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# Equitable Education for Haiti 

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# SENIOR THESIS APPROVAL 

This Honors thesis entitled
"Equitable Education for Haiti"
written by

## Breanna Parker

and submitted in partial fulfillment of the requirements for completion of the Carl Goodson Honors Program meets the criteria for acceptance and has been approved by the undersigned readers.

Rachel Pool, thesis director

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Dr. Barbara Pemberton, Honors Program director

Date
April 13, 2021

# Equitable Education for Haiti 

## Breanna Parker

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Honors Thesis

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## Equitable Education for Haiti

The Lord placed the country of Haiti on my heart a couple of years ago and has been faithful in providing an opportunity to expand my knowledge and passion for the people and culture of Haiti thus far. I did not know much about the history and background of Haitians before I began the Honors Program, but I knew that this would be a great season to dive deep into resources and learn all that I could during my time at Ouachita Baptist. I am an Elementary Education major and so I found it fitting to explore the education system and the effectiveness or lack thereof throughout history. Every student will be unique and learn in various ways, styles, and timelines but it is our job as educators to cater to those needs and do everything in our power and ability to provide not an equal education- but rather an equitable experience. An equitable learning environment compared to an equal atmosphere could potentially be the difference between reaching a student or them slipping through the cracks of the education system. An equitable education means that as an educator, you do whatever it takes to ensure that they have the resources and the opportunities they need to succeed. Equitable versus equal refers to the style of teaching and instruction a child needs, modifications, accommodations, and instructional time and duration for each concept. An equal education approach is a homogenous curriculum and pedagogy that the students must then either succeed under or adjust to the set ways. Through an equitable learning experience, students have the opportunity to develop into their own unique selves and to embrace the way they learn, communicate, and succeed without judgement or attempt to mold them into who they were not created to be. I chose to document a lesson plan unit that could potentially be implemented in Haiti if the Lord calls me to go do mission work and teach in a third world country. This thesis gave me a chance to research and have a teaching resource that was politically and historically accurate while also being practical and useful.

I will explore and delve into the aspects of family, tradition and culture, policies in the political realm, and the overall history of Haiti. This gives a solid foundation of both the previous standing of Haiti as well as the present status of their country and the current education system.

To follow the given context of Haiti and the background information that focuses on the historical, political, social, and educational aspects of the country, methods that are beneficial not only for third-world countries such as Haiti, but for all schools, are given as a resource that can be utilized by educators and child-care workers. These strategies denote what practices can aid students in their learning journey and can support them in a way that provides a lasting and useful educational schoolyear regardless of age. The effective practices are catered more to Haiti in general due to the equitable issue and the poverty barrier between countries, but some of these practices are important for all schools no matter where the location or situation is.

The issue of equitable education in Haiti is not based on specific practices or student growth, but rather is focused on how the poverty levels, governmental corruption, and inconsistency of faculty from year to year has had effects on the effectiveness and overall growth of learning in the Haitian schools. May it be noted that the data is particularly focused on the inner villages of Haiti more so than the capital of Port-au-Prince.

To begin my research of Haiti and to seek to understand them as a people group better, I chose to first look into the family aspect of the Haitian life. By learning more about the people that inhabit the beloved country, I believed that I could provide a more accurate representation of what could be potentially implemented into a Haitian classroom with success for both the educators and students involved.

## Family

Relationships and community highly impact an individual's growth and development as they advance throughout their life. Michelle Meleen writes, "Haitian culture developed mostly out of slavery, poverty, and hardship, so personal relationships are very important" (Meleen). In the United States, family is looked upon with respect and dignity, but society also views family as not only blood relatives but whoever is in your corner, supports you, and walks with you through daily life. The country of Haiti, specifically in the villages, is not as technologically advanced and the workforce does not mirror that of the United States or other first world countries. For this reason, family relies heavily on one another to pass family trades through generations and individuals do not separate from the family unit to complete personal goals, but rather operate as one to aid in keeping the entire community afloat the Haitian way.

Family is treasured in Haiti much like it is in other countries, but Haitians take their duty to their family and the legacy that they hold extremely near and dear to their heart. Family comes first in a lot of cases for the French-creole individuals, and education can be put on the back burner if assistance is needed from the children to learn the trade of the family and sell their product in the village markets. In areas like the capital of Haiti, Port-Au-Prince, life resembles that more so of what Americans might be accustomed to. While the family dynamic is not vastly different from the villages in these more modern cities, they do alter some based on the resources and opportunities that are available and the day-to-day operation of the community.

The family structure in Haiti varies depending on where you are at in the country. Much like the United States, we have stereotypes and social norms that we tend to fall into as a society depending on if we are in the southern part of the United States or if we are more up north. For Haitians, marriage is one aspect that does not operate or look the same in both the villages and
the big cities. In Port-Au-Prince for example, marriage resembles those that would occur in America or other modern countries. The marriage is legal and occurs with a modern license and functionality. The man and wife hold equal responsibility and accountability within the marriage, and it is a monogamous marriage rather than allowing polygamy to be an option. The man typically handles the farming and heavy labor within the household and property, and the woman handles the housework and child rearing in most cases. The family values resemble those of modern American values for the people who reside in the urban environments.

In the villages within Haiti, the marriages are not as modern and traditional as in the major cities. The families in the lower socioeconomic class tend to lean more towards plasaj even though the government does not recognize it as a legitimate and legal marriage. For this agreement, the man and woman agree among themselves for the marriage based on economic purposes, and the man cultivates a piece of land for the woman to live on. In these types of marriages, they can be extended to others and it is not necessarily a monogamous marriage in some cases (Gender Rols and Family LIfe, 2015).

In the most recent century, Haiti has seen more women enter the workforce and make changes in the community and career world. Since the family dynamic needs everyone at times to contribute to the village markets and even within the city walls, then Haiti has become looser on their regulations on the gender roles between males and females in the French-creole country. Divorce is still not widely common but is more acceptable among elite Haitians than it was in previous generations. Marriage is now more flexible for whether it is approached for more traditional reasons versus marrying for prestige and status (Gender Rols and Family LIfe, 2015).

An urge to find a way to form a bond of unity among family units in Haitians around the late 1700 s and 1800 s originated from the issues of slavery, infanticide, property destruction, low
childbirth rates, ignorance of legal authorities, and sexual depravity. The country of Haiti had to figure out how to live in a cohesive manner and build family traditions despite overpopulation, lack of resources, and habituating within a third-world country (Bastien, 1961) Remy Bastien writes, "The strong ties of kinship and the right of all to inheritance of the land, however, keep the relatives together. When a man's children reaches adulthood, he usually divides his land informally among them; daughters are no exception. Should the plots be too large for one individual to tend, there will be mutual exchange of services and in many cases, the sister will delegate the care of her land to one of her brothers against an agreed portion of the crop" (p. 482).

The way that Haitians approach family units and their devotion to one another is comparable to how they approach traditions in their country. The individuals within the country of Haiti are committed to the roots and long-standing traditions that have been a part of their life and routine since the country was developed. The households of Haiti is simply one example of a way that they stand true to the traditions of their ancestors.

## Tradition

The traditions in Haiti have been practiced for many years and the Haitians hold true to their culture and they continue to push forward and hold fast to their beautiful and unique island of Hispaniola. Haitians are known for their love of music and dancing, folklores and mythology, embracing and living out their faith, football, and placing family above all else.

There are many cultural backgrounds that are found in Haiti, so utilizing the cultural diversity of music and allowing it to unite the people of Hispaniola has become a way of life for Haitians. Throughout the year, there are multiple festivals and holidays dedicated to the celebration of religion, art, music, and more.

Carnival is a holiday celebration that lasts from late January to Mardi Gras. This tradition is marked by dancing, music, art displays, and gatherings that allow the Haitians to unite and celebrate with one another despite what other economic, political, or current circumstances are. Rara is another Haitian holiday that originated in the country and is celebrated during Easter week. It is also marked by dancing, music, and festivals and can be identified by the colorful parades and lighthearted spirits. Haiti gained its independence from France in 1804, so a special and unique holiday for the Haitians is Independence Day which falls on New Years Day, January 1. This tradition is full of parades, fireworks, singing of the national anthem, and rejoicing their freedom and independence from any other country's hold. A key belief system for Haitians is voodoo, so naturally there are traditions and holidays that directly relate to their faith. One of these holidays is Fet Gede, also known as All Souls Day. Most of the celebrations that occur in Haiti are centered around music and dancing because that is such a vital aspect of their culture and tradition and is a way in which they can express emotions and embrace community and find common ground with one another.

The Haitian dictator Papa Doc enforced his beliefs onto the people of Haiti and brought about the unique but vital aspect of the culture that consists of folklore and mythology that ultimately relate back to the voodoo beliefs to appease the spirits within the country. These magical tales carry on the tradition of what the Haitian individuals' belief regarding the voodoo culture and the mythology and folkloric influence of the tribes that once lived on the island.

Individuals that inhabit the country of Haiti take their faith and beliefs to heart and are dedicated to living a life worthy of what their belief system asks of them. The main religions that make up the country of Haiti is Roman Catholicism, Haitian Vodou, also known as voodoo, and Christianity. Catholicism and Christianity are heavily practiced due to the origination of the
country on the island and the heavy influence those religions had throughout history. While Vodou is typically known as "Black Magic", it is practiced because of the relation to the African heritage and a way to stay connected to ancestors throughout history. It is based on the spirits of the island and keeping in peace and unity with them.

Football in Haiti is not as we know it but is comparative to soccer in the United States. An organization called Restavek Freedom (2017) states, "Haitians are seriously passionate about the sport. The Haitian National team, also called Les Grenadiers, Le Rouge et Bleu, and Les Bicolores has been a member of FIFA since 1934 and has participated in the World Cup championship once in 1974." They range from leisurely playing to being on nationally ranked football teams. Many traditions are similar to other places in the world but have their own unique twist or characteristics that makes it different from other locations.

Despite the restavek way of life in Haiti and how they approach children and labor, Haitians place family above all else and see their children and family as gifts. Extended family is appreciated and valued and is essential to the dynamic of a home in Haiti. These traditions are only but a few of the wonderful inhabitants of the country of Haiti but show some of the valued areas of life and how they celebrate their home and those around them.

While the traditions have withstood the test of time in Haiti and have brought individuals closer together, the political realm of the country has had its fair share of hardships and struggles. The unity that has been experienced from within the family and through traditions shared have been torn away at times because of the corrupt political stance. Haitians have dealt with a corrupted and desecrating government for many years. They have faced natural disasters, harsh governing rulers, and lack of resources from the government.

## Political

Haiti has withstood many natural disasters and corrupt government leaders throughout the years and yet they continue to fight to remain an operating and sustainable country. The country of Haiti is made up of a semi-presidential system where the President is elected through a republic system and is elected through popular elections. The President then appoints a Prime Minister to reign under him and as head of the government. He is elected through majority of the National Assembly. The current President that is serving in Haiti is Jovenel Moïse who began his term in office in 2017. The Prime Minister that is currently head of government is Joseph Jouthe and took office in March of 2020.

An article revolving around the state of Haiti notes, "Political instability in 2019 continued to hinder the Haitian government's ability to meet the basic needs of its people, resolve long-standing human rights problems, and address humanitarian crises." (World Report 2020: Rights Trends in Haiti, 2020). Individuals are still fighting for humane rights such as clean water, food, health, freedom from discrimination, an equitable education, and a fair justice system. The lack of precipitation has affected how much safe water is available and how many resources are obtainable due to the chronic effect of low rainfall yearly. Discrimination against sexual identity and orientation is quite common and Haitians are trying to obtain rights within their own country but have not succeeded yet. The rights of women and girls are also a huge problem because their voice is not as well received as their male counterparts. The same article writes that, "Haiti does not have specific legislation against domestic violence, sexual harassment, or other forms of violence targeted at women and girls. Rape was only explicitly criminalized in 2005, by ministerial decree." (World Report 2020: Rights Trends in Haiti, 2020).

However, it is encouraging and empowering to see that in 2008 the second female leader of Prime Minister was accepted in by Parliament to serve her country and her people. Michèle Pierre-Louis' served from 2008 to 2009.

Haitians are demanding the removal of their current President, Jovenel Moïse, and have continued to protest since 2019 against the injustice they face and the lack of humane rights and resources to adequately survive and live a more comfortable life than they currently are. Haiti has a history of having corrupt politics and leaders that turn the other way when circumstances are less than ideal. The worst civil unrest that had happened in quite a while occurred in 2019 due to increased fuel prices because of poor leadership. The prices increased by $50 \%$ and Haitians fought back and protested. When the government leaders are accused of mishandling resources and taking care of their country's inhabitants, it causes disruption to the unity and community and can be rather difficult to restore peace.

The coat of arms of Haiti is represented by multiple flags, a palm tree, cannons on a hill, and the motto L'Union fait la force which means "Unity Makes Strength." Many have hypothesized that the different colored flags are meant to represent the multiple ethnicities within Haiti, and the white flag resembles unity and freedom from France. This flag represents the epitome of what Haitians want their country to be and what they were formed to represent despite political and economic corruption that has occurred. The economy of Haiti has continued to struggle and to teeter the line of high risk of collapse. The World Bank states that, "Haiti is the poorest country in the Western Hemisphere, with a Gross Domestic Product (GDP) per capita of US\$797 and a Human Development Index ranking of 169 out of 189 countries in 2019" The political realm of Haiti can improve with earnest leaders and a dedication and support from outsiders to provide the resources and materials needed to improve the living circumstances.

In 1996, Haiti's government had goals and ambitions under new leadership to increase and improve agricultural production, reform the administrative body, and regroup and modernize the economy for fellow Haitians. Throughout the political timeline of Haiti, once they have tried to reform and build the government and people back up to a healthy functioning government, events such as natural disasters and corruption has occurred. Individuals are still battling the effects of the 2010 earthquake and are still struggling to get back up on their feet and provide and live sustainably. The natural disaster devastated the island and sent their villages and occupants into ruins. The magnitude 7.3 earthquake was unstoppable and destroyed both the Dominican Republic and Haiti, with Haiti taking the more harmful blow.

An article over Haiti and its history made the statement, "But years of political cormption, violence, and a debilitating annual hurricane season have turned Haiti into one of the poorest countries in the Caribbean" (Haiti). The political aspect of Haiti has been rocky and left the Haitians to fend for themselves many times, but the history of Haiti has seen both prosperous and lacking times. Even though the country has struggled to govern itself and stay functioning at a high capacity, the French-creole natives have been around since the 1400s.

## History

The history of Haiti dates back all the way to 1492 when Christopher Columbus explored what is now known as the island of Hispaniola that consists of the Dominican Republic and Haiti. There was a time when the island was not prospering or succeeding as a trade production center because it was neglected during the exploration in the $16^{\text {th }}$ century. However, once Little Spain as it was known begun producing coffee and sugar, they quickly became a functioning and operating country that benefitted from its production and trade (Satake).

There was an enormous uprising of slaves from the $16^{\text {th }}$ to the $18^{\text {th }}$ century due to brutal leadership and an increase of demand for forced labor. Haiti was known as Saint Domingue in the $16^{\text {th }}$ century because it was ruled by the French. The men, women, and children were overworked and used as an attempt to spark back the economy and trade that was desired by the Haitians. Gaffield wrote about the historical time saying,
"In 1791, enslaved people on the northern sugar plains of Saint Domingue rose up in a coordinated rebellion to destroy French slavery. This started the 13-year event that has come to be known as the Haitian Revolution. In 1793, the rebels freed themselves by forcing the colonial commissioners to abolish slavery throughout the colony" (Gaffield, 2020).

The first attempt to abolish slavery was not completely successful, but under the power of Jean-Jacques Dessalines Haiti was able to permanently abolish slavery and be the first nation to do so. The French abolition did not continue as was hoped, and in return this sparked the Haitians desire and determination to demand and earn their independence. Haiti had written their first constitution in 1801 and began making their way through paving the way in which they would govern and handle their independence. This constitution allowed Toussiant to be governor for life, and he sought to play a major role in Haiti gaining their independence and the abolition of slavery. However, he was overtaken by the French in 1802 and did not see the day when Haiti finally broke free from France (Haiti History Timeline, n.d.). This independence was granted in 1804, and Haiti would then continue exporting coffee, sugar, and indigo and trying to make their way as a nation and an independent country (Gaffield, 2020).

After Haiti became an independent nation, they had some division and unrest and divided between the North and South in 1807. They were now known as the Republic and Haiti and the
state of Haiti and continued and tried to build up their prosperity and success after a recent separation from the French. Throughout history, Haiti has been known for their political unrest and their instability and inability to stay afloat and successful on their own. The nation in control of Haiti has altered over the years between the United States and the United Nations, but Haiti has rarely been free from alternative reign because of their poverty, violence, and unrest as a country. The military troops, the United States Occupation, would come and take over Haiti to try to gain control and stability back and allow the nation to grow and develop out of heaps and rubble.

In the midst of gaining their freedom and trying to maintain order within the country, Haiti has had a mass number of Presidents, Prime Ministers, and rulers come into the nation to either show their authority in a brutal manner and with a negative connotation or attempted to regain prosperity and have failed in doing so. These leaders have ranged in their level of beneficial actions for the country of Haiti and have included only two women throughout all these years.

On top of all the unrest and economic trouble, Haiti was hit with a massive 7.3 earthquake in 2010 that has continued to impede lasting effects on the country and in the Dominican Republic on the island of Hispaniola. This earthquake destroyed the villages, killed many families, left individuals to live under tents and tarps until shelter can be built and provided, and has left many without hope. However, many organizations and people from across the globe have gathered in support of Haiti, but that does not change the circumstance of the history of the country known for hardship and battles.

Currently in Haiti, it is being speculated as to whether Haiti will be considered a dictatorship because of how the country is currently being run and operated by President Moïse.

Charles writes, "In the 11 months he has been running Haiti without the checks and balances of a parliament, Moïse has been amassing an enormous amount of power that is alarming everyone from opposition figures, to human rights and democracy defenders, to the European Union and now, Washington" (Charles, 2020). The President believes that he is the only individual capable and worthy of handling Haiti but has failed to do so in a trustworthy or appropriate way. Communication with other world leaders and authority figures has been severed and the worry and stress of the safety of Haiti is increasing by the day.

COVID 19 has not been as detrimental to Haiti as it has been to other countries, but it is still infecting individuals and taking lives like it is currently doing in the United States and other countries. Because of the lack of resources, failure to meet health regulations, and economic instability, the threat of the virus ferociously spreading among Haitians is frightening. Even with the lax regulations and low case numbers, Haiti has not been completely exempt from the spread of the coronavirus in 2020. Doctors and researchers want to know why this outbreak has occurred despite their ability to steer clear from it for the most part. The ability to cope and treat this virus is addressed with, "In such poor, densely-packed neighborhoods - with little or no access to running water, sanitation and health facilities - residents struggle to follow even the basic hygiene guidelines that experts recommend to prevent contagion with the highly infectious virus" (Paultre \& Marsh, 2020). However, if travel continues to be monitored and kept at a minimum, the hope is that Haiti will continue to keep their case numbers at a lower and slower rate than the rest of the globe.

The history that has been documented for Haiti has taught us about the past and given us insight and hope for how to improve for the future. Through the years, one of the aspects of history that we have explored is how education is handled within Haiti. We have taken notes of
the returning teacher statistic, the resources available, the consistency of students coming to school each day, and the overall rate of individual student growth throughout the academic schoolyear.

## Education Past

Haiti is known for several things, but it is not common for the impact and success of their schools to be one of prestige or recognition when discussed with individuals who are not locals. Education in previous years in Haiti has been slow in progression or in some cases non-existent for children of a lower socioeconomic status or who do not have the means or opportunity to attend school and receive an education. Education in a third world country will look and operate differently than a school system in a country like the United States, but multiple aspects has caused the education system in Haiti to not be as productive and succeed throughout the years. Natural disasters have taken the focus away from school and pointed it to local necessities due to the community and villages needing to rally to build their country back up to a functioning state as best as they possibly can. Receiving an education is highly valued and respected among Haitians but is sadly just unobtainable or unaffordable for most due to the high unemployment rates.

The school system in the past and now in the present has mirrored closely to the system in the United States, but one major difference is that most schools are not public but rather privately owned and ran. The schools that are privately operated are typically under the Catholic leadership and authority or other organizations in the community. Most students in the past have not fully completed their education due to economical, financial, or cultural factors that have blockaded that experience for some Haitians.

The primary net percentage for school enrollment in Haiti denoted by The World Bank in the year 1986 was $51.363 \%$. In 1987, this enrollment rate dropped down to $42.547 \%$ ("School Enrollment, Primary," 2020). There could be many reasons for this, but one theory as to why the enrollment rate in schools dropped so drastically in this one year could correspond to the violence and massacres that occurred during that one year. There were a few instances within the Haitian history during the 1986-1987-time span when violence and injuries sparked in various places. This spike in violence and comuption could have caused a disruption for school children and the level of priority that going to school each day ranked. Another option for the decline in school attendance could be connected to the signing of the 1987 Republic of Haiti Constitution. This constitution states in Article 32-2 that, "The first responsibility of the State and its territorial divisions is education of the masses, which is the only way the country can be developed. The State shall encourage and facilitate private enterprise in this field." While I have not personally traveled to the country of Haiti or witnessed what the education system in both the cities and villages operates under, the research that I have conducted has spoken against the equality and availability for educational opportunities for all Haitians and failed to provide the appropriate training for teachers and all faculty. In light of that information, it appears that Article 32-2 might not be completely fulfilled due to the comupt economic and political realm within Haiti that has been researched and discovered by many.

For the year 2016, the literacy rate that was documented for Haiti was $61.69 \%$. This percentage is a huge increase of $13.01 \%$ from 2006 . While the numbers are still significantly lower than the schools of Haitian counterparts, any growth should be celebrated and investigated for what is working well in schools, and what can be improved for future learning. Macrotrends states, "Adult literacy rate is the percentage of people ages 15 and above who can both read and
write with understanding a short simple statement about their everyday life" (Macrotrends). Two other countries statistics that give a similar ranking are Congo and Dominican Republic at $77.04 \%$ literacy rate, and Chad at $22.31 \%$ literacy rate.

While I have not personally traveled to Haiti and been a part of the education system and the process of teaching young Haitians so that they can graduate, I do have some ideas and questions to consider if one were to travel and investigate how the schools were run and succeeding in Haiti. Despite the financial, political, and environmental difficulties that Haitians have been faced with, it is vital to step into the school environment with an open perspective and with a mindset that is set on how the students can benefit and grow and what they need to succeed and effectively learn in their given circumstance. If a child believes he or she will fail because of who they are or where they come from, then we as educators have already done them the biggest disservice by not lighting a spark inside of them and a desire to find a passion and hopefully develop a love for learning whether they already enjoyed school or not.

When entering a school in Haiti, I would be interested in viewing the materials and resources available, and the timeline of what a typical school day looks like. Regardless of availability for school funding for up-to-date resources, most of the time materials can be made with what is already available or students can be used as materials to teach concepts. I would also suggest an individual visiting a school to look at the meal plan and investigate how much students are being fed or if they are fed at all while at school. Maslow's Hierarchy of Needs addresses the needs that must be met before a student can adequately focus and learn. If a child is tired, hungry, or upset then the probability of them retaining any content during school is slim to none. I would also recommend looking into the funding for schools and the govemmental
policies that are tied to the education system to see what is blocking advocates from successfully providing all they need to for the children both attending and not currently attending school.

I believe that one of the biggest issues is the educational supplies and resources in the schools are lacking and the shortage of educators and qualified individuals who are willing to teach the younger generation is in tum having a huge impact on the rural population being less educated and equipped compared the urban population.

## Education Present

Dr. Mortel (2018) wrote a fascinating story explaining the history of Haiti and what the education system in his country has accomplished in the past, and then what his strong-willed desire to change those statistics for the better turned into. Mortel (2018) writes about the high rate of illiteracy, the lack of eligibility for enrollment in schools, the unrest within the country that places a burden on every individual, and multiple other reasons that have strayed eyes and minds away from educating young Haitians. However, he was not satisfied with those conditions and allowing his homeland to fade away as one of the poorest countries in the world. Mortel (2018) found a way to school a new generation for Haiti and one that had a love for learning and a desire to become all that they could for the generations to come. He reflects on his own experience and explains that it was a poor neighborhood but a rich childhood (Mortel, 2018, p.11). One does not have to have the best of the best or the newest technology and resources to be successful or even fulfilled. The best of the best can be defined differently depending on who you ask, but the approach to education and teaching that I believe should be taken is that we must pour all we can into the children in front of us so that they may have an equitable
education- not simply an equal one to match the peers around them or the schools we are aware of.

Mortel (2018) took a chance on his dream of starting a school for underprivileged Haitians and started to raise awareness for the cause. He writes, "An early step was to create the Mortel Family Charitable Foundation in 1997, funded initially with $\$ 25,000$ of my own" (Mortel, 2018, p.33). As Mortel began stepping through the process of being granted permission to continue, taking in donations, and laying down his own funds to support this calling that would soon become a reality, Les Bons Samaritans opened for the academic year of 2001-2002. The school was geared up and ready to serve Haitians who tended to be overlooked or ignored because of their status or financial ability, but those were exactly the students that Les Bons Samaritans wanted to make up their student body.

The donations sent to help Les Bons Samaritans begin and stay operating at full capacity were devoted for the purposes of feeding the students, so they are prepared to learn, and for training teachers and faculty who are dedicated and have a passion for the career and forming catechists. Mortel chose to place his own regulations on how the school would operate and what requirements would be met without questions asked. These included handpicking students who came from the most impoverished circumstances, ensuring students began at the lowest level of grade, the student body would consist of both boys and girls, regulations for only one child per family, the educational program must include music, labs for science, libraries, technology, analytical skills must be taught, and the school would be classified as a Catholic school (Mortel, 2018, p. 39-40). All these components were not placed to be a burden or as a long list of rules, but rather approached as a blessing that these students were poured into and given the best environment possible to learn and succeed and showcase their personal talents.

Mortel (2018) believed that every child should be given a chance at having an excellent education, and that no one should be overlooked because of their circumstance or place in life. He states, "I believe that raw intelligence and talent are blind to race, sex, and social class but dependent on the environment for realizing their potential. Influencing the environment, as I intended to do at the school, would make all the difference" (Mortel, 2018, p.39). Poverty, political or economic unrest, or any other environmental factor does not dictate the ability of an individual, and Les Bons Samaritans school is a representation of that. Equitable education is vital to the success of our world because every child has unique talents, abilities, and opportunities and it is our drive as educators to showcase those talents with everything in us so that these children can become who they were created to be without the things that are out of their dominion getting in the way of that success.

Don Levan is a director of campus ministry in Los Angeles for Bishop Alemany High School and travels to Les Bons Samaritans for Ash Wednesday as a mission trip. He articulated it beautifully when he said, "Education provides them with a chance to see themselves and their country in a different way while it empowers them to create a better future" (Mortel, 2018, p. 59). Haitians are no different than any other citizen that resides globally, so they should not be given less of an opportunity because of their financial circumstance.

For the school year 2020-2021, the organization of UNICEF has donated grant money for $\$ 7$ million to support Haiti schools in the reopening and sanitation needs due to the coronavirus outbreak that had caused the closing of schools for around five months prior to reopening. This grant is to be devoted for the purpose of hand washing stations, 350,000 disadvantaged students being supported for distance learning from rural or urban areas, psychosocial support due to the abrupt changes from this disease, appropriate training for teachers for virtual learning,
accommodations for special needs students, and a cash transfer program to aid in the economic distress from COVID-19 ("Haiti: Global Partnership for Education," n.d.). This grant will aid in the process of getting schools back to normal and to protect Haitians from spreading this highly infectious disease within their educational programs.

To gain more insight on the historical, cultural, political, educational, and even personal aspects of Haiti, I had the honor of discussing the country of Haiti with two women who have first-hand experience and a devoted love for the third world country. Ms. Fett has been visiting Haiti for many years and has been eager to serve and engulf herself into the culture and environment that Haitians experience. I interviewed her to hear about and discuss what Haiti is like from a personal and devoted perspective. Mrs. Amy Cenea has lived and traveled in Haiti for 18 years and gave me insight and wisdom from an insider perspective. She shared with me about the education, history, cultural, and social components of her beloved country of Haiti.

## Interviews

I had the privilege to get to know and interview Ms. Paige Fett who has worked in Haiti for several years and plans to go back to Haiti as soon as it becomes safe again for travel and the crime rates lower some. Ms. Fett has worked closely with citizens of Haiti, children, and mission workers who live there year-round. Her time with the French-creole community has made a lasting impact on her life, and she was gracious enough to share some of that knowledge and impact with me.

Haitians are extremely welcoming and gracious to new people and to their people that they walk through life with daily. While the individuals of the third-world country do not have an abundant amount of resources and experiences at their disposal, they do not live in such a way
that resembles pity or of misfortune. The Haitians are grateful for what they have and the relationships that they can form, and this spirit is contagious according to Ms. Fett. Mission of Hope is the organization that Ms. Fett has worked in partnership with throughout previous years, and they have a separate section of the organization that is geared towards solely educational skills and knowledge that can be implemented properly and efficiently for the Haitian people.

Due to current travel prohibitions and lack of movement around the borders, Mission of Hope is not sending more volunteers currently until the government and political situation is improved. When this changes, there will be more updates on the health and progression in the education, business, and political realms within Haiti's walls.

Another individual I had the pleasure of working with regarding the culture and education of Haiti is Mrs. Amy Cenea. She has worked in and traveled to and from Haiti for 18 years and was very gracious in sharing about her experiences and to give an insider perspective on the Haitian people. The following questions were the beginning questions that we discussed:

## 1. What is the general mindset and approach towards education in Haiti?

"There are a handful of schools that offer a public education in Haiti. They are state funded and are rarely found outside the major cities. Most schools are private schools, mostly run by churches or non-profit organizations. Children start school at the age three and attend three years of kindergarten. Followed by primary school (grades $1^{\text {st }}-6^{\text {th }}$ ) and then secondary school (grades $7^{\text {th }}-13^{\text {th }}$ - yes, there are 13 years of school in Haiti.) After completing grade 13, all students are required to pass a government exam to officially graduate. Majority of schools only go to grade 6, but just last year, the government mandated all schools must go to at least grade 9 if they want to be considered an official school. Unfortunately, there are a lot of schools
(especially rural), who are not registered with the government, but at least the kids are learning to read and write and basic math. The 3 years of kinder are similar to Pre-Kindergarten \& Kindergarten here. They start Kindergarten 1 at age three, Kindergarten 2 at age four, and Kindergarten 3 at age five. So, then they are starting 1st grade at age six, similar to here in the United States. They do require the extra 13th year, so most kids are graduating at nineteen or even older due to not being able to go to school every year, You will often see older kids in younger classes because they could not afford it and would take breaks in schooling to save the money."
2. What does a day in Haiti typically look like for a child? (Around the ages 6-11)
"School is going to typically run from $8 \mathrm{am}-2 \mathrm{pm}$, with one meal provided. Unfortunately, not every school provides a meal, due to finances. After school, children will quickly change out of their school uniform (every school requires a uniform) so their parents can wash it and prep it for the next day. And then just play with their friends/neighbors. It is very common for the meal they eat at school to be their only meal of the day. Majority of Haiti does not have running water and the electricity is not reliable, if even available. You will often find children just playing outside, with homemade toys. Or listening to music. Music is a big part of Haitian culture."
3. Is there equitable resources available for education and/or travel to go receive an education?
"There are programs, such as Compassion International that help students attend school. And it is fairly easy to acquire a student visa to study abroad, in the United States, if they have a sponsor in the States. This is more common for University level. For University level, there are some public universities that offer scholarships. They are very competitive."
4. Is focus mainly on trade in the village and running the household for both children and adults? If so, are there instances in those situations where developmental learning is still taking place?
"It is common to find children helping their parents in the local markets. For example, we noticed in our mountain schools, every spring, a large number of students would drop out of school. We discovered it was because they were helping their parents during mango season. I suppose children are learning the art of farming, trade and basic math skills when they are helping their parents. We have also discovered in our areas that the majority of parents do not know how to read or write, therefore they are not much help with their children's schoolwork."

Mrs. Cenea had such wisdom and insight to share about how education is approached in Haiti, and how Haitians operate and function in school and the process they go through to finish the education program from kindergarten to graduation. One thing that I kept processing the whole time was that Haitians are devoted individuals. They do not have all the resources that a first world country has, yet they still are dedicated to education while also helping their household function and operate through the different harvesting seasons. Amy Cenea said, "Over the years, I have seen major and encouraging improvements when it comes to education in Haiti. We have noticed a big improvement as this next generation are starting families of their own and being educated themselves, they see the value of education and are able to help their kids." Amy was able to voice the importance and passion for education that we as humans innately have regardless of background, culture, region, or even interest in the education system simply because I believe we were created to learn and grow, and I believe Haiti embodies that as well.

Through my time spent interviewing Ms. Fett and Mrs. Cenea, researching Haiti and its inhabitants, and studying the special and unique components of the country, I gathered some effective practices that can be useful for not only a third world country but any environment or
circumstance. These effective practices are meant to be implemented into a classroom to encourage innovative and collaborative change in the classroom.

## Effective Practices

Education has transformed from the way things have always been done, to embracing what needs to occur for the student to grow and succeed in their environment. It is an equitable approach rather than an equal one. We, as educators, must be advocates for our students. We must be ready to take on the task of walking along side our students and embracing that they are children before they are students and that that alone stands as truth before any residing characteristic or level of ability does. If the state-of-the-art resources are not feasible or obtainable, we find a way to make it happen regardless because our students deserve the best. "We can't control the input, but we can control our expectations and the kind of learning environment (system) that we create for students" (Leblanc \& Roulston, 2012, p. 13). It is our duty as educators to show up to work each day ready to serve the kids that walk through our doors because we are a part of their success story and we must desire to make it a great one.

The practices that are needed in Haiti are specifically formed to cater to the circumstances of Haitians and might not be applicable to other countries or within the United States. However, there are various practices that are efficient and beneficial globally and can be implemented within any classroom. It is vital to incorporate and put an emphasis on relationships and the importance of cultivating trust and respect both with your students and faculty as well as parents. No significant learning can occur without a significant relationship. Before a lasting impact can be made both educationally and relationally, there must be a connection and mutual
agreement that the teacher will protect the student and the student will allow the teacher to get to know them as an individual before they are recognized as a student.

Haiti specifically has a unique circumstance because many of their struggles have originated from poverty, natural disasters, and governmental barriers. This forms a divide in the effectiveness of education when learning cannot take place consistency in a school building or the students cannot be present in school because of financial difficulties. For this reason, it is imperative that the curriculum and teaching strategies used are centered around the needs that will most greatly impact the Haitians rather than trying to force a curriculum designed for a technologically driven country onto a third world area.

The curriculum and teaching practices must acknowledge the current state and resources available in the school before placing a method before the teachers and students that do not apply to them. For Haitians, this might mean that attempting to teach or center a lesson around the architectural structures and advances would not have as great a benefit because of their environmental surroundings and prior knowledge on said topics. If connections are not made during the lesson, the overall concept might be lost or overlooked unintentionally. It is imperative to begin at the basics and the foundational knowledge of academics so that crosscurriculum learning can occur whether it was directly intentional or whether the child makes the connections on their own. It is easier for children to make connections and apply the learning in the classroom to the outside world when they have learned those cognitive skills beforehand.

An issue that is repetitively occurring within the schools in Haiti is that the content being taught is presented in the French language, whereas Haitians speak primarily Creole in the home and among the villages and towns. This is causing a divide and disconnect on the degree of retention, long-term memory, and success in school because the students are having to listen to
the content, translate it in their minds to Creole, find the answer, and then provide the answer back in the French language. The tradition of Haiti has been for French to be the main language and is now mainly used by the elite. Okrent writes, "If only the elite have access to education, they are well served by French, but if the rest of the country is to have access too, the extra barrier should be removed" (Akira). An effective practice would be to implement a curriculum that aligns with a sole language to eliminate any confusion or extra steps for Haitians to learn and complete the education program available. It would be extremely beneficial if the education system in Haiti ensured that all students mastered both Creole and French in their elementary years so that they would complete the education system as bilingual students and effectively speak both languages that are prevalent in Haiti as young adults. For now, however, the Brice Foundation addresses that, "French is used in government offices and businesses. Only educated adults or secondary school students speak French, though with varying levels of fluency and accuracy" (Brice Foundation).

While every child learns in a different way and no two students are exactly alike, studies have shown that implementing visuals into lessons aid in the learning process and the retention rate for content. Even though technological advances that might be available in first world countries are not readily available at this time for Haitians, it is possible to design personalized visuals that pertain to exactly what is being taught for all grade levels. If assistance is needed to design templates to aid in the beginning processes of incorporating visuals and extra resources in the classroom, then generalized templates may be created to help spark ideas for future academic content. Students thrive off having visual, hearing, hands-on, or sensory resources that allow them to inquiry and experience the learning targets. Implementing an inquiry-based instruction
into Haitian classrooms may allow them to build mandatory life skills that can be utilized and applied not only in the schools but in their everyday lives both during and after graduation.

In Breaking the Poverty Barrier, Leblanc-Esparza and Roulston (2012) wrote about the importance of meeting children where they are at and helping them grow from that point. Being transparent and consistent in this inconsistent world is vital and they state, "True, we didn't put the students in poverty, but we had the power to help them climb out of it. If these students did not get the skills while they were in school, chances were high that they'd never pick them up, and they would be stuck repeating the cycle of their parents" (Leblanc-Esparza \& Roulston, 2012, p. 17). A lot of struggles that Haiti has faced have been unexpected and out of the hands of local Haitians. Haiti citizens have not been in control of the economic and political hardships that they have been stuck with. For this reason, there are instances where cycles have been repeated through generations because of variables and decisions that the government or higher level of authority have decided for the Haitians.

As adolescents, adults, individuals, and ultimately simple humans we must all come to the realization at some point in time of our lives that we were made for a purpose. That purpose varies and looks different for every person, but we all were made to do something and to be someone. For educators, I would hope that our purpose and passion is to make differences in children's' lives so that they may grow up and be contributors in society in a positive way. "If you have a driving passion, it will guide your every decision, helping you to stand strong when you face challenges, and it will seep into every conversation with staff, students, and parents" (Leblan \& Roulston, 2012, p. 12). The children in the schools in Haiti and across the globe deserve to have teachers who care about them, their well-being, and their success in school and outside of school. Haiti struggles with keeping faculty in their schools because of the lack or
delay of pay. While that is important and a vital aspect for survival, it should be a matter of importance to ensure that the educators in the schools have a passion for those students so that they can aid in the process of how those children grow up to become who they were created to be. This includes an equitable education that is molded to their needs, environment, and even their desires and interests. The path to success will not be the same for every child, and the educational system cannot act as though it is a "one size fits all" mindset for the curriculum.

Studies have shown that cooperative learning, group discussion, and collaboration in school has greatly benefitted students of all ages. We were not created for isolation but rather community. For this reason, being allowed to discuss ideas and thoughts with one another helps to stimulate higher order thinking and ultimately allows for a greater success rate. There are times for individual work and thinking, but there is also something to be positively said for allowing collaboration in the classroom. Teaching and modeling for students how to appropriately work with one another is a life skill that must be learned regardless of ethnicity, age, career, or gender. Incorporating life skills alongside educational skills is a benefit of being in a classroom and learning as one unit with peers rather than figuring things out by yourself with little to no exposure to academics and the social aspect of the world.

The greatest effective practice we can incorporate into our classrooms as educators is to be present and willing to listen and learn. We will never be perfect or even perfect how to teach a child most properly, but we can grow with one another and be ready each day to be better for ourselves, for our students, their parents, and the generations to come.

With these effective practices and the knowledge of Haiti that I have discovered, I incorporated all these aspects to design lesson plans for grades Kindergarten through sixth grade that can be utilized in any school or academic environment. Although the curriculum standards
are not listed for Haitian students and teachers, I incorporated Arkansas standards that included foundational skills that can be implemented regardless of geography.

The following unit is based on mathematics because regardless of language barriers or cultural differences, math exists everywhere in our world and is used on a daily basis. For this reason, the lesson plan unit is built around foundational math skills that will be needed and are essential whether you live in a first world country or a third world country.

## Lesson Plan Unit

## Math Lesson

## Kindergarten

## Arkansas Curriculum Standards:

- AR.Math.Content.K.CC.C. 6 Identify whether the number of objects in one group from 010 is greater than (more, most), less than (less, fewer, least), or equal to (same as) the number of objects in another group of 0-10 For example: Use matching and counting strategies to compare values.
* Haitian students will not be required to complete their educational program based on the Arkansas curriculum standards, but this allows for a foundational lesson to be utilized if framework is not available or viable for whatever circumstance. Students will not be assessed nationally or globally but will follow the requirements for their school to complete the grade and the education system set in place according to their current location.
* This framework and standard are solely written for the purpose to give structure and a concrete backbone to the origination of the topic discussed throughout the lesson plan.


## Objective:

- The students will use real life examples to compare values from 0-10 and will answer at least 5 value questions with $100 \%$ accuracy.
* The real-life examples will be applicable to that particular classroom, environment, and interests to make the content more relatable and intriguing.


## Arkansas Teaching Standards:

- Standard \#1: Learner Development
- Standard \#3: Learning Environment
* The teachers and educators in Haiti will not be held accountable to the Arkansas Teaching Standards listed but these acknowledge that the educator understands how each learner develops and operates under each learning style, and that the learning environment is suitable and appropriate for the child and for the content that will be taught.


## Materials/Technology:

- Blocks
- Crayons
- Pencils
- Books
- Pictures
- Candy/markers/snack/ object for attention getter


## Introduction:

* This lesson plan is not meant to be followed verbatim or even in the same sequence if other techniques want to be used but provides an optional method of how to explain and teach number value from 0-10 in a fun and hands-on way. Having the lesson plan written in this manner shows the steps to be followed to ensure proper questioning techniques, time allotted for activities and instructional time, and to explain the thinking process of how to catch students' attention and keep it until after the end of the lesson without losing control or misbehavior taking place.
- Use the object of choice or what is available and what will catch the students' attention the most and pass out a quantity of 5 of that object. For example, give each student 5 M\&Ms and keep 3 for yourself. Before the students eat the candy, ask them to identify who has more. Then have each child eat only 1 M\&M and then repeat the question of who has more pieces of candy.
- Repeat this game one more time so that both the class and the teacher have 3 pieces of candy left. Ask who has more and wait for the students' answer.
- Explain that we have been working on counting up to 10 , and today we are going to compare values to see who has more, less, or the same number of various things.


## Procedures:

- Begin by drawing 6 squares on one side of the board, and 2 on the other side. In the middle, write the vocabulary terms More, Most, Less, Fewer, and Least. Ask students to group those words on whichever side they believe it fits. Students may collaborate with one another as a team, and as they give their final answer, write the terms that they have placed on the designated side of agreement.
- This opener activity allows them to use prior knowledge or any context clues to decipher which side each term should be placed on.
- Once all the words are placed on either side, one by one reveal the correct answer for each. Ask the class Depth of Knowledge Level 1: "What does it mean to have the most?"
- Draw a set of 1 circle, 2 circles, and 3 circles on the board. Have students identify which set of circles has the most. Explain that the 3 circles are the most because it is the biggest number and set of circles in the group.
- Give each student 4 counting blocks on their desk and have them partner up with their shoulder buddy and use all the blocks to match into groups of 2 . Allow time for students to group their blocks and then ask which group has more.
- Then take the time to explain that the groups neither have more or less than the other groupings because they are equal to one another, or they have the same amount.
- Use the same blocks to then have the students make a group of 5, a group of 2, and a group that has 1 block in it. Have the students label which group has the most, more, and the least amount.
- Ask the class Depth of Knowledge Level 2: "How can we check to see if we have the right answer when we're answering the question of who has more or less?"
- Listen to multiple answers and then share that we can count up, use our fingers, draw or write out the answer, or even make an estimate by looking at the groups.
- Use different manipulatives to create your own examples with your students.
> Manipulatives can include but are not limited to blocks, crayons, books, pencils, shoes, jackets, markers, etc.
- Gather students on the floor as a group and use pictures to show representations of groupings. Have students count as a group the number of objects on each picture. Write down the number of each picture on the board and then have the class compare which value is greater.
* This activity puts concrete value to each number and grouping rather than students solely looking at which group 'looks bigger'.
- Have students form a horizontal line and give oral instructions that when a number is announced, the students will jump that number of spaces. As you continue, start adding in special instructions that will only apply for certain students to jump forward or backwards depending on instructions.
$>$ For example, "If you are wearing a blue shirt, jump backwards 2 times" or "If you have brown hair, jump forward 3 times."
- Once there is some variety in the spacing, have students review their vocabulary terms to identify who has jumped more spaces or the most, and who has moved the least number of spaces or fewer than the rest.


## Culmination:

- "Okay friends, we are going to finish our math lesson for today! But before we move on to our next subject, let us end math time with some group discussion." Ask the class Depth of Knowledge Level 3: "How can we use these vocabulary words that we learned today when we are at home and not at school?" Allow time for pondering and for students to gather their thoughts on the lesson.
- Recap the vocabulary that was introduced today to refresh all memories before hearing responses from multiple students. (The vocabulary words were More, Most, Less, Fewer, and Least)
- After letting the class share their thoughts with one another for the question, discuss that we can use those words regardless of what we are doing! It does not have to be only at school or in math class that we use those words. Give a few example scenarios that incorporate said vocabulary in them.
- (i.e "I have more flowers in my garden than my neighbor does, but she has the most animals on our street." "My brother has the least amount of hair on his head out of me and my sister, but he just got his hair cut today.")


## Assessment:

- The students will complete at least five value questions either verbally or kinesthetically with $100 \%$ accuracy.
* The assessment may be completed by grouping values with objects on their desk to represent each problem, verbally explained by the student to the teacher, represented by pictures that are drawn to express the solution to each problem, or can be written out to answer each question regarding values from 0-10.


## Depth of KnowledgeQuestions:

Depth of Knowledge Level 1: "What does it mean to have the most?"
Depth of Knowledge Level 2: "How can we check to see if we have the right answer when we're answering the question of who has more or less?"

Depth of Knowledge Level 3: "How can we use these vocabulary words that we learned today when we are at home and not at school?"

## Accommodations:

ADHD: This lesson implements methods, techniques, and accommodations that would work for a student with ADHD because it provides a lot of kinesthetic learning and hands-on activities
that will keep that student busy and engaged and will aid in preventing restlessness or misbehavior throughout the entirety of the lesson.

## Arkansas Curriculum Standards:

- AR.Math.Content.1.OA.C. 6 Add and Subtract within 20, demonstrating computational fluency for addition and subtraction within 10.
* This standard will not be directly applicable to Haiti since it is designed for the state of Arkansas. However, this standard is related to a foundational skill that will be utilized in all locations and all ages. For this reason, this standard may be used as a generalized framework that can be adjusted and formed to match the skills needed for Haitians to succeed and grow.
* The computational fluency will be different due to translation and expectation differences, but educators should teach according to Haitian education frameworks. This serves the purpose of providing educational feedback and options, and a basis for general skills needed if an educator happened to travel from the United States to Haiti and needed an idea of where to begin with students.


## Obiective:

- The students will demonstrate understanding of adding within 10 and will independently represent at least 5 addition equations with $100 \%$ accuracy.
* Depending on the level of understanding and resources available, students may also be assessed orally, kinesthetically, or computationally. Assessments may be individualized to be equitable rather than equal among all students.


## Arkansas Teaching Standards:

- Standard \#3: Learning Environments
- Standard \#4: Content Knowledge
* These standards provide an insight into how the learning environment will be handled during class time and how students can expect to be treated and taught. The content knowledge is accurate and known by the teacher to an extent where they can teach and present the content in multiple ways depending on how the student learns best. The teacher is there to aid the child in growing rather than sticking to their comfortable state.


## Materials/Technology:

- Individual whiteboards
- Counting cubes
- Number cards
- Smartboard
- Dice
- Number line on floor
- Pocket chart
- https://www.education.com/activity/article/shake-em-up/
* These materials do not have to be precisely followed but do give options on a way to present the content in an intriguing and experiential way. The technology is not a necessity but instead a bonus if it is an option to utilize for the lesson.

Introduction:

* The lesson plan is written in a manner as if the teacher were talking to the students in the classroom- like a script. This is not to be followed verbatim but provides an insightful way of how the lesson ideally should go and a road map to follow if need be.
- "Hello, friends! As you can see, we have a number line taped to the floor. We are going to start class off with a fun game!" Explain to the class that they begin on a number and then when a greater number is called out, they hop to that number. Then as a class we will figure out how many spaces they have moved. Allow time for the game to be played. "Friends, we just did addition with our number line! We went from one number and added a number to it to get a sum which is where we ended up on the number line."
- A number line can be created with absolutely anything. Use objects and write numbers on them, tear pieces of paper for each number, or use students to represent numbers.
- Now we remember that we have been working on counting to 10 this week, and we are going to continue learning more about numbers! Have students review counting to ten and use different scenarios to have them count. For instance, ask the class to count who all is wearing a certain color, how many chairs are in the room, or the number of walls or windows they can see.
- Today we will learn about addition and how to add with numbers that go up to 10 and will write our own math problems!


## Procedures:

- To begin, we need to talk about what addition is first. Ask students Depth of Knowledge Level 1 Question - "What is addition?" Allow multiple answers and for students to
explain in their own words what they believe addition is. Write on the board a clear and concise definition of addition. It is when you combine (or add) two or more numbers together to form a sum. Orally repeat the definition more than once and have students repeat it as a class.
- Define sum as when you add two or more numbers together you get the sum! It is the answer to an addition problem. Have students gather in two different groups to form a visual of an addition problem. Count the number of students in each group and combine them and then express to the class that together they are a sum.
- Draw 4 stars on the board and then include a plus sign and draw 3 hearts. Ask the class to count all together and write the number below both the stars and hearts to represent the objects. Explain that this represents an addition problem and have students share with their shoulder partner what makes it an addition problem.
- Write another example on the board and have students write along on their own whiteboards to maximize engagement. Use the equation $2+6=8$. Have the class count up to prove the equation.
- Have everyone pair up and provide instructions on the dice and counting cubes that will already be on desks. Each group will take turns using the dice or the counting cubes to represent an addition problem. When I write a problem on the board, they will use the counting cubes to represent the addition that is happening. The other partner will use the dice to show the addition problem.
- Model the behavior with both objects using the addition problem $5+4=9$. The student with the counting cubes will use 5 cubes and then combine it with 4 cubes to make the sum of 9 . The student with the dice will place the side with 5 and 4 up on the two dice and will write the sum on their individual whiteboard.
- Repeat this process with the pairs to allow for repetition with both dice and counting cubes for multiple rounds. Use the math equations, $3+5=8,1+4=5,5+2=7$, and $6+4=10$.
- Gather students back to whole group discussion and ask Depth of Knowledge Level 2 Question - "How can we show an addition problem?" Review and reflect on the previous activity and discuss that we can use objects, our fingers, and numbers to show an addition problem.
- Have students gather on the magic carpet in front of the pocket chart.
* This can be a real or a pretend carpet to add excitement to the lesson and get students moving to prevent distraction or misbehavior.
- Verbally explain a word problem and have students help choose the correct corresponding number flash cards to represent the addition problem. For example, "Allison has 7 lollipops. Her brother has 2 lollipops. How many lollipops do they have in all?" Students would then choose the number 7 and the number 2 and would count up to find that the number 9 is the sum.
* If a pocket chart is not present, number cards may be placed on the floor, a desk, or any object or space that works so that students may view the cards as they solve each problem.
- Go through multiple examples and allow for creativity from students to form story word problems and numbers to be represented on the pocket chart.
- Take a few minutes to review and recap on vocabulary for repetition. Go over the vocabulary words addition and sum once again and use the class as examples for an addition problem.
- "Alright class! Let's clear our desks and get out a piece of paper from our notebooks and a pencil! Model on the whiteboard how to number their paper from 1-5.
- "Let's discuss Depth of Knowledge Level 3 Question - 'How do we know if our work is correct when we solve an addition problem?'" Discuss different ways to check work and its importance in our lives. Examples of answers can include (counting up, using objects to represent problem, using math family problems to prove answer, etc.)
- Next time we will be subtracting within 10 and will write more math problems!


## Assessment:

- The students will write at least 5 different addition problems with $100 \%$ accuracy.
* Allow accommodations such as oral assessment, kinesthetic learning style for students to incorporate during assessment, or extra time.
* This assessment is simply an example of an assessment that can be used to document and account for the understanding of individual students. As long as there is concrete evidence of a students' improvement and level of achievement, assessments may be individualized to follow the given framework and can be altered to an extent for personal teaching styles.


## Depth of Knowledge Questions:

- Depth of Knowledge Level 1 Question - "What is addition?"
- Depth of Knowledge Level 2 Question - "How can we show an addition problem?"
- Depth of Knowledge Level 3 Question - "How do we know if our work is correct when we solve an addition problem?"
* These depth of knowledge questions seek to further and deepen learning past surface level and allows students to build the habit and mental skills of forming connections and applying the knowledge they have attained to other areas of their life. The level one question is designed to be a retrieval or recall question and can be explicitly found from the lecture or lesson. This is the easiest and most common type of question, but we must not stick to this level of questioning in our classrooms because it allows no room for cognitive growth. Level two questions have the purpose of asking the student to apply the knowledge learned, but in a limited capacity to slowly introduce the cognitive skills of application and synthesizing information. Level three questions cannot be retrieved from the content given but rather the answer has to be formed through personal implications to prove that insightfulness and understanding has occurred and mastered after time and practice.


## Accommodations:

$\square \mathrm{ADHD} / \mathrm{ADD}$ : This lesson has implementations and activities that helps a student with ADHD or ADD to focus and continue to be engaged throughout the entirety of the lesson. The hands on and kinesthetic learning style combined with the visual and auditory aspects seeks to fully emerge the student into the learning experience that is occurring.

Name: $\qquad$ Date: $\qquad$ Score: $\qquad$

Let's Add Grading Sheet

| Score | 1 | 2 | 0 | 4 | 5 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Math <br> Problems | Only one <br> addition <br> problem is <br> written or <br> explained. | Only two <br> addition <br> problems are <br> written or <br> orally <br> explained. | Three <br> addition <br> problems are <br> written or <br> orally <br> explained. | Four <br> addition <br> problems <br> are written <br> and or <br> orally <br> explained. | All five <br> addition |
| problems are <br> written and or <br> orally <br> explained. |  |  |  |  |  |
| Accuracy | Only one of <br> the addition <br> equations are <br> accurate. | Two addition <br> problems <br> given are <br> accurate. | Three of the <br> addition <br> problems <br> written are <br> accurate. | Four of the <br> addition <br> problems <br> are <br> accurate. | All five of the <br> addition <br> problems are <br> accurate. |

## Comments:

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2nd}Grad
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## Arkansas Curriculum Standards:

- AR.Math.Content.2.OA.C.3 Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by pairing objects or counting them by 2 s )
- Write an equation to express an even number (up to 20) as a sum of two equal addends

The schools in Haiti are not held nationally or globally accountable to these standards because it does not originate from the Haitian educational requirements. However, this lesson plan can be utilized and implemented regardless because it is based on foundational skills that can be translated globally rather than solely used for Arkansans.

* This standard is not going to be assessed by Arkansas guidelines, but gives the lesson plan a concrete foundation of where it came from and provides a valid resource of origination.


## Objective:

- The students will use manipulatives to explore even and odd numbers and will be able to solve both oral and hands-on problems with at least $90 \%$ accuracy.
* This objective is not to be assessed on for governmental documentation if it does not align with the Haitian education system but gives insight on how to assess a students' understanding based on the objective given at the beginning of the lesson.


## Arkansas Teaching Standards:

- Standard \#2: Learning Differences
- Standard \#4: Content Knowled ge
* These teaching standards for the state of Arkansas serve the sole purpose for this lesson plan to represent the knowledge and understanding the educator has regarding the learning differences of his or her students and the knowledge needed for the content being taught.


## Materials/Technology:

- M\&M'S
- Picture cards for visuals
- Sticky notes
- Blocks
- Crayons
- Markers
- Manipulatives that are available
- Notebook paper
- Pencils
- Adding Odd and Even Numbers - Quick Math Tricks (easycalculation.com)


## Introduction:

* This lesson plan does not have to be followed verbatim or in the exact sequential order but gives an example of how to teach this standard and represents multiple learning styles and techniques of how to explain even and odd numbers to second graders.
* Even and odd numbers may be taught with visuals that are available and do not have to be limited to the materials that were listed above.
- "Welcome back, class! I have a special treat for everyone today. But first, we have to use our treats for a math mystery before we begin."
- Pass out the 11 M\&M'S and instruct the students to first count them by ones and organize them on their desk.
- Next, have them count by twos and make separate groups on their table.
- Once this is complete, students will probably question or make remarks that they have one that is left by itself without a partner.
- "Well, it looks like we have found the mystery that must be solved today. What are we going to do with our lonely M\&M that does not have a partner?"
- "Today, we are going to be solving our mystery by learning all about even and odd numbers!"
$>$ Students may then eat their candy if instructed to do so by the teacher.


## Procedures:

- "To solve our mystery, we must first begin by learning some new vocabulary terms." Ask Depth of Knowledge Level 1: "What is an even number? An odd number?" Instruct students to work with their shoulder partner and decide on a final answer for both terms and write it on a sticky note. That sticky note will then be stuck to either the chalkboard, whiteboard, or wall as a chalkboard splash activity.
$>$ The chalkboard splash activity is an example of a TPT strategy. (Total participation strategy).
- Once the chalkboard splash activity is completed, read each note one by one and either affirm the thinking or graciously and smoothly redirect so that no confusion or misunderstanding can take place in the beginning.
- Define an even number as being divisible by 2 (it can be divided into 2 parts equally with no leftovers- refer to M\&M example to clarify). An odd number cannot be divided into two parts equally.
- Use the whiteboard to draw examples. Draw symbols and pair them in groups of two by circling the symbols. Write the total number of symbols to the side.
- Draw multiple examples by one another to visualize the different ways to group and whether there is a remainder or not.
- Have the class practice counting by twos and threes to improve and practice their mental math skills and addition.
- Pass out manipulatives of blocks, crayons, markers, or whatever is available and on hand in the classroom.
- Instruct the class that you will call out a number and they will organize that specific number into groupings. Once everyone has grouped their number of manipulatives together, the class will take turns explaining the different ways students chose to group and why it is or is not correct.
$>$ Groupings do not have to be paired into twos but can be unique to each student if they can explain whether it is even or odd, and why they grouped their manipulatives the way they did.
- Repeat this activity for multiple rounds and use numbers such as $13,10,9,16,7$, and 4 .
- Have the class stand up from their desks, and group them together based on personal characteristics of the classroom. Use this as repetition for even and odd number groupings and practice for counting in groups.
Once students have sat back at their desks, ask Depth of Knowledge Level 2: "How can we figure out whether an answer will be even or odd without counting?"
- After a few responses have been shared, explain that there are three rules that can be followed to know what the solution of a problem will be before we count.
- The total of two numbers follow these rules:
$>$ If two even numbers are added together, the answer will be even.
$>$ If two odd numbers are added together, the answer will be even.
$>$ If an odd number and an even number are added together, the answer will be odd.
- Allow time for students to work with their table team to explore these rules and test their validity.
- Take a few minutes to also write these examples on the board.

$$
>3+3=6,5+5=10,8+8=16,7+7=14,4+4=8 \text {. }
$$

> Have the class brainstorm the similarities that all these equations have with one another.

- Once students have recognized that every solution is an even number, ask the class to come up with a formula that represents this finding.
- Allow time for collaboration and discussion but guide the conversation to discover individually that $\mathrm{N}+\mathrm{N}=$ even number.


## Culmination:

- "Friends, we need to begin wrapping up our math lesson for today. While we get ready to look at our homework for the day, let us have a group discussion over Depth of Knowledge Level 3: "How can we use math in our everyday lives? Why is it important?"
- Allow time for students to process the question and answer. Have them share with their shoulder partner and table team, and then allow a few volunteers to share with the class.
- Allow the last depth of knowled ge question to spark discussion for a few minutes and explain the importance of mathematics in our everyday lives and how we can properly utilize it and implement in into our conversations and thought processes.


## Assessment:

- The students will answer questions over even and odd numbers and will represent equations in different ways according to instructions with at least $90 \%$ accuracy.
* To provide more opportunities for accommodations and modifications, students may be assessed orally, kinesthetically, or through written work to provide an equitable educational experience. The most important guideline is that students have a mastered understanding of the objective and standard.


## Depth of KnowledgeQuestions:

Depth of Knowledge Level 1: "What is an even number? An odd number?"
Depth of Knowledge Level 2: "How can we figure out whether an answer will be even or odd without counting?"

Depth of Knowledge Level 3: "How can we use math in our everyday lives? Why is it important?"

## Accommodations:

ADHD: This lesson is designed to be accommodational for students with ADHD because of the active and continuous movement and learning that is designed to occur. Students will not have a lot of downtime, so this allows students with ADHD to stay focus and engaged throughout the entirety of the math lesson.
$3^{r d}$ Grade

## Arkansas Curriculum Standards:

- AR.Math.Content.3.MD.A. 1 Tell time using the terms quarter and half as related to the hour (e.g., quarter-past 3:00, half-past 4:00, and quarter till 3:00)
- Tell and write time to the nearest minute and measure time intervals in minutes
- Solve word problems involving addition and subtraction of time intervals in minutes (e.g., by representing the problem on a number line diagram)
* Haitian students will not be held to the Arkansas standard to complete their education, but this standard allows a basis for a foundational skill that needs to be learned by all individuals. Students need to be able to identify the time from an analog clock rather than simply reading the time from a digital clock.


## Objective:

- The students will understand how to tell time and use proper vocabulary regarding time and will be assessed both orally and computationally with $100 \%$ accuracy.
- The assessment given for the students can be monitored and completed orally, through pictures, words, or math problems according to accommodations and modifications that are needed.
- Students will not be assessed nationally according to the guidelines of the United States but need to complete an assessment and meet the given objective to determine if there is understanding for this foundational skill.


## Arkansas Teaching Standards:

- Standard \#3: Learning Environment
- Standard \#4: Content Knowled ge
* The Arkansas Teaching Standards provide a guideline and a way to identify how the classroom environment and the students will be interacted with and how the lesson is approached from the teacher's point of view, experience, and knowledge of the content.
$\because$ These teaching standards represent the state of Arkansas but can be utilized in any state or country because it communicates that the standard of conduct is exceptional and met by the cooperating teacher and is adequately prepared to teach the students in their care.


## Materials/Technology:

- Analog clock
- Digital clock
- Braille clock
- Sticky notes
- Telling Time Record Worksheet
- What Time Is It? Wristwatch activity
- Crayons
- Scissors
- Tape
- Musi
- Flashcards
- Whiteboards
- 5 Hands-On Ways to Teach Telling Time - WeAreTeachers
- Learning Resource big classroom clock kit
* These materials do not have to be followed exactly but provide an optional pathway on how to teach time and the terminology that corresponds to telling time in an adequate and experiential way.


## Introduction:

- This lesson plan is not meant to be followed verbatim or even in the same sequence but provides an optional method of how to teach about time and how to interact with clocks while using appropriate terminology. This lesson plan represents a way to interact with students in an experiential, hands-on, and visual way to keep them intrigued and involved throughout the entirety of the lesson.
- "Welcome back, friends! I am so happy that you all could make it to school today because I have a fun lesson for us to learn today."
- Show the same time represented by an analog clock, digital clock, and orally. Have the class say the time in unison for each one to incorporate repetition and allow them to see the same time displayed in multiple ways.
- Explain to the class that today we are going to practice telling time, using the correct vocabulary for clocks, and introduce word problems that involve time intervals.
- Begin the lesson by showing the current time from an analog clock and writing that time on the board. Ask students to talk with their shoulder partner of why they think that time is either correctly or incorrectly written.
- Have a few students share their thoughts and then discuss that the shorter hand represents the hour, and the longer hand represents the minutes. Draw an example of an analog clock that shows the time, 3:30. Have students work as a team to identify the time, and then ask them how they came to their conclusion.
- Use an analog clock and explain that the minutes are not visible like how we say it. For example, the 30 minutes from $3: 30$ is not represented by a 30 shown on the clock, it is represented by the number 6 .
- Explain to the class that each number on the clock when finding the minutes is counted by 5 's.

$$
\begin{aligned}
& >\text { (i.e } 1=5,2=10,3=15,4=20,5=25,6=30,7=35,8=40,9=45,10=50,11=55,12=60 \\
& \text { or } 0 \text {.) }
\end{aligned}
$$

- Have a volunteer come up to the board and count the minutes on the analog clock in intervals of 5. Ask the class to collaborate with their table partners on what they believe the dash marks on the clock are used for.
- Use a chalkboard splash TPT (Total participation technique) for this question and have each table decide on a final answer and use their sticky notes to write down their answer and then stick it to the chalkboard or whiteboard.
- Read off the answers and have the class give their final answer based on the chalkboard splash responses. Either affirm or reroute the thinking based on what it decided upon but reiterate regard less that the dash marks on the clock are for counting by 1 's and represent 1 minute each. There are 4 dashes in between each number.
Gather everyone onto the floor as one group and ask Depth of Knowledge Level 1: "What does half-past, quarter to, or fifteen past mean when dealing with time?" Have students raise their hands and share so that as a group everyone can listen to multiple responses.
- Use both an analog and digital clock and point arrows to the 15,30 , and 45 mark. Write down the vocabulary, half-past, quarter to, and fifteen past. Have volunteers come up to the board and label the arrows of which vocabulary phrase matches which spot on the clock.
- Have students explain their thought process and why they chose what they did and explain that half-past is halfway on the clock and between each hour, and 30 minutes is halfway through one hour. Quarter to means 15 minutes, and a quarter to $60^{\prime}$ clock is 5:45 because that is 15 minutes until 6:00.
$>$ Address the possible misconception that when counting money, a quarter equals 25 cents, but that in time it is not identified as 25 minutes. Rather, we divide the
clock and hour into four equal parts, and a quarter of that is 15. (a quarter is equal to $1 / 4$ of a dollar).
- Fifteen past is simply 15 minutes past the beginning of the hour or the designated time that is stated. It can also be used for fifteen until when talking about the 45 -minute marker.
- Send students back to their desks and pass out both the Telling Time Record Worksheet and What Time Is It? Wristwatch activity
- Provide oral instructions to first design their own wristwatch and cut it out. They may color it however they want but they only have a few minutes to work before we begin the activity. Walk around and help them secure the watch with tape to their wrist once they have cut it out.
$>$ Before the watch is secured on the wrist, also have students draw a time on their watch. Reiterate that the shorter hand is the hour and the longer is the minute.
- Once that is complete, explain that the Telling Time Record Worksheet will be used to record and document times that are seen.
- Students will get to travel around the room while music is playing, and when the music stops, whoever is closest to them will show their watch and the other person will record the time that is shown and label whose watch they looked at.
- Complete this activity for multiple rounds and then gather students back at their individual desks.
- To regroup and refocus ask Depth of Knowledge Level 2: "Why is it important to be capable of telling time on different clocks?" Have students write their answer on the bottom of their recording time worksheet and then listen to a few responses of students you have called on.
- Use flashcards that represent time in various ways and have students 'pop up' when they know the answer to review before ending the lesson for the day.


## Culmination:

- "Alright, class! Everyone sit back down in your seats and we are going to wrap up our lesson over time." Have a few students show their wristwatch that they designed and show what time it is and name a few different ways to identify the time.
- While class is coming to an end, ask Depth of Knowledge Level 3 question, "How would you teach someone who couldn't tell time to read a clock and verbally announce the correct time?"
- Allow time for several students to share ways to explain how to tell time and to write the same time various ways. This incorporates self-generated differentiated instruction and proves full understanding if it can be explained in their own words and taught to another individual.
- Next lesson, we will be using word problems to practice our addition and subtraction skills using time!


## Assessment:

- The students will complete at least five questions over clocks and time and orally express the correct time with $100 \%$ accuracy.


## Depth of KnowledgeQuestions:

Depth of Knowledge Level 1: "What does half-past, quarter to, or fifteen until mean when dealing with time?"

Depth of Knowledge Level 2: "Why is it important to be capable of telling time on different clocks?"

Depth of Knowledge Level 3: "How would you teach someone who couldn't tell time to read a clock and verbally announce the correct time?"

## Accommodations:

Visual impairment: This lesson is designed to be accommodational for students with a visual impairment because there are braille materials. A large chunk of the lesson is centered over dictation and orally deciphering how to incorporate the correct terminology in everyday speech regarding telling time.

4th Grade

## Arkansas Curriculum Standards:

- AR.Math.Content.4.OA.A.2 Multiply or divide to solve word problems involving multiplicative comparison
- RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a Grade 4 topic or subject area.
- Students will not be held nationally to these standards since they are not directly applicable, but this provides a guideline and a basis to go off if Haiti education standards are not available or the teacher is not familiar with them. These standards can be used globally and provided a foundational knowledge of mathematics for students to learn the material and be contributors in their society.
- The vocabulary and language used will need to be translated into the language used in the classroom whether that is French or Creole. The general academic and domainspecific words may be altered for a fourth grader in Haiti compared to in Arkansas if needed and if the environment demands so because of age range gathered into one room.


## Objective:

- The students will investigate word problems through direct instruction and hands-on activities and will be able to solve at least 5 multiplicative comparison problems with $100 \%$ accuracy.
- The assessment given for the students can be monitored orally, through pictures, words, or math equations.


## Arkansas Teaching Standards:

- Standard \#3: Learning Environment
- Standard \#4: Content Knowledge
* The Arkansas Teaching Standards provide a guideline and a way to identify how the classroom environment and the students will be interacted with and how the lesson is approached from the teacher's point of view, experience, and knowledge of the content.


## Materials/Technology:

- https://www.onlinemathlearning.com/multiplicative-comparison-4oal.html
- Whiteboard and markers/ chalkboard and chalk
- Paper
- Pencil
- Multiplication flashcards
- Mega notepad
* All materials are listed as the ideal materials to use if available but can be easily adjusted and flexible to what is on hand and what can be clearly used to reach the objective goal and for students to understand the concept.
* The website is a teacher resource that can be utilized to provide ideas, examples, and learning targets for students of all abilities and ranges of learning.


## Introduction:

* The lesson plan is written in a manner as if the teacher were talking to the students in the classroom- like a script. This is not to be followed verbatim but provides an insightful way of how the lesson ideally should go and a road map to follow if need be.
- "Hello, everyone! I am so excited to start our lesson with all of you today."
- "Let us start with a number talk!"
- "A number talk means that we are going to look at some numbers that I write down and try to solve the problem using different ways to get the answer!"
- Write on the board " 32 is $\qquad$ times as many as $8 . "$
- Ask the students to sit quietly and see if they can figure out the answer. Have them give a thumbs up when they think they have the answer.
- Have students share their answer and how they got it.
- Allow the students to listen to the different strategies. Highlighting that students used multiplication and division strategies.
- Review the previous lessons of addition and have students make connections between addition and multiplication. Have students' pair and share how $8 \times 4=32$ can connect to $8+8+8+8=32$ and why it is the same thing.
- Ask Depth of Knowledge Level 1 Question: "Can anyone tell me what does it mean to multiple? Divide?" Explain to the class that multiplication is adding a number to itself a
specified number of times. Division is separating a number into parts to make them smaller than the initial product.
- Ensure that multiplication and division is defined, and students have a strong understanding between the differences of multiplication and addition and between division and subtraction.
- "Today, we will be learning about solving multiplication and division problems that involve multiplicative comparison...which, guess what? All of you just did! We are also going to write our own word problems using some of the vocabulary we have been working on in our reading."


## Procedures:

- To start off, let us define what a multiplicative comparison is. It is a statement that shows how two factors and their product can be read as a comparison. Go ahead and define factor, product, and comparison as well. Students may be used as examples to provide a visual of the vocabulary words.
- Have students define each word in their own terms to assess understanding before moving on. Be patient and use multiple methods of explaining terms to ensure the language barrier is not a hindrance or way of miscommunication.
- When defining factors, students can be grouped together. Have the class count the separate groups and write the number down, and then add them together to find a total. Explain that each group is a factor of the addition problem because on their own they do not make up the whole problem, which is a factor.
- For product, you may use the same example or objects found in the room or from the village to explain that the product is the whole, or final answer to a multiplication problem.
- Comparison can be used in a variety of ways such as comparing colors of clothes that each child is wearing, number of students compared to the number of teachers, etc.
- Once students have a grasp on the terminology and vocabulary being used throughout the lesson, continue with the number talk.
- "Let us revisit our number talk multiplicative comparison from earlier."
- 32 is 4 times as many as 8 .
- "What is another way that we could write this as an equation?"
- $32=4 \times 8$
- $8 \times 4=32$
- Ask the class to discuss as a group what the differences between the math problems are and explain why they are considered the same thing.
- "Now can someone find the factors and the product of the factors in this problem?"
- 32 is the product. 4 and 8 are the factors.
- A product results from a process or action.
- A factor is something that contributes to a result.
- Continued exposure to math terminology will help the child's long-term memory be advanced.
- "So, we can read the statement, 32 is 4 times as many as 8 , as a multiplicative comparison. We are comparing 32 with 4 times 8 ."
- "Let us look at some other phrases that we might hear in these kinds of problems."
- Times as many (i.e 14 is $\underline{7}$ times as many as $\underline{2}$ ) $7 \times 2=14$
- Times more (i.e $\underline{9}$ times more than $\underline{5}$ ) $9 \times 5=45$
- Times as much (i.e $\underline{6}$ times as much as 10 ) $6 \times 10=60$
- Times as large (i.e Holly's cupcake is $\underline{3}$ times as large as Brad's)
- Write each phrase and example down on whatever materials are available and discuss each one with the class and have them take turns explaining the meaning of each one. Examples can be used within the classroom with hands on materials to aid in the visual and kinesthetic learning for the group.
- Numbered Heads Together (Total Participation Technique strategy) Divide students into groups to work through a couple of word problems. Give every student a number from 14. Have all of the 1 's gather into a group to work with one another, all of the 2 's, 3 's, and 4's. This allows students to work with a variety of people and to get up and moving during the lesson to prevent sleepiness, distraction, or misbehavior. Have them find the solution and also write the word problem into an equation.
- Model to everyone how the equation should be written once it is solved.
- 1) Darlene picked 7 apples. Juan picked 4 times as many as Darlene. How many apples did Juan pick? Answer: $4 \times 7=28$
- 2) Joelle read 9 books in the fall. George read 7 times as many books. How many books did George read? Answer: 9x $7=63$
- 3) Sarah is 12 years old. Michael is $x$ years old. Sarah is 3 times as old as George. How old is Michael? Answer: $12 / 3=4 \quad x=4$
- Bring students back to their tables and go over the word problems as a class.
- Ask them what they did to solve the problems
- Ask Depth of Knowledge Level 2 Question: How do you pick apart a word problem to begin to solve it?
- Write a problem on the board and ask students to walk through it with you
- Explain that there are words that will mean the same thing when in a word problem like times means multiplication. (ex. Times as many, times more, and times as much are all keywords for multiplication. Times as large can be a clue for division if the other factor is unknown)
- Pick apart each word and make sure students understand where they relate in a problem.
m Ask students to hold up their depth of knowledge cards (Total Participation Technique strategy) to check their understanding
- If depth of knowledge cards are not available (green light, yellow light, red light), have them hold either a thumbs up for full comprehension, sideways thumb for semi comprehension but needs checking up on, or thumbs down for need assistance immediately to check individual understanding and thought processes.
- Ask students to think of their own multiplication word problem
- Think Pair Share (Total Participation Technique strategy)
- Each student comes up with their own word problem and then shares with their neighbor, then as a whole table they share.
- Students then can trade problems and solve a problem someone else at their table wrote.


## Culmination:

- "Alright, friends! Let us start wrapping up for the day." Allow time for one or two students to present how they worked a multiplicative problem on the board.
- If board is not available for use, have them orally share or write on materials at hand to explain their multiplicative comparison problem.
- Ask Depth of Knowledge Level 3 Question: Why is it important that we learn these math strategies like multiplication and division?

D Sample answer: It helps us to solve real world problems that can relate to us personally. For instance, comparing ages and heights in families, discovering the better price of food, etc.

- Allow time for students to work on assessment, and if time runs out assign it for homework.
- Next class we will be working on division comparisons!


## Assessment:

- The students will be able to solve at least 5 multiplicative comparison problems with $100 \%$ accuracy.


## Depth of KnowledgeQuestions:

Depth of Knowledge Level 1: "What does it mean to multiple? Divide?"
Depth of Knowledge Level 2: "How do you pick apart a word problem to begin to solve it?"
Depth of Knowledge Level 3: "Why is it important that we learn these math strategies like multiplication and division?"

## Accommodations:

ADHD: This lesson will cater to students with ADHD because it provides a way for students to succeed with all learning styles due to the variety of teaching methods. Students with ADHD will have means to have their focus redirected due to the fast pace and mixture of differentiated instruction.

Assessment Sample:

| Animal | Bat | Dog | Squirrel | Goat | Cat |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Hours of sleep | 20 hrs | 14 hrs | 5 hrs | 15 hrs | $? \mathrm{hrs}$ |

1. Harry noted that bats sleep 4 times as much as cats do. To show how many hours cats sleep, form a multiplicative comparison statement to complete the chart.

Complete the statement:
2. Goats sleep $\qquad$ times as long each day as squirrels do.
3. Bethany was measuring out candles for the birthday cake and realized that Nathan had 9 times more candles than she did. Bethany had 7 candles. How many did Nathan have? Form a multiplicative comparison to represent the word problem.
4. 32 fish is 8 times as many as 4 fish. Form a multiplicative equation to represent the statement.
5. $21=7 \times 3$. Write a comparison statement that accurately represents the multiplicative equation.

## Arkansas Curriculum Standards:

- AR.Math.Content.5.NF.B. 6 Solve real world problems involving multiplication of fractions and mixed numbers. For example: Use visual fraction models or equations to represent the problem.

These standards are not meant to be globally assessed, but rather ensures that the skills being taught in this lesson are valid and reputable. This lesson contains foundational skills that every individual should understand regardless of location or residence.

* Haitians will not be held accountable to the Arkansas standards, but will follow the guidelines of Haiti's educational program that is set into place.


## Objective:

- The students will use real life examples to understand multiplication of fractions and mixed numbers and will solve at least 5 questions with at least $85 \%$ accuracy.


## Arkansas Teaching Standards:

- Standard \#3: Learning Environment
- Standard \#4: Content Knowledge
* These standards are not listed to inform Haitians of what Arkansas does, but rather is a useful addition to let the audience and educator know and be aware that they are to be knowledgeable in the areas of how the learning environment operates and is organized so that optimal learning can occur and that they have mastered the content knowledge to pass along to students.


## Materials/Technology:

- Market prices from villages
- Whiteboard or chalkboard
- Manipulative blocks
- Pencil
- Paper
* This lesson plan does not have to be followed exactly but utilizes an optional way to teach multiplying fractions and mixed numbers.
* Note that if students are struggling with the current content or even have mastered it at a quicker pace than expected, follow the flow of the classroom and either slow it down and try explaining it a new way, or provide opportunities for advanced content and learning. Never hinder or hurt the child's learning experience because of a perceived notion that a lesson plan must be followed verbatim. Every student learns in a different way and at a different pace, so we must provide an equitable experience for all.
- Write on the board examples of negative numbers, whole numbers, mixed numbers, and fractions.
- As students are getting settled, have them identify the similarities and differences of all the numbers on the board.
- Have multiple volunteers share characteristics that they noticed of all the examples.
- "Okay, friends! We have been exploring negatives numbers and whole numbers, and today we are going to discover how to multiply mixed numbers and fractions!"


## Procedures:

- Begin the math lesson by asking Depth of Knowledge Level 1: "What is a fraction? Mixed number?" Have students use the TPT strategy (Total participation strategy) of Numbered Heads Together to define these two words.
$>$ Numbered Heads Together is a technique to utilize to ensure every student participates and gets to share their thoughts and opinions. Give each student a number between 1-4 and have each correlating number gather in one group to discuss the vocabulary terms.
$>$ All the ones will be in a group, all the twos, the threes, and the fours.
- Allow time for students to gather with their groups, discuss the meaning of the terms, and then share their findings and thoughts with the whole class.
- Either affirm thoughts or nonchalantly redirect to prevent misunderstanding and to spare emotions from embarrassment.
- Share that a mixed number is a whole number along with a fraction to denote that it is in between two consecutive whole numbers.
- A fraction is a part of a whole and is represented by a numerator (the top number), a horizontal line, and the denominator (the bottom number below the line).
- Use relatable and current prices from the village trade markets or prices in the city to utilize for the next real-world examples.
- Write the prices on the board and read aloud a word problem to the class. Instruct them that they must find an equation that matches the word problem and provides a way to solve the unknown. Read a word problem of choice that has the students buying multiple of one product that is written as either a fraction or a mixed number.
- Students may collaborate as a team but must agree on one final answer to share with the teacher.
- Once students have given an answer, explain that a multiplication problem that involves mixed numbers or a fraction will be written as though it were normal equation.
- Ask Depth of Knowledge Level 2: "How do we know what to multiply when working with fractions and mixed numbers?"
- Allow for several responses and then share the following content:
- A mixed number typically needs to be changed to a fraction before multiplying.
$>$ When there is fraction where the numerator is larger than the denominator, it is known as an improper fraction.
$>$ A mixed number must be changed into an improper fraction before it can be multiplied by either a whole number or another fraction.
- To change a mixed number into an improper fraction, you simply multiply the denominator by the whole number, and then add the numerator. That number is then the new numerator and is placed over the original denominator.
- To multiply, you treat it like a normal multiplication problem.
> If there are two fractions being multiplied, first multiple the two numerators, and then multiple the two denominators. The new numerator is then placed on top of the new denominator.
$>$ If multiplying a fraction with a whole number, place the whole number over 1 so that the value is not altered, and then repeat the above process.
- Use multiple examples on the board and repeat each step aloud as it is being done by hand.
- Have the students explain the process to check for understanding and give examples to work on with their table team and individually.
- Pass out manipulative blocks to visualize parts of a whole and to have a hands-on experience of working with a mixed number or fraction.


## Culmination:

- "Okay, friends! Great work today! We discovered how to work with mixed numbers and fractions and multiply them together!"
- Before completing wrapping up for the day, ask Depth of Knowledge Level 3: "Why is math important for us to learn about?" Listen to the class' responses and stimulate a class discussion on math and its relevance in our world.


## Assessment:

- The students will solve at least 5 multiplication problems with fractions and mixed numbers with at least $85 \%$ accuracy.
* This assessment needs to be documented in writing to assess full understanding, but accommodations and modifications may be implemented.
* If a student needs a manipulative, extra time, oral instructions, or further explaining, allow for those aids to be utilized.


## Depth of KnowledgeQuestions:

Depth of Knowledge Level 1: "What is a fraction? Mixed number?"
Depth of Knowledge Level 2: "How do we know what to multiply when working with fractions and mixed numbers?"

Depth of Knowled ge Level 3: "Why is math important for us to learn about?"

## Accommodations:

Misbehavior: This lesson plan helps to prevent misbehavior because of the active and engaging nature. Students do not have a lot of downtime or independent work time, so it has left little room for unplanned or uncharted chaos.

6th Grade

## Arkansas Curriculum Standards:

- AR.Math.Content.6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values, explaining the meaning of 0 (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge)
* This standard may or may not be applicable or comparable to the Haitian educational program that is implemented in their country but provides a reputable foundation for the lesson plan that is printed below. Haitians will not be accountable to the Arkansas State of Education Department but will still need to have a full understanding of the foundational skill that is listed above regardless of the system of education they respond to.


## Objective:

- The students will use manipulatives to discover and understand the concept of positive and negative numbers and will complete at least 5 questions with $100 \%$ accuracy regarding the standard.


## Arkansas Teaching Standards:

- Standard \#4: Content Knowledge
- Standard \#5: Application of Content
$\therefore$ These standards represent the understanding educators have and the recognition of the important and relevance of the content being taught in everyday life, and how to teach the content in a way that is understandable and experiential for all students.


## Materials/Technology:

- Thermometer
- Number line
- Whiteboard
- Chalkboard
- Pencil
- Paper
- Manipulatives (counting blocks)
* This lesson plan is not designed to be followed verbatim but provides a step-bystep process of an optional method and technique of how to explain and teach positive and negative numbers using real world examples.
* The quotes are not meant to be read as a script but rather provides insight on how to speak to students and clarity on how it is imagined that the lesson would go if taught in real time.
- Have a number line placed on the floor and welcome students back to class. Review the previous lesson and recap on what has been learned up until this point.
- Have a few volunteers come to the number line and give them a specific number to stand on.
$>$ Some numbers will be positive, and some will be in the negatives
- Discuss what is different between the numbers and the placement on the number line.
- Next, have the students on the negative numbers walk and count the steps to reach their peers on the positive numbers.
- Exclaim that today we will be learning about positive and negative numbers and how it applies to our everyday lives!


## Procedures:

- Begin by asking Depth of Knowledge Level 1: "What is a positive number? A negative number?" Have a few volunteers respond and share their thoughts and wording in various ways to define the given terms.
- Explain that a positive number is anything greater than 0 , and a negative number is anything less than 0 .
$>$ Note that 0 is neither negative or positive but simply neutral and a space marker to divide between negatives and positives.
- Use real life examples such as a thermometer, credit and debit card, sea level, and other local examples to further explain the concept of positive and negative numbers according to their context.
- Pass a thermometer around and have students look at different pictures of places with varying temperatures.
- Have them identify and discuss differences they see in the pictures alone, and then look at the values of the temperature.
- Ask the class to work with their table team to find the connecting characteristics between the temperature and the pictures of the different locations.
$>$ Allow time for discussion but work towards the end goal of discovering that the lower the temperature, the colder the environment will be.
$>$ This in turn affects the weather and the elements such as snow, ice, drought, fires, etc.
- Introduce credit and debit cards and repeat the same process to discuss how money can be correlated to find patterns with positive and negative numbers.
$>$ For example, the more money you have, the higher the positive number will be, but the higher the tax and interest rate can be.
$>$ If you have negative numbers on your debit card, you are in debt because you owe money.
- Have students use the manipulative counting blocks to work with their team and play a trading game. Have them barter and "buy" blocks from one another and allow them to discuss and experience negative and positive numbers based on how many blocks they have.
- Once the activity is completed, collect the blocks, and refocus the attention of the class. Write an addition problem on the board that contains negative numbers and ask Depth of Knowledge Level 2: "How do we solve addition problems when there are negative numbers?"
- Allow multiple students to answer and then explain that addition problems follow two regulations when working with positive and negative numbers.
$>$ If two negative numbers are being added, the second negative becomes a positive.
$>$ If a negative number and a positive are added together, it acts as a subtraction problem.
- Allow students to collaborate and work as a team to implement these regulations into practice problems.


## Culmination:

- "Alright, class! It is time to put away those materials and face the front of the classroom again." Ask Depth of Knowledge Level 3: "How is this applicable to our everyday life? Why is it important?" to wrap up class and end on a thought-provoking note.
- Allow time for discussion and to hear the voices of the class.


## Assessment:

- The students will solve at least 5 questions that revolve around positive and negative numbers with $100 \%$ accuracy.
* Accommodations and modifications may be implemented for the assessment if needed. Students may have extra time, oral instructions, further explanations, or manipulatives to provide an equitable assessment for all students based on individual needs.
* Haitian students will not be globally assessed according to Arkansas standards or requirements but will answer to their Head of Education in Haiti.


## Depth of KnowledgeQuestions:

Depth of Knowledge Level 1: "What is a positive number? A negative number?"
Depth of Knowledge Level 2: "How do we solve addition problems when there are negative numbers?"

Depth of Knowledge Level 3: "How is this applicable to our everyday life? Why is it important?"

## Accommodations:

Visual impairment: This lesson plan allows for accommodations to be met for students with a visual impairment because there are hands-on manipulatives used throughout the lesson that can be individually passed around and investigated. This allows for a close-up and personal look at the materials being used for this lesson and prevents any vision trouble from far away views at what is being discussed and used to explain content.

## Relevance and Implications

While this thesis explores and expounds on the country of Haiti and the growth and progression of their educational system throughout history, it also provides an insight to the methods and strategies that educators use in their classroom to encourage diversity and heterogenous learning groups. The issue at hand was equitable education and how to strive to achieve that regardless of geographical location. For Haiti, the main issue, if not the biggest, is that there is not a sufficient number of educators in the field and not enough consistent or qualified individuals to follow through with educating the younger generation. Haiti has struggled with the financial aspect of paying their teachers, and for this reason there are few who continue in the teaching field from year to year. Rather than the curriculum being the sole focus for Haiti, the first task at hand should be to train and equip the individuals in the school and focus on keeping the staff as consistent as possible.

It is a continuous process to work on improving an educational system, and there will never be a curriculum, district, or program that ceases to need improvement. However, while circumstances and times are troubling and unknown, as educators we must continue to trudge ahead in hopes and desires of giving our students the best learning environment and experience as we can. The field of education does not thrive because of one man's work, but rather a collaborative and communicative effort. The growth that we see in the educational field is done in increments rather than massive leaps, and together we can work as one towards the purpose and goal of influencing the minds of the generations behind us.

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