Program. Next, Nationwide and Texas school enrollment status, student demographics, and socioeconomic status are analyzed. After, the author describes Waco Independent School District and its importance to the study. The author then emphasizes the importance of a healthy, balanced diet and early academic success. Afterward, the author introduces the STAAR achievement exams and provides a breakdown of the STAAR reading scores. This leads to an investigation of early reading and academic readiness. Finally, the author addresses the arguments of the thesis regarding schools in the Waco ISD with high Hispanic students, reading outcomes, and student participation.

Hunger and Poverty

The United States Department of Agriculture (USDA) contains many sectors that assess the need for economic growth and development in rural areas, farming, and food. Their objectives in the Food sector focus on providing school programs with help from nutrition programs and American agricultural producers to provide 100% American grown school meals daily (Neuberger & Namian, 2010). The National School Lunch Program and the School Breakfast Program gear to eradicate food insecurity and foster academic excellence for pre-K to twelfth-grade students. Additional Federal programs such as the Free and Reduced

Programs are eligible for families who struggle financially and are part of at least one federal assistance program (Neuberger & Namian, 2010). The Federal policy states that all children in a household are eligible for free school meals if anyone is receiving assistance under the Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp Program (Aussenberg, 2019). They can also receive benefits if they are a part of the Temporary Assistance for Needy Families (TANF) cash assistance program or the Food Distribution Program on Indian Reservations (FDPIR). These policies help students from households that are economically burdening them to achieve academic excellence (Odoms-Young & Bruce, 2018).

There is a significant difference between food insecurity and hunger. The USDA defines the former as the lack of constant access to enough food for an active, healthy life, while the latter is the personal, physical sensation of discomfort (Coleman-Jensen, 2018). Food insecurity is the lack of available financial resources for food at the household level. However, not all households living below the poverty line experience food insecurity, and neither do all families living above the poverty line are free from experiencing food insecurity (Coleman-Jensen, 2018). There are so many overlapping issues such as lack of affordable housing, social isolation, chronic or acute health problems, high medical bills, low blue-collar jobs, massive amounts of debt, or lack of proper education that can all contribute to the complex issue of food insecurity (Gayán-Navarro et al., 2020). These social determinants can affect individuals and communities by reinforcing social reproduction and food desert-driven communities. As of 2021, Feeding America reports that about 84% of households buy the cheapest food, not necessarily the healthiest food, to provide enough to eat for the growing hunger

population (Miller, 2021). Natural disasters and economic shocks like the COVID-19 pandemic have significantly increased food insecurity and will take time to recover. Racial disparities and food insecurity also play a significant role (Gayán-Navarro et al., 2020). It is important to address these issues and implement stronger policies that promote inclusivity. Food insecurity has many negative impacts, especially on a child's early education.

Assessment of Poverty

The war on poverty addressed by President Lyndon B. Johnson during his State of the Union address was the first official push by the United States to implement policies to eradicate poverty. Poverty, in essence, is measured by comparing an individual's or family's income to a set poverty threshold of income needed to cover basic needs (Gayán-Navarro et al., 2020). Those individuals or families who fall below the poverty line are considered poor (Gayán-Navarro et al., 2020). The U.S. Census Bureau measures poverty using The Official Poverty Measure and The Supplemental Poverty Measure.

Official Poverty Measure

The Official Poverty Measure configures income, pre-standardized threshold, and family size and compares it to the population. First, income measures the pre-tax income, such as interest, child support, educational assistance, social security, and earnings, but does not include non-cash government benefits (University of Wisconsin - Madison, 2021).

Second, income is set against a threshold that is three times the cost of the minimum diet from the year 1963 to today's prices. These standardized thresholds and

statistical models help estimate percentages of individuals living in poverty, the poverty rate, and how poverty distributes by age, race, ethnicity, region, family type, income inequality, and sex (University of Wisconsin - Madison, 2021).

However, these prices are updated annually for inflation by the consumer price index. The consumer price index is the average change over time in the price paid by urban households for a set of typical goods and services that people buy and consume (University of Wisconsin - Madison, 2021). Researchers use it merely for the statistical representation of how inflation affects the poverty rate for government agencies, which is adjusted based on family size. The official poverty threshold remains the same throughout the United States. For example, in 2016, it was \$24,339 for a family with two adults and two children, whereas in 2020, it was \$26,246 (Ravallion, 2016).

Lastly, the threshold compares the family size, age of the householder, and composition. A family is defined as two or more people related by birth, marriage, or adoption. At least one of the parties must be the definitive householder, and all must share an income (Koball, 2018).

The Supplemental Poverty Measure

The Supplemental Poverty Measure is a newer report focused on cash resources and noncash benefits from government programs, targeting low-income families and federal expenses like taxes. It is a method created to represent better the lives of individuals living in the 21st century. Unlike the Official Poverty Measure, the Supplemental Poverty Measures (SPM) define families as either coresident unrelated children, foster children, unmarried partners, or relatives (Fox & Burns, 2021). In addition, this method utilizes information from today's basic needs, such as food,

housing, utilities, and shelter, from current prices (Fox & Burns, 2021). The SPM integrates other factors such as geographical demographics or place of residence. The rental unit, property price, and mortgage gauge give a more holistic approach to categorizing poverty (Fox & Burns, 2021). Implementing noncash government benefits and living expenses shifts the perspective of poverty in the United States.

Evaluation of Federal Programs

The United States provides several federal assistance programs geared towards the success and benefits of state and local governments, public and private institutions, nonprofit organizations, and most importantly, American citizens. There are two types of federal public assistance programs—social insurance programs and social welfare programs. Social insurance programs benefit those who meet specific age, employment status, or veteran status (University of Wisconsin - Madison, 2021). These programs include (not an exhaustive list) social security, unemployment insurance compensation, workers' compensation, and veterans' affairs benefits (University of Wisconsin - Madison, 2021).

Social welfare programs are known to be allocated the most from federal budgeting. The federal budgeting has been increasing drastically over the last three decades (Afanasiev & Shash, 2016). There are six welfare programs: Temporary Assistance for Needy Families (TANF), Medicaid, Supplemental Nutrition Assistance Programs (SNAP), Supplemental Security Income (SSI), Earned Income Tax Credit, and Housing Assistance (Afanasiev & Shash, 2016). These programs are government subsidies for low-income families and individuals that fall below a target. The target is a percentage of the federal poverty level broken down by family size. For example, in

2021, the poverty level for a family of four is \$26,500 (University of Wisconsin - Madison, 2021). Unlike most federal assistance programs, the government provides yearly funding for welfare, and each state then expands on the funds. These extra funds are critical because they administer the program's cost, whereas the federal funds provide the benefits.

The Temporary Assistance for Needy Families (TANF) provides direct help to families living in poverty. Most of the TANF recipients are children. In 2020, TANF helped more than two million Americans. Eighty percent of those recipients were children (University of Wisconsin - Madison, 2021). However, these percentages highlight only a marginal amount of TANF recipients. In 2019, only twenty-three percent of the families with children living in poverty received TANF assistance (University of Wisconsin - Madison, 2021). Although this program provides financial service for many families and individuals in need, many past administrations fear that this particular program instigates a never-ending cycle of poverty.

Medicaid and the Child's Health Insurance Program (CHIP) provide low-income families access to medical care. In 2020, Medicaid helped pay for more than eighty-two million low-income adults and children (Center on Budget and Policy Priorities, 2020). CHIP is a subgroup of Medicaid and provides health insurance to children in low-income families. Health benefits include hospital care, medical supplies, tests, eye exams, dental care, and regular check-ups (Center on Budget and Policy Priorities, 2020). Medicaid has been deemed helpful for large families. However, most Medicaid assistance goes toward U.S. births demographically centered toward Hispanic families (Center on Budget and Policy Priorities, 2020).

Most known as food stamps, the Supplemental Nutrition Assistance Program (SNAP) provides food assistance. In 2020, more than thirty-nine million U.S. citizens will benefit from the program. Since then, SNAP benefits have increased from \$680 per month to \$782 per month for a family of four (University of Wisconsin - Madison, 2021). In addition, SNAP branches into several other programs, such as the Special Supplemental Food Program for Women, Infants, and Children (WIC), designed to help pregnant, postpartum, and breastfeeding women and children up to age five. The program provides food, vouchers, education, and referrals throughout the process.

Another well-known food-based welfare program is the Child Nutrition Program. The program offers free or reduced-cost meals (breakfast and lunch) to 44.1 million children throughout the school year (Tiehen, 2020). Subgroups such as Summer Food Service Programs, Community Food Systems, and Special Milk Programs have evolved and grown within the Child Nutrition Program to provide substantial care for children from all family backgrounds and financial statuses. In addition, options such as the Community Eligibility Provision (universal free meals) have helped fight hunger in the states in the last decade under the Child Nutrition Program (Tiehen, 2020). Research has shown that U.S. government programs focused on improving health and educational outcomes, such as the Child Nutrition Programs, for low-income students who benefit the most from society (Andreyeva & Sun, 2021). These early investments have shown substantial benefits to the U.S. government through increased tax revenues from adults who benefited from these programs as a child.

The United States Department of Agriculture helps facilitate the federally allocated funds for all child nutrition programs. Specifically, the economic and research

division ensures that children receive nutritious meals and snacks throughout the United States of America. Meals and snacks that promote good health, educational preparedness, and academic readiness are the divisions' top priorities. The United States Department of Agriculture's Food and Nutrition Service (USDA-FNS) correctly administers the meals and snacks at the federal level for all the states participating in the program. In the fiscal year of 2019, total expenditures on these programs amounted to \$23.4 billion (University of Wisconsin - Madison, 2021). However, the expenditures have steadily declined since the second half of 2020 due to the ongoing COVID-19 pandemic.

The pandemic allowed the USDA to diversify its techniques by allowing flexibility in distributing its child nutrition programs with the help of several institutional or privately held distributors. For example, the National School Lunch Program, School Breakfast Program, and the Summer Food Service Program worked together to provide for the rising food needs during the pandemic.

The USDA consulted and lobbied with several local food distributors. Institutions such as Baylor Collaborative on Hunger and Poverty thrived under the leadership of Doug McDurham. The program provided the necessary emergency relief the government desperately needed by distributing meals to rural schools closing all around the states. This collaborative program provided over 39 million meals to 43 states and Puerto Rico during the spring and summer of 2020. Mr. McDurham was the director of the Baylor Collaborative on Hunger and Poverty. In addition, he has been working on a pilot program that emphasizes distributing summer meals to students living in rural areas across the country. The consultation and opportunity provided by the USDA during the

coronavirus pandemic allowed him and his team validity and an immense sense of urgency regarding the importance of rural food insecurity.

The Summer Food Service Program is one of the five known Child Nutrition Programs funded by the USDA. The Summer Food Service Program provides meals to over 4.7 million children each day across more than 37,000 sites in June 2020 (Toossi et al., 2021). Overall, in the fiscal year 2020, the program served about 1.3 billion meals and snacks at the cost of \$4.1 billion to USDA (Toossi et al., 2021). These expenditures were nearly nine times greater than the fiscal year 2019, primarily due to the coronavirus pandemic. In perspective, the program served 564.4 million meals from March through May 2020 compared to only 1.2 million meals in 2019 (Toossi et al., 2021). The program operates at schools, camps, parks, playgrounds, housing projects, community centers, churches, and other public sites where children are known to gather during the summer. Much of McDurham's pilot study focused on summer meals; however, it required his team to abide by the USDA distribution policies. The USDA requires the sites to operate in areas where at least half of the students come from families at or below 185% of the Federal poverty level (Tiehen, 2020).

The School Breakfast Program provides healthy and nutritious breakfast to children at several public and nonprofit private schools throughout the United States. The School Breakfast Program provides low-cost or free breakfasts to 14.7 million children each school day at a high cost of \$4.5 billion allocated by the federal budget (Tiehen, 2020).

Students are eligible to participate in these programs at schools that participate in the program. However, this requires documentation from both the students' and school

districts' end to provide the precise number of students qualified for low-income free breakfasts. The USDA provides these benefits by distinct parameters.

First, students from households with incomes at or below 130% of the Federal poverty line receive a free breakfast (Tiehen, 2020). Students with households with income between 130% and 185% of the Federal poverty line receive a reduced-price breakfast reduced-price. Finally, students from families with income above 185% of the Federal poverty line receive full price (Tiehen, 2020). The School Breakfast Program has become more and more resourceful over the past decades, with a steady 2.6% increase each year (Tiehen, 2020). Lower-income students typically benefit the most.

Participation in the School Breakfast Program has reduced food insecurity. Food insecurity measures food availability and an individual's access to it. The School Breakfast Program provided easy access for students to receive nutritious meals every school day. However, there is hesitancy among schools that participate in the National School Lunch Programs over the School Breakfast Programs. One is that meals served during lunch are more popular and utilized throughout the country. In addition, the average cost per breakfast for schools are continuously exceeding reimbursement rates over the last decade (Tiehen, 2020). As a result, out-of-pocket costs from school districts increased and significantly affected school districts with poor budgeting systems and financial resources. It is essential to prioritize school breakfast at school because a good healthy breakfast has been shown in many studies to improve students' brain function throughout the day.

The USDA invites schools to allow local food vendors to help redistribute the cost burdens, such as labor, and substitute it for a much more interactive role that engages students to participate in school breakfast programs more.

The National School Lunch Program is the second-largest food and nutrition assistance program, and it operates at over 100,000 public and nonprofit private schools and residential childcare institutions (Toossi et al., 2021). The program provides low-cost or free lunches to 29.6 million children each school day in the fiscal year of 2019, which was allocated \$14.2 billion from the federal budget (Tiehen, 2020).

The USDA provides lunches to students who attend schools participating in the school lunch programs. Students from households with incomes at or below 130% of the Federal poverty line receive a free lunch (Toossi et al., 2021). Students with households with income between 130% and 185% of the Federal poverty line receive a reduced-price lunch (Toossi et al., 2021). Finally, students from households with income above 185% of the Federal poverty line receive a low-cost full-price lunch (Toossi et al., 2021).

These guidelines force students from low-income families to take advantage of the benefits. Research has shown that children from food-insecure and marginally food-secure households were more likely to eat school meals and receive more food and nutrient intake than other children (Toossi et al., 2021). Students who participate in this program have helped schools reduce food insecurity in their school districts. In addition, the USDA encourages local school districts to use locally produced food in school meals and "farm-to-school" activities to encourage students to try new foods and learn about them (Toossi et al., 2021). This helps increase lunch participation and reduce the stigma associated with free or reduced lunch.

The Community Eligibility Provision

The Community Eligibility Provision (CEP) is a non-pricing meal service option for schools in school districts in low-income areas where residents are below the federal poverty line (Toossi et al., 2021). This policy allows school districts to provide free breakfast and lunch to all enrolled students. The United States Department of Agriculture regulates the program through reimbursements to the school districts participating in it. The government provides these reimbursements using a formula based on the percentage of students categorically eligible for other specific government assistance programs. These programs include the Supplemental Nutrition Assistance Program, Temporary Assistance for Needy Families, the Food Distribution Program for Indian Reservations, Medicaid benefits in some states, or children known to be homeless, migrant, enrolled in Head Start, or foster care. Medicaid benefits are automatically implemented for students with incomes below 133% of the poverty line. This data-matching program eliminates the constant need for local administration on household applications and assessing eligibility for each student (Pérez & FitzSimons, 2021). These household applications are individual income data traditionally used to determine the requirements for specific food assistance programs.

The Community Eligibility Program reduces administrative paperwork and costs, increases school meal participation, eliminates stigma, maximizes federal reimbursement, and implements innovative breakfast models without discrimination. Schools and districts can participate in this program if their student population contains 40% or more identified students and if those identified students would have initially received free meals under the child nutrition guidelines (Pérez & FitzSimons, 2021).

These parameters allow certified children for eligibility for free school meals without the burden of completing the meal application. This form of direct certification reduces the administrative burden and opens financial stability for many students and families who can choose free meals. The CEP truly allows high-poverty schools and districts to flourish and serve students their fundamental right to a good, balanced meal. In addition, this program grants more students the education and health benefits linked to eating school meals. Therefore, it emphasizes the importance of the program to all pre-K to 12th-grade students.

The benefits reaped from the Community Eligibility Program are less administrative work, increased participation, facilitating constant innovative breakfast service models, improving the financial viability of school nutrition programs, and elimination of unpaid meals fees (Pérez & FitzSimons, 2021).

The reduced administrative work allows schools and districts to no longer collect and verifies school meal applications every year. Also, this helps reduce the fear of rejection of applicants due to either applicant or processing error. The policy has increased participation within schools and their respective school districts overall. Schools in the initial pilot states of the Community Eligibility Program increased breakfast participation by 9.4% and lunch participation by 5.2%, according to a study conducted by the U.S. Department of Agriculture ((Pérez & FitzSimons, 2021). This trend in school meal participation has increased over the years. However, more research is needed to help analyze how to implement participation better.

In addition, the Community Eligibility Provision helps facilitate innovative breakfast service models for schools and school districts. Schools are not restricted by

collecting school meal fees or billing each meal served by specific fee categories through this policy. As a result, many innovative breakfast models are implemented, such as the "grab and go" service that is utilized by having several food carts placed across the school for easy accessibility for students. More integrated models that prioritize breakfast use the first fifteen minutes of class for breakfast. This model implements the importance of a solid, healthy breakfast through daily lessons and objectives during the period. Both models boost breakfast participation and other alternative breakfast serving models.

Participation is a significant part of the success of the Community Eligibility Provision. Still, funding has always interfered, and recently the COVID-19 pandemic has shown how fragile yet crucial it is to implement job security for the school nutrition staff. In addition, the Community Eligibility Provision eliminates unpaid meal fees. Unpaid meal fees have been challenging for school lunch and breakfast programs. As a result, it has led to about 530,000 tons of food waste annually, equivalent to \$1.7 Billion each year (Pérez & FitzSimons, 2021).

The Independent Student Percent (ISP) determines the percent of meals reimbursed at the free rate by the United States Department of Agriculture to the schools or school districts participating in the CEP. The ISP is multiplied by 1.6, a formula, to help determine the actual reimbursement value since individual income data is not required (Pérez & FitzSimons, 2021). The remaining value is reimbursed at the paid rate. The United States Department of Agriculture reimburses meals according to the cost at the free rate. Any charges for serving these meals more than the Federal reimbursement rate are determined as the paid rate where the schools or district must pay it. For instance, schools or districts with an ISP of 55% will have 88% of their breakfast and lunches

reimbursed at the free rate, whereas 12% will be at the paid rate (Pérez & FitzSimons, 2021). The paid rate is technically the nonfederal source that helps smoothen out the program financially. Under the CEP, any schools or districts applying with an ISP of 62.5% or higher will receive the free rate for 100% of their meals served (Pérez & FitzSimons, 2021). However, this does not discourage schools or districts from implementing the CEP. The program has shown that many schools and districts with an ISP below 62.5% have successfully implemented the CEP (Pérez & FitzSimons, 2021).

The CEP is a novel, innovative step toward how Child Nutrition Programs should be implemented in schools and districts. The policy allows everyone to benefit from free meals. However, there is a significant emphasis on low-income communities adopting this provision, especially its many benefits. School administrations, school nutrition staff, students, and families benefit from the CEP and its merits. Research has shown strong correlations between the CEP program and student academic achievements, especially early education. In addition, the COVID-19 pandemic has allowed more schools to adopt this program, and its benefits for the school and students may prolong the program longer.

School Enrollment Nationally

School enrollment of students is a critical portion of a child's growth and success in their education. Enrollment has historically been more abundant at the college and elementary school levels. However, there have been many instances throughout history where events have increased or reduced the number of school-enrolled students. For example, during post-World War II, the baby boomers were a huge component. This increased elementary school enrollment during the 1960s, which later increased high

school enrollment in the following years (Bauman & Cranney, 2020). It is important to note that generally, when enrollment sizes increase independent of population fluctuation, it is at the older and younger ages, such as nursery and college.

The baby boomer era has helped establish consistency and stability in school enrollment over the last century. About 96% of elementary and secondary school children aged 5 to 17 were enrolled in school in 2018 (Irwin et al., 2021). This high percentage has remained consistent at 90% or higher, even for 16- to 17-year-old students from 1981 to 2018 (Irwin et al., 2021). This means that stability remained in the number of kindergartens through 12th-grade students enrolled each year. If there were no stability, there would be constant fluctuation of high school enrollment percentages by senior year.

The baby boomers and the echo boomers led the front charge of the high elementary school student enrollment numbers. Baby boomers entered elementary school from 1955 to 1970, which led to a significant increase of 25.5 million to 34.0 million enrolled students (Bauman & Cranney, 2020). However, in 1985, the number of students enrolled in schools had dropped to 26.9 million. Later, it increased drastically to 33.2 million in 2001 (Bauman & Cranney, 2020). Similarly, these patterns were seen in high school enrollments as well. High school enrollment increased from 10.3 million to 15.7 million from 1960 to 1976. The student enrollment later decreased to 12.7 million in 1990 and rose to 17.4 million in 2005 (Bauman & Cranney, 2020). Thus, kindergarten to high school enrollment rates has increased even with the sudden drops in student school enrollment. Kindergarten student school enrollment has generally increased as well. In 1967, only 10% of kindergartners attended school full day; however, in 2018, it was 81% (Bauman & Cranney, 2020). Although not all states today require their school districts to

offer kindergarten or even full-day kindergartners, the general trend has led to it being the set precedent (Bauman & Cranney, 2020). High school enrollment is essential because it directly implicates the number of dropouts, which is detrimental to a child's career success. For example, in 1955, 77% of 16- to 17-year-old attended high school, while 92% attended in 2018 (Bauman & Cranney, 2020). The rates of high school dropouts reduced from 20% to about 6% in those years (Bauman & Cranney, 2020). Understanding the relationship between school attendance and student success is important, as many studies show a positive correlation.

School Enrollment in Texas

Texas is a unique sector in education, considering its southern region and diverse racial identities spread throughout the state. In Texas, all children must attend school at the age of six, although Texas policies do not require students to attend kindergarten. Independent research conducted by the National Research Council states the importance of learning during early education and prekindergarten. Early education is directly linked to future academic accomplishments, specifically for English learners, disabled, or economically disadvantaged (Du et al., 2021).

Enrollment trends are observed and predicted at all grade levels, including migration into the state statistics, private and home-schooling statistics, and grade level retention statistics. Enrollment trends in the secondary grades are affected by a students' decision to graduate early, transfer into high school equivalency programs, or even drop out of school (Du et al., 2021). At the same time, funding for early childhood and kindergarten programs affects elementary schools' enrollment status and trends. Both aspects are essential to understanding and analyzing how one affects the other.

Nationwide public-school enrollment has been increasing drastically over the last decade, especially in the southern and western states of the country (Du et al., 2021). Texas school enrollment has increased, especially in the previous decade. Nationwide, Texas has had the fourth most significant increase in public school enrollment between 2008 and 2018, just behind the District of Columbia (28.8%), Utah (20.9%), and North Dakota (20.2%) (Du et al., 2021). Texas student enrollment had a 14.3% increase in the same period, nearly five times the amount in the United States of 2.9% over the same period (Du et al., 2021). Even with the significant growth, the state is projected to only experience the fourteenth most considerable increase from 2018 to 2029 at 4.4% (Du et al., 2021). However, this does not undermine the substantial increase in enrollment over the last decade. The student school enrollment in Texas increased to 8.9% from 2010-11 to 2020-21 (Du et al., 2021). In the past 33 years, from 1987-88 to 2020-21, the student school enrollment increased to 66.6% (Du et al., 2021). The gradual increase in student school enrollment was evident from 1987-88 to 2020-21, ranging from as low as 0.6% to as high as 3.7% (Du et al., 2021).

During the 2020-21 school year, at the height of the COVID-19 pandemic, statewide enrollment decreased for the first time since the Texas Education Agency started collecting enrollment data in the Public Education Information Management (Du et al., 2021). Texas had reached 5 million student enrollments at the beginning of the 2012-13 school year, then surpassed 5.4 million in 2018-19 (Du et al., 2021). Student enrollment decreased to about 2.2%, or 122,354 students, between the 2019-20 school year and the 2020-21 school year (Du et al., 2021). As a result, under 5.4 million students were enrolled in those years (Du et al., 2021). All grade levels between the 2019-20 and

2020-21 school years had decreased in student enrollment, except for 8th and 10th through 12th-grade (Du et al., 2021). The most significant decrease came from prekindergarten at 20.9%, followed by a reduction in early education at 18.9%, and kindergarten at 5.9% (Du et al., 2021). Kindergarten also had the lowest enrollment during that period. As mentioned previously, early education is crucial for a child's future career and wellbeing.

In contrast, 10th grade had the highest increase in enrollment between the 2019-20 and 2020-21 school years at 3.4%, followed by 11th grade at 3.0% (Du et al., 2021). There are many theories as to why this is the case, especially with government-mandated shutdowns of in-person schools. One is that the Texas Education System was quick to adapt to those certain grade levels by providing specific online platforms for their students to succeed and retain the necessary materials. Students could learn the education curriculums in a remote environment through synchronous or asynchronous instruction. Synchronous courses happened with all participants present at an allotted time, promoting a live, interactive class. At the same time, asynchronous courses were designed not to require students to be present at the allotted time, which supports self-paced classes through prerecorded lecture videos and content. In addition, during the 2020-21 school year, schools in Texas were allowed to allow students to either choose remote instruction or on-campus instruction, which could have greater increased the amount of student enrollment for 8th-grade students and high schoolers (Du et al., 2021).

Enrollment by grade level and race/ethnicity is a massive component in schools constantly improving their curriculum, especially for underserved communities. The five largest racial/ethnic groups are Hispanics, White, African American, Asian, Hispanic,

and multiracial (Du et al., 2021). In Texas public schools, Hispanic students have dominated student enrollment at each grade level from K -12 (Du et al., 2021). As mentioned previously, Texas designed its early education programs to serve children who need English assistance and learning. For instance, Hispanic students made up 52.9% of total enrollment in the 2020-21 school year and accounted for 62.6% of students enrolled in the early education program (Du et al., 2021).

White students made up 15.1% of the program, with 26.5% of total enrollment during the same school year (Du et al., 2021). These demographics are essential for schools to understand where improvements are necessary. Therefore, better accommodations are allocated to those students and would increase their academic success for themselves and their future families.

Meals and Academic Success

Healthy meals, especially during early education, are essential for a student's academic success. The Academy of Nutrition and Dietetics states that early education programs should implement specific benchmarks to meet children's nutrition needs (Hayes et al., 2018). Also, these benchmarks should promote children's optimal growth in safe and healthy environments (Benjamin-Neelon, 2018). Many factors include the quality of the nutrients from foods and beverages, the interactions between the child and care provider, and the environment that the child consistently partakes in at mealtime.

Healthy eating has many influences, such as lowering the chances of obesity, prioritizing a child's physical activity, better sleep, and lowering stress levels during a child's lifetime (Benjamin-Neelon, 2018). Professional dietitians recommend that care providers such as parents or school systems engage in healthier food options to boost

early childhood education success (Hayes et al., 2018). In addition, care providers should serve as role models to support healthy behaviors and address specific health issues earlier in life.

The Academy of Nutrition and Dietitians lists twelve required benchmarks between two to five years of age. Dietitians, parents, schools, or other care providers, in general, can help conduct these benchmarks. The benchmarks should provide children with a variety of healthy foods and beverages in appropriate portions; limit less-healthy foods; be mindful of food safety, foodborne illness, and food allergies; and create healthy physical and social eating environments (Benjamin-Neelon, 2018). In addition, the benchmark respects children's hunger and satiety cues; encourages child-care provider role modeling; works with parents to promote healthy foods brought from home to child care; respects the culture and encourages cultural foods; and be mindful of food security and family resources (Benjamin-Neelon, 2018). Also, it facilitates nutrition education for children and families, considers barriers to serving healthy foods and beverages from the provider's perspective, and provides training and technical assistance to child-care providers (Benjamin-Neelon, 2018). These benchmarks are core standards set by the Academy of Nutrition and Dietitians.

The first benchmark addresses the need for having nutritional quality foods and beverages. This benchmark maintains appropriate calorie intake that ensures the child consumes healthy, nutritious foods that promote optimal growth. The Dietary Guidelines for Americans are updated every five years and provide the appropriate nutrition and diets needed to achieve from early to old age (U.S. Department of Agriculture & U.S. Department of Health and Human Services, 2020). Consistent with the Dietary

Guidelines from 2020-2025, children should consume five to nine servings of fruits and vegetables daily—especially dark green, red, and yellow vegetables. In addition, children also need adequate servings of vitamin-rich foods at least three times per week. Care providers should be cautious and provide minimal amounts of processed fruits and vegetables or those low in added salt and sugar. As an alternative, frozen varieties are good options when fresh produce is not available or is too costly. This alternative is utilized in federal school meal programs to help provide for the high volume of student participants every year. In addition, the guideline prefers fruits packed in water instead of syrup and vegetables low in sodium whenever these items are packaged and distributed to consumers. If not, caretakers should be strongly encouraged to rinse fruits and vegetables to remove some of the sugar and sodium (U.S. Department of Agriculture & U.S. Department of Health and Human Services, 2020).

Organizations such as the American Academy of Pediatrics, the National Academy of Medicine (formerly the Institute of Medicine), and the National Resource Center for Health and Safety in Child Care and Early Education have implemented limitations on juice. The American Academy of Pediatrics suggests no more than 4 to 6 oz of juice each day (U.S. Department of Agriculture & U.S. Department of Health and Human Services, 2020).

The guidelines prefer whole-grain foods such as brown rice and oatmeal for an early age diet. These foods provide the recommended dietary fiber for digestion, which can be harder to incorporate from other diets. The guidelines also prioritize other food sources such as vitamins, minerals, a healthy mixture of lean proteins, low- or fat-free dairy, and legumes (Hayes et al., 2018). Studies have consistently shown that children

from elementary school lack the required number of fruits, vegetables, and fiber to sustain healthy habits and optimal school performance (Hayes et al., 2018). This issue should be addressed to families and schools to emphasize the importance of proper diet. Schools have the power to lobby and push forward healthier standards that can bring success to their current and future students.

The next benchmark assesses the need for limitless healthy foods in a child's diet. This benchmark helps prevent obesity and other chronic diseases from notional inadequacy (Benjamin-Neelon, 2018). For example, meals and snacks that include excessive saturated fat, sodium, and sugar have led to early-onset obesity in schools. In addition, the popularity of carbonated, sugar-sweetened beverages at all ages has factored into the risk of developing diabetes, especially insulin resistance.

Amidst the current COVID-19 pandemic, the importance of food safety, foodborne illness, and food allergies have been at an all-time high. Some of the challenges with implementing food safety come with the constant evolution of new pathogens, modes of transmission, and multidrug-resistant strains (Benjamin-Neelon, 2018). However, thanks to the progression of technology, practicing proper sanitary food preparation, food management, and regularly washing hands have been proven to be effective prevention strategies. Schools enforce these policies, such as children and food providers must wash their hands; all plates, bowls, and serving equipment must be disinfected; and single-serving items such as paper napkins must be discarded after a single use (Benjamin-Neelon, 2018).

Food allergies are another important risk that needs to be addressed, especially in schools. Allergies such as insect stings, latex, and medication can be life-threatening to

children (Hayes et al., 2018). The most common allergy-inducing food items for children are eggs, milk, peanuts, and tree nuts. Therefore, school dietitians, food staff, and teachers need to have the necessary training to recognize symptoms of an allergic reaction as soon as possible.

It is important to facilitate the appropriate mealtime environment at home and school at an early age. These mealtime environments create healthy physical and social eating environments that promote healthy eating habits in children (Benjamin-Neelon, 2018). Establishing a healthy mealtime environment includes having chairs, tables, plates, bowls, and eating utensils that are clean and accessible. In addition, emphasizing the importance of eating three meals a day should be prioritized at schools through positive and encouraging messages (Benjamin-Neelon, 2018).

Another notable benchmark is prioritizing interactions between children, families, and care providers. Several studies have shown that providers play a crucial role in influencing young children's eating behavior (Benjamin-Neelon, 2018). This is critical to emphasize at schools, especially for students from low-income families. In a more recent study, 124 child-care providers from 50 child-care centers in North Carolina found that 90% of providers reported modeling healthy eating behaviors to children, and researchers observed this behavior at 80% of the centers (Erinosho et al., 2012).

Many school cafeterias have implemented more diversity in their food menus to incorporate inclusivity into their diverse and rich student demographics (Benjamin-Neelon, 2018). In addition, learning about new food can enhance a child's knowledge about food and its importance to its culture. However, some dietary restrictions may be from religious or personal reasons, such as vegetarian diets. Therefore, it is essential to

provide those students with the necessary saturated fat, sodium, calories, and cholesterol levels through proper staff training and implementing of certain foods on the school menu (Benjamin-Neelon, 2018). This further emphasizes the importance of being inclusive of everyone's cultures and educating students at schools through meals.

Food insecurity is the biggest threat to retaining proper healthy food habits at a young age. Nearly 2.9 million children lived in food-insecure households in the United States in 2017, and it has not changed since 2016 (Coleman-Jensen et al., 2017). The COVID-19 pandemic inflated the number of food-insecure students. Food insecurity is associated with poor overall dietary quality in adults and a lower intake of fruits, vegetables, and dairy products in children (Benjamin-Neelon, 2018). The Academy of Nutrition and Dietetics addresses the importance of federal nutrition assistance programs for children ages 2-11 years old. These programs are designed to help children with food insecurity.

Other federal food assistance programs like the Supplemental Nutrition Assistance Program or the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) are some of the many programs designed to help families in need of immediate aid (Hudak et al., 2020). They promote health and assist in how to partake in healthy diets. Although food insecurity is still an impending issue, these programs have helped mitigate the growing numbers of poverty in rural and inner-city schools in the past decades.

The USDA constantly pushes to require serving a greater variety of fruits and vegetables, more whole grains, and make water available in their school lunch programs. In addition, they aim to decrease the number of added sugars, pre-fried foods, processed

meats, sweet crackers, and grain-based desserts in meals and snacks served to children (Hayes et al., 2018). Although the department implements these policies every year, each state can exercise the option of making additional changes with prior USDA approval (Hayes et al., 2018). This strong relationship between the federal and state to implement the best available programs for school districts is critical for many reasons. The most important one is funding. Funding for these large federally and partially state-run programs is important for the success and availability of the required resources in several school districts.

The prevention of certain health diseases such as obesity has been a constant push by the National Academy of Medicine. So, the Academy implements several federally ran food assistance programs (Hayes et al., 2018). Many policies aim to prevent obesity in early childhood since it is a fast-growing disease in the U.S., especially in the southern states (Hayes et al., 2018). There are many childhood obesity prevention policies that federal programs incorporate. These programs recommend regular physical exercise to promote healthy weight, enhance cardiovascular functions, and better motor functions in most cases (Hayes et al., 2018). In 2015, the Institute of Medicine recommended 15 minutes of moderate to vigorous physical activity each day for all children (Benjamin-Neelon, 2018). Several studies show that students who are constantly underperforming in regular exercises but utilizing excessive media and screen use can hinder a child's early health.

In addition, the prevention of early-onset obesity, inadequate sleep, chronic stress, and psychological/emotional distress have emerged to affect early childhood (Benjamin-Neelon, 2018). For example, insufficient sleep can occur from napping during the day or

having a short sleep duration related to obesity in children (Benjamin-Neelon, 2018). As a result, it reduces the quality of sleep. In addition, high obesity levels have elevated cortisol levels, which are the body's natural stress hormones. This relation should be monitored in early childhood because it can lead to other chronic diseases like hypertension, renal failure, and cardiovascular disease.

Understanding the proper nutrients needed at an early age is essential for a child's success in their early education and beyond. If not, diseases such as obesity, stress, and inadequate sleep can hinder the child's ability to perform to their optimal level. In addition, academic success is essential for a child's future, and understanding how proper nutrients and diet can uphold that goal is important.

Student Achievement Scores

Schools use standardized tests to help test students' academic performance and gauge their future success. The 21st-century school curriculum emphasizes equipping students with the knowledge and skills to consistently think critically, solve complex problems, and perform at high levels (Finn et al., 2014). As a result, schools use standardized exams to master those goals.

Testing programs have used several research fields such as education, social science, and psychology to help integrate new and creative ways to test for cognitive development. They address certain concepts such as how efficiently the information can be processed, how much information is processed and maintained collectively, and how well new, complex problems can be solved using known reasoning skills (Cowan et al., 2005). These concepts help integrate more novel, innovative, and efficient methods of assessing cognitive skills. This is particularly important because of the long-term effects

it has on students. Many studies have shown that late childhood through young adulthood benefits from enhancing working memory, faster retention speed, and fluid reasoning at an early age.

Cognitive skills, especially developing the working memory and processing speed, help tremendously with math and reading abilities at a young age. These skills provide great and valuable predictors for schools to assess their strengths and weaknesses in their curriculums (Alloway & Passolunghi, 2011). Studies suggest that school attendance helps increase cognitive skills, especially working memory and executive functions. There is a positive relationship between time spent in school and measures of intelligence (Finn et al., 2014). Although the push for cognitive skills is evident in many curriculums throughout schools, implementing them effectively is a challenge. Schools have always prioritized crystallized intelligence based on facts and rooted experience. Reading comprehension and learning vocabulary benefits the most from crystallized intelligence. However, there is a strong relationship with fluid intelligence enhancing students' academic performance when working with crystalized methods (Finn et al., 2014). This is particularly effective in early academic success and may serve as a pedestal for a novel, innovative learning model.

The importance of early childhood development reflects on a students' preparedness before the school year. For example, many studies show that parent-child book reading interaction enforces strong reading comprehension skills, more substantial vocabulary from memory, and more motivation to read (Ece Demir-Lira et al., 2019). This practice is essential for pre-K preparedness and projects students to succeed in academia. However, the interaction between a parent-child is unique. Studies have shown

that the language and vernacular used by parents are expressed strongly during the parent-child reading interactions than in reading interactions found elsewhere (Ece Demir-Lira et al., 2019). This interaction helps maintain and develop the child's vocabulary diversity and syntactic complexity (Ece Demir-Lira et al., 2019). As a result, researchers have shown in many studies, especially in meta-analysis data, a strong correlation between parent-child reading interactions and a child's later language and literacy success by creating a solid foundation (Ece Demir-Lira et al., 2019). Although studies show the importance of a child to have consistent, early childhood parent interactions, it also shows how detrimental it can be to a child who does not have those interactions. Children growing up in low socioeconomic status households, foster homes, or nontraditional family units can affect the child's future language and literacy success from the lack of parent-child reading interaction (Ece Demir-Lira et al., 2019).

There are alternative theories to early childhood development. One such theory views early reading as a method to enforce acute phase development rather than substantial long-term benefits (Blachman et al., 2014). Students who need explicit and systematic instruction in the early reading acquisition phases are more likely to require crystallized intelligence or evidence-based support to develop complex skills (Blachman et al., 2014).

Reading Assessments on Academic Success

Kindergarten through third grade is an excellent indicator for future success in a child's academia. In a longitudinal cohort study, researchers assessed the exposure to reading, reading comprehension, robust vocabulary, and general knowledge in a 10-year study of students from 1st grade following until 11th grade (Sparks et al., 2014). First-

grade reading ability was a strong predictor of all the 11th-grade outcomes. In addition, their third and fifth-grade reading success was equivalently as strong of an indicator for future success (Sparks et al., 2014). Further, the study points out that early reading education pushes for better reading habits in a student's career and benefits their life (Sparks et al., 2014). This shows the importance of establishing early reading comprehension in schools because it can be fatal for a student's academic success.

The same researchers, Cunningham and Stanovich, conducted another longitudinal study that assessed literacy and language skills. Their study had 54 first graders participate in reading, spelling, vocabulary, IQ, and listening comprehension measures (Sparks et al., 2014). The researchers followed the same groups of students over the next ten years for comparative data analysis. The results showed that first-grade reading skills were a strong predictor of 10th-grade outcomes. In addition, second and third-grade level students indicated strong predictors for comprehensive language development (Sparks et al., 2014). Regardless, any student who received reading skills from at least first grade is already exposed and more engaged in reading than those with no experience. It serves as a long-term benefit by providing students with the necessary reading skills and engagement (Sparks et al., 2014). As a result, reading at an early age is beneficial because it serves as an exponential function throughout life.

Students who read at an early age are at an advantage to comprehend a broader range of texts, gain knowledge, and have more educational opportunities. It is a vital skill in academics, professional settings, and social life. Of course, one also reaps the benefits of engaging in literary texts more intimately and better understanding its art. However, the

opportunities such as developing literary and comprehension skills for potential career options make early age reading advantageous (Shanahan et al., 2010).

A group of researchers sampled an elementary school in Michigan to understand and examine the effects of teachers' knowledge on students' reading achievement scores from first through third grade. Many of the confounding variables, such as the teacher's professional background, students' prior reading achievement, and districts with an ideal demographic, were assessed in the study (Carlisle et al., 2011). As a result, the first-grade students performed statistically better on their academic reading comprehension exam later that year. At the same time, the second and third-grade students did not prove to statistically perform better on their reading comprehension exams at the end of the year (Carlisle et al., 2011). This study demonstrates that even though early reading education is essential, it is also important to prioritize proper teacher training as it may significantly affect proper reading comprehension success. In addition, the bridge between conceptual and psychometric methods is important to understand and utilize in early education curriculums (Carlisle et al., 2011).

Third grade is an essential early education indicator that sets up a students' early career success. Mastering reading in third grade is pivotal as it bridges many reading comprehension skills needed to advance further and develop those skills in more challenging texts. Research has shown that students who fail at this grade level are likely to perform poorly in later grades and drop out of school later in their careers, and some may drop out before receiving their high school diploma (Hernandez, 2011). Researchers conducted an extensive database analysis to understand different relationships between poverty and early reading education in a study. One in six children who are not reading

proficiently in third grade does not graduate from high school on time, four times greater than proficient readers (Hernandez, 2011).

In addition, 22% of children who have lived in poverty do not graduate from high school, compared to 6% of those who have never been poor (Hernandez, 2011). It is exceptionally high for poor Black and Hispanic students, at 31% and 33% (Hernandez, 2011). The racial disparity between Black and Hispanic students in poverty is evident nationwide, and as a result, it can affect student academic success.

The State of Texas Assessments of Academic Readiness or STAAR is a state student testing program. The program assesses third through twelfth-grade students' reading, writing, mathematics, science, and social (Texas Education Agency, 2021c). The STAAR program assesses whether a student has mastered specific concepts of a core subject and certain grade levels. It also allows school administrators and educators to improve their curriculums for better results and development (Texas Education Agency, 2021c). Other states like Georgia, New Hampshire, and New Jersey adopted the STAAR program (Texas Education Agency, 2021c). These states implemented the program and utilized its policies to effectively assess the third through the twelfth-grade education system (Boyd, 2011). The program's reputable reputation shows its ideals and constant drive to improve. However, there have been several backlashes on the new STAAR program. Many groups say that students and educators spend too much time on state testing, the stakes for the tests are too high, and the local districts should have complete control over the ways students are tested and graded (Texas Education Agency, 2019b). These are valid points and are challenging to address when administering statewide standardized exams. STAAR enforces policies to make sure each school district follows

them. Accountability on the educators' end is critical for the success of the students and the school. However, engaging in meaningful activities and lesson plans that are region or demographic-specific is challenging considering the diverse demographic expressed in Texas.

The STAAR program is labeled or defined by its policy through four levels: masters grade level meets grade level, approaches grade level, and does not meet grade level (Texas Education Agency, 2019b). Mastering grade level indicates that the students succeeded in the next-grade level with little to no academic intervention. Students can think critically, creatively, and easily apply their knowledge in familiar and novel situations (Texas Education Agency, 2019b). Meets grade level is the following category, and it measures that the student has a high probability of succeeding in the next grade level but may still need some short-term assistance. Students can still think critically and apply their knowledge to familiar and novel situations (Texas Education Agency, 2019b). Next, the category of approaches grade level addresses that the student can succeed in the next grade level with the help of targeted academic interventions, like tutoring (Texas Education Agency, 2019b). Students are generally able to demonstrate the ability to apply specific knowledge and skills in familiar contexts. Finally, the did not meet grade-level category states that students are unlikely to succeed in the next grade level (Texas Education Agency, 2019b). These students need significant assistance, ongoing academic interventions and struggle with learning and applying the knowledge in all contexts (Texas Education Agency, 2019b). The STAAR program uses these four categories to assess how well the education curriculum is at each school, district, or state level. This criterion will be used later in this research to evaluate the status of reading levels attained

at each grade level at schools with a high Hispanic population in the Waco Independent School District.

Hispanic Students: Reading Outcomes and Hunger

Hispanic students account for 20% of all students enrolled in schools throughout the United States. On average, these students are significantly underachieving educationally compared to white students in every academic measure (Gonzalez, 2019). The main reason is that many of them do not speak English fluently, and the accommodations built by the English Language Learners have proven to not be adequate and sufficient in the 21st century (Gonzalez, 2019). The more significant issue is prioritizing policymakers to allocate more funds and novel programs that help integrate more Hispanic students to grow and succeed in their education. This starts with a solid foundation in English learning and comprehension between pre-K and twelfth grade. As a result, this should directly impact more Hispanic students graduating from high school and attending college.

Hispanic students are not the only marginalized groups in education. Blacks and Hispanics have historically been excluded and constantly perceived as less competent than their White peers (Camacho, 2016). This repetitive false narrative of Hispanic and Black students not being motivated enough or not competent to succeed in school leads to confirmation bias in society. In other words, self-fulfilling prophecy has affected society's views, behavior, and judgment of Hispanics and Blacks in school. Stereotypes are expressed and seen at all institutional levels and have polluted how society can properly uplift one another. As a result, Hispanics constantly receive marginally lower verbal ability scores, reading comprehension, and communication than their White peers (Flores

et al., 2017). As a result, programs such as the English Learning Assistance Programs should provide more innovative methods to improve students' reading and communication skills.

The Hispanic population is known to have very low health literacy, especially immigrants. Researchers in California have used their large Hispanic demographic to assess the low health literacy. Low health literacy relates to the high percentage of Hispanic families living in poverty, lacking consistent health insurance, and limited English learning proficiency (Becerra, 2012). Programs funding by the government can improve language proficiency at schools. However, other issues such as poverty and lack of health insurance are more challenging to address for Hispanic students. These limitations set up challenges to helping Hispanics master English and reading comprehension skills. Hispanics account for over 60% of the United States population, and 25% speak little to no English (Dunlap et al., 2015). This language barrier has affected many families in the states, which caused them to be in a constant state of fear of the government.

Achievement exams assess and gauge a student's mastery of certain core subjects (Li, 2016). This relationship is most robust for Black students compared to any other students, regardless of socioeconomic status (Li, 2016). However, researchers could not find a statistical significance between achievement scores and a student's reading achievement for Hispanic students (Li, 2016). It was a bit surprising. However, it makes sense since Hispanic students typically perform worse on reading achievement exams due to poor English development. Although it has not been proven effective in the last two decades, programs like the English Learning Assistance help Hispanic students develop

better English and reading comprehension (Li, 2016). It is important to overcome the language barrier for Hispanic students, to develop better English comprehension skills, reading abilities, and communication. Also, it will provide for more opportunities such as jobs and internships for students as they succeed in early education by prioritizing reading.

Mexican Americans are the largest and fastest-growing Hispanic subgroup in the United States and have the lowest educational attainment rates compared with other groups (Schneider et al., 2006). This applies to the growing Mexican American population in South Texas. Hispanic students account for the largest and fastest-growing population in school enrollment, especially in Texas but are more likely to live in poverty. When students see nutritional improvements, schools have found fewer school absences. A healthy, balanced diet is reflective of a student's academic success. This research assesses how universal free meals, specifically community eligibility provision, for free breakfast and lunch positively impact reading scores of low socioeconomic Hispanic third through fifth-grade students attending Schools at Waco ISD. In addition, the author analyzes school meal participation rates to understand the effectiveness of the provision in Waco ISD. This research also investigates the effects of the COVID-19 pandemic on Waco ISD.

CHAPTER TWO

Methods and Materials

Data on the nationwide administration of the School Breakfast Program (SBP) and National School Lunch Program (NSLP) are not composed in one central databank. The author used data such as school meal participation rates for SBP and NSLP, Waco ISD demographics, and student reading scores from Waco ISD and the target schools. In addition, the author compiled data from the Texas Education Agency, the United States Department of Agriculture (USDA), the Texas Department of Agriculture, annual budget reports of Waco ISD from 2015 to 2022, the United States Census Bureau, and individual school reports in the Waco ISD. Also, the author used additional secondary sources to build a comprehensive and longitudinal data set about the SBP and NSLP meal programs with and without the Community Eligibility Provision (CEP). The USDA receives SBP and NSLP meal program data from each state, and the state, in return, receives those results about federally run programs from school districts. The Texas Department of Agriculture is an example of a state-run program that receives school meal participation rates from school districts in Texas, such as Waco ISD. In addition, the author received student reading scores for schools in Waco ISD via public access in the Texas Education Agency data bank. Also, the author obtained school and district demographics data from the National Center for Education Statistics (NCES), a public forum run by the U.S. Department of Education.

Waco ISD legislated the CEP in the 2018-2019 school year and has extended its contract for the 2021-22 school year. The author knew which schools and school districts

enacted the CEP through public records from the USDA Food and Nutrition databank. The databank provides the CEP number, the contracting entity name (school district), type of organization, the total number of identified students in the CEP, the CEP total enrollment, eligibility status, and the contracting entity's current year in the CEP program. The author used additional sources such as the Food Research and Action Center and the Texas Education Agency for further data confirmation.

Student SBP and NSLP meal participation rates at each school are accessible through public records from the Texas Open Data Portal run by the Texas Department of Agriculture. Schools provide information on the number of meals provided to students at the end of each month and a monthly meal participation rate. The author uses data from the number of meals provided each month between September to May from the 2015-16 to 2021-22 school year. This research excludes the 2020-21 school year due to schools shutting down from the COVID-19 Pandemic.

The author obtains the school demographics of Waco ISD from the NCES and annual budget reports of Waco ISD. The NCES provides gender and race/ethnicity statistics at each grade level for each school. The databank also provides information on how many students are eligible for free lunch and breakfast. As of the 2018-19 school year and beyond, everyone is eligible for free meals. This was not the case in the previous years. The author used the annual budget reports of Waco ISD and Texas Public Education data to check whether the percentages were accurate and precise. The primary and secondary sources provided seven categories of students' race/ethnicity. They include American Indian/Alaskan Native, Asian, Black, Hispanic, Native Hawaii/Pacific

Islander, White, and two or more races. As a result, the author used these resources to focus on Waco ISD schools with a large Hispanic student demographic.

The author analyzed Hispanic students reading performance levels from third, fourth, and fifth grade. The Texas Education Agency (TEA) provides public access to these exams scores, such as math and writing. The author focused on reading scores. In addition, the TEA provides academic performance reports for each district and school on a letter criterion. The author uses this to analyze further the schools' progress, including its current area of improvement. These reports also categorize the STAAR performance rates for each grade, subject criteria and provide performance levels for each race/ethnicity. The TEA did not provide data for the 2019-20 school year due to the COVID-19 Pandemic. However, they did provide results for the 2020-21 school year. The author provides a comprehensive and longitudinal research study on federal school meals and their effects on student reading performances from the 2015-16 to 2020-21 school years. The author graphs average performance rates for Hispanic readings scores for Waco ISD and six other schools with a large Hispanic population. These schools include Bell's Hill, Kendrick, Provident Heights, Dean Highland, Alta Vista, and Cedar Ridge Elementary Schools. The author could not provide a proper comparative analysis of how the CEP has affected the student performance levels due to only two years' worth of reading scores, especially since reading scores from the second year occurred during the COVID-19 Pandemic. As a result, the author discusses the unprecedented COVID-19 Pandemic and its effects on reading scores across schools in Texas and the U.S.

The author conducts two interviews to give a deeper analysis of how the CEP has affected the education techniques and experience at the administrative level for each

school. The author wants to understand how the CEP program has changed the school's structure and become aware of the critiques and improvements that should be addressed. The interviews are semi-structured; this includes a strict series of questions created before the interviews for the potential candidates. However, the author designed these questions to facilitate open-ended responses and allow the interviewee to express their thoughts on the CEP. The questions are as follows:

1. Tell me about yourself. (i.e. title, education, skills, experience)
2. What made you pursue your career in the Waco ISD?
3. Describe the school's "makeup." (e.g. school size, ethnicity, school readiness)
4. Currently, what are some of the goals of the school?
5. What are the major issues your students are facing? (e.g. hunger, academics)
6. How would you describe the school's relationship with the Food Administrators before, during, and maybe after COVID-19?
7. How have the Federal Meal Programs affected your school?
8. Which programs do you think have the most impact on your students' health and academic pursuit?
9. How was the idea of the Community Eligibility Provision introduced to the Waco ISD, and what were your thoughts about the district's push for free meals?
10. How or in what ways has the Community Eligibility Provision affected your school and students?
11. Has it helped increase exam scores, school participation, or other academic-related areas?

12. What are weaknesses, critiques, or areas of improvement the program fails to accomplish?
13. How has the COVID-19 pandemic affected your school?
 - a. Early (2020); Middle (2021); Now (2022)
14. What trends/results would you have expected if the pandemic had not happened?
15. What are some new precautions the school has taken for future emergency preparedness?

The researcher used these questions as a starting point in the interview, and they assisted in the data collection. The author incorporated the responses from the interview to the quantitative data obtained and created a conclusive analysis to discuss the CEP program.

It is essential to emphasize the importance of teaching and its effects on early childhood development. As an Oklahoman, the author understands how challenging it is to accomplish those goals when administrators constantly underappreciate teachers. The author was actively engaged in these interviews, and as a result, they provided several different perspectives on the CEP.

CHAPTER THREE

Results

The results section provides quantitative and qualitative data based on the methodology referenced in the Materials and Methods section. The findings were arranged sequentially and logically:

1. The author provided a brief overview of Waco ISD via ethnicity demographics, the effects of the COVID-19 pandemic, and State of Texas Assessments of Academic Readiness (STAAR) reading scores. Next, the author provided an overview of the STAAR reading exam scale to standardize the author's results.
2. After that, case studies using quantitative data of the top six elementary schools with the highest Hispanic student demographic were provided, such as third through fifth-grade STAAR reading scores. In addition, the author provided school meal participation data for those schools from the past six years.
3. Finally, the author conducted two qualitative data analyses by interviewing principals of the top six elementary schools with high Hispanic student demographics in Waco ISD.

Waco Independent School District

Waco ISD serves the community in Waco, Texas, in McLennan County. The district contains twenty-five campuses: fifteen elementary schools, four middle schools, three high schools, and three alternative schools (Waco Independent School, 2022a). Transformation Waco is a non-profit that started in 2017 to improve student outcomes at

campuses that need support within Waco ISD. The organization consists of three elementary and two middle schools, part of the in-district charter system. They include Alta Vista, Brook Avenue, G.W. Carver, Indian Spring, and J.H. Hines. Transformation Waco works with Waco ISD and Prosper Waco to help fulfill their goals of developing talent, managing performance, providing support to students, and creating an operation to transform the Waco community. The goal to increase student success opportunities by closing racial disparity gaps in behavior, academics, attendance, and engagement is a priority to help the Waco community grow. The in-district charter system has a high minority demographic, further emphasizing the need to improve these schools in the Waco ISD. As of 2021, Waco ISD has 91.26% of its students economically disadvantaged, according to the Annual Waco ISD Improvement Report for 2021 (Waco Independent School District, 2022a).

Waco ISD has a predominately large Hispanic population, which directly reflects the demographic of the Waco community. From 2015 to 2019, the Waco ISD demographics dashboard states that only 19.6% of children speak English less than well in their homes, and 15.6% speak English very well (U.S. Department of Education, 2022). The language barrier is a challenging and ongoing issue on many campuses, especially campuses with a high Hispanic population. The figures below illustrate the student ethnicity demographic in Waco ISD from 2017-18 through 2020-21 school years. The Hispanic population has predominated the past four years, averaging 60.65% (Waco Independent School District, 2022b). Figures 1, 2, and 3 show that the Hispanic population has slightly grown, whereas the African American population shows the opposite.

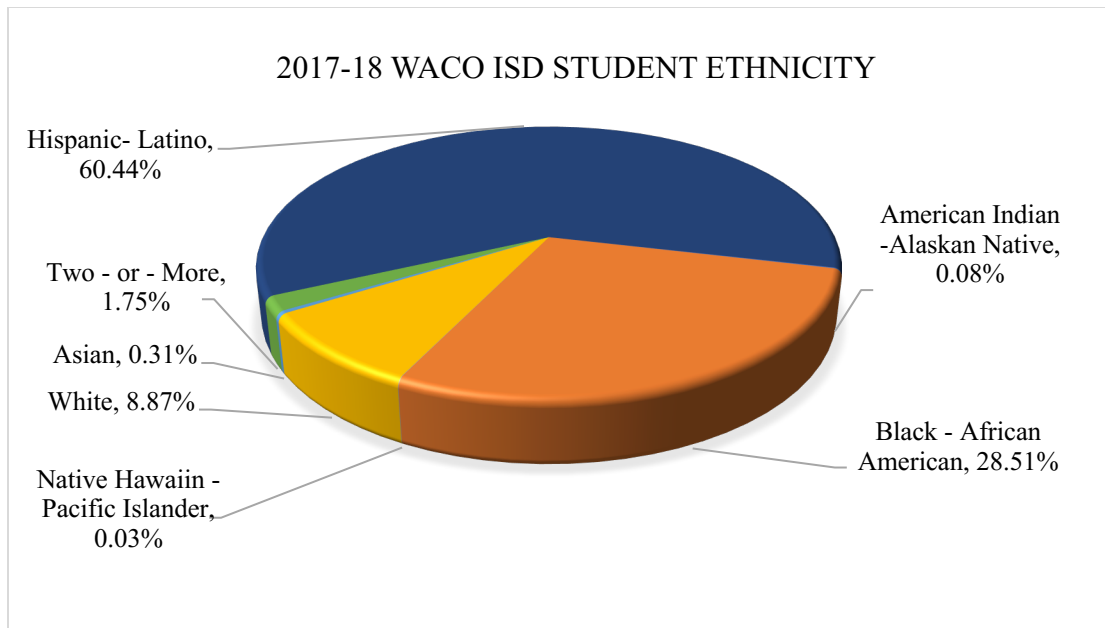


Figure 1: 2017-18 Waco ISD Student Ethnicity Demographic. Adapted from *Student Demographics by Year and Campus / 2017-2018*, Waco Independent School District, 2019. Copyright 2002 – 2022 by Blackboard, Inc.

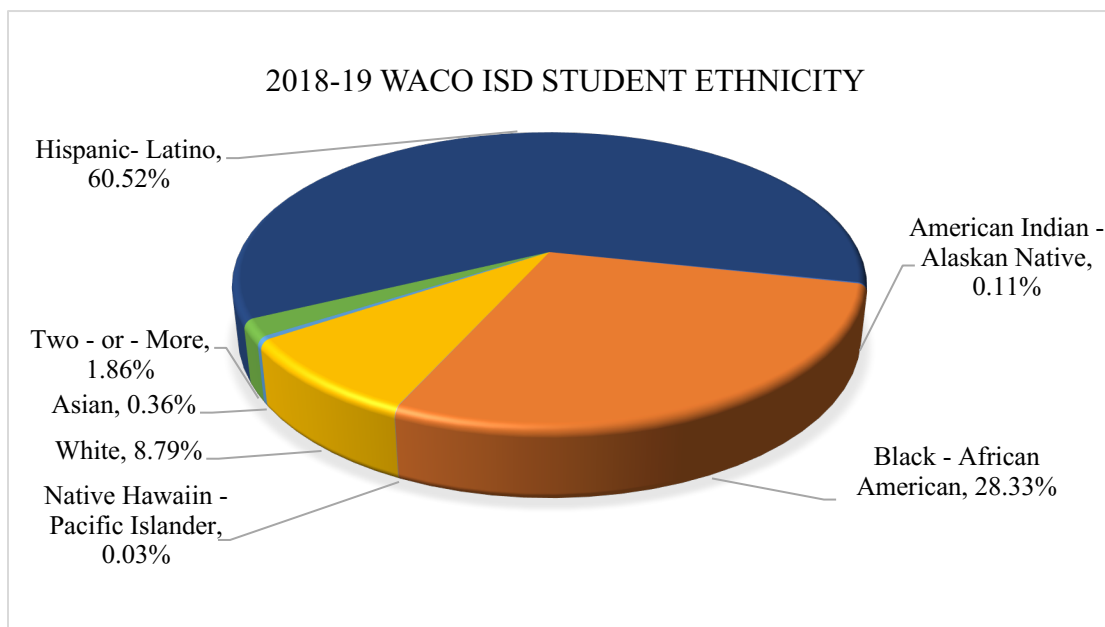


Figure 2: 2018-19 Waco ISD Student Ethnicity Demographic. Adapted from *Student Demographics by Year and Campus / 2018-2019*, Waco Independent School District, 2019. Copyright 2002 – 2022 by Blackboard, Inc.

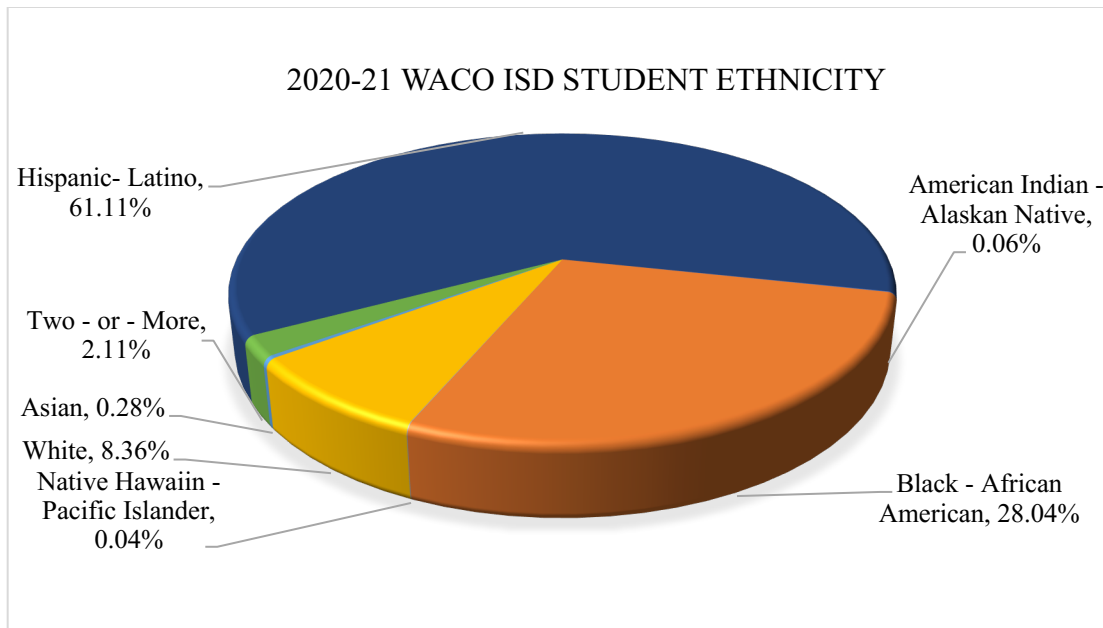


Figure 3: 2020-21 Waco ISD Student Ethnicity Demographic. Adapted from *Improvement Plans / District Improvement Plan*, Waco Independent School District, 2022, Copyright 2002 - 2022 by Blackboard, Inc.

In 2019 (before COVID-19), Waco ISD had 33.8% of their students' families live with an income level below the poverty line, and 36% of their students' families receive Food Stamps/SNAP benefits (U.S. Department of Education, 2022). During the COVID-19 pandemic, more families lost their jobs and steady income to provide for their families. The pandemic also affected the education system. The need to effectively administer virtual schools and proctor exams was a huge challenge for many schools. As a result, the district heavily relied on iPads for their students to take assessments and exams. The principal from Alta Vista Elementary School and Kendrick Elementary School discussed how Waco ISD took all the necessary steps to replicate a constructive learning environment for all students during the COVID-19 pandemic. However, it was not enough, as figures 4, 5, and 6 show a general decline in STAAR reading averages for third through fifth-grade students in the Texas and Waco ISD. The STAAR performance ratings of Waco ISD's end-of-the-year exams were deficient compared to previous years.

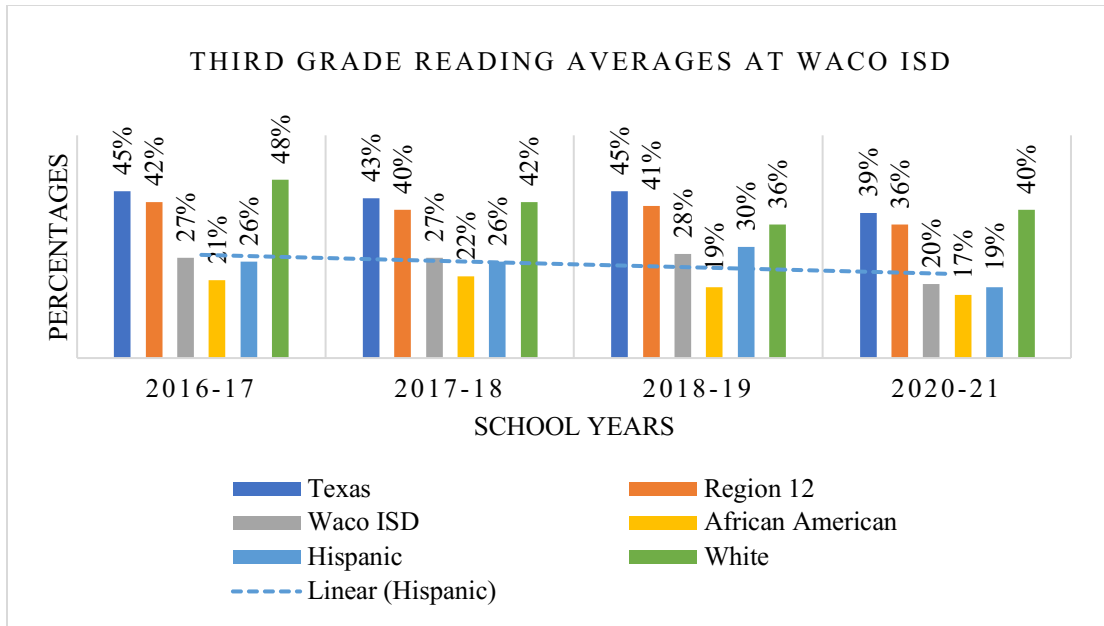


Figure 4: Meets Grade Level and Above for Third Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

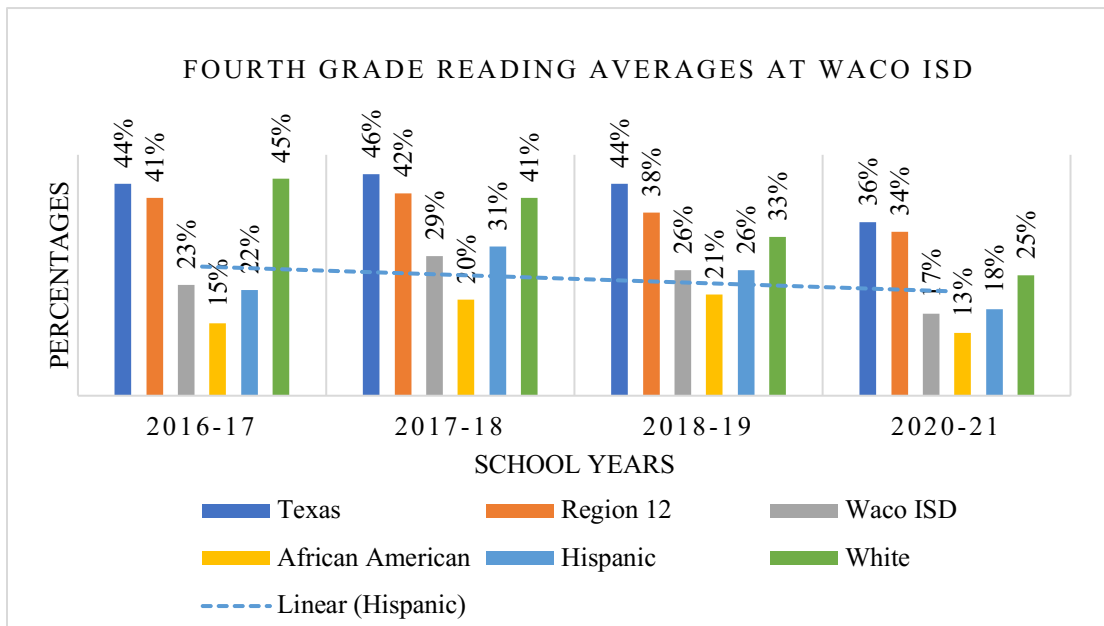


Figure 5: Meets Grade Level and Above for Fourth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

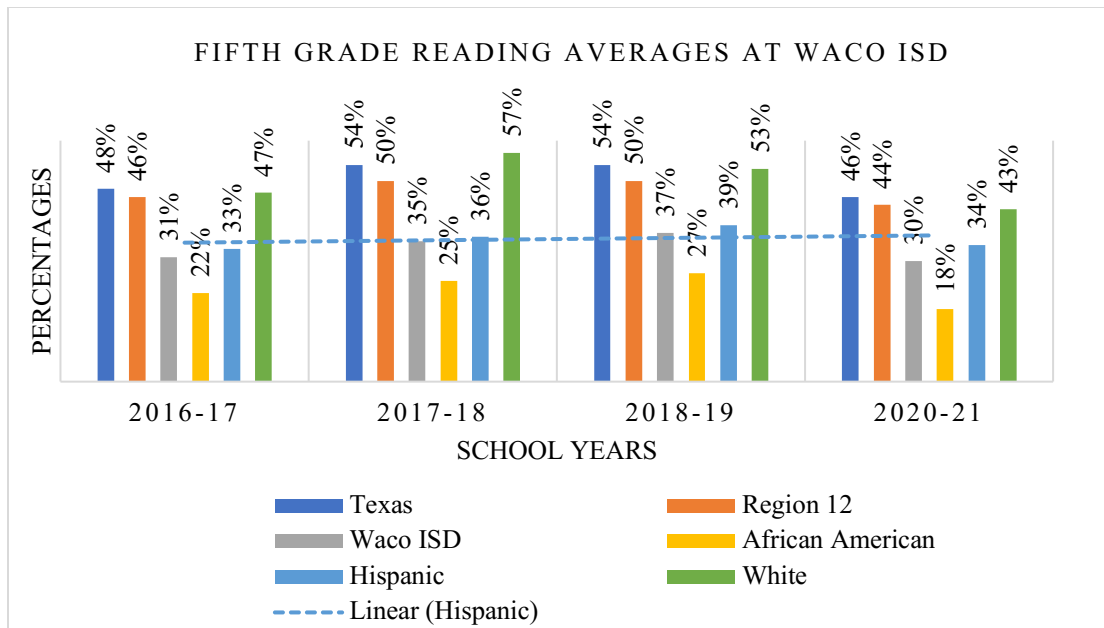


Figure 6: Meets Grade Level and Above for Fifth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

Figures 4, 5, and 6 depict STAAR performance reading scores that meet grade level or above. The Community Eligibility Provision allowed for universal free meals during the 2018-19 school year for all campuses in the Waco ISD. Since schools were canceled due to the pandemic during the spring of 2020 due to the COVID-19 pandemic, schools did not administer STAAR performance rates for the 2019-20 school year. This limits the author to gather only two years of STAAR reading scores since administering universal free meals at Waco ISD. The author did not conduct a statistical analysis because these graphs serve only to illustrate general trends between the state of Texas, Waco ISD, and the three predominant ethnicities in Waco ISD. The overall trend of STAAR performance reading scores during the COVID-19 pandemic for all categories listed above decreased. Therefore, the effects of virtual learning during the COVID-19

pandemic do not accurately reflect the possible impact that universal free meals could have had on students and their academic scores.

State of Texas Assessments of Academic Readiness

The State of Texas Assessments of Academic Readiness (STAAR) is Texas's student testing program for third to eighth-graders. It scales the academic performance standards to the extent of how much the student effectively learns the content and skills of his/her grade level on an exam. Three levels assess a student's performance—Level I: Unsatisfactory Academic Performance; Level II: Satisfactory Academic Performance; Level III: Advanced Academic Performance (Texas Education Agency, 2015). The STAAR program was effective in spring 2012 and split into three phases to provide school districts time to adapt to the new curriculum, train teachers, and close the knowledge gap. Phase 1 is from 2011 to 2015; Phase 2 is from 2016 to 2018; Phase 3 is from 2019 to 2021 (Texas Education Agency, 2015). The last phase did effectively help set the standards for the rest of the following years. It is required for a student to achieve at least level II for each STAAR exam in order to pass the exam.

The TEA abolished the three-tier level system during the 2016-2017 school year and replaced it with a four-tier system. The four-tier system includes: did not meet grade level, approaches grade level, meets grade level, and masters grade level (Texas Education Agency, 2019b). Regardless, students must achieve the approaches grade level tier to pass the STAAR exam. Hence, the previous level II tier is equivalent to the approaches grade level tier. In addition, the author compared the official raw score conversion tables for reading of Spring 2016 and 2021. The raw score conversion tables for 3rd-grade reading were scaled the same at 1345 (Texas Education Agency, 2021b).

The raw score conversion tables for fourth grade were scaled the same at 1434 (Texas Education Agency, 2021b). Furthermore, finally, the raw score conversion tables for fifth grade were scaled the same at 1470 (Texas Education Agency, 2021b). The author uses this to justify using STAAR reading scores from the approaches grade level category and the level II-tier system interchangeably.

Case Reports

Bell's Hill Elementary School

Bell's Hill Elementary School (ES) is a Title 1 school with 729 students during the 2020-21 school year (Texas Education Agency, 2022). The school consistently has the most prominent Hispanic student demographic in all Waco ISD elementary schools. During the 2015-16 to 2020-21 school years, about 93.13% of the student demographic are Hispanic (Texas Education Agency, 2022). The second-largest ethnic group is African Americans, with a student demographic of 4.17% (Texas Education Agency, 2022). During the 2018-19 school year, before the COVID-19 pandemic, 93.9% of the student group at Bell's Hill ES were economically disadvantaged (Texas Education Agency, 2019a). This rate was 16.9% and 33.3% greater than Waco ISD and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2019a). During the 2020-21 school year, which was during the COVID-19 pandemic, 96.4% of the student group at Bell's Hill ES were economically disadvantaged (Texas Education Agency, 2022). This rate was 5.1% and 36.1% greater than Waco ISD and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2022).

Texas declared a state of disaster for the 2019-20 through 2021-22 school years because of the COVID-19 pandemic. So, the school's yearly accountability rating, which assesses how well the school performs, was not proctored. However, a year before the pandemic, Bell's Hill earned a B (80-89%). As a result, the TEA rewarded the school for its achievements and performance of serving many of its students well and encouraging them of higher academic goals/achievements (Texas Education Agency, 2019a). Bell's Hill ES continued to grow, improve, and achieve many accomplishments. They have performed outstandingly in their students' reading and science categories; hopefully, those ratings continued to grow during the COVID-19 pandemic.

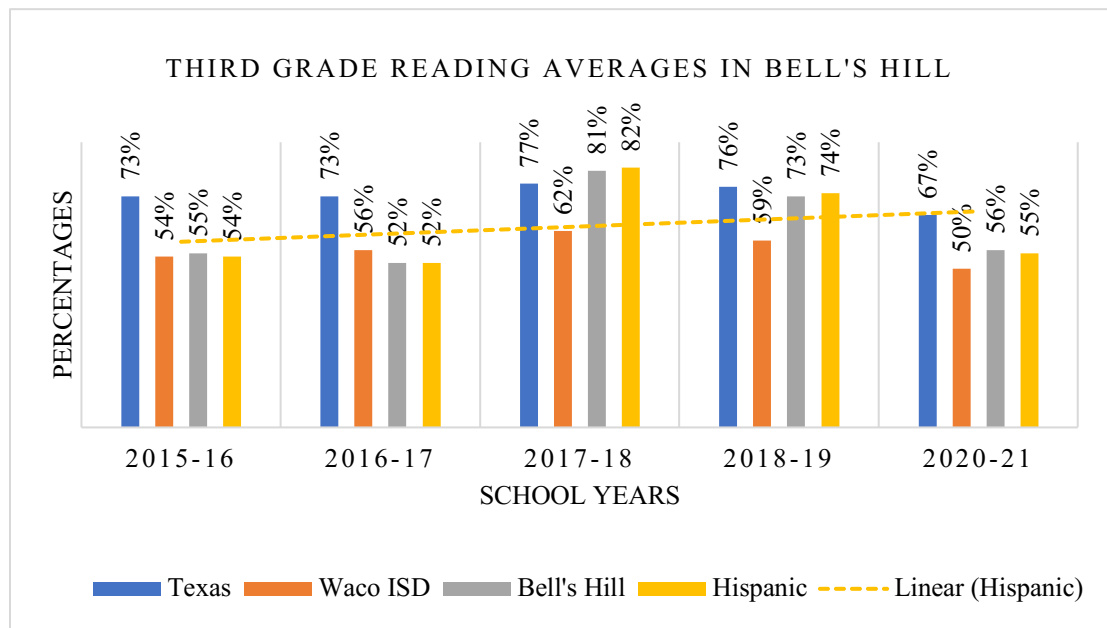


Figure 7: Approaches Grade Level or Above for Third Grade Reading, Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

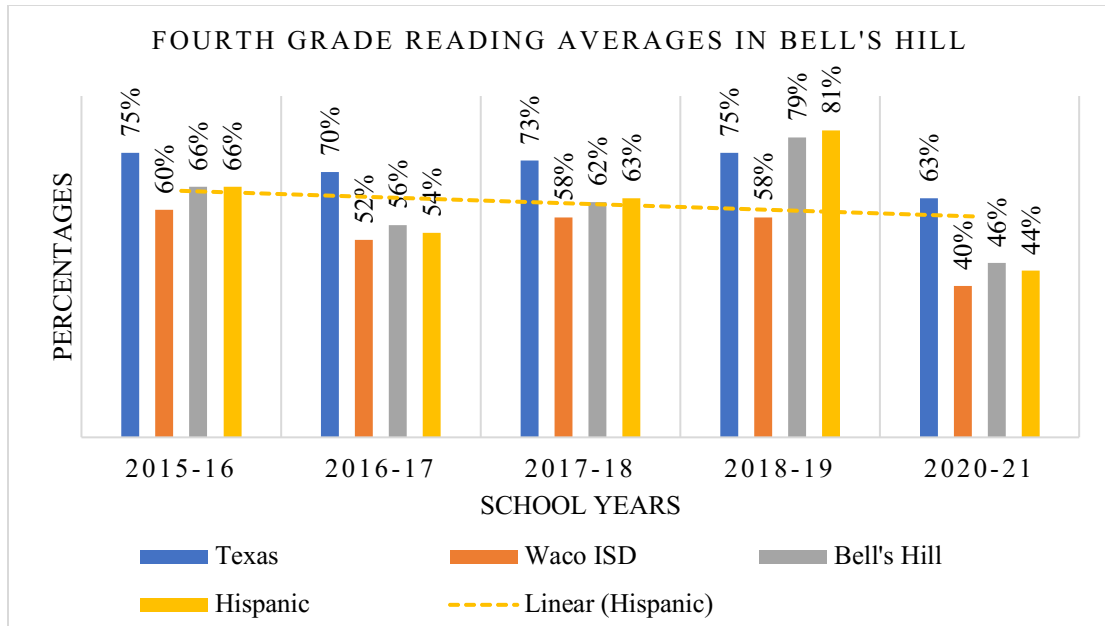


Figure 8: Approaches Grade Level or Above for Fourth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

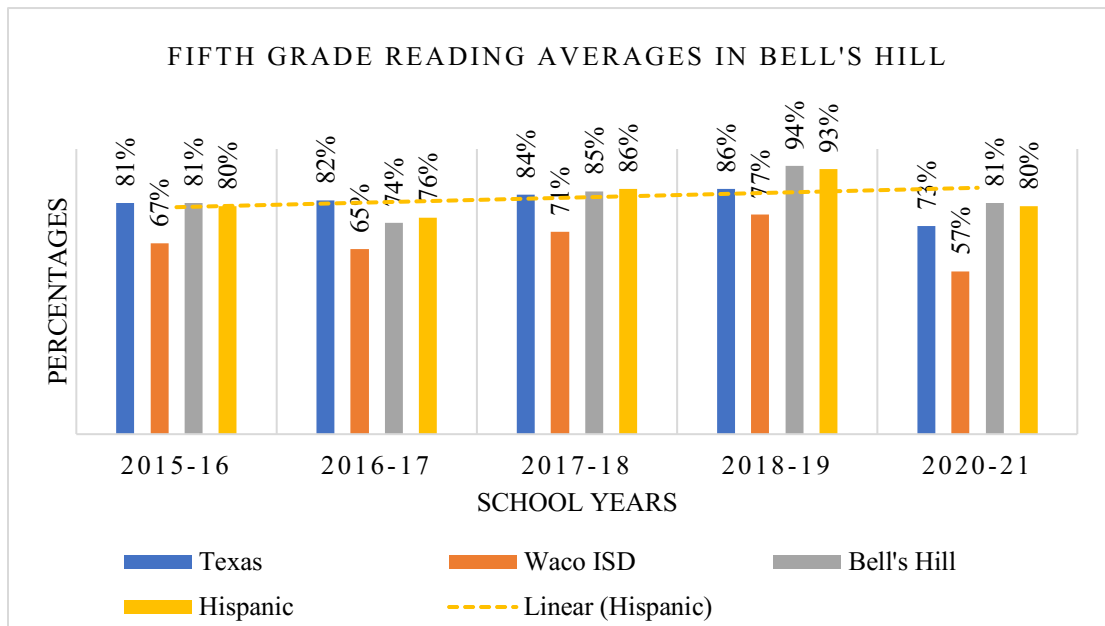


Figure 9: Approaches Grade Level or Above for Fifth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

All three figures show a generally positive trend for third through fifth-grade STAAR reading scores for Hispanic students in Bell's Hill ES. This trend is greater than the Waco ISD reading averages, and Bell's Hill ES continued to grow and be on the pace of the Texas reading averages, which is a challenging task. Although statistical significance was not tested for these STAAR reading scores, the effects of universal free meals during the 2018-19 school year and beyond seem minimal to noneffective. Indeed, Hispanic fourth and fifth graders at Bell's Hill ES did perform the highest during the 2018-19 school year; however, the results of one data point cannot justify that universal access to free meals did improve STAAR readings scores for particularly those students that year. As a result, the sudden impact of the COVID-19 pandemic makes it impossible to discern the positive or negative effects of the universal free meals program during the 2019-20 and 2020-21 school years. However, using CEP consistently could have long-term effects on student academic success.

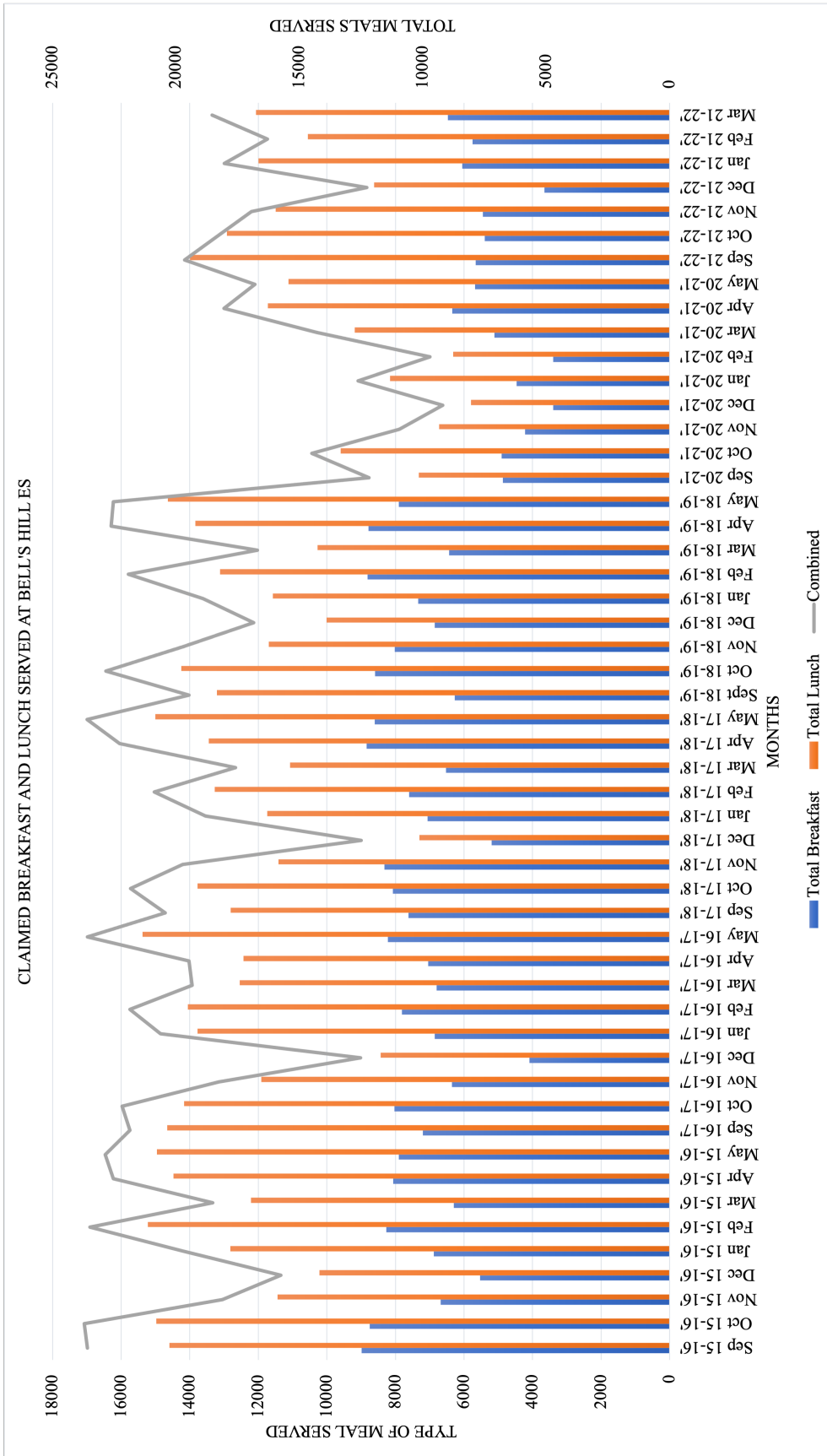


Figure 10: Total number of breakfast and lunch served at Bells Hill ES for claim month. Meals served from September of 2015-16 school year to March of 2021-22 school year are provided in this chart. The 2019-20 school year participation rates are excluded due to COVID-19. Adapted from *School Nutrition Program - Meal Reimbursement Information - Program Year 2015-16* | *Open Data Portal*, Texas Department of Agriculture, 2020, June 20, Copyright 2022 State of Texas.

Kendrick Elementary School

Kendrick Elementary School (ES) is a Title 1 school with 509 students during the 2020-21 school year (Texas Education Agency, 2022). The school has a large Hispanic student demographic. During the 2015-16 to 2020-21 school year, about 79.53% of the student demographic are Hispanic (Texas Education Agency, 2022). The second-largest ethnic group is African Americans, with a student demographic of 13.5% (Texas Education Agency, 2022). During the 2018-19 school year, which was before the COVID-19 pandemic, only 95.2% of the student group at Kendrick Elementary were economically disadvantaged (Texas Education Agency, 2019a). This rate was 18.2% and 34.6% greater than Waco ISD and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2019a). During the 2020-21 school year, which was during the COVID-19 pandemic, 96.1% of the student group at Kendrick Elementary were economically disadvantaged (Texas Education Agency, 2022). This rate was 4.8% and 35.8% greater than Waco ISD and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2022).

Texas declared a state of disaster for the 2019-20 through 2021-22 school years because of the COVID-19 pandemic. So, the school's yearly accountability rating, which assesses how well the school performs, was not proctored. However, a year before the pandemic, Kendrick earned a D (60-69%) (Texas Education Agency, 2019a). The school needed improvements and failed to meet enough students to make adequate academic progress (Texas Education Agency, 2019a). The school trended downward in student performance since the 2015-2016 school year (Texas Education Agency, 2016).

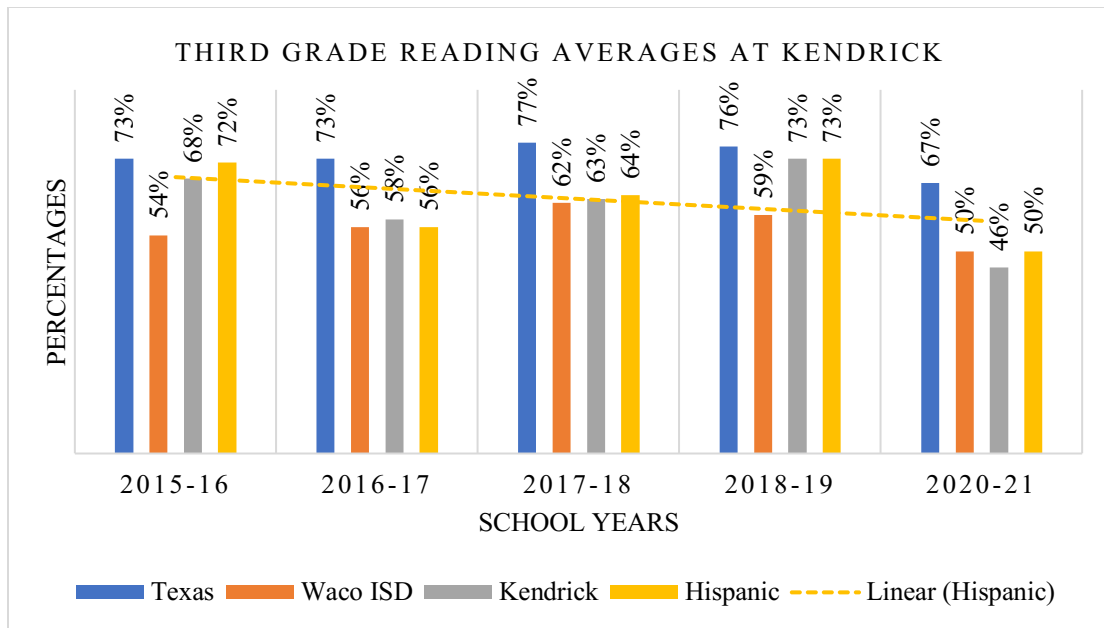


Figure 11: Approaches Grade Level or Above for Third Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

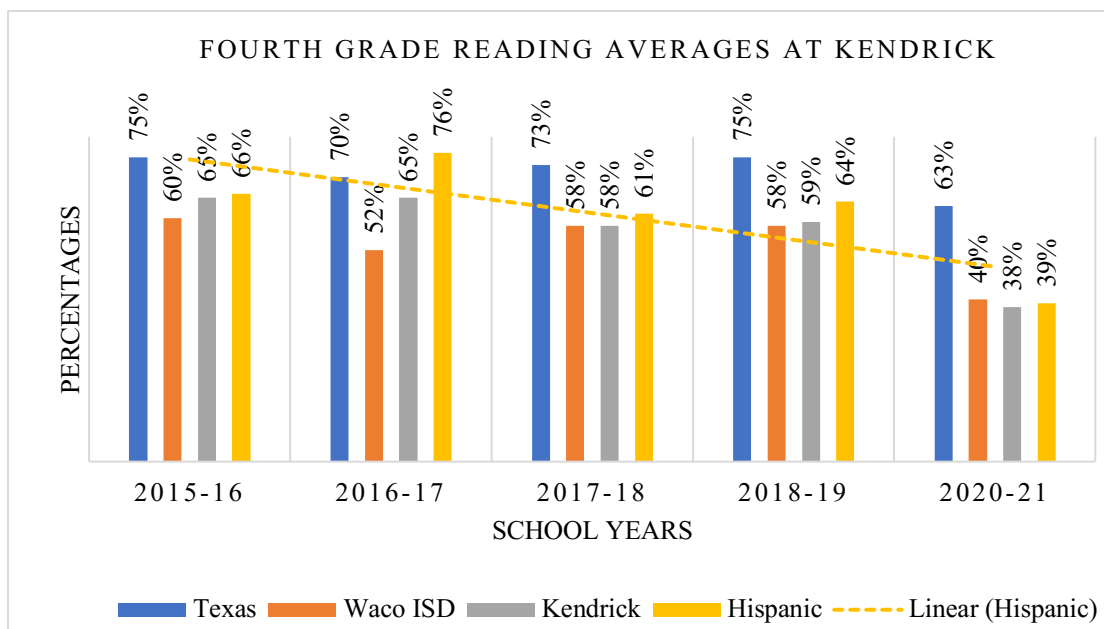


Figure 12: Approaches Grade Level or Above for Fourth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

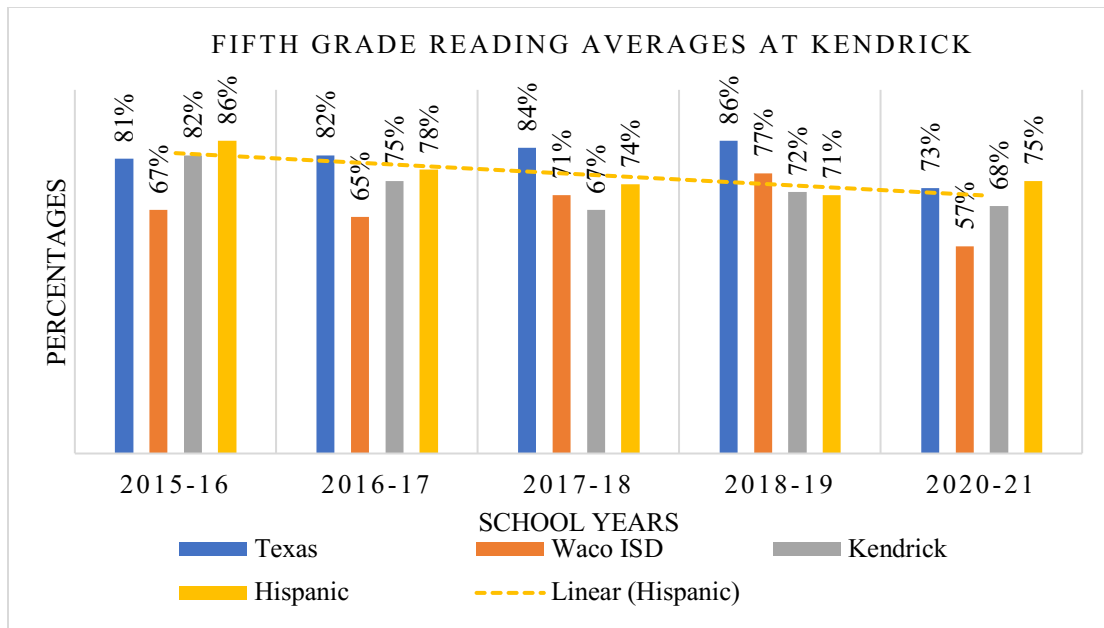


Figure 13: Approaches Grade Level or Above for Fifth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

All three figures show that the general trends for third through fifth-grade STAAR reading scores for Hispanic students in Kendrick ES were mainly greater than Waco ISD averages. However, figures 11 and 13 show a gradual decline, whereas figure 12 shows a more considerable decline for Hispanic students. Although statistical significance was not tested for these STAAR reading scores, the effects of universal free meals during the 2018-19 school year and beyond seem minimal to noneffective. In addition, the impact of the COVID-19 pandemic makes it difficult to analyze either positive or negative effects of the universal free meals program during the 2019-20 and 2020-21 school years. However, using CEP consistently at Kendrick ES could have long-term effects on student academic success.

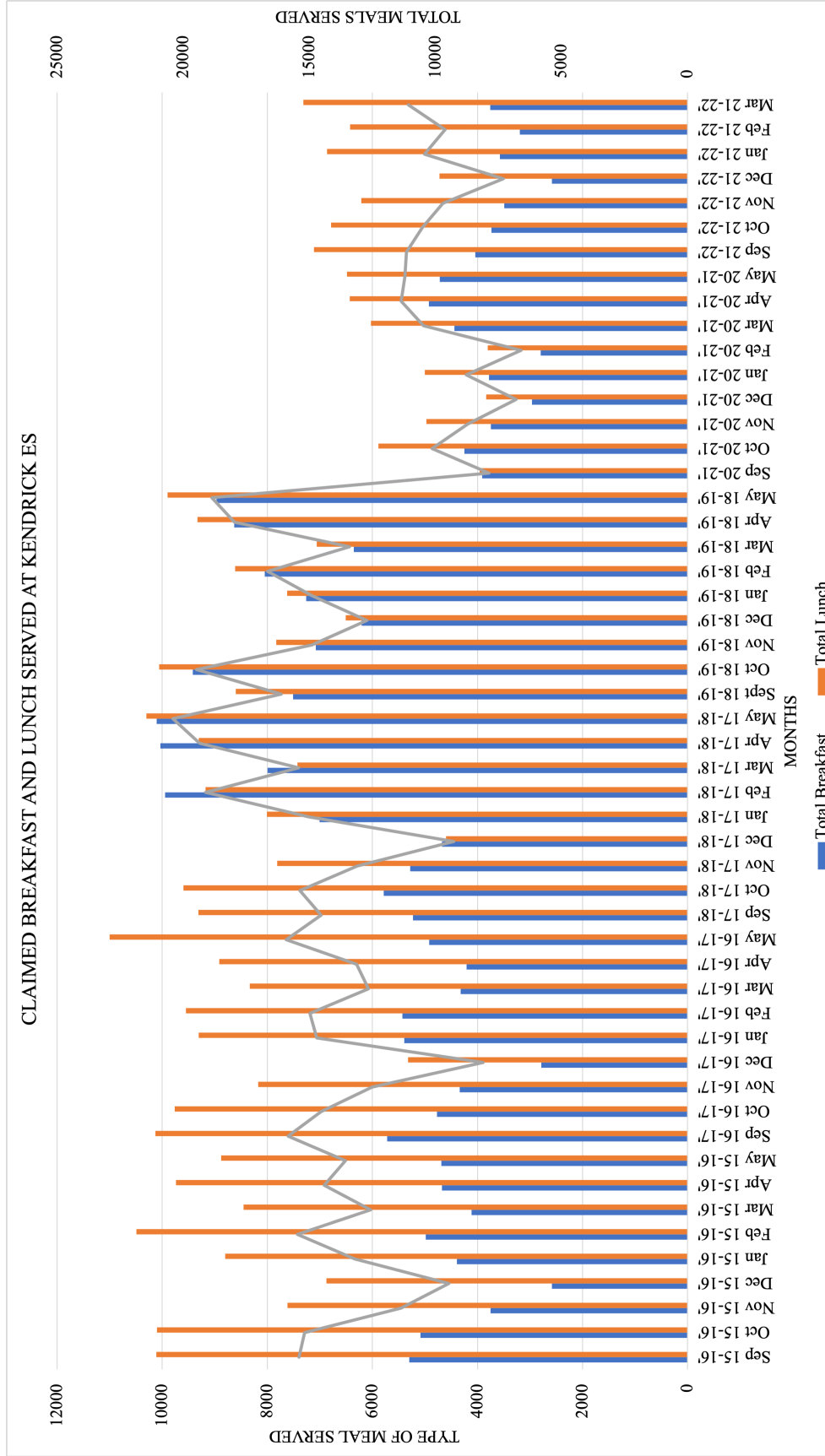


Figure 14: Total number of breakfast and lunch served at Kendrick ES for claim month. Meals served from September of 2015-16 school year to February of 2021-22 school year are provided in this chart. The 2019-20 school year participation rates are excluded due to COVID-19. Adapted from *School Nutrition Program - Meal Reimbursement Information - Program Year 2016-17* | *Open Data Portal*, Texas Department of Agriculture, 2020, June 20, Copyright 2022 State of Texas.

Provident Heights Elementary School

Provident Heights Elementary School (ES) is a Title 1 school with 363 students during the 2020-21 school year (Texas Education Agency, 2022). The school has a large and growing Hispanic student demographic. From 2015-16 to the 2020-21 school year, about 70.58% of the student demographic are Hispanic (Texas Education Agency, 2022). During the 2018-19 school year, which was before the COVID-19 pandemic, only 83.1% of the student group at Provident Heights ES were economically disadvantaged (Texas Education Agency, 2019a). This rate was 6.1% and 22.5% greater than Waco ISD and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2019a). In contrast, during the 2020-21 school year, when the COVID-19 pandemic occurred, 97.0% of the student groups were economically disadvantaged at Provident Heights ES (Texas Education Agency, 2022). As a result, this is 5.7% and 36.7% greater than the districts and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2022).

Texas declared a state of disaster for the 2019-20 through 2021-22 school years because of the COVID-19 pandemic. So, the school's yearly accountability rating was not administered, which assesses how well the school performs. However, a year before the pandemic, Provident Heights ES earned an accountability rating of a B (80-89%) during the 2018-19 school year. This rating means that the TEA recognizes the school for its performance of serving many of its students well. In addition, the score reflects the school's ability to encourage high academic achievements and appropriate academic growth for most of its students (Texas Education Agency, 2019a). As a result, Provident Heights has found a solution that maximizes its students' academic success.

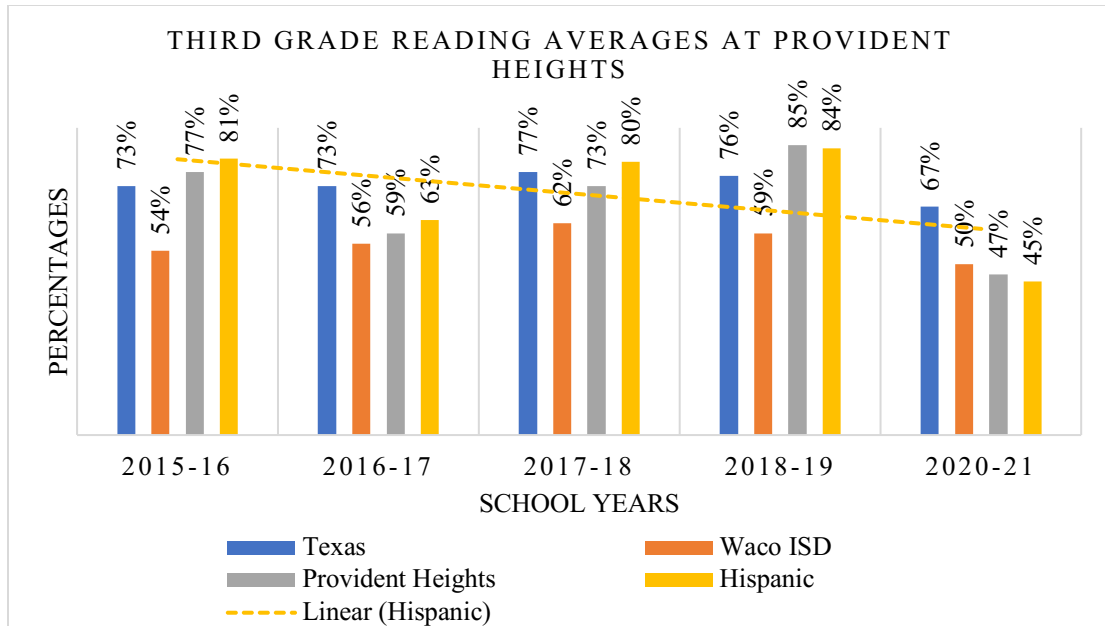


Figure 15: Approaches Grade Level or Above for Third Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

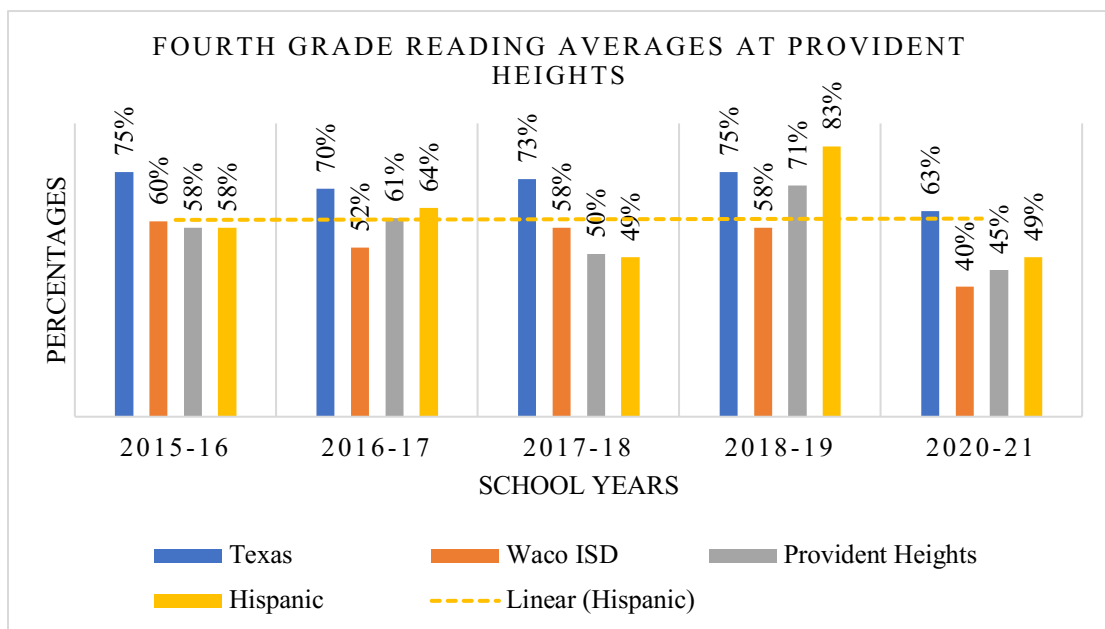


Figure 16: Approaches Grade Level or Above for Fourth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

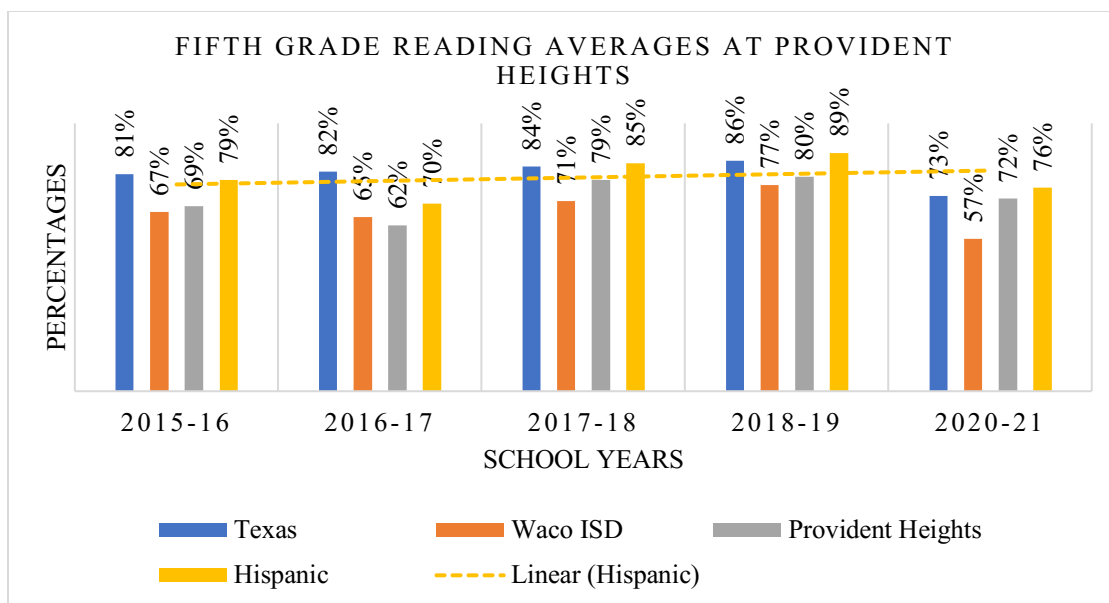


Figure 17: Approaches Grade Level or Above for Fifth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

In addition, the general trends of STAAR reading scores for third through fifth-grade students have gradually improved, especially for Hispanic students. Fourth and Fifth-grade students performed better than the average reading scores from Waco ISD, predominantly Hispanic fifth-grade students who performed better than the average fifth readings scores in Texas. STAAR reading scores were highest for all three grade levels during the 2018-19 school year, which was the first year that the Waco ISD gave free meals. Assuming the implementation of free meals allowed students to perform well during the 2018-19 school year is not a reasonable conclusion. Nevertheless, using CEP consistently could have long-term effects on student academic success at Provident Heights ES. It would be preferred to have multiple readings scores over several years. However, the COVID-19 pandemic made it difficult for the author to suggest those conclusions. In addition, STAAR reading scores decreased, and any signs of progression from previous years were abysmal.

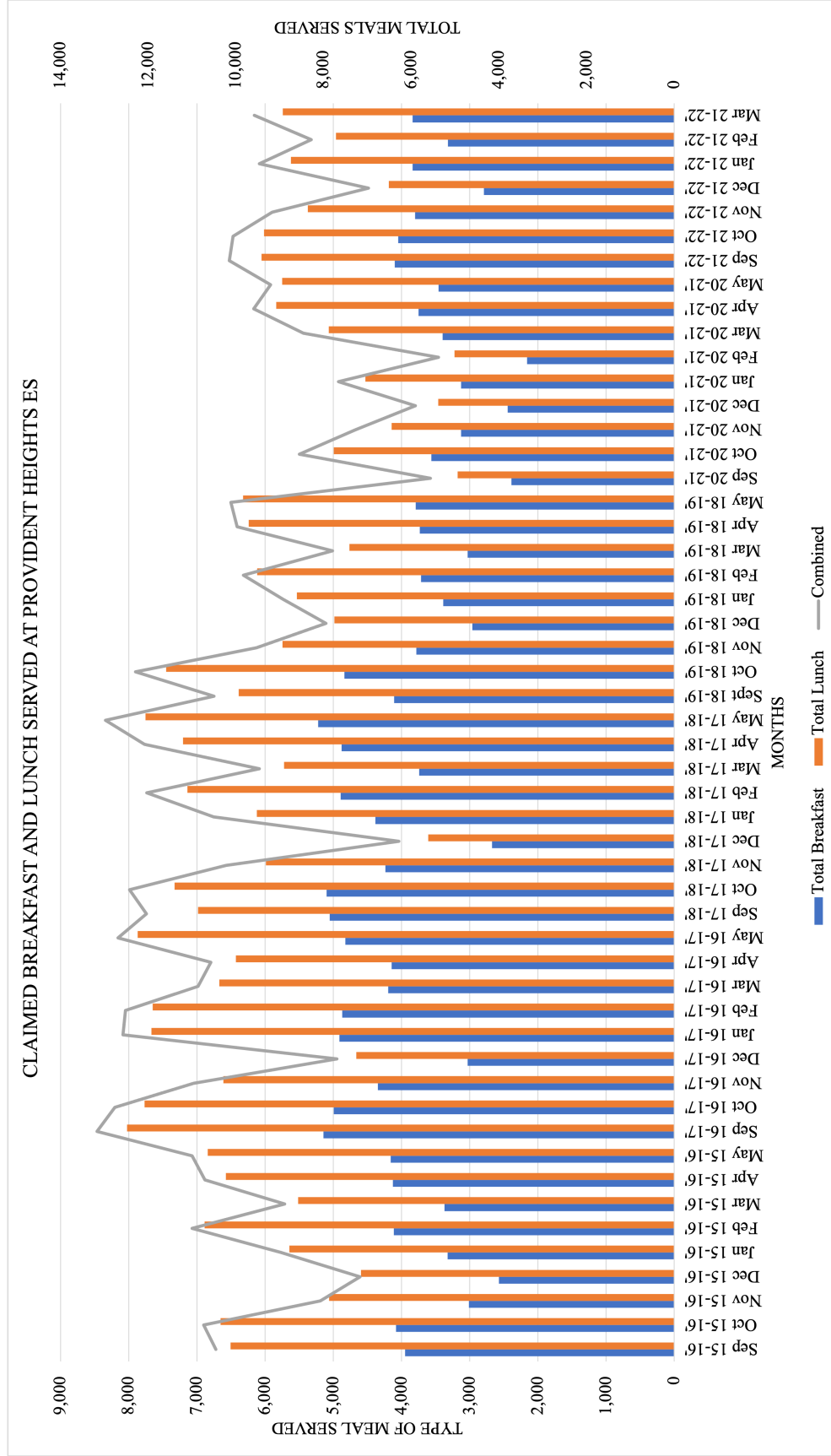


Figure 18: Total number of breakfast and lunch served at Provident Heights ES for claim month. Meals served from September of 2015-16 school year to February of 2021-22 school year are provided in this chart. The 2019-20 school year participation rates are excluded due to COVID-19. Adapted from *School Nutrition Program - Meal Reimbursement Information - Program Year 2017-18* | Open Data Portal, Texas Department of Agriculture, 2020, June 20, Copyright 2022 State of Texas.

Dean Highland Elementary School

Dean Highland Elementary School (ES) is a Title 1 school with 634 students during the 2020-21 school year (Texas Education Agency, 2022). Dean Highland ES has a similar Hispanic student demographic as the Waco ISD, but has marginally grown over the past six years. The Hispanic demographic at Dean Highland averaged 61.72% from 2015-16 to the 2020-21 school year (Texas Education Agency, 2022). During the 2018-19 school year, which was before the COVID-19 pandemic, 88.6% of the student group at Dean Highland were economically disadvantaged (Texas Education Agency, 2019a). This rate was 11.6% and 28% greater than the district and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2019a). However, during the 2020-21 school year, which was during the COVID-19 pandemic, 93.3% of the student group at Dean Highland ES was economically disadvantaged (Texas Education Agency, 2022). This rate is 2% and 33% greater than the district and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2022).

Texas declared a state of disaster for the 2019-20 through 2021-22 school years because of the COVID-19 pandemic. So, the school's yearly accountability rating was not administered. However, a year before the pandemic, Dean Highland received an F (below 60) (Texas Education Agency, 2019a). The school was rated this low for its unacceptable performance to serve only a few students well. Most of their students need more academic support for future academic success. These results are not surprising as Dean Highland ES struggled to reach a 60% accountability rating in the previous years and has shown clear signs of regression (Texas Education Agency, 2016).

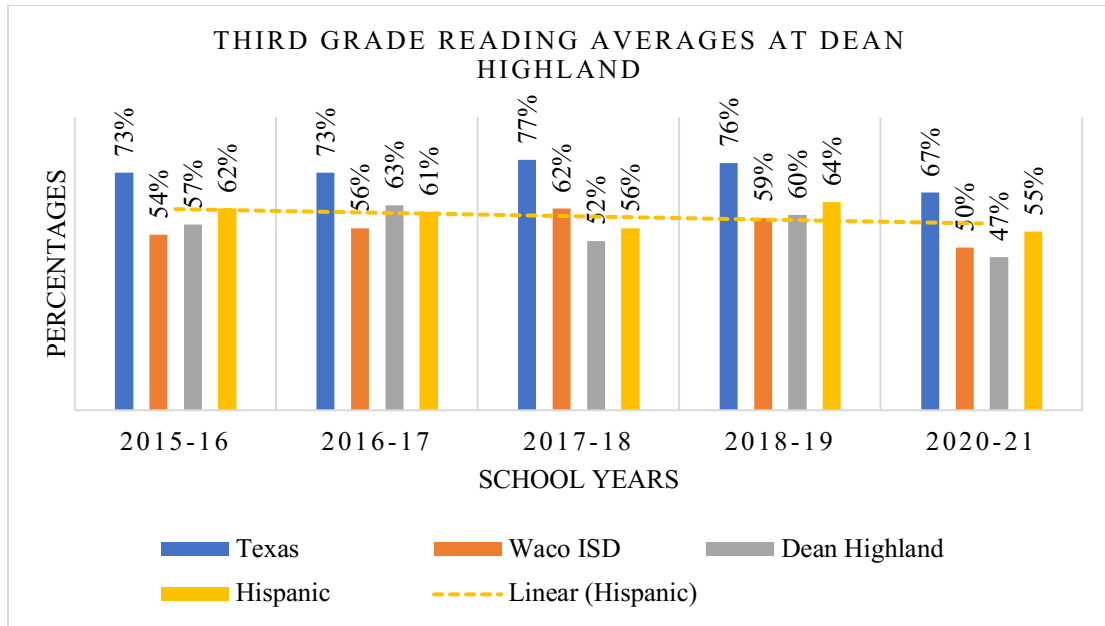


Figure 19: Approaches Grade Level or Above for Third Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

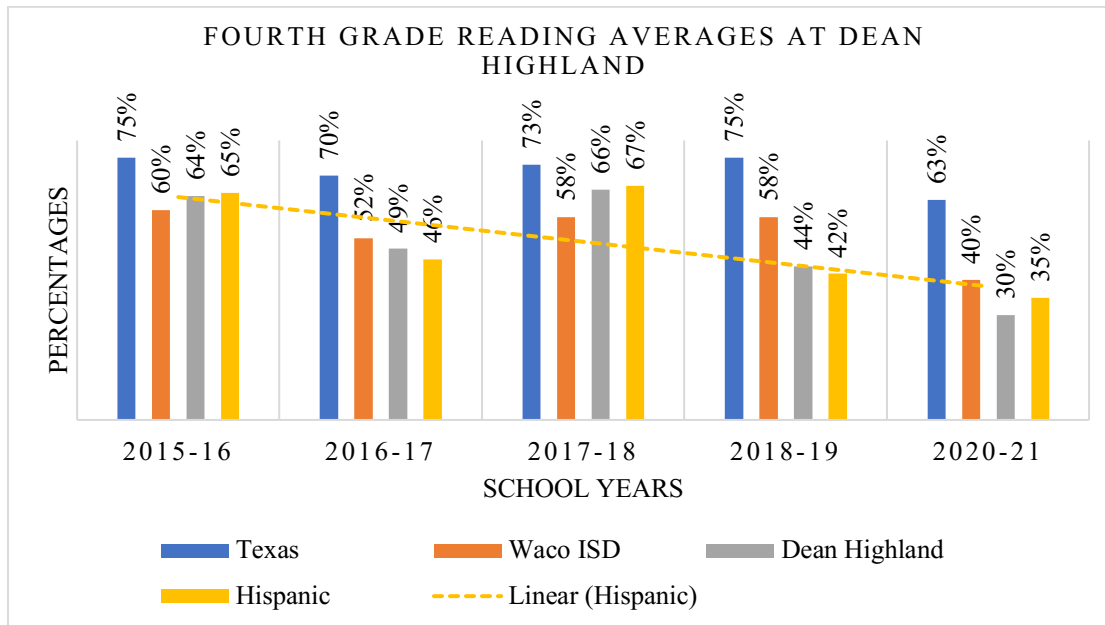


Figure 20: Approaches Grade Level or Above for Fourth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

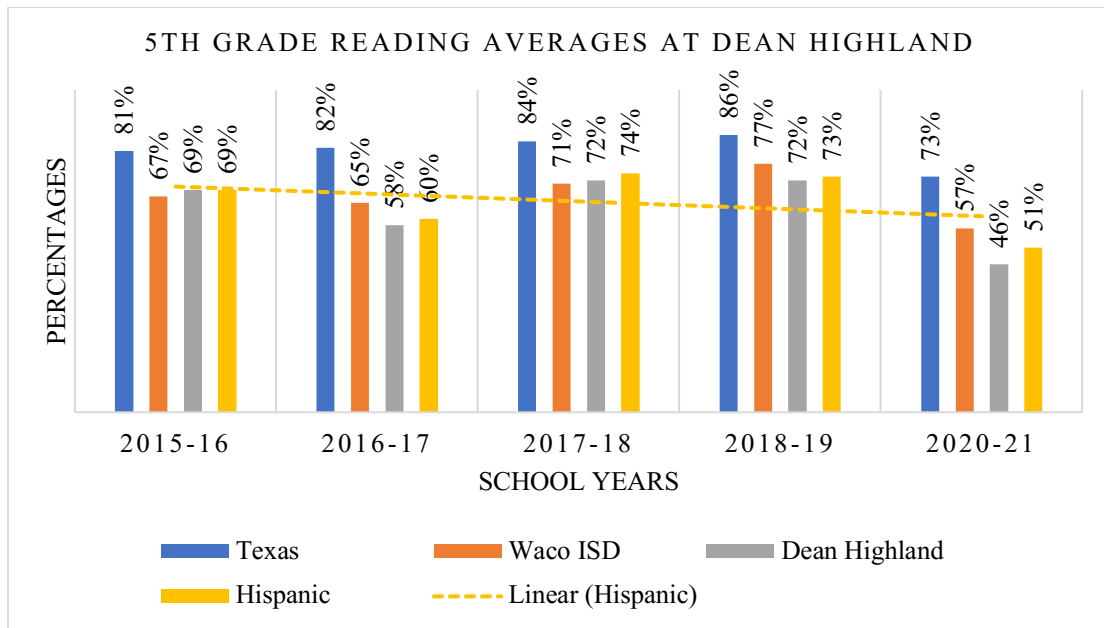


Figure 21: Approaches Grade Level or Above for Fifth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

Figures 19 and 21 show similar trends between Hispanic students and Waco ISD. Unfortunately, neither matched the reading averages of Texas. In addition, Hispanic students generally struggled and did worse than the Waco ISD during the pandemic, except for third-grade students. However, finding a correlation between the implementation of universal free meals to reading score averages is challenging. It is unreasonable to suggest that universal free meals potentially helped increase reading scores at Dean Highland ES. The school was struggling a lot before the pandemic, so suggesting the further implementation of free meals does not seem to be the most robust solution for the school's current state. However, using CEP consistently could have long-term effects on student academic success at Dean Highland ES and should be monitored for the following years.

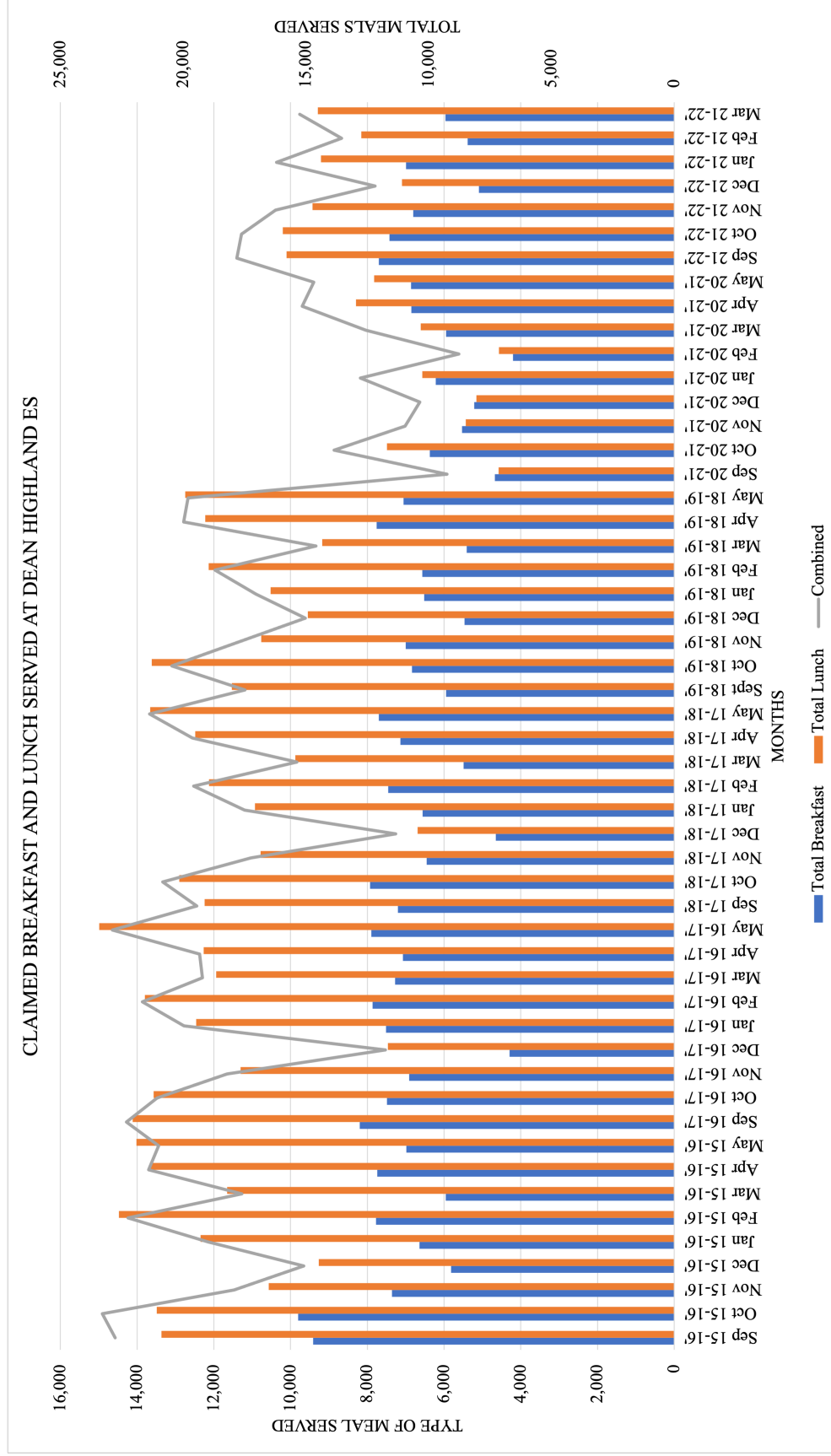


Figure 22: Total number of breakfast and lunch served at Dean Highland ES for claim month. Meals served from September of 2015-16 school year to February of 2021-22 school year are provided in this chart. The 2019-20 school year participation rates are excluded due to COVID-19. Adapted from *School Nutrition Program - Meal Reimbursement Information - Program Year 2018-19* | *Open Data Portal*, Texas Department of Agriculture, 2020, September 10, Copyright 2022 State of Texas.

Alta Vista Elementary School

Alta Vista Elementary School (ES) is a Title 1 school with 467 students during the 2020-21 school year (Texas Education Agency, 2022). Alta Vista ES has a predominately large Hispanic student demographic that has continued to increase in the past six years. The Hispanic demographic at Alta Vista average 65.08% from 2015-16 to 2020-21 school year (Texas Education Agency, 2022). The African American demographic, the second-largest, averaged 22.55% during the same period (Texas Education Agency, 2022). During the 2018-19 school year, which was before the COVID-19 pandemic, 88.8% of the student group at Alta Vista ES were economically disadvantaged (Texas Education Agency, 2019a). This rate was 11.8% and 28.2% greater than the district and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2019a). However, during the COVID-19 pandemic, 90.1% of the student group at Alta Vista ES were economically disadvantaged (Texas Education Agency, 2022). This rate is 1.2% less than but 29.8% greater than the districts and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2022).

Texas declared a state of disaster for the 2019-20 through 2021-22 school years because of the COVID-19 pandemic. So, the school's yearly accountability rating was not administered, which assesses how well the school performs. However, a year before the pandemic, Alta Vista earned a C (70-79%) (Texas Education Agency, 2019a). The school received an average rating for its performance of serving many of its students well, but there are areas for improvement to continue to provide student success. Alta Vista ES has grown and has clearly shown improvement over the year.

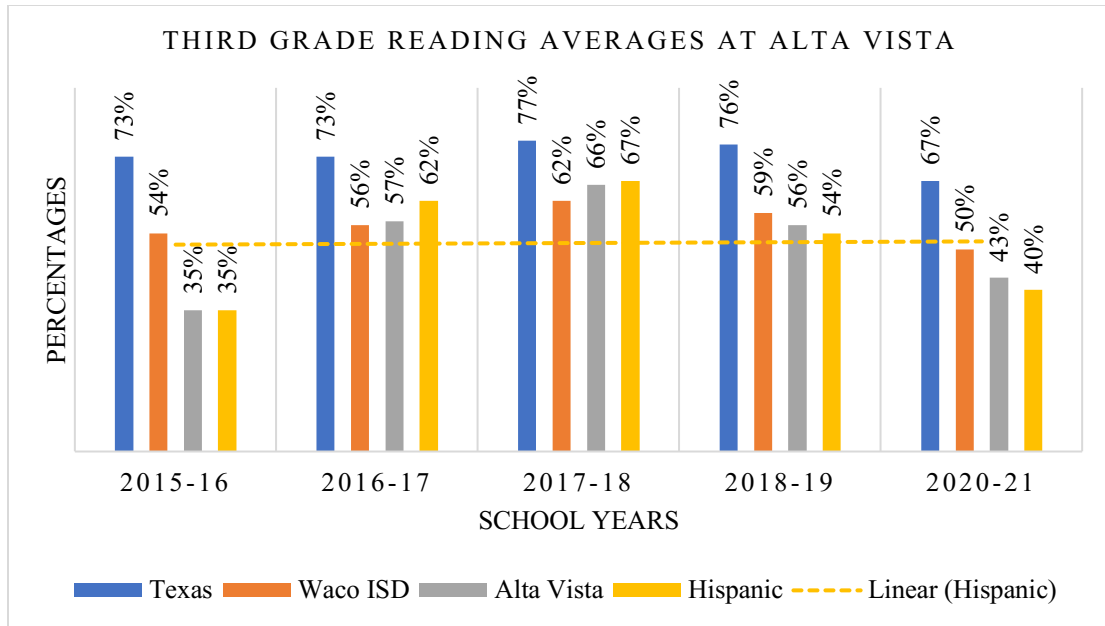


Figure 23: Approaches Grade Level or Above for Third Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

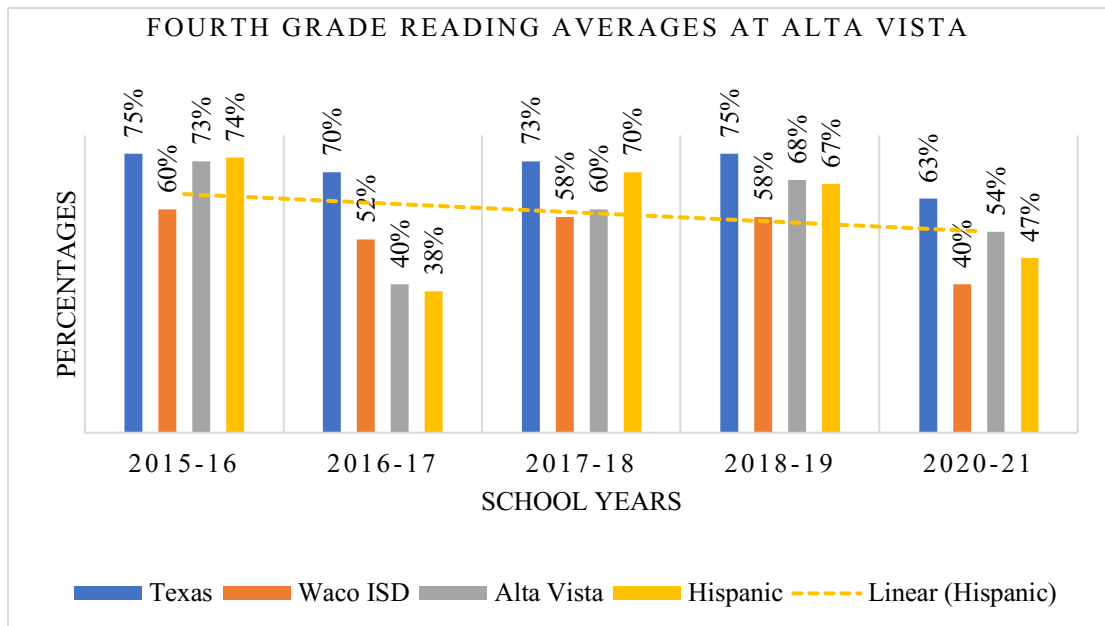


Figure 24: Approaches Grade Level or Above for Fourth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

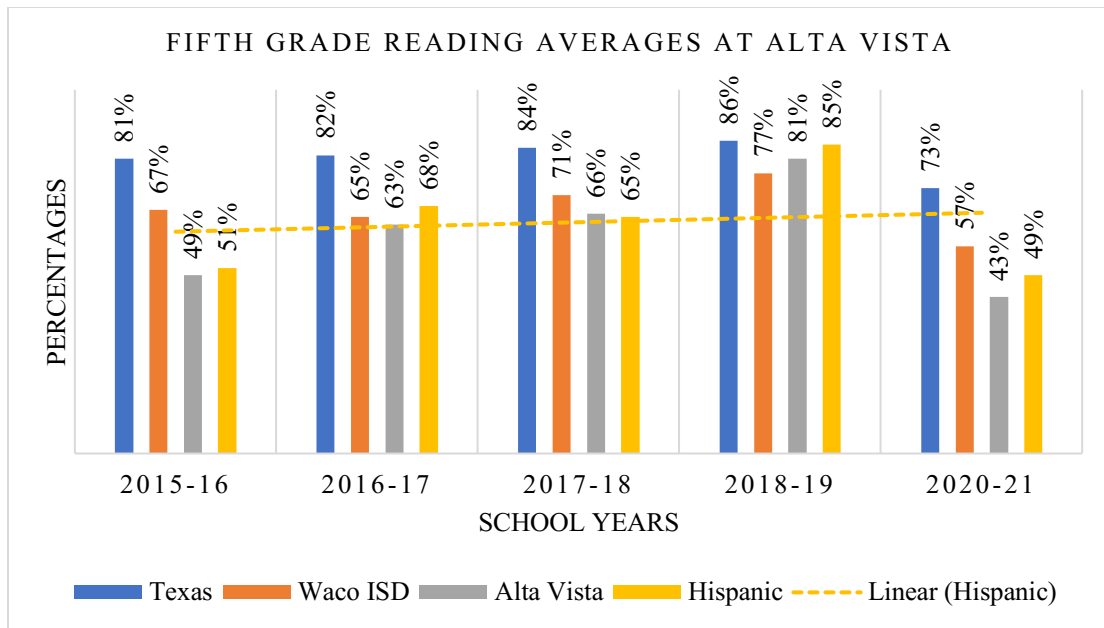


Figure 25: Approaches Grade Level or Above for Fifth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

All three figures show a generally positive trend until the 2020-21 school year (COVID-19 pandemic). Figures 24 and 25 show that fourth and fifth-grade Hispanic students in Alta Vista, for most of the time, performed better than Waco ISD, including during the year that the district gave free meals to all campuses. It would have been ideal to have more reading scores past the 2018-19 school year to see whether these results were sustained. As a result, it is unreasonable to suggest that the implementation of free meals starting the 2018-19 school year could potentially help increase reading scores at Alta Vista ES. The fluctuation of STAAR reading scores at all grade levels these five school years indicates obstacles other than what implementing free meals could offer. The pandemic impacted STAAR reading scores at all grade levels and halted the school's progression from previous years. Nevertheless, using CEP consistently could have long-term effects on student academic success at Alta Vista ES in the next decade.

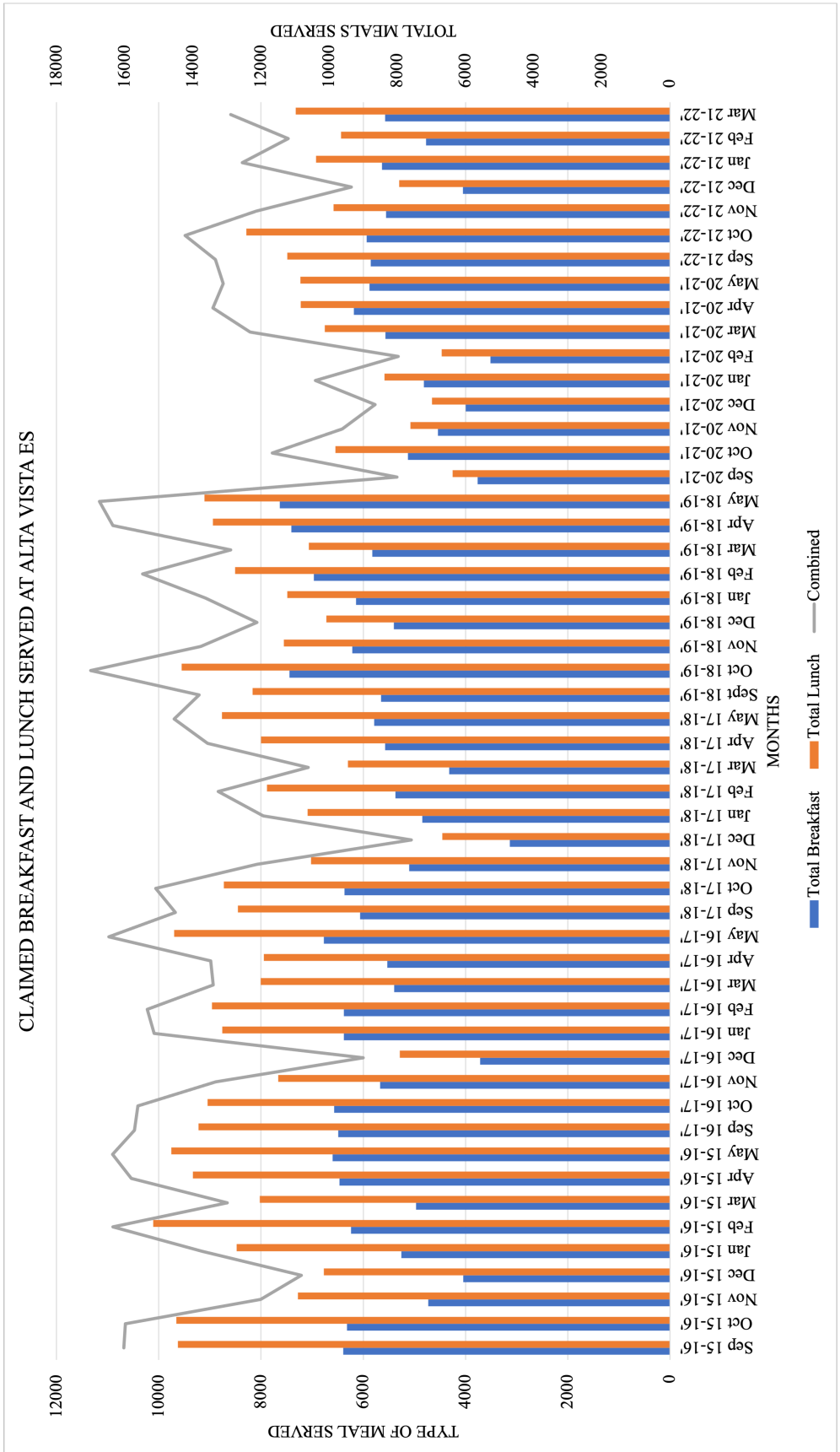


Figure 26: Total number of breakfast and lunch served at Alta Vista ES for claim month. Meals served from September of 2015-16 school year to February of 2021-22 school year are provided in this chart. The 2019-20 school year participation rates are excluded due to COVID-19. Adapted from *School Nutrition Program - Meal Reimbursement Information - Program Year 2020-21* | *Open Data Portal*, Texas Department of Agriculture, 2021, October 15, Copyright 2022 State of Texas.

Cedar Ridge Elementary School

Cedar Ridge Elementary School (ES) is a Title 1 school with 521 students during the 2020-21 school year (Texas Education Agency, 2022). Cedar Ridge ES has had a predominant stable Hispanic student demographic within the past six years. The Hispanic demographic at Cedar Ridge ES averages 62.38% from 2015-16 to 2020-21 school year (Texas Education Agency, 2022). During the 2018-19 school year, before the COVID-19 pandemic, 93.3% of the student group at Cedar Ridge ES were economically disadvantaged. This rate was 16.3% and 32.7% greater than the district and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2019). However, during the COVID-19 pandemic, 95.6% of the student group at Cedar Ridge ES were economically disadvantaged. This rate is 4.3% and 35.3% greater than the district and Texas's percentages of economically disadvantaged students, respectively (Texas Education Agency, 2022).

Texas declared a state of disaster for the 2019-20 through 2021-22 school years because of the COVID-19 pandemic. So, the school's yearly accountability rating was not administered, which assesses how well the school performs. However, a year before the pandemic, Cedar Ridge ES earned a C (70-79%) (Texas Education Agency, 2022). The school received an average rating and performed great by serving many of its students well, but there are still areas of improvement that further maximize their students' academic success. Cedar Ridge ES has remained consistently average in the past few years; however, they were able to grow by performing outstandingly in their science and reading categories (Texas Education Agency, 2022).

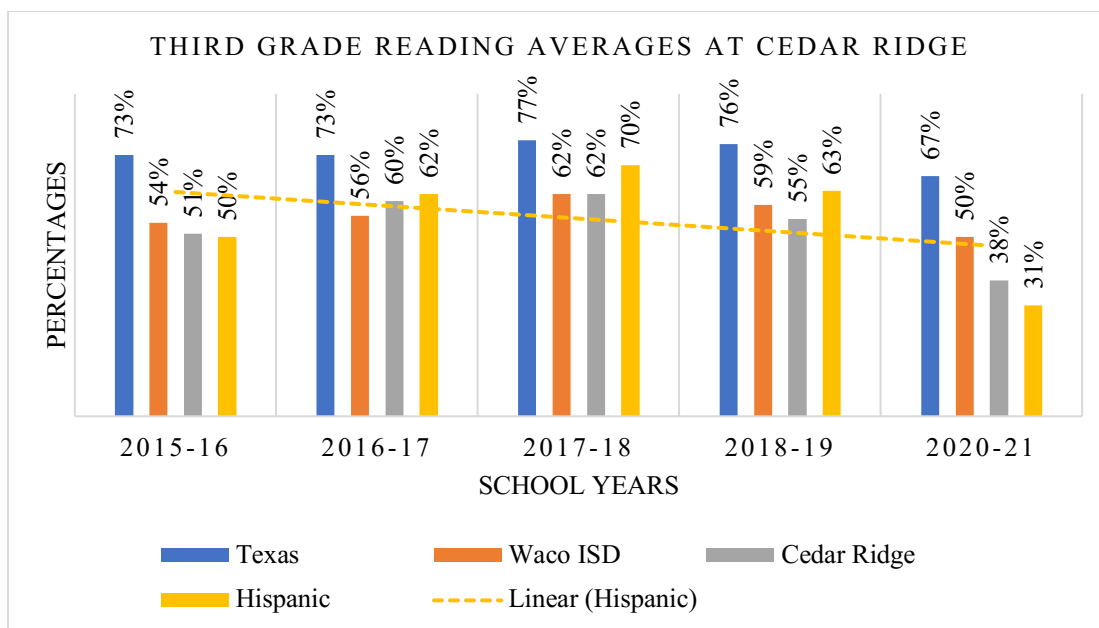


Figure 27: Approaches Grade Level or Above for Third Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

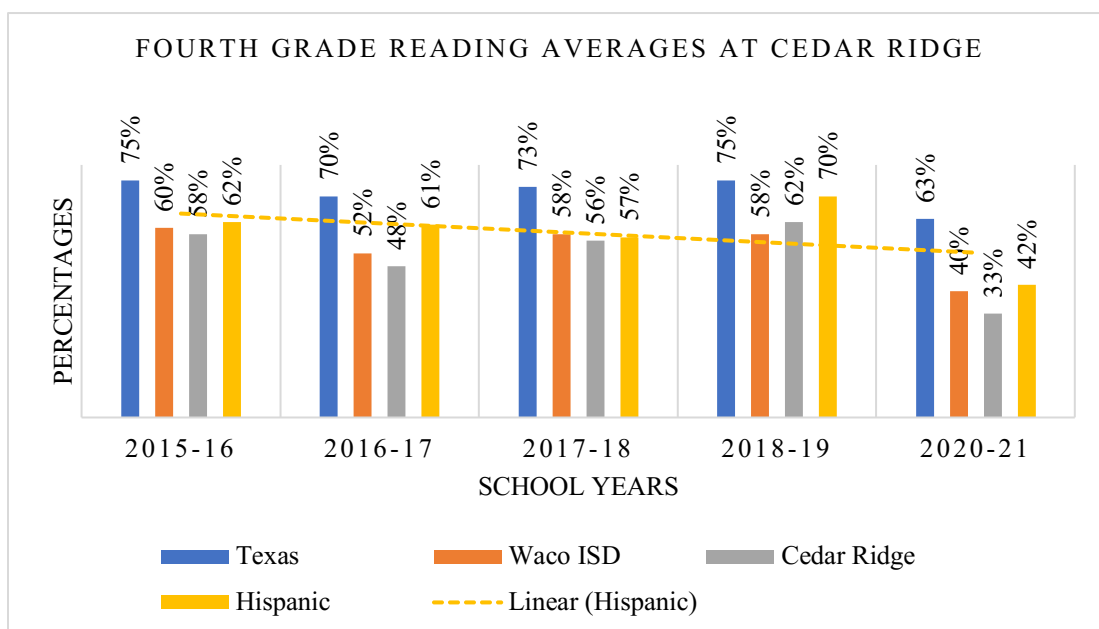


Figure 28: Approaches Grade Level or Above for Fourth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

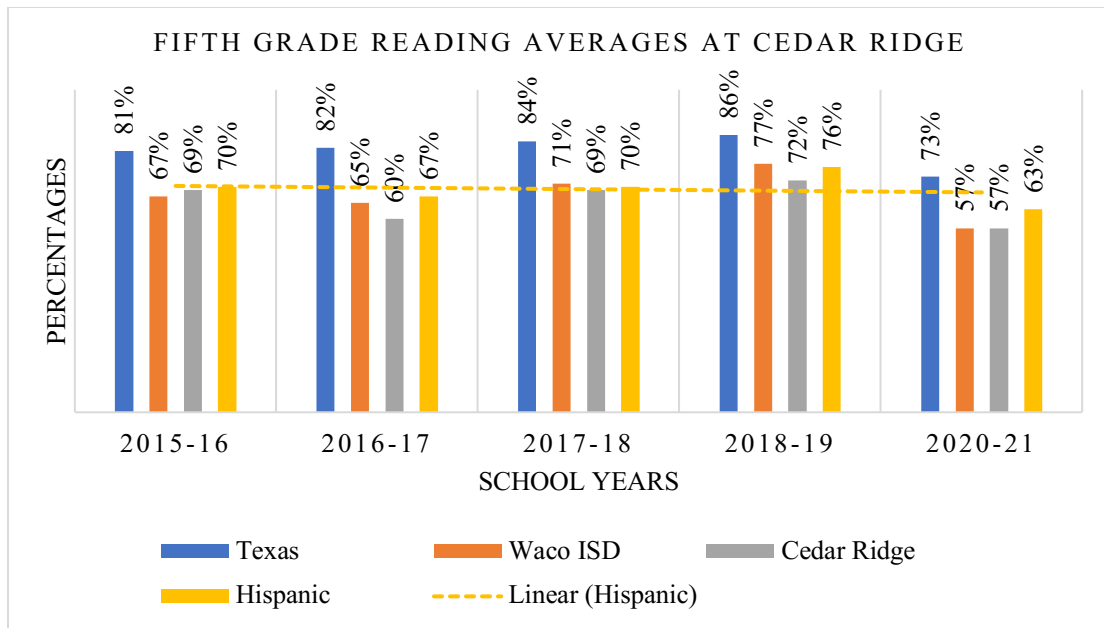


Figure 29: Approaches Grade Level or Above for Fifth Grade Reading. Adapted from *Texas Academic Performance Reports*, Texas Education Agency, 2021, December 6, Copyright 2007 – 2022 Texas Education Agency.

Figures 28 and 29 show an incremental increase in STAAR reading scores for fourth and fifth-grade Hispanic students before the COVID-19 pandemic and had the best STAAR reading scores during the 2018-19 school year. In contrast, third-grade STAAR reading scores would initially increase, then decrease during the 2018-19 school year. This is the same year that the district provided the universal free meals program to all campuses. Even though fourth and fifth-grade Hispanic students performed well and were either at or slightly above Waco ISD’s reading averages, they still failed to meet the reading averages of Texas. As a result, the intervention of free meals may not be the best option for Cedar Ridge to elevate all of their student’s reading success in the future. However, using CEP consistently could have long-term effects on student academic success at Cedar Ridge ES in the next decade and should be closely monitored.

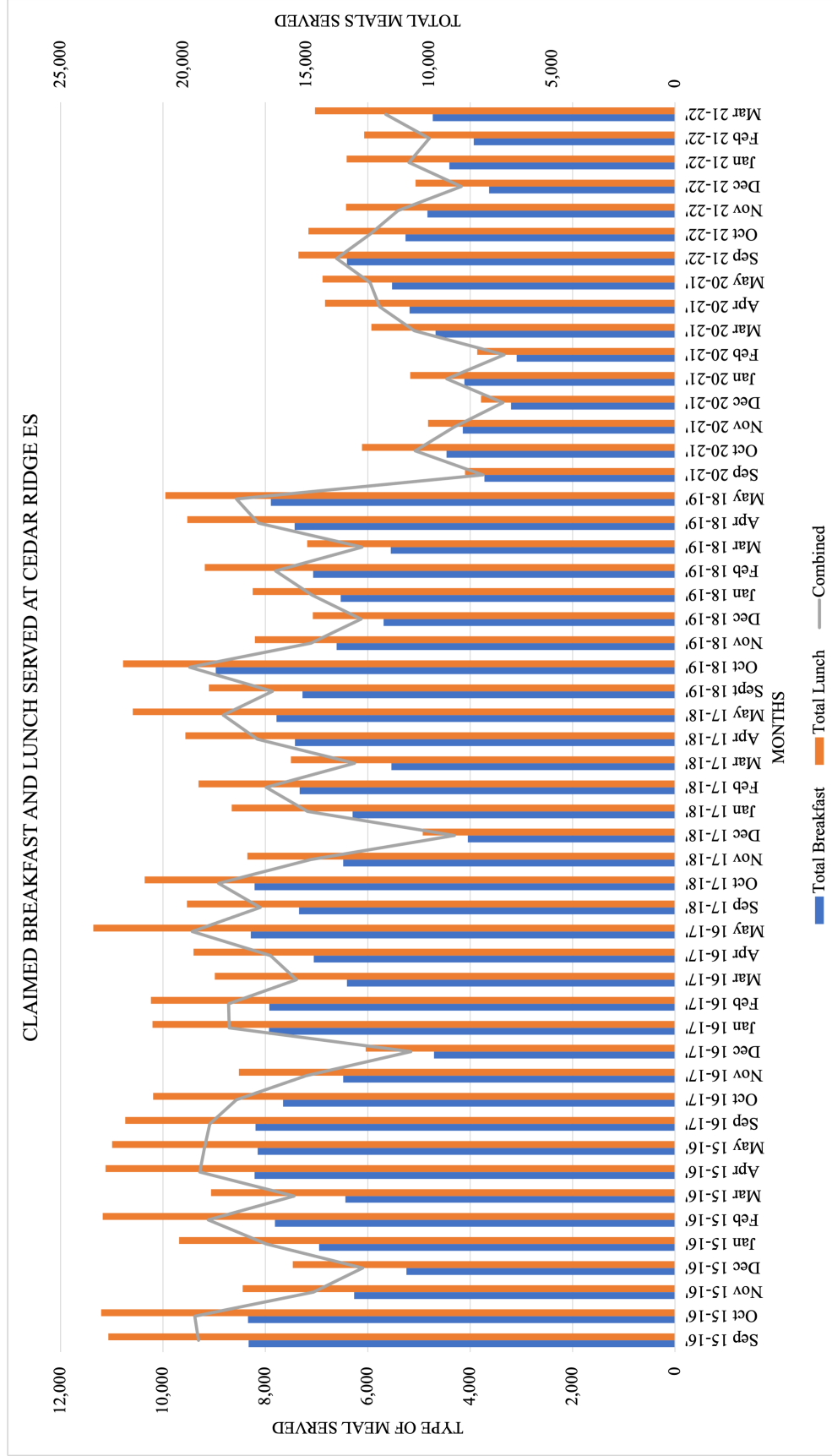


Figure 30: Total number of breakfast and lunch served at Cedar Ridge ES for claim month. Meals served from September of 2015-16 school year to February of 2021-22 school year are provided in this chart. The 2019-20 school year participation rates are excluded due to COVID-19. Adapted from *School Nutrition Program - Meal Reimbursement Information - Program Year 2021-22* | Open Data Portal, Texas Department of Agriculture, 2022, March 31, Copyright 2022 State of Texas.

Case Analyses

The author conducted two interviews to give a deeper analysis of how the Community Eligibility Provision (CEP) has affected the education experience for schools with a majority of Hispanic students. For this thesis, the author interviewed Principal Lindsey Helton from Alta Vista Elementary School and Principal Isabel Lozano from Kendrick Elementary School. Both schools are within the top six Waco ISD elementary schools with a large Hispanic population. The author wants to address and understand how the CEP program has changed the school's structure and become aware of any critiques and improvements. The interviews are semi-structured; this includes a strict series of questions created before the interviews for the potential candidates. However, the questions facilitate open-ended responses and allow the interviewee to express their thoughts on the CEP.

Alta Vista Elementary School

The principal at Alta Vista decided to work for the Waco ISD to give students in Waco a strong opportunity to pursue their goals, whether it be in agriculture, an artist, an astronaut, or teacher. Waco continues to have generation upon generation of men and women who are not able to escape the education traps they are in because they drop out of high school, cannot read, or cannot get into a community college because they must take so many remedial classes to the point where it gets too expensive to finish their degree. Waco needs to emphasize the opportunity for their children to pursue any goal or ambition, and it all starts with creating a strong foundation in elementary school. Early education is pivotal for the onset success of students and their academic journey.

The principal at Alta Vista emphasizes the need for a tier-one education system at Alta Vista elementary school. The need to have good quality teachers to effectively teach students to be at grade level or make a year's worth of progress consistently in math and reading. Loaded jargon fills the education system and can be daunting and difficult for parents to understand. However, if students can understand those goals and explain them to their parents, it becomes much more impactful for their academic journey. Students must have a sense of ownership and responsibility for their education. In addition, parents should have equitable access to the school to understand how the school system works and its relationship to their children's success to the school's general progress.

The principal strongly advocates for all students' equity and believes it substantially impacts the Waco community. She believes that it is important to expose all the students in Waco to career opportunities and give each student a legitimate chance to pursue those goals.

Case Analysis of the Principal at Alta Vista

The principal at Alta Vista is a Baylor Alumni who graduated with a degree in Business focusing on international business and management studies. She received her master's degree at Charleston University in education and administration. Soon after, she moved to Alta Vista Elementary school and worked as the Assistant Principal for four and half years. Later she got promoted to principal and has been for the last three and a half years. Her fourteen years in education, all in Waco ISD, have allowed her to be much more impactful to the community, primarily through her partnerships with Baylor University.

The principal at Alta Vista specifically chose Waco ISD because she knew that is where the greatest need is in the Waco Community. She firmly believed that every child at Waco deserves the opportunity to pursue a career, and it starts with building a solid foundation in elementary schools.

Alta Vista Elementary School averages about five hundred students each year. The campus is a pre-K through the fifth-grade program, consisting of two through eleven-year-old students. Most grade levels consist of about 80 students. The campus is closely around 65% Hispanic students, about 25% African Americans, approximately 7% White, and an interesting mix of two or more races. The diverse ethnicity groups drive Helton to emphasize equal access to information for all of the student's families. The school writes both Spanish and English transcripts for all forms of communication. In addition, there is always an administrator who can speak Spanish to assist in oral communication for students and their families continually. She is always seeking more bilingual staff members because it provides an extra layer of assistants to the students at Alta Vista. She is currently pushing for more bilingual classes; currently, she has bilingual classes from pre-k through first grade. It is challenging to find bilingual staff members.

In terms of size, the biggest challenge is to have all five hundred students fed breakfast by 7:45 in the morning every school day. The school opens at 7:15 am, so thirty minutes are allotted for students to be fed breakfast and get to class. The next obstacle is feeding students who come in late in the morning. The district recently changed when school starts from 8:00 am to 7:45 am, and many students and families struggle to arrive on time. Helton encourages having those students grab their breakfast and eat their meals in class if that were the case. However, it hinders teachers and their assessments for the

class. Lunch is not as challenging because a two-hour time is given for the school staff to prepare and regulate meals. Lunches are split into intervals for each grade level, starting at 10:45 am to 12:45 pm from pre-K to fifth grade.

The biggest challenge this year the school is facing, especially schools across the United States, is getting their students back on grade level for the year. The COVID-19 pandemic has negatively impacted students' progression in reading, especially in the lower grades. The principal emphasizes how important it is to have students reading on grade level by the beginning of third grade because it can adversely affect students and their future academic success. Third-grade students now were in first grade before the COVID-19 pandemic, and it has been a challenge for teachers to push their students to achieve reading at grade level. The principal at Alta Vista hopes to achieve reading at grade level by the end of third grade as it becomes more manageable for both students and teachers. It is significantly worse for current High schools because administrators will be experiencing students with two years of learning gaps for the next twelve years. It is tough to make more than a years' work of progression within a year for students, and it is now challenging to make up a year's work of progress in one year because students and teachers frequently miss school because of COVID-19 contact tracing. The goal is to figure out how to accelerate these students and their learning gaps, which Texas struggles with historically.

The Child Nutrition Service team did an incredible job facilitating and delivering meals for students attending Alta Vista during the COVID-19 pandemic. They went above and beyond by delivering meals to students and their families in their neighborhoods when the school went virtual and continued to do so for students and

families who opted to continue virtual learning. The CNS team has not provided the same service for the 2021-22 school year, mainly because most students have decided to come to in-person learning this school year. The principal has used her partnerships with the community to link those families who need further support, such as rent, food, or clothing. The CNS teams at the district level and on-campus are high-functioning teams that continue to do a great job at prioritizing students and their families. The principal describes them as Cafeteria Managers because they understand how important it is to provide meals for students, especially those facing food insecurity.

In the past, schools would have parents fill out forms regarding their income so that the school could price their meals accordingly to the average income. In most cases, the school averaged around 95% of students who received free meals. Recently, the Waco ISD received a grant from the federal government to provide free meals to all students, regardless of income. Implementing universal free meals is a great push and levels the field because it reduces students' social stigma of receiving free meals. In addition, it allows students the option to receive a second breakfast if students receive breakfast from home. The option allows students to feel as if their initial meal was not fulfilling enough or if they had their initial meal a couple of hours before school started because their parents must work early. The push is to make sure students do not feel hungry during the school day because it is tough to have students concentrate if their stomachs are growling and they cannot focus during classroom assessments.

It is tough to assess whether student academics have benefited from free meals, especially since COVID-19 was a huge factor during the initial start of the novel program for the district. The hope is to have the Waco ISD continue to provide free meals in the

coming future because it does open up the option for students to receive meals regardless of their parent's financial status. Food is heavily emphasized at Alta Vista Elementary School because administrators understand the importance of receiving breakfast and lunch for students, especially the young.

The correlation that the principal at Alta Vista and her colleagues have noticed during the implementation of the free meals is on student behavior. Generally, there is a hungry student, but he/she may or may not express what he/she wants to help satisfy their need. It is always necessary to receive more food because they did not receive the appropriate amount of food from home, did not have time to grab breakfast in the morning, or could not afford a meal. As a result, it hinders the students' academic performance and actively engages in their school assessments. Alta Vista's student behavior instances have decreased significantly in the past four years. In 2015, when the current principal at Alta Vista first joined seven years ago, there was about 120 in-school suspension (ISS). As of now, the school was trending downward and projected to have 45-50 ISS. Yes, several other factors could have helped decrease student behavioral instances. However, she and her colleagues learned from extensive communication with their students that their students are hungry when they misbehave most of the time.

The CNS team organized to cook, package, and distribute the food when schools shut down during COVID-19. When schools opened in the fall of 2021, 60% of students were in person, and 40% decided to do remote learning. Every six weeks, schools send student report cards and the option to be in remote or in-person learning to parents throughout the year. By the end of the school year, 90% of the students returned to in-person learning. Alta Vista split up school breakfast and lunch meal periods. Pre-K

through second grade had their breakfast and lunch in their classrooms, whereas third through fifth-grade students had both meals in the cafeteria. The new distinctions helped regulate the COVID-19 social distancing mandate and to help minimize the spread of the virus. Remote families received meals from the CNS team twice a week. The families struggled with the utilization of the program, especially transportation and timing of the meals. The 2021-22 school year has fully resumed in-person learning at Alta Vista Elementary and other Waco ISD schools. The Texas Education Agency (TEA) allowed for remote learning; however, the requirements for remote learning were extensive, so the Waco ISD decided to go 100% in-person learning for the school year. COVID-19 has not affected school decisions on implementing breakfast and lunch during the school year. The challenge is that students who have been in quarantine or have COVID-19 missing school for an extended period. Those missed days would count as absences, and the expectations would be that the students would have to make up those assignments. In addition, it has been a challenge because Helton is constantly worried about whether those students receive meals during quarantine. The CNS has not offered similar programs to the COVID-19 pandemic to families and their students.

Kendrick Elementary School

The principal at Kendrick Elementary School has held this position for the last four years. She used to work as a teacher, instructional specialist, board member of the Academic Advising Coordinator, and the Assistance Principal to Caesar Chavez Middle School and University High School. She loves to teach and enjoys interacting with her students every day. The principal discusses her hardships and struggles growing up as a first-generation immigrant. Her perseverance to be successful and never settle for

anything less has strengthened her as a person, role model to the Waco Community, and strong leader.

Case Analysis of Principal at Kendrick ES

The principal at Kendrick ES mentioned how she always had a constant perseverance attitude in life, especially with her parents being immigrants. She understood the hardships in life through her parents and extended family members working labor-intensive jobs and in an environment that was not friendly. Her idea of success was to have a job that prioritized her passions and goals in life as equally as the next person. Her community efforts in Waco were inspirational. Her attitude of having a servant's heart allowed others around her to be inspired and motivated to be better versions of themselves.

Waco changes in the past decade have affected the school's demographics, predominantly south Waco. South Waco holds great real-estate values due to its location on the I-35 and the popularity of the Magnolia Silos. As a result, families who used to live in south Waco are selling their houses because they can not afford to live in the area. Families moving has changed the school's demographic, especially the number of economically disadvantaged students. During the 2020-21 school year, 97% of their students were economically disadvantaged, meaning that 97% of students either qualify for free or reduced meals. However, this year the school is projected to have 94% of its students economically disadvantaged. Kendrick elementary school is 78% Hispanic, 12% African Americans, and the rest are White or two or more races. In the 90s, the school had the most White and African American student population. These changes in demographics over the past three decades illustrate the diversity of Kendrick elementary

school. Also, the direct and indirect effects of the Waco community play an essential factor in Kendrick elementary school's change in demographic.

The current goals of Kendrick elementary school are to emphasize the importance of introducing more bilingual teachers and administrators. In her first year as principal at Kendrick elementary school, she noticed that there was only one bilingual instructor. Today, the school has at least one bilingual instructor from pre-K through third grade. Her push for more bilingual instructors is pivotal because they can provide robust and constructive mentorship to their students, especially Hispanic students. These changes were deemed very successful, and they uplifted the school's overall performance. The school's culture changed, but it provided a stronger bond between students and teachers. It is compelling for students to see men and women with similar cultural backgrounds in administrator roles. She wants to emphasize this at Kendrick elementary school because there was a lack of such representation when she was in school. However, once COVID-19 hit, everything changed. As a result, nationwide, there are huge learning gaps for students at all grade levels, and it has been challenging for administrators to accelerate two years' worth of education within a year.

One of the school's main challenges is retaining students for the following school years. The growing rapid gentrification of Waco has made it difficult for low-income students to attend Kendrick elementary school. This year, Kendrick elementary school is at 471 students; however, the school was projected before the school year to have 519 students. As a result, Kendrick elementary school is below 48 students. It is unfortunate because the school can do nothing to help eliminate the problem.

The Child Nutrition Service (CNS) teams from the Waco ISD and Kendrick elementary school did an incredible job of distributing meals to Kendrick elementary school students. The CNS teams would provide meals that last for the entire week and help deliver extra meals for the weekends. Social media was pivotal in spreading the news, and as a result, there was a huge turnout. When schools started opening up during the 2020-21 school year, the CNS continued to deliver meals to neighborhoods of students who opted to continue remote learning. However, by the end of the school year, about 80% of the students returned to in-person learning at Kendrick.

The school has always had a strong relationship with the School Nutrition Programs, and it has gotten more robust during the COVID-19 pandemic as their food services were exceptionally organized and efficient.

The principal at Kendrick ES was pleased with the Waco ISD's push for universal free meals for all of their campuses. The district's approval of the universal free meals program was perfectly timed because it allowed campuses across the Waco ISD to adjust to the new regulation a year before the COVID-19 pandemic struck schools across the United States. Soon, Kendrick elementary school was distributing meals to their students exceptionally efficiently.

Kendrick elementary school followed what the district had proposed for all their campuses to implement during the COVID-19 pandemic. Fortunately for Kendrick elementary school, the campus was an Apple campus because they won a one-million-dollar grant for seven years, which provided all their students and teachers with an iPad and laptop to do their school assessments. As a result, Kendrick Elementary school was ready to start remote learning as soon as the Waco ISD announced all virtual learning.

The 2021-21 school year has been more manageable because the Waco ISD is 100% in person with no remote learning. However, it has been challenging for many students because they would miss an extended time. Most of the time, it was due to being quarantined or contracting COVID-19. She believes that the school has reached its peak because she is starting to see much better attendance records as the school year progresses in March.

Kendrick Elementary School was on pace to exceed expectations before the COVID-19 pandemic struck in the spring of 2020. Many of their students were reading on grade level and above. However, those marginal improvements have become a much more significant gap as achieving reading on grade level is a challenge for many teachers to accommodate their students. The principal at Kendrick ES knows that it is miserable, especially for the first-grade students who are now third-grade students. The expectations for those students to achieve third-grade reading or math level are daunting for them and their teachers because they must find a method to accelerate their reading skills. She knows that the lack of supervision and in-person learning has affected many of their student's learning abilities and behavior. It is not the parents' fault for not being constructive during their child's remote education because many parents did not know how to facilitate a good learning environment. She is aware that many parents are undocumented immigrants and understands that those families must overcome so many daily challenges. Many of those parents work two or three jobs, and when COVID-19 shut down restaurants, they essentially lost their jobs. The pandemic has affected the Waco community financially and the education system.

Summary of Case Analyses

Two passionate, driven Principals lead Alta Vista and Kendrick Elementary School. Both principals state there is no strong correlation between universal free meals and academic scores because many other variables could potentially affect those scores. However, both campuses have noticed a relationship between students misbehaving and hunger. This relationship has led both principals to appreciate the implementation of universal free meals by the Waco ISD because there has been a correlation between a reduced number of students misbehaving and in-school suspensions.

Summary of Results

It is no surprise that the high Hispanic student population in Waco ISD strongly resembles the Waco community. The COVID-19 pandemic affected Waco ISD and all schools across Texas negatively. STAAR reading scores were extremely low, which marks a challenging time for the next twelve years for teachers to adapt to as many as two years of reading gaps for many students. Although there was no correlation between universal free meals and STAAR reading scores, a positive relationship has been noticed between a school's accountability rating and STAAR reading scores during the first year of universal free meals. In addition, breakfast and lunch participation rates averaged much higher during the Community Eligibility Provision before the COVID-19 pandemic. Student participation is projected to increase as more students transition to schools after the pandemic. Interviews from principles from Alta Vista ES and Kendrick ES provided further insight into a positive correlation between a reduced number of students misbehaving and free meals since the 2018-19 school year.

CHAPTER FOUR

Discussion

This chapter aims to understand how the Waco community has influenced the Waco Independent School District (Waco ISD). Also, this chapter addresses the common quantitative themes between all six elementary schools and how it relates to the COVID-19 pandemic. In addition, the author analyzes student participation for all six schools. These schools are categorized based on the school accountability rating scale. Bell's Hill and Dean Provident Heights fall under the high achieving schools. Alta Vista and Cedar Ridge fall under satisfactory schools. Kendrick and Dean Highland fall under unsatisfactory schools. Next is an analysis of both interviews from Alta Vista Elementary School and Kendrick Elementary Schools. Finally, a discussion about the effects of Community Eligibility Provision (CEP) on third through fourth-grade students in Waco ISD.

Waco and Waco ISD

The Waco ISD comprises a large, consistent Hispanic student demographic. In many ways, the large, growing population directly reflects the growth of the Waco community in the last decade. Magnolia's growing popularity and small business growth in downtown Waco have provided many job opportunities for many Waco residents. Amidst the COVID-19 pandemic, many men and women were losing jobs. However, the Waco community was prevailed by many local partnerships, such as Baylor University. Baylor University provided many people in the Waco community with several job opportunities during the COVID-19 pandemic. Jobs such as being a COVID-19 Contact

tracer for the Baylor students or the Waco community were available through such strong partnerships.

Waco ISD's large Hispanic population shows the need for diversity within the Waco ISD administration and core curriculum. The push for bilingual courses and teachers is great, especially with its niche job opportunity. Investing in more bilingual teachers and administrators would provide students with more constructive mentorship opportunities. Students will be able to easily recognize more men and women in their community that share similar cultural views, which would further their desires and motivate them to pursue similar careers. The need for representation is great, especially in a district predominantly of Hispanic background. It is important to establish a strong cultural identity within any group or organization, to accomplish far greater goals in the future. For example, professional sports emphasize building a culture such as American Football. Some teams emphasize offensive schemes, such as the Kansas City Chiefs, whereas others emphasize defensive schemes, such as the New England Patriots. Developing an identity is critical for the success of any organization, and the author sees several glimpses of that identity for Waco ISD.

Case Studies and Analyses

This thesis provided six case studies and two extensive case analyses on two of those case studies. Waco ISD has twelve elementary schools (ES). The author used the top six schools with the highest Hispanic population for those case studies- Bell's Hill ES, Kendrick ES, Provident Heights ES, Dean Highland ES, Alta Vista ES, and Cedar Ridge ES. All six elementary schools have a Hispanic population of at least 60% or higher. The highest accountability rating letter grades out of the six elementary schools listed above

were a B from Bell's Hill Elementary School and Provident Heights Elementary School. The letter grade is reassuring, considering both are ranked first and third overall in the Hispanic student population. The letter grade shows that both campuses are constantly taking the necessary steps to ensure, as much as they can, that achievement gaps would not result from ethnicity or socioeconomic status.

All six elementary schools have a high percentage (the lowest was 83.1%) of economically disadvantaged students. In addition, all six elementary schools are above the average percentage of economically disadvantaged students in Waco ISD and the State of Texas. These numbers illustrate how important it is to facilitate these schools with proper education and resources. It is important to provide a strong opportunity for these students to pursue any career or goal they aspire to become. The COVID-19 pandemic increased all six elementary schools' percentage of economically disadvantaged students (the lowest was 90.1%). The effects of the COVID-19 pandemic were brutal for these schools, especially for the Waco ISD. The COVID-19 pandemic immediately halted any sign of school progression from these six elementary schools. Schools face students who are at most two years behind in reading and math grade levels. It is very difficult to make up more than a year's worth of material within a school year, and now, schools such as Alta Vista Elementary School and Kendrick Elementary School are struggling to meet at least one year's worth of material during a school year. Third-grade students, who were first-grade students before the COVID-19 pandemic, are expected to meet or be above grade level in reading and math by the end of the school year. The author respects today's teachers as they have an unimaginable difficult challenge. The ability to accelerate materials for all grade levels has unfortunately been the case for

many schools across the United States. National reading scores are at an all-time low, and they will only persist for the next twelve years as all grade levels were affected by the learning and education gap from the COVID-19 pandemic.

High Achieving Schools

In this study, Bell's Hill Elementary School and Provident Heights Elementary School had the highest accountability rating, a B rating, before the COVID-19 pandemic. Bell's Hill Elementary School had the second-highest amount of economically disadvantaged students before and during the COVID-19 pandemic. It is the largest school out of the six elementary schools chosen for this research. In contrast, Provident Heights is the smallest elementary school in this study. The school had the lowest economically disadvantaged students before the COVID-19 pandemic. However, the school had the most economically disadvantaged students during the pandemic. Bell's Hill, a large school, stayed consistent and struggled with the amount of economically advantaged students on its campus before and during the pandemic, even though it received one of the highest accountability ratings. However, Provident Heights struggled greatly during the pandemic, possibly because of its small school size.

Figures 7, 8, and 9 for Bell's Hill showed a generally positive trend for Hispanic students for third through fifth-grade STAAR reading scores. Fourth and Fifth-grade Hispanic students performed the highest during the 2018-19 school year. This school year was when the district first implemented the Community Eligibility Provision. They performed better than the average reading scores from Waco ISD and Texas. Figures 15, 16, and 17 for Provident Heights also showed a generally positive trend for third through fifth-grade STAAR reading scores for Hispanic students. Unlike Bell's Hill, all Hispanic

students from third through fifth grade performed the highest during the 2018-19 school year. Also, those students performed better than the average Waco ISD and Texas reading scores. In the past, Hispanic students from both schools had outperformed the district and Texas. However, not as much as the 2018-19 school year. These students outperform as much as 25% and 8% from the district and state levels, respectively. A statistical significance was not tested for these STAAR reading scores, so the results of one data point, due to the pandemic, cannot justify that universal access to free meals did improve STAAR readings scores for Hispanic students. As a result, the sudden impact of the COVID-19 pandemic makes it challenging to analyze either the positive or negative effects of the universal free meals program during the 2019-20 and 2020-21 school years.

Bell's Hill and Provident Heights calculated student participation on the number of meals served each month from September 2015-16 to March 2021-22 school year. The author illustrates their data in figures 10 and 18. There has been more student participation for lunch than breakfast throughout the years. However, student participation has increased during the 2018-19 school year during the Community Eligibility Provision. Although the school did not provide participation rates during the 2019-20 school year due to the pandemic, it has complicated accurate data analysis for the following years. However, there is a positive trend as students transition to schools during the 2021-22 school year. Early projects due indicate similar participation rates to the year before the pandemic.

Satisfactory Schools

This category groups Alta Vista Elementary School and Cedar Ridge Elementary School because of their shared accountability rating of a C. These schools have the fifth

and third highest number of students in this study. Alta Vista had the fourth-highest number of economically disadvantaged students before the COVID-19 pandemic. Nevertheless, they responded well during the pandemic and had the lowest amount of economically disadvantaged students in this study, even though it was still at 90.1%. Cedar Ridge performed similarly by moving from third to fourth-highest number of economically disadvantaged students during the pandemic. Both medium-sized schools were relatively under control and performed better than most schools during the pandemic in the study.

Figures 23, 24, and 25 for Alta Vista show a generally positive trend until the 2020-21 school year. Figures 24 and 25 show that fourth and fifth-grade Hispanic students at Alta Vista performed better than Waco ISD. Even during free meals, these students continued to perform well. The pandemic impacted STAAR reading scores at all grade levels and halted the school's progression from previous years. As a result, it is unreasonable to suggest that the implementation of free meals starting the 2018-19 school year could potentially help increase reading scores at Alta Vista ES. The fluctuation of STAAR reading scores at all grade levels even before the pandemic indicates that other obstacles need to be solved to elevate all their students' reading success.

Figures 27, 27, and 29 show the trends and results from Cedar Ridge. Even though fourth and fifth-grade Hispanic students performed well and were either at or slightly above Waco ISD's reading averages, they still failed to meet the reading averages of Texas. As a result, the intervention of free meals may not be the best option for Cedar Ridge to elevate all their student's reading success in the future.

Both schools struggled to meet the district and state-level standards before the pandemic. Third-grade reading scores from Hispanic students were not different from the years before the Community Eligibility Provision during the 2018-19 school year. However, fourth or fifth-grade Hispanic students from either school did perform well when the district gave the free meals. Nevertheless, neither school at either grade level performed better than the reading averages from Texas.

Alta Vista and Cedar Ridge calculated student participation on the number of meals served each month from September 2015-16 to March 2021-22 school year. Figures 26 and 30 illustrate the data on student meal participation for those schools. There has been more student participation for lunch than breakfast throughout the years. However, student participation has increased during the 2018-19 school year during the Community Eligibility Provision. The author has noticed smaller declines for both meal programs in December during the CEP than in previous years. This indicates that these schools are distributing more meals; as a result, it alludes that students are more willing to participate in the free meals program. Although the school did not provide participation rates during the 2019-20 school year due to the pandemic, it has complicated accurate data analysis for the following years. However, there is a positive trend as students transition to schools during the 2021-22 school year. Early projections indicate similar participation rates as the 2018-19 school year. As a result, using CEP consistently could have long-term effects on student academic success at either Alta Vista or Cedar Ridge ES in the next decade and should be closely monitored.

Unsatisfactory Schools

Kendrick Elementary School and Dean Highland Elementary School performed poorly before the COVID-19 pandemic. Kendrick had a D accountability rating, whereas Dean Highland received an F rating. Kendrick is a medium-sized school and had the most economically disadvantaged students before the pandemic. However, they improved and ranked third in this study during the pandemic but still are at 96.1%. In this study, Dean Highland is the second-largest elementary school and remained to have the fifth-most number of economically disadvantaged students before and during the pandemic. It is alarming that Dean Highland failed to achieve district accountability ratings before the pandemic, especially with such a large student size.

Figures 11, 12, and 13 generally show a neutral or declining trend for third through fifth-grade STAAR reading scores for Hispanic students at Kendrick. An accurate correlation could not be determined between STAAR reading scores and universal free meals since only one year's worth of data was provided, excluding the scores from the 2020-21 pandemic school year, and statistical significance was not tested for these STAAR reading scores. In addition, the impact of the COVID-19 pandemic makes it challenging to discern either positive or negative effects of the universal free meals program during the 2019-20 and 2020-21 school years.

Figures 19, 20, and 21 show the STAAR reading scores of Dean Highland. Like Kendrick Elementary School, there is a mixture of neutral and declining trends. In addition, it is challenging to accurately depict whether the intervention of free meals impacted the STAAR reading scores for Hispanic students at Dean Highland. The school

was struggling before the pandemic, and it is unreasonable to suggest that universal free meals could help increase reading scores at Dean Highland ES.

Although Kendrick and Dean Highland Elementary Schools have fluctuating STAAR reading scores, Hispanic students generally perform well compared to their respective schools. However, neither school could perform at the Texas reading averages. As a result, it shows that these schools need other interventions or in cooperation with free meals to help students reach an acceptable reading level.

Kendrick calculated student participation on the number of meals served each month from September 2015-16 to February 2021-22 school year. Figures 14 and 22 illustrate those numbers. There has been more student participation for lunch than breakfast throughout the years. However, student participation has increased during the 2018-19 school year during the Community Eligibility Provision. The author has noticed that both schools have the highest number of meals served in December during the CEP than in previous years. This indicates that students are more willing to participate in the free meals program and may indicate less stigma associated with receiving free meals.

Although both schools did not provide participation rates during the 2019-20 school year due to the pandemic, it has complicated accurate data analysis for the following years because of school shutdowns and virtual learning. However, there is a steady trend as students transition to schools during the 2021-22 school year. Based on early projections from Figures 14 and 22, the graph provides a steady positive growth in school meal participation during the 2021-22 school year. CEP could have possible long-term effects on student academic success and lessen social stigma at either school. It is

important to continue to monitor these results and understand where the most growth is shown.

Case Analysis on Alta Vista Elementary School

The principal at Alta Vista emphasized that their biggest challenge this year and in the years to come is getting their students back on grade level for the year. The COVID-19 pandemic has negatively impacted students' progression in reading, especially in the lower grades. The principal emphasizes how important it is to have students reading on grade level by the beginning of third grade because it can adversely affect students and their future academic success. It is not easy to make more than a years' work of progression within a year for students. Hopefully, Alta Vista and Waco ISD can figure out a way to accelerate these students and their learning gaps.

The correlations between free meals and student achievement scores are complicated, especially since COVID-19 was a huge factor during the initial start of the novel program for the district. The principal at Alta Vista does not see any correlations and does not expect to see one since so many other factors influence a student's performance.

However, the principal at Alta Vista and her colleagues have noticed a correlation between meals and student behavior. Alta Vista's student behavior instances have decreased significantly in the past four years. In 2015, when the current principal at Alta Vista first joined seven years ago, there was about 120 in-school suspension (ISS). As of now, the school was trending downward and projected to have 45-50 ISS. It is important to note that several other factors could have helped decrease student behavioral instances.

However, she and her colleagues learned from extensive communication with their students that their students are hungry when they misbehave most of the time.

One of Alta Vista's goals is to have the Child Nutrition Service team implement a snack system for all their grade levels. An early lunch makes it extremely difficult for students to remain concentrated in the afternoon, whereas a late lunch makes it challenging to remain concentrated in the morning. A snack system would essentially help solve that problem and help students maintain an optimal amount of concentration and motivation in their school assessments regardless of lunchtime. The principal knows that many of her students at Alta Vista are around families who smoke Marijuana, so the idea of secondhand Marijuana induced hunger for her students further perpetuates the need for a snack system for all grade levels. Medically speaking, secondhand Marijuana smoke presents some of the same health risks as secondhand cigarette smoke. Incorporating a family mealtime environment at all grade levels, not just for pre-K and Kindergarten, is something the school would like to implement to reduce the social stigma further. Implementing free meals has helped, but taking it a step further would significantly eliminate such social stigma, especially for students who are heavy for their age.

Food waste is another issue Alta Vista Elementary School has noticed during meals. Federal rules and regulations state that each student needs a certain number of fruits and vegetables on each plate. Forcing students to eat can create an unhealthy relationship between the school and the students and is not ideal for the school. The federal government states that certain types of food must be on each plate, such as fruits or vegetables, to be considered a free meal. The regulation creates a challenge, especially

the amount of food wasted by students. The school has implemented a "Share Bin" policy for packaged food instead of throwing them away. However, this technique has not been effective since the spread of COVID-19.

Case Analysis of Kendrick Elementary School

The principal of Kendrick Elementary School understands that universal free meals provide many opportunities for students and their families with less of a burden regarding where their next meals will be. However, she emphasizes several other factors, such as the school's emphasis on bilingual instructors and eliminating the zero-tolerance rule with positive encouragement for all students, which can impact a student's academic success. The principal does see a correlation between most student behavioral instances to hunger. As a result, she does see merit in the Waco ISD's implementation of free meals for all students. However, it is not the only way to impact a student's academic journey.

The principal mentions how she found huge success in implementing eating breakfast in the classroom for the earlier grade levels. Many of her colleagues have found it beneficial to the student's ability to concentrate and remain motivated throughout the class period. The principal at Alta Vista also mentioned the benefits of eating breakfast in the classroom. As a result, schools and the district can investigate how to effectively implement meals for students, especially at early grade levels.

Summary of Results

The Community Eligibility Provision provided universal free meals to all students regardless of income. The goal was to see student achievement scores increase because of the implementation of the policy. However, that was not the case upon analyzing the

data. Limitations include only two years' worth of achievements scores since implementing the policy and the COVID-19 pandemic, which halted in-person learning to remote learning. As a result, the COVID-19 pandemic makes it impossible to discern any positive or negative effects of the universal free meals program during the 2019-20 and 2020-21 school years. In addition, upon analyzing these six elementary schools, it has come to the author's attention that there need to be other interventions that complement the usage of free meals to affect student achievement scores. Several factors play a role in improving student achievement scores, such as the quality of the curriculum, class size, relationship with peers, parent involvement, assessments, and school facilities. Although providing students with free and accessible meals does bring a certain value, such as reducing social stigma and improving student engagement and motivation in a classroom, it can most certainly not be the only intervention that helps improve student achievement scores.

CHAPTER FIVE

Conclusion

Positive or negative correlations between the Community Eligibility Provision (CEP) and STAAR reading scores of Hispanic students from third through fifth grade in Waco ISD are only minimally recognizable at each school. The lack of STAAR reading scores due to the pandemic has complicated the author's approach to deriving an analysis and concluding with a definitive answer. As a result, the author recommends more data on reading averages for an accurate analysis. However, using CEP consistently could have long-term effects on student academic success in Waco ISD in the next decade, and the author encourages the district to continue with the universal free meals program.

Waco ISD administered the CEP during the 2018-19 school year. As a result, the author noticed an increase in school meal participation rates during the CEP for all six schools in this study. The Waco ISD did not conduct school meal participation rates during the COVID-19 pandemic. However, since schools have transitioned to in-person learning, early projections indicate similar participation rates to the 2018-19 school year. As a result, it may indicate early signs of less social stigma toward receiving free meals at schools.

In addition, the author has concluded a strong correlation between reduced student misbehaving in schools such as Alta Vista Elementary School and Kendrick Elementary School to reduced hunger. There have been far fewer student misbehaving incidents at these schools since Waco ISD passed the CEP during the 2018-19 school year. As a result, many teachers have noticed more students engaged and participating more in

classrooms. Since the Community Eligibility Provision, school administrators have noticed a reduced social stigma toward receiving free meals.

There is a strong correlation between school accountability ratings and STAAR reading scores of Hispanic students. Schools that received a B or higher school accountability rating before the COVID-19 pandemic had Hispanic students from at least two grade levels perform better than the reading averages of Waco ISD and Texas. They were fourth, fifth, and very rarely third-grade Hispanic students most of the time. Schools that achieved a C or lower accountability rating before the COVID-19 pandemic had Hispanic students from at least one-grade level perform better than the reading averages of Waco ISD, but none performed better than the Texas reading averages. A school's accountability rating references results from standardized exams, school dropouts, graduation rates, and college readiness. Many of these schools have not been able to elevate third-grade reading levels for Hispanic students, which is concerning. Early reading success is associated with early academic success.

The impact of the COVID-19 pandemic halted all STAAR achievement exams during the 2021-22 school year. As a result, the author used a year less STAAR reading scores in this thesis. In addition, the COVID-19 pandemic negatively affected the national reading averages at all grade levels and will continue to do so for the next ten to twelve years. The effects of virtual learning during the COVID-19 pandemic negatively affected the reading levels of many students, which has caused as much as two years' worth of reading gaps. The author suggests that future research should emphasize the effects of the pandemic on national, state, and district-level reading averages.

Alternative interventions are explored and strongly recommended for all schools to elevate their students' reading scores. Introducing eating breakfast in classrooms or reinstituting the snack system through small portable carts through campus are some ideas many schools have explored and are interested in implementing.

Limitations

Waco ISD implemented the Community Eligibility Provision (CEP) during the 2018-19 school year. The goal was to analyze trends in student achievement scores three years before and after the CEP. Waco ISD and each campus release their achievement scores every year and are available on the Texas Education Agency website. However, due to the COVID-19 pandemic, Waco ISD stated that the 2019-20 school year would be declared a state of disaster. This notion means that no student achievement scores were collected. Schools transitioned to online, remote learning, which ultimately opens more confounding variables such as electronic access, mental health, and home environment. However, Waco ISD lifted the state of disaster during the 2020-21 school year, and student achievement scores were collected. Having only two achievement scores for third through fifth grade was a limiting factor. As a result, these data points or trends cannot justify that universal access to free meals either improved or hindered reading scores; and make it difficult to investigate any positive or negative effects of the universal free meals program on student achievement scores.

Another limitation to this thesis is the lack of interviews conducted for a case analysis. The author sent multiple emails to all twelve elementary schools in the Waco ISD and only received two responses. It would have been ideal to have six interviews, preferably within the top six most Hispanic student populations. The author would have

been able to analyze the CEP programs within each school further and understand their effect on its education system.

Outlook

Future studies should investigate using multiple interventions such as the quality of the curriculum, class size, relationship with peers, parent involvement, assessments, and school facilities. These interventions will help provide schools and the Waco ISD with a holistic approach to understanding the effects of universal free meals. Finding a relationship with student achievement scores might not be the best option, considering many factors contribute to student performance. However, alternative trends such as finding relationships with student outbursts or misbehaving in relation to hunger are possible avenues worth exploring, considering both Principals found a strong correlation. In addition, researchers should investigate innovations to increase school meal participation, especially breakfast. Many school districts have implemented innovations such as portable food carts and food trucks. These innovations have been successful at increasing school meal participation. As a result, the author strongly suggests this for future research, especially for Waco ISD.

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