Dr. Mae C. Jemison: Breaking Racial and Gender Barriers in Space

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Individual Documentary
Process Paper Word Count: 491
Time: 9:59
When I began looking for an NHD topic, I knew I wanted a topic that was involved with civil rights, specifically on gender or racial issues. After researching multiple events, I narrowed my potential NHD topic to two women who had broken barriers in space: Sally Ride and Mae Jemison. After researching both women further, I decided to study Mae Jemison as my NHD topic. This allowed me to address the civil rights movement that occurred within America in the 1960’s, an event that has impact on my family.

I began to research Mae Jemison on multiple platforms, with most of the being biographies about her. I used information I gathered from those sources as a starting point for the rest of my project. I took my search to YouTube, where I found multiple videos of her sharing her story. Although I could have easily filled up the ten-minute documentary with information I gathered from these sources, I realized Jemison’s story is not just about her, but about barriers that were broken which allowed for her to enter space. Multiple barriers were broken that allowed for Jemison to enter space, but there were two that I decided to focus on: racial and technological barriers. Although gender barriers had to be broken to make it socially acceptable for Jemison to enter space, I focused on racial barriers that had limited her. This is because the Civil Rights Movement would have personally affected her more than the Woman Rights movement. I researched both the Space Race and the Civil Rights Movement to show how society had to shift from when she was born to when she entered space. Upon entering space, she broke gender and racial barrier, showing that the prejudice that society had previously placed on her gender and race were false. Once I realized this, I researched how her breaking barriers has impacted current society. I also thought it was important to mention what she was currently
doing because she is still actively changing the world. So, I included how she is currently attempting to break current technological barriers to make interstellar travel possible.

While conducting my research, I concluded that a documentary would be the best presentation style for Jemison’s story. It is a recent enough event that there are many videos and photos about her life. Also, a documentary allowed me to tell a story through music. To begin the video-making process, I wrote and recorded a script. From there, I edited the recorded script and entered it into a video-making program along with the interviews of Jemison I had. Once I had the audio aligned so it was under the time limit, I inserted the photos and text to bring the whole documentary together. I continuously was finding photos to include throughout the documentary making process, because if you think you have enough photos, you do not. I continued to re-edit the documentary until it was competition day.
Annotated Bibliography

Primary:


Space shuttle Challenger bright mission STS-7 into space. A part of that crew was Sally Ride, the first American Woman that entered space. That event helped motivate Mae Jemison to enter the astronaut training program, which eventually led to her becoming an astronaut. This website provides a photo of the Challenger launching.


The song Johnny B. Goode is a song that the United States choose to represent the United States used to represent their country on the Voyager Golden record. This record was launched into space, representing Earth if any extraterrestrial life form received the record. This song was used in the space race portion of the documentary.


CBS provides footage of the original Star Trek T.V. show. Nichelle Nichol’s, an African American actress, stared in this show, becoming the first African American woman on prime time T.V. Mae Jemison regularly watched Star Trek growing up, and it was one of the many things that encouraged her to become an astronaut. This footage was used in the historical background portion of the documentary.


This website provides outlines the different building zones in Chicago. It provided an image that allowed me to see where Mae Jemison grew up in comparison to the rest of Chicago. That image was used a part of the historical background, specifically the portion that discusses Mae Jemison early childhood, to show viewer where she grew.


During the civil rights movement within America, John Coltrane wrote a song in dedication to four girls who passed away in a bombing. This song reflects the sorrow and pain that was felt in the African American fight for rights. This song was used as background music during the civil rights movement portion of the documentary.

Students across America interviewed Mae Jemison, asking her about her time in space. This interview provided insight on the process that Jemison went through to become an astronaut. This information was used in the historical background portion of the documentary, showing the audience what she had to go through to become an astronaut.

“Dr. Mae Jemison.” *Dorothy Jemison*, jemisonfoundation.org/about/mae-jemison/.

This website is the Dorothy Jemison foundation, a foundation the Mae Jemison founded after her trip to space. This website provides information on different charities and programs Mae Jemison founded and sponsored post-space. This information was used in the short term/long term portion of the documentary, showing viewer the impact and importance of Mae Jemison.


Sally Ride and Valentina Tereshkova were two women who broke barriers that enable Mae to enter space. Tereshkova was the first female astronaut, and Ride was the first American female astronaut. Information and photos that this website provided were used in the historical background portion of the documentary, in the portion that explained barriers that were broken in order for Jemison to enter space.


This website is the official NASA report for mission STS-47. It provided insight on the experiments that were being conducted onboard the endeavor. It provided multiple images that were used in the heart of the story portion of the documentary.


This website is an article report of post-space Mae Jemison visiting Cornell University to encourage students to pursue STEM topics. The article provides information and images of Jemison that was later used in the short term/long term impact portion of the documentary.
Girls ask Dr. Mae Jemison about space.” YouTube, May 23, 2018, https://www.youtube.com/watch?v=JZoDnBoTTxQ

Girls ask Mae Jemison a variety of questions about her trip to space and her experience throughout her life. This source provides background information on the short term/long term impact of Jemison’s legacy.


This interview was conducted by two Google Developer staff members, after Jemison gave a speech about the 100 Year Starship program. The interview provided information on the impact of Mae Jemison’s flight from her opinion. I used this source as a part of historical background and the short-term, long-term impact.


African girls that were impacted by Peace Corp program preform a skit about the life of Mae Jemison. This shows the significance of Mae Jemison trip to space, where her position inspires people she doesn’t interact with. A picture from this website was used in the short term/long term portion of the documentary.


The International Astronautical Federation provide primary footage of mission STS-47. The crew is narrating footage that is showing the different experiments that took place during their flight. Footage from this video was used as a part of the heart off the story.


This is an interview of Mae Jemison, where she discusses her career. It provides insight on how she always wanted to be an astronaut. The footage from this video was used a part of the historical background, in the bibliography section that talk about her education.

This article is on the life of Mae Jemison. It provides primary information on Jemison astronaut career, and what she did after space. This article was used as background knowledge that led me to other sources.


This video provides footage of the Freedom Day boycott of 1963. The footage collected from this resource was used in the historical background portion of the documentary, specifically the civil rights section.


This video from Instagram TV shows aspiring astronaut Myah Mitchell being accepted into Disney’s Dreamers Academy. This video includes a clip where Mitchell’s was talking about how Mae Jemison inspired her to pursue her dreams. That clip was show in the short term/long term impact portion of the documentary.


This newspaper provided primary insight on how society at the time reacted to Mae Jemison entering in space and informs readers about how Jemison values equality. Information from this article was used as background information for the historical background/heart of the story portion of the documentary.


Ramsey Lewis was artist who originated from Chicago, Illinois in the 1950’s. This song represents the music that was being performed in Chicago while Mae was growing up. This song is used in the historical background portion of the documentary.


Explorer 1 was the first United States satellite that was launched into space as a part of the space race against the Soviet Union. This primary source provides information on how the satellite was built and what the satellites mission was. Photos and information from this source were used in the space race portion of the documentary.

Mae Jemison was a speaker at a STEM day in New Jersey. At this event, she inspired students to pursue STEM careers. This primary website discusses the event of that day to a group of middle school students, as well as provides a photo of Mae Jemison with those students. The photo from this website was used in the historical background portion of the documentary.


The NASA program has an archive of photos for there astronauts, including Mae Jemison. Photos collected from this sight were used in the introduction, heart of the story, short term/long term impact, and conclusion portion of the documentary.


This article provides information of how racism did not waver Mae Jemison from her ambitions and dreams. Even though it was hard at times, her mindset is what kept her on track to becoming an astronaut. This article was used as background information for the historical background portion of the documentary.


This website provides of photo of Mae Jemison giving a speech to Stanford University graduates. This image was used in the historical background portion of the documentary, specifically the section that discusses Jemison’s education.


After contacting Myah Mitchell, she provided photos of her being accepted into the Disney Dreamers Academy. Mitchells is an aspiring astronaut, who was inspired by Mae Jemison. The photos collected form Mitchells was used in the short term/long term portion of the documentary.

This website shows that Mae Jemison’s flight made way for other astronauts. After Jemison’s flight, 4 other African American women have become astronauts. This information was used in the short term/long term portion of the documentary.


This an hour-long resource tap is footage of experiments and life onboard the Endeavor during mission STS-47. This resource provided footage and information about the day-to-day life of the astronauts who lived on the Endeavor. Footage from this video is used in the heart of the story portion of the documentary.


This video provides primary information on Mae Jemison’s life and her trip to space. Mae talks about her how experience helped during her flight. The part of this video that is included in the documentary is the portion where she discusses how it was important to her that underrepresented cultures were represented in space. That footage was included in the heart of the story.


This website is a first-hand account of Princeton University’s graduating Class of 2000. Included in the class was Mae Jemison, who received an honorary degree. A photo of Mae Jemison accepting her degree was shown, and that image was used in the historical background portion of the documentary, specifically the portion that discusses Mae Jemison’s education.


In preparation for her flight into space, Mae Jemison had to practice launching to ensure that it went correctly. This website provides a photo of Mae Jemison after she practiced launching into space.

The STS-47 mission in the NASA photo database provides images of the STS-47 mission in space. These photos were used for the heart of the story.


The NASA archive of the STS-8 mission provides pictures of Guion Bluford, and his trip to space. The photos found in this archive were used as a part of the historical background.


Music is a way to set the tone of a story. This piece of music is a simple yet moving piece of art. Angels Amongst Us is used in various places throughout the documentary.


A short speech by Mae Jemison talking about her life, growing up, and how she uses her position to help and empower future generation. This source was mainly used as background information to find other resources, but it provided information on the type of person she is.

“The Earth We Share.” Dorothy Jemison, jemisonfoundation.org/the-earth-we-share/.

This website provides information on The Earth We Share space camp, one of the organizations Mae Jemison founded after her trip to space. It shows how Mae Jemison was able to use her position as a former astronaut to inspire other to pursue STEM careers. Information and photos from this website were used in the short term/long term portion of the documentary.


The Chicago Historical Society provided primary photos of what Chicago looked like in the past. The image selected from the collection of old photos is of the Commercial District in the 1950s. Its shows a Red Robins parlor with a few cars and other shopping areas. This photo was used in the historical background portion of the documentary, to show where Mae Jemison grew up.
United States, Congress, Jemison, Mae C. “Forty Years and Counting: The Triumphs of Title IX.” *Forty Years and Counting: The Triumphs of Title IX.*

This is a written testimony of Dr. Mae Jemison, present to the United States congress. It discusses the significance of Title IX, and how it impacted the life of Jemison and those around her. Information collected from this testimony was used as background knowledge, leading to find other resources. This testimony also provides a quote from Mae Jemison about why she felt it important to fly


The NASA collection of various ringtones and audio effects includes many different space related sounds. One of these noises is of the Sputnik space satellite beep. Sputnik was the first satellite to orbit the Earth. The Sputnik beep is briefly heard when Sputnik was being shown.

Secondary:


This article from the National Women’s History Museum provided information of women who inspired Mae Jemison and information on Jemison flight to space. This information was used as background knowledge, leading me to find better resources.


This website provides information and pictures of Sally Ride, the first woman in space, and the difficulties she went through to enter space. This information is in the historical background portion of the documentary, showing barriers that were broken before Mae Jemison so that she could go to space.


This website provided information and photos on the Freedom Day Boycott of Chicago that occurred in 1963. Although this information was not used in the documentary, it provided information about what was occurring around Jemison as she grew. Photos from this source was used in the historical background and conclusion portion of the documentary.

During Mae Jemison’s academic career, she attended Stanford University. This website provides a photo of Jemison at a Stanford graduation. That image is used in the historical background portion of the documentary, specifically the area that discusses Jemison’s academic career.


This website provides a picture of a little girl recreating Mae Jemison’s official astronaut portrait for mission STS-47. This image is used in the short term/long term impact, showing how Mae inspired others.


This website provides a picture of Mae Jemison with her childhood idol, Nichelle Nichols. This is used as visual aid in the historical background part of my documentary. Even though the photo is depicted as more modern, it shows that Nichelle Nichols continued to impact Mae Jemison, and that Mae did not forget her influence. This image is used in the historical background portion of the documentary, specifically the area that discusses Nichelle Nichols.


This website is a biography on the life on Mae Jemison. It allowed me to see what influenced and was important to Jemison. Information from this website was used as background knowledge, leading me to researching more topics.


This secondary website provides some primary photos of Mae Jemison as a student. The images found on this website are used in the introduction of the documentary as well as the historical background portion that discusses Mae Jemison in school.
The wind ensemble rendition of Angels Amongst Us brings a inspirational feel. That felling is used during the civil rights portion and the Heart of the story portion of the documentary.

This video provides basic knowledge of events that were occurring during the 60’s. Information from this video was used in the introduction of the documentary.

The Luna 2 was a space probe that was launched by the Soviet Union and was the first man made object to land on the moon. This website provides information and photos of the Luna 2 crash to the moon. This photo was used in the space race portion of the documentary.

Ebony released a magazine in October of 1992 with Mae Jemison on the cover. This image shows the significance that Mae Jemison entering space had on the African American community at the time. This website is a reselling of that magazine. The photo collected from this website is used in the short term/long term impact of the documentary.

This video is a secondary post of the iconic “I Have A Dream” speech that Martin Luther King, Jr gave on the steps of the Lincoln Memorial. This footage provides insight on one of the swaying points during the civil rights movement of the 1960’s. This footage in used in the historical background part of the documentary, specifically the civil rights portion.

This PDF is a school newspaper for Morgan Parks high school. One of the articles includes an image of the Morgan Parks building in the 1916. That imagine is used in the historical
background portion of the documentary, when referring to Mae Jemison time at Morgan Parks High School.


Jazz was one of the popular music styles in the 1960s, and this video is a collection of jazz hits from that era. The music from this was used in various portion of the documentary, to set the tone of the video.


There were many Chicago boycotts that were occurring around Mae Jemison as she grew. This website provides information and photos from those boycotts. Although the information was not included in the documentary, photos from this website were included in the historical background portion of the documentary.


This website provides photos and information on the impact Martin Luther King, Jr had on America during the civil rights era. This provided information on what was occurring around Mae as she grew. The photo and information collected from this website went into the historical background portion of the documentary, specifically the civil rights portion.


This website discusses the significance of the space race that was occurring in the mid 1950’s through the 1960’s. Both the images and the information that was found on this website was used in the historical background portion of the documentary.


The space shuttle Challenger exploding in 1986 affected Mae Jemison astronaut selection process. This article provides pictures and information on the Challenger exploding. Photos
and information from this article were used as a part of the historical background portion of the documentary.

Light, Points of. “Former Astronaut Dr. Mae Jemison Empowers Youth to Explore, Connect with the World Through STEM Education.” Former Astronaut Dr. Mae Jemison Empowers Youth to..., www.3blmedia.com/News/Former-Astronaut-Dr-Mae-Jemison-Empowers-Youth-Explore-Connect-World-Through-STEM-Education.

Mae Jemison is known for encouraging students to follow STEM careers. This website shows that Mae is inspiring students. Although this article fits under the short term/long term theme, the image of Mae Jemison with students that this article provides, is used in the historical background portion of the documentary.


This website is a biography of Mae Jemison. It informed me of the names of Mae Jemison’s family members and some events she did during her childhood. This information was used in the historical background portion of the documentary.


This website provides a picture of Mae Jemison and Nichelle Nichols on a Star Trek set. This image shows that both Nichelle Nichols and the Star Trek producers realized the significance of Jemison and wanted to honor her and her childhood dreams by incorporating her into the show. The image collected from this website went into the historical background portion of the documentary.


This website provides photos and information on Malcolm X’s influence on the civil rights movement. This went into the historical background, specifically the civil rights portion, of the documentary.

This website is another presentation on Mae Jemison. It provided photos of Jemison during various ages of growing up. Those photos were used in the historical background portion of the documentary.


This website discusses the photo of Bernie Sanders being arrested in the 1960’s due to the Chicago boycotts. Along with the Bernie Sanders photo, there are photos of the Chicago boycotts that occurred in the 1960’s. The photos collected from this website went to the historical background portion of the documentary, specifically the civil right section.


This is a video of John F. Kennedy’s iconic speech at Rice University. It helped me understand the American strive for space. This footage was a part of the historical background, specifically the area that discusses the space race.


This video is a collection of different patriotic songs. One of these song were used in the Space Race section of the documentary, to set the feeling of American pride.

Peace Corps Online: Special Report: Sierra Leone Peace Corps Medical Officer and NASA Mission Specialist Dr. Mae Jemison, peacecorpsonline.org/messages/messages/467/2021262.html.

This website is a collection of information on Mae Jemison, including information on her involvement with the Peace Corps. A photo from this website was used In the bibliography portion of the documentary, specifically when her time with the Peace Corp was mentioned.


The Civil Rights Movement was occurring in Chicago while Jemison lived there. This encyclopedia provides historical background on the change that was occurring around Jemison while she was growing up. This information was used as background knowledge, making a way for other research.

This biography of Mae Jemison provides information and photos of Mae Jemison’s trip to space. Information from this source provided background knowledge on Jemison’s life, leading on to further research.


This website provides photos and information about Rosa Parks and the Montgomery bus boycotts. A photo from this website was used as a part of civil rights portion of the historical background, informing viewer about what happened around Jemison as she grew.


This encyclopedia provides information on school desegregation in the Chicago School District. This encyclopedia used as part of the background knowledge, helping me see some of the challenges Mae Jemison faced while growing up.


This video is an interview on Peggy Whitson and Mae Jemison. It discusses why it was significant for both women to go into space. This footage is used as background knowledge for why it was important for Mae Jemison to go to space.


This website provides information and photos of President John F. Kennedy’s and his plans for the space program in the 1960’s. The information this website provided went into the introduction and the historical background portion of the documentary.


The space shuttle Challenger exploding was a very rememberable day in history. The explosion halted the astronaut training selection process that allowed Mae to become an astronaut. This website provides information about the explosion and a photo of the event. A
photo from this website was used in the historical background portion of the documentary, the portion that discusses the specific events that lead up to Mae entering space.


This website provides information of president Eisenhower turning NACA to NASA. This was a significant change that occurred during the space race. This information was used as a part of the introduction and historical background portion of the documentary.


This website provides a picture on Nichelle Nichols acting in star trek. Nichols was a significant figure in Mae Jemison’s life, in encouraging her to pursue a career as an astronaut. The photo collected from this website was used in the historical background portion of the documentary, specifically the section that discusses Nichelle Nichols and Star Trek.


The Brown versus Board of Education case of 1954 was a significant turning point for the civil rights movement. This website provides information and photos of the Brown v Board of Education case of 1954. A photo and information from this website is used in the historical background, specifically the civil rights portion, to inform viewers about barriers that were breaking to help Jemison enter space.


This website provides a picture and information of the Voting Rights Act of 1965. The photo and information collected from this cite is used as a part of the historical background, specifically the civil rights portion, tow show viewer barriers that were breaking to allow for Mae to enter space.

This website provides a photo of a historic “Welcome to Decatur, Alabama” sign. That photo is used in the historical background portion of the documentary.