

The Social Education of a Virus: Local Critical Dialogues During a Global Pandemic

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Introduction

In 2014, the city of Monrovia, Liberia, was in the midst of the most aggressive outbreak of the Ebola virus in the history of Africa. By the time the World Health Organization lifted the international health emergency in 2016, the virus outbreak infected 28,646 people and caused 11,323 deaths. By all accounts, the outbreak of a virus with a mortality rate of 40% among infected became the deadliest regional pandemic in the history of the continent.

Thomas Eric Duncan was a personal and delivery driver in Monrovia. He had several jobs in the courier industry and worked for some of the major logistic companies such as Safeway Cargo and FEDEX-Liberia (Orishimi, 2014). On September 15, 2014, after the family of Marthalene Williams could not locate the services of an ambulance after suffering convulsions during her pregnancy, Duncan volunteered and secured a taxi ride to a hospital. He rode the taxi with Williams and several of her family members. Williams died days later of the Ebola virus at a hospital in Monrovia (Botelho & Wilson, 2014).

On September 19, 2014, Duncan took a plane for the United States via Brussels. He was planning to visit his family and partner in Dallas. He arrived at the Dallas/Fort Worth Airport a day later (Onishi & Santora, 2014). On September 24, 2014, at his partner's home, Duncan began experiencing symptoms such as abdominal pain, dizziness, and headaches. Upon arriving at the emergency room in the Texas Health Presbyterian Hospital early in the evening, he was checked by triage nurses for temperature and chest compressions. He was released later in the

evening and sent home with a series of prescriptions but without a definite diagnosis (Wilonsky, 2014).

Four days later, on September 28, 2014, Duncan was rushed to the hospital by ambulance after experiencing a worsening of his symptoms. Upon arrival at the hospital, it was discovered that he came from Liberia, an Ebola hotspot. Doctors immediately contacted the Center for Disease Control and proceeded to implement Ebola safeguard protocols such as the wearing of protective personal equipment (PPE). Later that day, Duncan experienced a shock to his system that produced uncontrollable diarrhea and nonstop vomiting (*Detail's of Duncan's treatment reveal a wobbly first response to Ebola*, 2014). He was admitted to the intensive care unit a day after his arrival; he was diagnosed with the Ebola virus on September 30, 2014. Duncan never made it out of the intensive care unit. He passed away on October 8, 2014. In the process, the nurses assigned to Duncan's care, Nina Pham, also contracted the virus, becoming the first person to get the virus in U.S. soil (Westfall et al., 2014).

By all accounts, the death of Thomas Eric Duncan, the first person to die of Ebola outside Africa, should have sent shockwaves and raised the alarm among government officials throughout the states and the nation. It did not. Initial calls for the Texas government to form a response team and program to combat a pandemic or a virus outbreak were met with mild interest at best. A report commissioned by Governor Rick Perry that highlighted the extent of the state's lack of preparedness, including an insufficient number of PPE's and the absence of an emergency stockpile, never ignited the need of lawmakers at the state capitol to urgently address this problem (Benson, 2020). Efforts to pass a bill that would have allowed the state government to create a pandemic response preparedness team died in the House without a hearing (Mortiz, 2020).

Six years later, we may very well be finding ourselves suffering the effects of such a lethargic response to Duncan's death by state officials and political leaders. To say that the state has not properly reacted to this crisis is an understatement. We dived into the spread of COVID-19 completely blinded and without any directions. The response has been characterized by a series of missed calls to actions, lack of federal guidance, and late responses. A completed lack of coordination in confronting the spread of the virus has been evident at every step.

On December 30, 2019, the Chinese government publicly reported that a cluster of pneumonia cases originated in the city of Wuhan, Hubei province. Twenty-five days later, the government places the city of 11 million in strict lockdown and closes the entire city and its inhabitants to the rest of the outside world. For some, this action came with a heavy dose of disbelief. For others, this could only happen in a country with an authoritarian regime. And for the rest, the virus that originated in one of the wet markets of the city could easily be managed and contained by modern, western medicine. Almost four months later, we find ourselves with almost every major city in the industrialized world deserted and on lockdown, national and international travel interrupted to grinding halt, schools and universities around the world closed indefinitely, and, in the United States, one in every three households are under a stay-at-home order.

How did it come to this? Did we ignore the warning signs? What is next? What can social studies teachers and academics learn from the biggest public health crisis of our lifetime and an invisible enemy that has hijacked our lives? In this paper, I propose critical points of dialogue for this critical moment. As we are becoming engulfed in the Twilight Zone feelings that this experience is creating for all of us, social studies teachers and educators must not lose sight of our teaching duty. If anything, it is in moments like this that we must help students become fully

functioning citizens. Time demand we engage in critical dialogues. For Freire (1970), the knowledge that is only for immediate purposes such as passing a test and soon forgotten is not valuable knowledge. Freire's argument is that such pedagogical practices do not enable the student to explore his or her situation in the world. Other proponents of critical pedagogy, such as McLaren (2003) and Apple (2005), argue that the practice of banking education promotes market and capitalistic ideals in education, which only widens the social inequalities and injustices in our society. The struggle for critical pedagogy has evolved around the notion of challenging the current distribution of knowledge, values, and practices to promote a truly democratic society (Gabel et al., 2013; Giroux, 1988). Critical pedagogues equate social justice as the pursuit of knowledge that would create autonomous members of a democratic society enabling them to be active participants in society in the light of Rawls's (1971) social contract.

Ignoring Historical Early Warning Signs

The Ebola virus disease (EVD) is a hemorrhagic illness commonly found in humans and primates. Its symptoms are fever, sore throats, muscular pain, headaches, diarrhea, and vomiting. The peculiar aggressiveness in which these symptoms manifest often leads to kidney and liver failures along with internal and external bleedings. The first recorded cases were identified in 1976 in South Sudan and the Democratic Republic of the Congo (Harrod, 2015). The name is given after the Ebola River because one of the first cases was identified in Yambuku, a village located near the body of water. Over the next decades, the disease would cause havoc in Sub-Saharan Africa.

Despite the devastating effects of the disease, with average mortality ranging from 50% to 80%, the disease has been successfully contained within the African continent (Gostin et al.,

2014). With the rare exceptions of extreme cases of patients who had been rushed to hospitals in Europe and the US, the uncontrolled spread of the disease outside Africa was virtually unknown. Everything changed in September 2014 when Thomas Erica Duncan's story took the state of Texas, the country, and the world by surprise. The history of pandemics is vast and ancient. Since Roman times, civilizations have dealt with pandemics and outbreaks. The question is not what we have learned. In reality, we have learned a lot. We do know a lot about how viruses spread and contagions propagate. The bigger question might be why humanity is always caught off guard and always ignoring the early signs when it comes to viruses outbreak.

H1N1: Lessons not Learned

These days, people are familiar with H1N1 thanks to the Swine Flu pandemic of the mid-2000s (2005-2009). The disease, however, is over a hundred years old, and it has caused havoc before. On the morning of March 4, 1918, an Army Private named Albert Gritchell, who was stationed at Fort Riley, Kansas, complained of flu-like symptoms such as headaches, sore throat, and fever (DeGroot, 2017). By the afternoon, 100 cases with similar symptoms were reported among his fellow soldiers. By mid-summer, more than 22 members of Gritchell's regiment were dead. It is believed that these were the very first recorded cases of the original strain of the H1N1 virus, commonly known later as the Spanish Flu of 1918. Over the next two years, the outbreak of the Spanish Flu killed 650,000 Americans and close to 50 million people worldwide (McClelland, 2020). The ease of the spread and devastating mortality rate of the disease caught everyone off-guard. The similarities, however, of how the disease was handled in 1918 and how current virus outbreaks are managed today are strikingly similar.

Duncan's death in 2014 was not the first time that a traveler brought a deadly virus from abroad with public health officials scrambling to contain the threat, imposing quarantines and other strict measures. A similar scenario played out a hundred and two years ago. In August 1918, a ship coming from Europe arrived at the New York City Port, bringing several infected people with H1N1. The passengers were quickly isolated; the port closed and placed under quarantine (Wilson, 2020). At the time, Royal S. Copeland, New York City Health Commissioner, became the immediate national public face, quickly setting the tone about how the rest of the nation would react to the Spanish Flu pandemic (Howard, 2015). In a similar fashion, responses were timid and not aggressive. And same as today, public officials played a delicate balance of figuring out what measures to impose without inflicting orders that were too "Draconians" (Howard, 2015). In the case of Copeland, he downplayed the severity of the contagion, suggesting that avoiding kissing, affectionate greetings, and proper distance would be enough to isolate the virus (Wilson, 2020). He further suggested that theatres and restaurants could remain open with proper ventilation and air circulation. By the fall, his suggestions were spread widely by newspapers nationwide; his guidelines were adopted in major cities across the country. Furthermore, Copeland viewed with disgust the stricter measures imposed by other cities such as Chicago where compulsory vaccination became mandatory and public spaces were closed. He viewed targeted-smart measures as the most appropriate response. Same as now, cities, counties, and states responded differently, and measures to contain the virus varied immensely. Contrary to New York, Chicago did impose stricter rules, which included the closures of parks and lake beaches, non-essential retail, and proper distance among Chicagoans (McClelland, 2020). By the end of the pandemic, the Spanish Flu would kill 20,000 New Yorkers. By contrast, Chicago's death amounted to 8,500.

The exact origins of H1N1 continue to be widely unknown, but scientists do know that it did not originate in Spain. Yet, same as today with COVID-19, records show that Spain was one of the major epicenters of the Spanish Flu, but not the biggest one. During the late 1910s, the world was engulfed in the ravaging effects of World War I. Coverage and attention to the disease were not extensive, and wartime censorship to preserve high social morale made it harder for newspapers to report the disease devastating effects in countries like the United States and Britain. The death of King Alfonso IX from the Spanish Flu shifted the attention of the world into Spain, falsely giving everyone the impression that Spain was the world epicenter.

With very few exceptions, the virus eventually died in 1920. Medical treatments were few and varied, and a vaccine was never developed. Eventually, herd immunity took its course and the virus stopped spreading at a mass scale. It did not take long for the world to forget about the disease (Latson, 2015). In reality, by the mid-1920s, its devastating effects were almost forgotten. This also includes how the scientific community responded. The origins and the behavior of the disease elicited very little interest among epidemiologists and infectious disease experts. It was not until the mid-1930s that it was known that initial connections were made between the H1N1 and strains of the Avian and Swine flu. It is safe to say that the ravaging effects of the Spanish Flu were not taken seriously.

Playing with Water: Before Chloroquine Became a Buzzword

These days, Chloroquine has become a buzzword, heavily promoted as a possible cure for COVID-19. The obscure drug was discovered by Hans Andersag and his colleagues at laboratories of German pharmaceutical Bayer in 1934 when they were able to synthesize derivatives of quinine, an active compound of cinchona bark--a medicinal plant found in the

Peruvian Andes (Baird et al., 2012; Krafts et al., 2012). Originally, it was thought to be too toxic for humans, and, for a decade, it laid dormant inside the vaults of Bayer laboratories. In the 1940s, the benefits of the drug to combat Malaria were discovered by military doctors from the Afrikan Korp (DAK) during World War II. The DAK opened a laboratory in Tunis for its production and began to use it *en-mass* among its troops in the African continent. While fighting the DAK, French and American soldiers discovered the drug and sent samples to the Bayer laboratories in the United States (Sneader, 2005).

Contrary to H1N1, Malaria and its effects were widely known in the 1920s and 1930s. Plasmodium, the parasite that carries the disease, was discovered in 1880. It infects humans when the parasite is injected inside the body by a mosquito bite (Centers for Disease Control, 2009). The parasite enters the bloodstream and multiplies by breeding inside the blood's red cells; however, the release and multiplication of the parasite in the bloodstream also destroys the blood cells. Symptoms vary from mild cases of chills and fever to severe cases of pulmonary edema that can lead to death. Malaria is transmitted by mosquitoes, and it flourishes in warm climates and stagnant waters.

The infectious disease, which has prehistoric origins, already made its marks in the world. It was first introduced in the Americas by Columbus in 1492, killing almost entirely the indigenous population of the continent. Later, it spread widely through colonial America. It made its imprint during the American Civil War, including infecting General Ulysses S. Grant who suffered from recurring bouts for the rest of his life (King, 2012). Its biggest imprint in the Americas happened during the construction of the Panama Canal in the early 1910s.

In 1933, in the midst of the Great Depression, President Franklin D. Roosevelt created the Tennessee Valley Authority (TVA), a government-owned corporation, as part of the New

Deal (Kitchens, 2013).l. Soon, it became the most ambitious infrastructure project in American history. It was nothing short of monumental. Today, it is one of the biggest utility corporations in the country. The original idea of TVA was to modernize the rural Midwest by providing navigation, flood control, water channels, electricity, fertilizer manufacturing, and economic development to the Tennessee River Valley--an area mostly composed of Tennessee, Kentucky, and portions of Alabama, Georgia, Mississippi, North Carolina, and Virginia (*TVA history-Facts, Timeline, and Meaning*, 2017). The major feature of this massive undertaking was the gigantic control and management of water. More than 40 hydroelectric dams would eventually be constructed. However, the creation of canals and reservoirs of water, along with scorching summers, were ideal for the breeding of Anopheles genus, the mosquito that carries Malaria (Kitchens, 2013). During the 1930s, the disease spread throughout the region. Poverty and insanitary conditions did not help, and the disease became incredibly infectious among poor communities that were near riverbanks and reservoirs.

It took the threat of Malaria throughout the Tennessee River Valley in the 1930s and 1940s and the economic threat posed by the disease for the federal government to finally act. In 1946, a single office on the sixth floor of the Volunteer Building in Peachtree Street in Atlanta, Georgia, became occupied by a team of medical doctors and scientists. With an original budget of \$1 million dollars, the Communicable Disease Center--known today as the Center for Disease Control (CDC)--became the primary agency to combat the spread of Malaria in the south (*Our Story-About CDC*, 2018). Today, the CDC is a massive national network of hospitals, high-security labs, and multiple rapid response teams with an annual budget of 11 billion dollars. Headquartered on the grounds of Emory University, over the years, the CDC would tackle head-on some of the most vicious virus outbreaks in the world, from the spread of Ebola to the

devastation of *AIDS*. Although the CDC has been at the forefront of combating some of the most serious public health threats since the second half of the 20th century, questions will always remain about the apathy that has taken public officials to react. Originally, the CDC only had seven medical officers. The initial response to combat the disease was the massive spraying of Dichlorodiphenyltrichloroethane, commonly known as DDT (Washburn, 2019). It would take the threat of biological warfare during the Korean War and the uncontrolled spread of Tuberculosis for the government and the private sector to provide massive investments and transform the CDC into the country's elite public health agency that we know today. It was not until the late 1950s that Malaria was eradicated in the United States. It was not until the 1960s that the WHO and the CDC promoted the use of Chloroquine to combat malaria (Krafts et al., 2012).

The Gay Cancer and the Politics of Public Health

In the early 1980s, the study of infectious disease was a moribund career. It did not carry the glitz and glamour of other medical professions; it did not attract the attention of many medical doctors. It was an obscure occupation that only attracted the interest of few scientists. Among those interested in the profession was a young medical scientist working at the labs of the National Institute of Allergy and Infectious Disease (NIAID): Anthony Fauci. However, it would not be long before Fauci and his team would be at the front and center in the fight for one of the most devastating diseases of the late 20th century. His laboratory would be the first one to pay attention to the sudden outbreak of a new, unknown disease in the east and west coast.

In 1981, a rare case of pneumonia, *Pneumocystis Carinii Pneumonia (PCP)*, was discovered among five gay men who were thought to be previously healthy in Los Angeles

(Centers for Disease Control, 1981; Hooper, 2000). This rare disease aggressively attacked their immune system. At the same time, an unusual case of a very aggressive form of cancer that produced skin lesions affected a group of young men in New York (Altman, 1981). Later that year, cases of PCP were reported to spread quickly among drug addicts who used needles. By the end of the year, 121 deaths were reported of 270 cases of a severe immune deficiency disease that disproportionately affected the gay community and drug addicts in New York, Los Angeles, and the San Francisco Bay Area.

During the 1980s, the Acquired Immune Deficiency Syndrome, better known as *AIDS*, would ravage the world. The disease went unnoticed for most of the early 1980s. For many of us, the revelation of this new disease came shockingly when the death of actor Rock Hudson was announced in 1985. With the passing of the years, millions will be infected and die. By the end of 2018, 32 million people have died from the disease (*HIV and AIDS: An origin story*, 2020; UNAIDS, 2019).

But the disease did come alone. It came with a string of anger, despair, fear, stigma, and discrimination. It did not take long for those suffering from the disease to confront the social bias from the rest of the society (Frank, 1986). Soon, fears of the diseased manifested itself in the form of job restriction and unfair hiring practices, housing discrimination, and a slew of other unfair practices, including denial of medical service. The “Gay Cancer”, as it was originally known, would shape our collective lives forever (Block, 2006). In addition to the social stigmas, the disease came with a heavy dose of politics.

The original report from the CDC about four young men exhibiting symptoms of pneumonia caught the attention of Fauci and his team at NIAID (Fauci, 2006). However, it was not the scientific aspect that worried Fauci and his colleagues the most. In the early days of the

outbreak, Fauci predicted that HIV/*AIDS* would expose the failures of our government, highlight how overburdened and ill-equipped was our healthcare system, and display the weakness of our legal institutions and social work system (“Anthony Fauci honored by ABA AIDS Committee,” 1996). Unfortunately, he was right.

The current crisis with COVID-19 is not the first time that would make New York the epicenter of a pandemic. In the late 1980s and early 1990s, New York was ground zero during the fight against *AIDS*, and, with that, it exposed how the health care system with the most advanced medical breakthroughs in the world collided with the most unequal health care system in the world (Krauthammer, 1983). How would one of the most unjust health care systems in the industrialized world cope with one of the most devastating diseases in modern time? Soon, it became evident how inadequately prepared the system was (Bayer, 1991). The situation became extreme in New York because the disease disproportionately affected those in dire economic situations and most vulnerable (Wright, 2013). According to Bayer (1991), lack of funding meant little access to the expensive medicine such as zidovudine (AZT) for those without insurance. In addition, access to proper care became limited and many resorted to receive care in emergency rooms due to the absence of clinics and hospitals capable of offering specialized medical services to treat HIV/*AIDS* (Schoenbaum & Webber, 1993). In no time, a system ill-prepared to respond to this new disease became overruled and in crisis with catastrophic results. However, very few could envision how defaulted the system was because it did not become evident until hard choices were made such as who to admit in the nursing homes, provide access for housing, give maternity care, administer adult care, and enter into drug-prevention treatments (Bowen, 2016; Burg, 1994; Ehrlich & Moore, 1990; Smith et al., 1992). It took the entire collapse of the New York public system to collapse for congress to act. It was not until 1990

when the first major federal funding package of \$2.9 billion to fight aids was approved (Bayer, 1991).

Teaching the Movement: The End of Innocence

It is important for us to allow our students to make sense of the current moment. Critical dialogues and conversations are vita and imperative (Kincheloe, 2007). Our history shows that we have been in this situation before. Our country has dealt with a public health crisis before. And as before, we see that many missteps and missed-opportunities repeat itself. It is at this junction that we, as educators, find ourselves. As the Internet and social media becomes littered with advice of how to survive the current lockdown situation, what is the role of social education? Empowering and emancipation will take a lot more than a five minute YouTube lesson about home-schooling. It would amount to critically looking at our current social, political, and economical situation (Duncan-Andrade & Morrell, 2007; Giroux, 1988).

As I write this piece, the constant change in our dynamic is becoming mind boggling: the price of a barrel of oil has plummeted to negative territory; the protest from the far right to open the country has evolved from the fringes of the media to front-and-center headlines and a mainstream conservative movement; the efficacy and legitimacy of our federal form of government has been questioned and tested like never before perhaps since the Civil War; and the monumental task of what would really take to reopen the country's economy is only now becoming visible.

However, we have been here before. Our public health system has collapsed before (Bayer, 1991). Our lives have been put on stand-still in previous times. Epidemics have previously ravaged our nation. And the stories of how everything started and how our nation

responded are eerily similar, time and time again (Benson, 2020). The need to critically look at our society and discover the multiple truths of our moments will be vital. Social education demands it. If anything, history clearly shows our inherent flaws and how we tend to repeat them. Competing doctors most interested in fame and notoriety hijacked the early efforts to combat *AIDS* throughout most of the 1980s (Shilts, 2011). During the Spanish Flu in 1918, public officials in New York undermined the need to properly put safeguards and made it the epicenter of the pandemic in the nation (Howard, 2015). And during the 1930s, it took an eminent economic threat for authorities to look for a cure of Malaria (Kitchens, 2013). Understanding our current situation historically will be crucial.

How did we find ourselves in this place today? That will be a very hard question to answer. However, if the past is anything indication of our present situation, then, the answer does lie in the uncomfortable truth of our eternal self-content about our society and ourselves. We gloat in our achievements, and we pride ourselves that we have the best of everything. However, once again, a pandemic crisis shows us how inadequate our private health care system works in a time of public health crisis just as it did during the peak of the *AIDS* epidemic. For decades, the containment of the Ebola virus in Africa was not an accident. Experts understood the horrific nature of the disease and did everything they could to contain it within the continent (Harrod, 2015). The death of Thomas Eric Duncan, his ability to bypass authorities at multiple airports, and his death at a regional hospital in Dallas should have sent the highest medical authorities in the nation into Defcon 1 mode. It should have sent chills down the spine of every government official and put them into action. It did not (Benson 2020).

So, where do we truly stand with our students at this moment? This is another question that might be difficult to answer. It will be a moment that we can cherish or miss completely.

This will be our perfect moment to foster our social activism, emancipatory dialogue, and our quest for social justice. This will be the perfect moment to understand our situation in the world. We cannot miss it. Too much is at stake. If we miss this opportunity, we will miss a great change to create our next generation of agents for change.

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