

Food Apartheids and the Curriculum that Saves it

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Abstract

Health is wealth! Unfortunately, everyone does not have access to healthy food. We are facing a new apartheid, and this one deals with food access. The lack of access to healthy foods puts individuals at risk for more severe health conditions such as heart disease, type 2 diabetes, high cholesterol, cancer, and sleep apnea all of which can lead to death. Areas that have high food inequality are areas that have high poverty rates, a deteriorating education system, and an overwhelming amount of food deserts. To solve the food apartheid that is plaguing African Americans in the District of Columbia, we will use Geographic Information Systems (GIS) to locate schools in areas that are considered food deserts and develop curriculums for after school agricultural programming for students and their families. It is critical, to begin with, K-12 students so that they can live to be healthy adults. Students will be encouraged to engage their families by sharing knowledge and participating in community efforts to rebuild their neighborhoods. This will provide a creative alternative to solving the food apartheid crisis and creating a new health care delivery system that is built within the community.

Keywords: GIS, Curriculum Development, Food Deserts, Washington DC, Food Access

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Introduction

Analyzing empirical data on solving the food apartheid crisis is important for identifying what solutions are necessary for ending the food disparity gap amongst black and white communities. This pervasive problem within low-income communities is complex and a part of a larger intersectional social structure that has been established long before the transatlantic slave trade. According to Satia, the mortality rate for white and black men across the United States between 1983 and 1998 has increased from 6.4% to 6.9% with white males having a 10.2% greater expected life expectancy rate (2009). This has been a consistent problem according to CDC reports when comparing the mortality rates of white and black populations. Since then, in 2015 it was reported that the age-adjusted mortality rate among black and white populations increased 1.2 times greater since 2008 after having reached a record low in 2014 (CDC, 2015). Between the sexes, female life expectancy rates have been 4.9 years higher than their male counterparts and have narrowed since 1979. In 2015, life expectancy decreased for the entire population; however, the data were consistent in showing that this rate was still disproportionate among racial groups with black and Hispanic males and females having a lower life expectancy rate than their white counterparts.

One of the leading causes that contribute to the imbalance in mortality rates is the disproportionality of diseases that affect each population with diet being one of the main contributors. In 2016, the CDC reported that out of the entire population within the United States, the number one leading cause of death for the entire population was heart disease but was greater in Hispanic populations and greatest in non-Hispanic black populations. Along with heart disease, non-Hispanic black populations along with Hispanic populations have a greater mortality rate in cancer, diabetes, stroke, kidney disease, homicide and Septicemia (CDC, 2016). This data showed that the greatest mortality rates are due to chronic illnesses that can be prevented through a lifestyle change that largely includes one's diet. Willett et al. reported that medical experts have recognized the relationship between diet and chronic diseases, along with many other variants and has provided solutions for how to reduce those diseases. Unfortunately, these solutions do not address the health disparity along with lifestyle differences that disproportionately affects black and Hispanic communities.

Satia argues that because race is a sociological construct, the health disparity among white, black and Hispanic populations is not due to genetics and that if we adjust the income and demographic variables between blacks, Hispanics and whites the health gap would be narrowed. Unfortunately, Satia claims that there isn't enough empirical data that proves that this is true and that socioeconomic status in relation to income and demographics negatively impacts black and Hispanic communities. In opposition, Fish, and colleagues, research states otherwise. Fish and colleagues research on, "African American and Latino Low-Income Families," found that socioeconomic and cultural factors affected how individuals purchased and interacted with their food environments. Fish and colleagues research also found that due to personal experience and cultural differences, populations make conscious decisions about which food suppliers they choose to frequent. The study also reviewed food shopping behaviors, fruit and vegetable consumption and healthy food options by strategically analyzing a sample subset of low-income minority women in Forsyth County, North Carolina.

Statement of the problem

Food Insecurity according to Vaccaro and Huffman is the lack of access to nutritious food for an active, healthy lifestyle that is greatly affected by a lack of access to monetary capital and resources. Similarly, the USDA defines “Food Desert/Apartheid” as parts of a country lacking nutritional resources such as fresh fruits and vegetables, as well as whole foods. Food Apartheid is largely prevalent in impoverished communities due to a lack of grocery stores, farmer’s markets, and health food providers. A lack of monetary capital and resources is known as “social inequality,” and it creates a lack in access to supermarkets that supply fresh produce, which contributes to lower consumptions of fruits and vegetables (Produce for Better Health Foundation, 2018). Fish and colleagues sample study provided evidence that confirmed Vaccaro and Huffman’s research by stating that they learned that among the population of women they interviewed the consumption of fruits and vegetables from their respected families were below the recommended average for the United States. The Behavioral Risk Factor Surveillance Survey of the United States including D.C. provided information in 2015 showing that blacks and Hispanics consumed more fruits than vegetables in relation to their white counterparts creating a diet that is higher in sugar and lower in nutrient intake. Within the scope of research, data also stated that this greatly affected youth and young adults within black and Hispanic communities aged 6 – 24 years old. Overall, young adults aged 18-24 only consumed 20.9% of vegetables compared to the recommended intake, while the intake among children ages 6-9 years increased. Though there was an increase from 2014 in young children, unfortunately, it was not enough to reach the recommended consumption rate. This is specifically relevant because one of the major vulnerable groups affected by food apartheid is children from low- income minority neighborhoods and communities.

Purpose of the study

This paper is a continuous study that focuses on providing a solution for closing the food disparity gap that exists between minority and white communities by analyzing a sample subset of the District of Columbia. By creating a culturally relevant curriculum for schools and after-school programs based on data obtained using GIS Data Analytics, low-income communities will become healthier, as well as knowledgeable in ways that they can help prevent and decrease the food apartheid crisis within their own communities. Fast food restaurants located in low-income communities produce more marketing than middle to high-income communities. The marketing of these advertisements largely consists of food that is high in calories and sugar content. Satia acknowledged that “education benefits blacks more than whites along with educational attainment, income, net worth, and demographic variables.” Schools are one of the largest institutional structures within low- income communities and are responsible for educating the minds of those who live within the community they serve. By educating children and creating opportunities for learning and growth for their families, the community gains autonomy of their resources especially as it relates to food options and accessibility. A 2015 study by Ohri-Vaschapti et al., proved that U.S fast food was the second largest supplier of energy in the diets of children and adolescents. This is due to several sociological structures including

media and marketing that disproportionately affects the neighborhood in which these children frequent (Ohri-Vaschapti et al., 2015). Children and adolescents spend on average 7 hours per workday in school, for an average of 179 school days not including holidays and summer school according to the National Center for Education Statistics. With this data, it is important to educate children in environments that they frequent the most.

This study utilizes Geographic Information Systems (GIS) to show the decline in grocery stores as the African American population increased in Washington, D.C. and analyzed trends, historical implications, and policies that attributed to this decline. Specifically, this study uses the data collected to understand how to begin creating a culturally appropriate, diverse and relevant curriculum to the most vulnerable populations affected by the food apartheid crisis within the District of Columbia.

Literature Review

In 1930, “Washington DC total population was 486,869. The African American population was 27%, and the white population was 73 %”(Asch, 2017). Majority of the African American residents were either poor or of the working class. Despite their socioeconomic status all African Americans struggled to find decent housing. “Shut out from new suburban housing developments; black residents sought homes in older predominantly white neighborhoods” (Asch, 2017). Once blacks started moving in predominantly white neighborhoods whites with the financial means to do so moved to other segregated parts of the city. This departure signaled to the white residents that remained that their neighborhood was worsening. “Many white residents assumed that black neighbors would bring crime and blight thereby depreciating property values” (Asch, 2017). White residents that refused to leave enforced restrictive racial covenants that were written into their housing deeds forcing blacks to move to majority black areas that were already overcrowded.

When public housing was created mid-twentieth century, its original purpose was not to house the poor. Specifically, public housing was designed for “working white lower and middle-class families who could afford decent housing but couldn't find it because none was available. It was not heavily subsidized, and tenants paid the full cost of operations with their rent”(Rothstein, 2017). Before President Roosevelt signed the new deal black and white families faced a severe housing shortage, forcing families to “double up with relatives, stay in apartments too small for their growing families, or remain in emergency Quonset huts that had been put up towards the end of [World War I]” (Rothstein, 2017). Not only was housing unavailable, but jobs were not available either. During the great depression, unemployment was at an all-time high. In DC “more than 75% of the city’s unemployed were black” (Asch, 2017).

As a response to the housing shortage and high unemployment rates, President Roosevelt signed the new deal to create a series of programs and projects aimed to restore the American dream. Under the new deal, the Public Works Administration (PWA) was created to “alleviate [the] national housing shortage while creating jobs in construction” (Rothstein, 2017). Under PWA African Americans were able to occupy units in segregated neighborhoods because PWA developments were not integrated. In areas where neighborhoods were integrated the PWA decided if the neighborhood was white or black. Once a decision was made the PWA used public

housing to finalize the decision by “installing white only projects in mixed neighborhoods, it deemed white and black only projects in deemed colored” (Rothstein, 2017).

In 1934, Congress and President Roosevelt created the Federal Housing Administration. The FHA “insured bank mortgages that covered 80% of purchase prices had terms of twenty years and were fully amortized”(Rothstein, 2017). To qualify, the FHA did an appraisal of the property to ensure there was a low risk of default. Properties that were racially mixed or all white properties that were near black neighborhoods were considered too risky for insurance. Properties that were in all white neighborhoods were considered low risk and were insured. Since “the FHA’s appraisal standards included a whites-only requirement, racial segregation now became an official requirement of the federal mortgage insurance program” (Rothstein, 2017).

The FHA also encouraged banks to make loans for newly built suburbs. According to the underwriting manual used to appraise properties in 1935 stated that “natural or artificially established barriers proved effective in protecting a neighborhood [from infiltration of lower class occupancy]” (Rothstein, 2017). The FHA discouraged banks from making loans in urban areas stating in the underwriting manual that “older properties tend to accelerate the rate of transition to lower class occupancy” (Rothstein, 2017). The FHA also discouraged school integration. Writing in their manual that children “are compelled to attend school where the majority or a considerable number of the [students] represent a lower level of society or an incompatible racial element the neighborhood under consideration will prove far less stable and desirable if this condition does not exist”(Rothstein, 2017), mortgage lending in these neighborhoods were considered high risk.

To limit government intervention in public housing president Roosevelt signed the Housing Act of 1937. The Housing Act of 1937 ended the Public Works Administration (PWA) direct construction of public housing and left states to create their own local housing authorities. Under the Housing Act of 1937, the United States Housing Administration (USHA) was created to provide federal subsidies to states that created local public housing authorities. “Under the terms of the act, public housing properties would be built and owned only by state-chartered or locally governed public housing authorities. This gave states and localities the right to choose whether or not to participate in the program by deciding whether or not to create Public Housing Authorities ” (McCarthy, 2014).

Also, decisions about operations, location, design, and who could live there would be left up to the PHA. No federal funds were given for operations and maintenance so “public operations would be sustained primarily on tenants rent, [meaning] families would be required to have an income to pay the rent charges for public housing units” (McCarthy, 2014). To prohibit competition with the private housing market, a very low maximum income requirement was set for public housing residents meaning that earlier residents could no longer live there because their income exceeded the low maximum requirement. The act also required “for each new unit [created] an unsafe or unsanitary unit had to be eliminated” (McCarthy, 2014). With location up to the local housing authorities, the USHA recommended that “the aim of the local housing authority should be the preservation rather than the disruption of community social

structures which best fit the desire of the groups concerned” (Rothstein, 2017). With this recommendation, local housing authorities ensured communities that they would not force public housing on communities that did not want it. However, the communities that did want public housing were able to decide where it will be located thus guaranteeing that public housing would remain segregated.

By 1940, The African American population increased from “27% to 28% and the white population decreased from 72% to 71%” (Asch, 2017). In 1941, after President Roosevelt declared war on Germany, he signed executive order 8802 prohibiting discrimination in defense industries based on “race, creed, color, or national origin”(Hirsch, 2000). With hopes of better economic opportunity, blacks and whites migrated from the rural south to Washington DC increasing the total population “from 486,689 to 663,091” (Asch, 2017). Although jobs were available for southern black migrant families housing was not. Due to discrimination and restrictive housing covenants, southern black migrant families were forced to move to areas in the city that were already overcrowded while southern white migrant families were able to move to the suburbs.

In 1945 Congress passed the District of Columbia Redevelopment Act, its purpose was to “aid city officials in slum clearance and urban reconstruction.”(HISTORIC AMERICAN BUILDING SURVEY, n.d.) Under the Redevelopment Act, the DC Redevelopment Land agency was created and granted power to use eminent domain to acquire blighted areas for the use of redevelopment. This initiated the process of urban renewal in the district. The agency called for the demolition of homes of 1,345 families 97% of them black” (Hill, n.d.) and businesses some of which were black-owned.

In 1948 President Truman signed executive orders 9980 and 9981. Executive order 9980 banned racial discrimination in the federal government, and executive order 9981 banned racial discrimination in the armed forces. Executive orders 9980 and 9981 made it possible for African Americans to receive better-paying jobs by working in the federal government and armed forces. As a result, Washington DC African American population “increased from 28% to 35%” (Asch, 2017) (CC).

To achieve better housing conditions for all Americans President Truman signed the National Housing Act of 1949. The act “financed slum clearance under urban redevelopment (later renewal) programs, [expanded the] Federal Housing Administration (FHA) mortgage insurance, committed the federal government to building 810,000 new public housing units, and allowed the Farmers Home Administration to grant mortgages to encourage the purchase or repair of rural single-family homes”(Freeman, 1996). At the same time, the VA “began to guarantee mortgages for servicemen. It adopted FHA housing policies, and VA appraisers relied on the FHA underwriting manual”(Rothstein, 2017). To condemn integration the FHA and the VA “imposed conditions these suburbs be all white” (Rothstein, 2017). In 1949, the federal government took segregation a step further by “guaranteeing bank loans to mass production builders who would create [these all-white utopias known as the suburbs]” (Rothstein, 2017). By the end of 1949 people that didn't want to conform to integration and had the financial means to do so started to leave the city. By 1950, “the FHA and the VA were insuring half of the mortgages

nationwide”(Rothstein, 2017). As a result, the white population in DC “decreased from 71% to 64%”(Asch, 2017). This mass exodus continued until the 1970s.

Under the Housing Act of 1949 cities were able to receive funds to renovate neighborhoods that were deemed uninhabitable and unsafe to live. The federal government would put up money to buy property using eminent domain to condemn and clear blocks, redevelop areas and build housing on a modern scale which made it possible for people to live in better housing. Southwest, Washington DC where a large number of African Americans lived was the first neighborhood to be renovated under this act. In 1950, “The National Park and Planning commission published a comprehensive plan which identified Southwest as a problem area in need of redevelopment”(HISTORIC AMERICAN BUILDING SURVEY, n.d.). In 1954, the redevelopment of Southwest had begun. “Over the next two decades, the urban renewal of Southwest displaced approximately 1,500 businesses [most of which were black owned] and 23,000 residents” (HISTORIC AMERICAN BUILDING SURVEY, n.d.). From 1954-1970 Southwest and other parts of the city that were considered slums were redeveloped.

Also, under the Housing Act of 1949 public housing started to house more black families that have been displaced by urban renewal. By the end of the 1950s “the percentage of [black] families living in public housing increased from 36% to 46%” (McCarthy, 2014). The rise of black families living in public housing led to the disapproval of new public housing developments in predominantly white communities. As a consequence by the end of 1957, “the goal of 810,000 units was not met. Only about 210,000 of the 810,000 were under management” (McCarthy, 2014).

In the 1950s white supremacy being known as the law of the land started to crumble as the civil rights movement started to pick up momentum. In 1954 the groundbreaking Supreme Court case *Bolling v Sharpe* prohibited school segregation in Washington DC, *Brown v Board* was soon to follow which prohibited school segregation nationwide. As a result, many white teachers left DC public schools to teach in the suburbs, or private schools and white families either moved to the suburbs or sent their kids to private schools. The birth of full integration caused a massive demographic shift, and by 1957 Washington dc became the nation’s first major city with a black majority.

While the white population started to decrease in dc, the suburb population increased by “nearly 330 percent reaching more than 1.3 million people by 1960” (Asch, 2017). According to the 1962 special report titled the Negro in Washington stated that nine years after the Supreme Court case Brown v Board DC schools were segregated again.

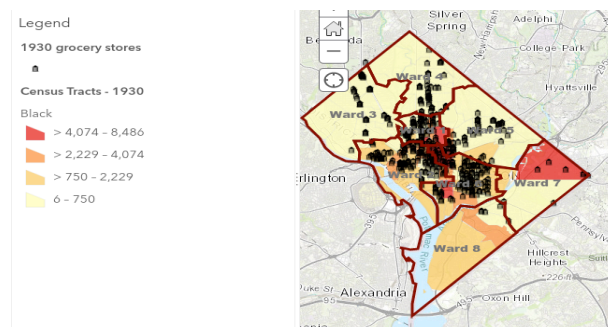
Methodology

Geographic Information Systems (GIS) was used to gather and analyze the decline of grocery stores as the black population increased in DC. GIS was also used to locate schools that are in food deserts. Qualitative and Quantitative data were collected to measure the impact of the lack of grocery stores in the black community. Concurrently, extensive research was conducted in order to review already existing

culturally inclusive curriculum. From that research it was found that there is a significant lack in curriculum programs that are culturally inclusive along with incorporating elements from different subject areas such as math and science. Based on this research, a culturally inclusive content based curriculum began to develop (Appendix A,B,&C).

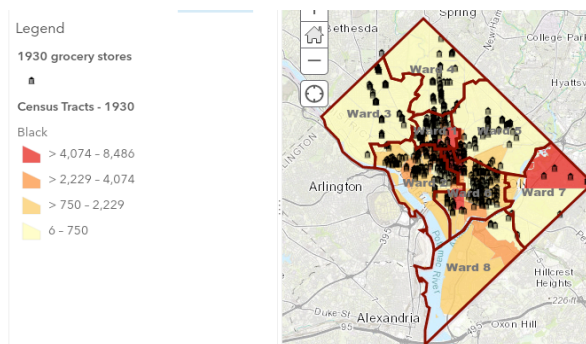
Study findings- Impact on Food Access

Before government policies resulting in white flight African Americans in DC were likely to live in predominantly white neighborhoods. These neighborhoods tended to be densely clustered with smaller grocery stores giving African Americans access to food.



Map of the population in 1930. Upper ward seven where the area was predominately black had grocery store access.

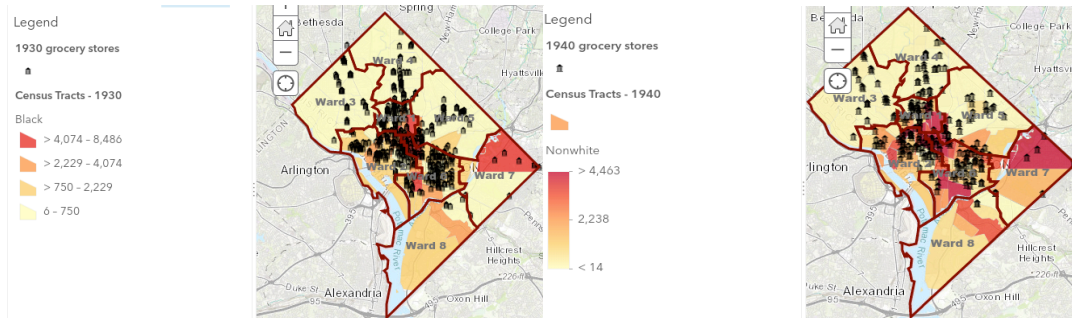
In 1934 the government instituted a national appraisal system where race held just as much weight as property values. Low-interest home loans were offered to middle-class white families to move to the suburbs but, Due to redlining, restrictive housing covenants, government policies, and discrimination African Americans were unable to have access to the same loans that advanced white families to the suburbs and were driven to areas that were already overcrowded. As a result, white flight started to take place, and the number of grocery stores started to decrease as well. By 1940 the white population decreased slightly from 73% to 71 while the black population increased from 28% to 35% (Asch, 2017).



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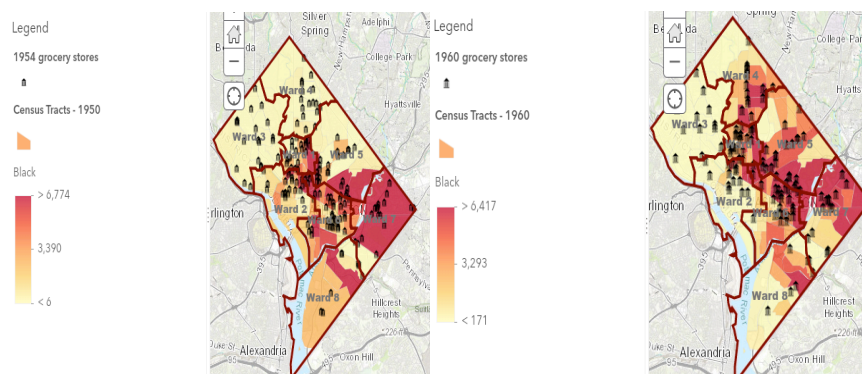
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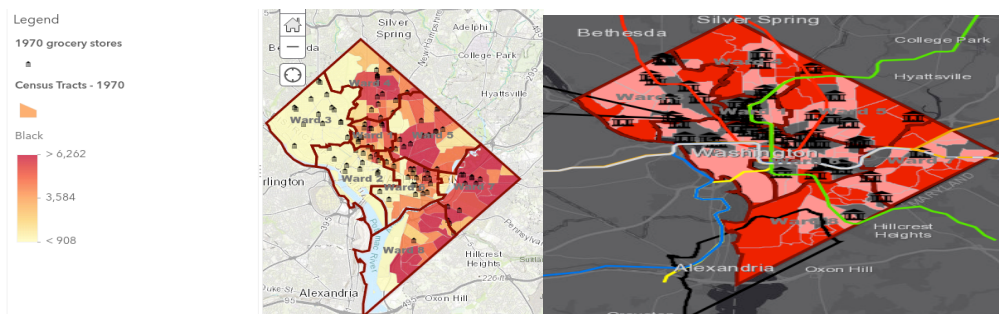
The housing act of 1949 financed Slum clearance causing African American families to become displaced. Since there was a growing need for high-density low-income housing, The Housing Act “created a class called public housing that would be constructed through government financing and have low rents”(Friedman, 1966). The first housing Project built in DC under the housing act of 1949 was Barry Farms. Opened in 1954 Barry Farms was located in Far Southeast a predominantly white area at the time. Also in 1954 the groundbreaking supreme court case brown v board of education prohibiting segregation in public schools. In response, a mass exodus of white families fled to the suburbs.

However, DC wasn't always a food desert from 1954-1960 every ward in DC had access to grocery stores. However, ward eight had the least amount of grocery stores.



Map of DC from 1954-1960 when everyone had access to food

Since many public goods are locally financed, white flight in DC generated disparities in food access leaving dc a food desert by 1970.



Map on the left is when dc became a food desert. Map on the right is dc today. The dark pink are the areas that are food deserts.

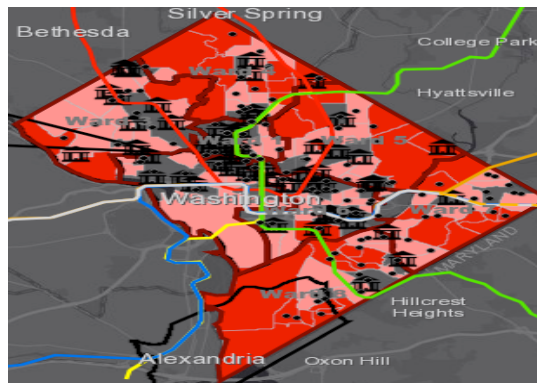
In conclusion, as the black population increased in Washington DC the number of grocery stores decreased leaving areas with a high concentration of African Americans without access to food. This left those areas vulnerable to become oversaturated with fast food chains. This trend of declining grocery stores started in 1934 and lasted until the seventies. Today these areas are still considered food deserts.

Limitations

There are several limitations to this ongoing study that is relative to data. The first limitation of this study has been the lack of empirical data that analyzes the intersection between access to capital, racism, sexism, xenophobia and other social constructs. There is also a lack of curriculum development analyses and effectiveness. Another limitation was in the inconsistency of the census data collected over time. For example, the census data collected in 1930 referred to African and African Americans as black, and in the year 1940, the census included non- white. This means that they could have been discussing a wide variety of racial and ethnic groups. Lastly, a limitation was in trying to gain access to impactful and meaningful data that has been released to the public and analyzed for qualitative and quantitative impact. Due to the need for funding, the process of testing within the Maryland and District of Columbia region has been delayed.

Conclusion

To solve the food apartheid crisis plaguing the African American community in Washington DC, it is imperative to create curriculums that will teach students and their families that live in food deserts how to create their own sustainable food models, i.e., maintain a garden. In order to know what schools should be targeted for outreach, GIS was used to identify schools that are located in food deserts.



The black dots are the schools that have been identified as being located in food deserts

These programs would provide a hands on experience that would help students become more involved within their communities. Parmer et al., and Castro et al., provides useful data on the impact of a Nutrition based Education Program in school and community based environments. Parmer et als., research focused on school-based gardening and hypothesized that a nutrition based education program would increase the consumption of fruits and vegetables among second graders and their families. The curricula used was “Pyramid Cafe & Health” and “Nutrition from the Garden”. They studied 3 treatment groups, one group of students received instruction time along with a hands on gardening experience, another group only received the nutrition education curricula and the final group did not receive the curricula or the gardening experience (Parmer et al., 212). Castro et als., research focused on the use of community based gardens as a resource for an obesity prevention program. The program provided weekly gardening work sessions for 3 years in low income communities with families who had at least one child that was 6 years old. The basis of this study was to also increase fruit and vegetable consumption amongst the participants and their families. Both Parmer et al., and Casto et als., study yielded positive results. Both proved that by providing opportunities for hand on experiential learning opportunities with gardens and a nutrition based instruction, consumption of fresh fruits and vegetables increase, as well as knowledge of how to grow and sustain fresh food sources. By combining school based nutrition education programs with community based gardening it shows great promise for eradicating the food apartheid crisis. Neither method must be used in schools or community gardens, however these are the areas that would be most frequented. It will not only create a sustained method of healthy food access, but would also assist with creating greater opportunities for economic growth and would harness the gifts and talents of the children within these communities. Healthy people juice is an organization in Baltimore that has begun to engage students by creating an entrepreneurial model that combines nutrition with economics. Students create healthy juices to sell within their neighborhoods, while receiving nutrition based instruction. The organization also provides nutrition based instructional cooking classes to members within the community which creates unity and opportunities for access to healthier food options. Expansively, by introducing children and their families to healthier food options on a consistent basis, it will increase awareness in the community and among policy makers.

Appendix A: Sample Culturally Inclusive Activity

Sample Math Examples (Culturally Inclusive)

Lesson: Word Problems

Grade Level:

Standards:

Directions: Read each word problem carefully and solve for the answers by sharing your work.

Example 1:

1. Timothy went to the local corner store with \$5.00. At this store he bought 2 apples for \$2.50, 1 pack of gum for \$.25 and a bag of chips for \$1.00. After paying for his items with the \$5.00 he was given, how much money should he have left over?

Example 2:

1. Emilio worked on his grandfather's farm in Brazil every summer for 5 years. Every summer he spent on the farm in Brazil, he walked 3.0 miles to and from the farm to his grandparent's house. One day on his walk to the farm he decided to stop and purchase flowers at a flower stand that was 1.5 miles away from his grandparents' house. How many miles did he walk that day?


Fun Facts Corner:

- Did you know that 14% of the Brazilian population is vegetarian?
- Did you know that one of the ingredients in mumbo sauce is soy sauce?


Activity (Optional)

- Find out where the nearest farm is in your community
- With your parent/guardian make your own mumbo sauce

**Note: All work and samples created are the work and study of the author. **



Ex.1 is culturally inclusive and relevant to the culture of D.C.



Ex.2 is culturally inclusive and relevant to the culture of Brazil

Overall, if this sample learning tool was given to students in DC or Brazil each group of youth's would not only learn math in a way that is culturally relevant to them, but also will learn about other cultures in the world.

Appendix B: Sample Math Lesson Plan

Example Math Curriculum

Sample Lesson Plan

Grade Level:

Objective(s): 1. Students practice addition and subtraction with decimals 2. Students understand how to make proper money management decisions 3. Increase student exposure to a variety of fruits and vegetables.

SWBAT:

Standard(s):

Time

Monitor/Feedback

	<p>Hook: Your mother sends you to a community garden and gave you only \$10.00 to spend on fresh fruits and vegetables. You are already aware that it will cost \$2.75 to purchase five tote bags to carry the fruits and vegetables in, but you don't know how much fruit and vegetables you can get with the remaining amount. You eventually begin to choose a variety of fruits and vegetables, but now you have to decide what food you can purchase with the amount of money you have in order to also purchase the five tote bags.</p>	
	<p>Introduction of Activity (I do)(We Do): (Teacher): ask, "What operation(s) can be used to help us figure out how much we can spend so that we will have enough money left over to purchase the five tote bags?"</p> <p>Then... (Teacher): ask the entire class to choose at least two fruits or vegetables from the ziploc bags (*prices are already written on the cutouts) on their desks/tables. (Seating Chart: 4 Students to a table or 4 connected desks)</p> <ul style="list-style-type: none"> - Assuming, that the students have chosen subtraction and addition as their operation(s), the teacher will then tell the class that she/he will do the calculation(s) for the two fruits or vegetables that she/he has chosen.. - The teacher then begins to find how much change she/he will receive by subtracting the price of the tote bags and the chosen fruit(s)/vegetable(s) and will write the answer on the board. - The teacher will then ask the entire class to calculate how much change they will receive from potentially purchasing the fruit(s) and/ or vegetable(s) they chose. (The person who finishes first will be given the opportunity to share their answer) 	<ul style="list-style-type: none"> -Ask the question -Receive answers from students -If they give various answers steer them towards the correct answer - A variety of food including Fruit and vegetable cutouts with prices on them should already be placed on student tables in a ziplock bag - Remember to ask students if they may have

	<p>- As a class they will then compare prices and decide which would have been the best fruit(s) and/or vegetable(s) to purchase. Teacher: “ Which fruits and vegetables can we purchase so that we have enough money left over to purchase the tote bags?”</p>	<p>gotten another answer (for clarification purposes)</p> <p>- As you are calculating your chosen fruit(s) and vegetable(s) remember to talk through each step of the process, especially if more than one action is required</p>
	<p>Whole Class Activity (You do):</p> <p>- The entire class will be split into teams. Depending on class size that may vary and on their desks they will find a worksheet that has a word problem on it, various types of food cutouts, scrap paper and pencils. (*Each team will have the same word problem on their worksheet)</p> <p>- The teacher will then explain to the students that as teams they will be given 10 minutes to choose the food items they want to compare and do the proper calculations based on what has been asked on their worksheet. Also, that whichever team has the most change left over after doing the proper calculations will be the winners.. All work must be shown...</p> <p>- When the 10 minutes are over the teams will then share out their answers and how much they have left</p>	<p>- Handouts should already be placed on students desks with all materials</p>
	<p>Closing/Assessment:</p> <p>- The teacher will give the students an exit ticket that has the question on it, “ In 1 paragraph, explain how this activity applies to real life circumstances?”</p> <p>- Teacher will express that it must be turned into the teachers inbox before the end of the school day.</p> <p>- They will also receive a worksheet with multiple word problems that involve subtracting decimals.</p> <p>Resources/Materials: (20) Food, fruit and vegetable cutouts per table with prices written on each of them, worksheets, pencils, exit ticket, timer background music, scrap paper</p>	

Appendix C: Sample ELA Lesson Plan

Example ELA Curriculum

Sample Activity Worksheet

Grade Level:

Standards:

Directions: Read the following unfinished paragraph and circle all of its errors. When you have found all of the errors rewrite the paragraph with the proper corrections. Lastly, please include your own conclusion to this unfinished paragraph.

One day on a sunny saturday Afternoon Sally decided to help her Father plant tomatoes in the community garden located a few miles away from her home. as she was Assisting him, she noticed a puppy run into the Garden. She was so distracted by this, and she didn't notice that she was planting apple seeds instead of tomatoe seeds. As the puupy continue to run through the Garden Sally.....

Your Conclusion:

Think About it: Have you ever planted a fruit and/or vegetable? If yes, what did you plant? If not what would you like to plant?

Do: With a parent/guardian, visit your nearest community garden and try to identify a fruit and/or vegetable that you have never seen or eaten before. When you have identified the food with your parent/guardian ask the community garden staff to provide research material on that particular fruit and/or vegetable.

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