

Introduction: Charles Richard Drew

Charles R. Drew, MD. ca. 1949

Courtesy of the Moorland-Spingarn Research Center

Read-aloud text (First paragraph):

"African American surgeon Charles Richard Drew (1904-1950) has been called "the father of the blood bank," for his outstanding role in conceiving, organizing, and directing America's first large-scale blood banking program during the early years of World War II. While best known for the blood bank work, Drew devoted much of his career to raising the standards of African American medical education at Howard University, where he trained a generation of outstanding surgeons, and worked to break through the barriers that segregation imposed on black physicians. His premature death in a car accident generated enduring stories that he was a victim of medical segregation, though this was repeatedly proved false."

Teacher's Introduction: Charles Richard Drew

**a. What are your observations on the portrait?**

Students may note that Dr. Drew looks formal in the photo, and that the photo was taken around 1949. Some may name the "Courtesy" line and identify where this photo is held/archived.

(Optional) Teachers may inform students that many places, such as the national and state archives, universities, libraries, museums, and other organizations, collect and preserve historical documents and records. There may be other primary sources that provide firsthand accounts of the past, such as photographs, letters, memos, reports, notes, emails, text messages, audios, videos, and art works.

Charles R. Drew, MD. ca. 1949

Courtesy of the Moorland-Spingarn Research Center, Howard University

Read-aloud text: "African American surgeon Charles Richard Drew (1904-1950) has been called "the father of the blood bank," for his outstanding role in conceiving, organizing, and directing America's first large-scale blood banking program during the early years of World War II. While best known for the blood bank work, Drew devoted much of his career to raising the standards of African American medical education at Howard University, where he trained a generation of outstanding surgeons, and worked to break through the barriers that segregation imposed on black physicians. His premature death in a car accident generated enduring stories that he was a victim of medical segregation, though this was repeatedly proved false."

b. What information can you gather about Dr. Drew from the text?

- Was an African American and a surgeon, and was born in 1904 and died in 1950.
- Became known as "the father of the blood bank"
- Trained/mentored other African American surgeons and fought to end the discrimination against black physicians

c. What do you already know about historical events and setting during which Dr. Drew lived?

- During his life time (1904-1950), there were two World Wars. At that time, people in the U.S. lived through the Great Depression in 1930s and in a racially segregated society.

d. What one thing would you like to learn about Dr. Drew based on this introduction?

- Students may have questions about his family, becoming a doctor, blood bank work, etc.

Definitions: Primary and Secondary Source¹

Primary sources are materials that provide direct or first-hand evidence about an event, person, object, or work of art. Usually, primary sources are created during the time in question. Examples: letters, diary entries, news films, photographs, poetry, fiction, music, pottery, clothing, and buildings.

- Can you think of an example of a **primary** source?

Secondary sources are at least one step removed from the event or phenomenon being studied; they interpret, assign value to, conjecture about, and draw conclusions about the events reported or thoughts expressed in primary sources. Many secondary sources are published works such as textbooks, histories, magazine articles and reviews, encyclopedias, etc., but can also take the form of radio or TV documentaries, for example.

- Can you think of an example that is a **secondary** source?

¹ Adapted from <http://www.loc.gov/teachers/usingprimarysources/>

Teacher's Definitions: Primary and Secondary Source¹

Primary sources are materials that provide direct or first-hand evidence about an event, person, object, or work of art. Usually, primary sources are created during the time in question. Examples: letters, diary entries, news films, photographs, poetry, fiction, music, pottery, clothing, and buildings.

- Can you think of an example of a **primary** source?

There are a variety of examples that students may mention. Teachers may provide a timeframe, event, or people to help students apply their understanding of primary and secondary sources to what they have recently studied:

- Recording of and letters by various Civil Rights leaders such as Dr. Martin Luther King, Jr.
- Student's own writings—e.g., journal entries, poems, text messages, emails, etc.
- Song lyrics, artworks, and novels
- Personal items—e.g., Madame Curie's lab notebook, George Washington's glasses

Secondary sources are at least one step removed from the event or phenomenon being studied; they interpret, assign value to, conjecture about, and draw conclusions about the events reported or thoughts expressed in primary sources. Many secondary sources are published works such as textbooks, histories, magazine articles and reviews, encyclopedias, etc., but can also take the form of radio or TV documentaries, for example.

- Can you think of an example that is a **secondary** source?

Students may the following examples:

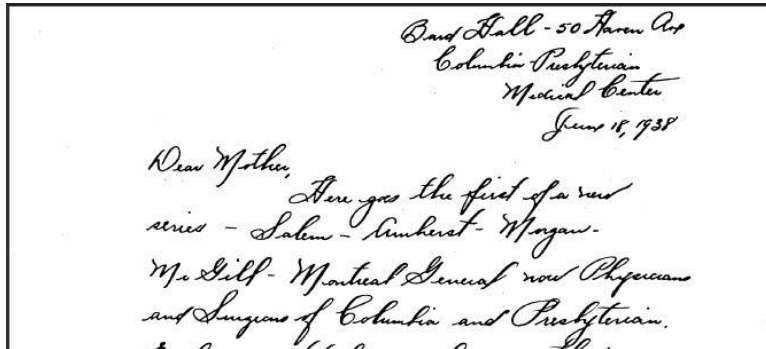
- Student's written biography of Harriet Tubman, report on another country, etc.
- Online Wikipedia
- Textbooks on art history, American Civil War, etc.
- A map showing the relocation of Native Americans after specific treaties
- An article about NASA's Mars rover, Curiosity.

¹ Adapted from <http://www.loc.gov/teachers/usingprimarysources/>

Quiz: Primary and Secondary Sources

Consider the following items from Profiles in Science: The Charles R. Drew Papers website. Assign whether each item is a **Primary** or **Secondary** source.

1.

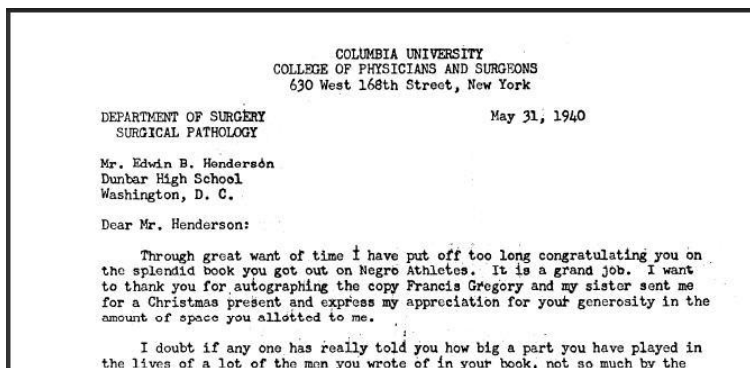


(<http://profiles.nlm.nih.gov/ps/access/BGBBGF>)

Hand-written letter from Dr. Drew to his mother, Nora, dated June 18, 1938.

Courtesy Moorland-Spingarn Research Center, Howard University

2.



(<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGD>)

Dr. Drew's typed letter to his high school coach, Edwin Henderson, dated May 31, 1940.

Courtesy Moorland-Spingarn Research Center, Howard University

3. “Drew attended Stevens Elementary and then Dunbar High School, which was then one of the best college preparatory schools--for blacks or whites--in the country. Though bright, he was not an outstanding student; instead, he devoted much of his effort to athletics, where he excelled. Ambitious and competitive, he lettered in four sports, and won the James E. Walker Medal for all-round athletic performance in both his junior and senior years.”

(<http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>)

An excerpt from “Biographical Information” section of Profiles in Science: The Charles R. Drew Papers website.

Courtesy National Library of Medicine



4. (<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFF>)

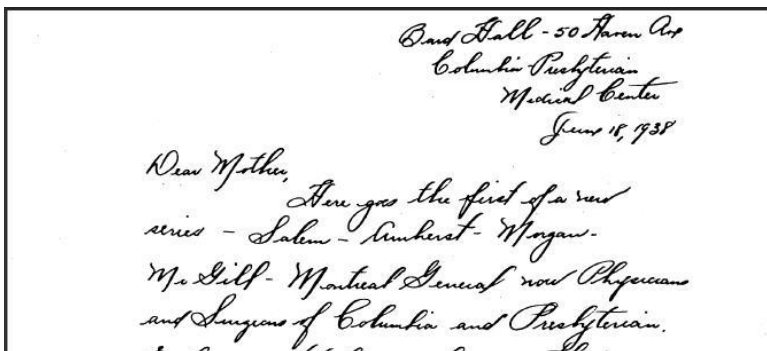
A photograph of Dr. Drew with a microscope in a laboratory, ca. 1940-1941.

Courtesy Scurlock Studio Records, Archives Center, National Museum of American History, Behring Center, Smithsonian Institution

Teacher's Quiz: Primary and Secondary Sources

Consider the following items from The Charles R. Drew Papers site. Assign whether each item is a **Primary** or **Secondary** source.

1.



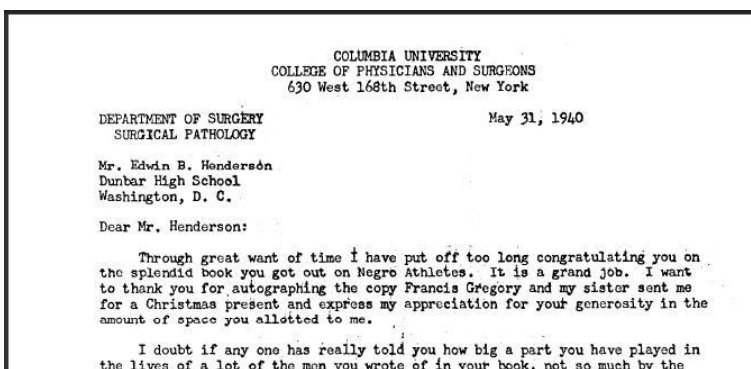
(<http://profiles.nlm.nih.gov/ps/access/BGBBGF>)

Hand-written letter from Dr. Drew to his mother, Nora, dated June 18, 1938.

Courtesy Moorland-Spangarn Research Center, Howard University

Dr. Drew's letter to his mother is a primary source. The letter was hand written by him and contains his own words and perspectives (firsthand account) about the situation and events that Dr. Drew was experiencing directly in 1938.

2.



(<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGD>)

Dr. Drew's typed letter to his high school coach, Edwin Henderson, dated May 31, 1940.

Courtesy Moorland-Spangarn Research Center, Howard University

This typed letter from Dr. Drew to his high school coach, Edwin Henderson is a primary source. Dr. Drew wrote and sent this to his coach and described his experiences and ideas to the coach.

3. “Drew attended Stevens Elementary and then Dunbar High School, which was then one of the best college preparatory schools--for blacks or whites--in the country. Though bright, he was not an outstanding student; instead, he devoted much of his effort to athletics, where he excelled. Ambitious and competitive, he lettered in four sports, and won the James E. Walker Medal for all-round athletic performance in both his junior and senior years.”

(<http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>)

An excerpt from “Biographical Information” web page of “The Charles R. Drew Papers” online exhibition.

Courtesy National Library of Medicine

This excerpt from the online exhibition is a secondary source. The text provides facts and evidence for Dr. Drew’s early schooling and athleticism.



4. (<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFF>)

A photograph of Dr. Drew with a microscope in a laboratory, ca. 1940-1941.

Courtesy Scurlock Studio Records, Archives Center, National Museum of American History, Behring Center, Smithsonian Institution

This photograph is a primary source as it was taken of Dr. Drew in early 1940s. It provides visual evidence of Dr. Drew working in a laboratory at that time.

An Excerpt from “Biographical Information”

1. Read closely the text below from the “Biographical Information” section of the Profiles in Science: The Charles R. Drew Papers website.

“Washington was still racially segregated during that era, but its large African American community included many prosperous and well-educated families, and their public schools were often excellent. Drew attended Stevens Elementary and then Dunbar High School, which was then one of the best college preparatory schools--for blacks or whites--in the country. Though bright, he was not an outstanding student; instead, he devoted much of his effort to athletics, where he excelled. Ambitious and competitive, he lettered in four sports, and won the James E. Walker Medal for all-round athletic performance in both his junior and senior years. He was voted "best athlete," "most popular student," and "student who has done the most for the school." He also served as captain of Company B in the Third Regiment of the High School Cadet Corps during his senior year. Drew did not express any early medical ambitions; his senior yearbook entry noted that he aspired to become an electrical engineer.”

(Source: <http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>)

An excerpt (second paragraph) from “Biographical Information,” Profiles in Science: The Charles R. Drew Papers. Courtesy National Library of Medicine

2. List at least three facts about Dr. Drew you learned from reading the excerpt text.

3. What key accomplishment does the excerpt highlight about Dr. Drew?

Teacher's an Excerpt from "Biographical Information"

1. Read closely the text below from the "Biographical Information" section of the Profiles in Science: The Charles R. Drew Papers website. *If needed, teachers may incorporate vocabulary work to help students' comprehension of the text.*

"Washington was still racially **segregated** during that era, but its large African American community included many **prosperous** and well-educated families, and their public schools were often excellent. Drew attended Stevens Elementary and then Dunbar High School, which was then one of the best college **preparatory** schools--for blacks or whites--in the country. Though bright, he was not an outstanding student; instead, he devoted much of his effort to athletics, where he excelled. Ambitious and competitive, he **lettered** in four sports, and won the James E. Walker Medal for all-round athletic performance in both his junior and senior years. He was voted "best athlete," "most popular student," and "student who has done the most for the school." He also served as captain of Company B in the Third **Regiment** of the High School Cadet Corps during his senior year. Drew did not express any early medical ambitions; his senior yearbook entry noted that he aspired to become an **electrical engineer**."

(Source: <http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>)

An excerpt (second paragraph) from "Biographical Information," Profiles in Science: The Charles R. Drew Papers. Courtesy National Library of Medicine

2. List at least three facts about Dr. Drew you learned from reading the excerpt text.

Students may point out that Dr Drew:

- and his family lived in Washington, DC
- went to Stevens Elementary School and Dunbar High School
- participated in four sports, and won the James E. Walker Medal in last two years of high school
- was recognized by his peers as the best athlete and most popular student who contributed much to the school
- was a captain of the Cadet Corps at his high school
- was interested in becoming an electrical engineer

3. What key accomplishment does the excerpt highlight about Dr. Drew?

The text highlights Dr. Drew as an outstanding athlete, while describing him as well-liked student with a career interest in electrical engineering rather than medicine.

Charles R. Drew: Primary Sources



Charles Drew (top row, third from right) with the rest of the Dunbar High School football team. [1920]. Courtesy of the Moorland-Spingarn Research Center. Available online at <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFS>.

Bard Hall - 50 Haven Ave
Columbia Presbyterian
Medical Center
June 18, 1938

Dear Mother,
Here goes the first of a new
series - Salem - Amherst - Morgan -
McGill - Montreal General now Physicians
and Surgeons of Columbia and Presbyterian.
Each new step has marked growth in a
thousand ways, yet through it all
I have seemed to have remained essentially
the same; the people and things dear
to me from a very long time ago retain;
and probably always shall retain first
place in my thinking and feeling, so
much so that though separated from them,
never estranged and the living force
in this intangible bond which holds
so tightly is you.
This place is so immense and
has so many ramifications that I
haven't even found my way around

Transcript of the first page image on the left:

Bard Hall - 50 Haven Ave
Columbia-Presbyterian Medical Center
June 18, 1938

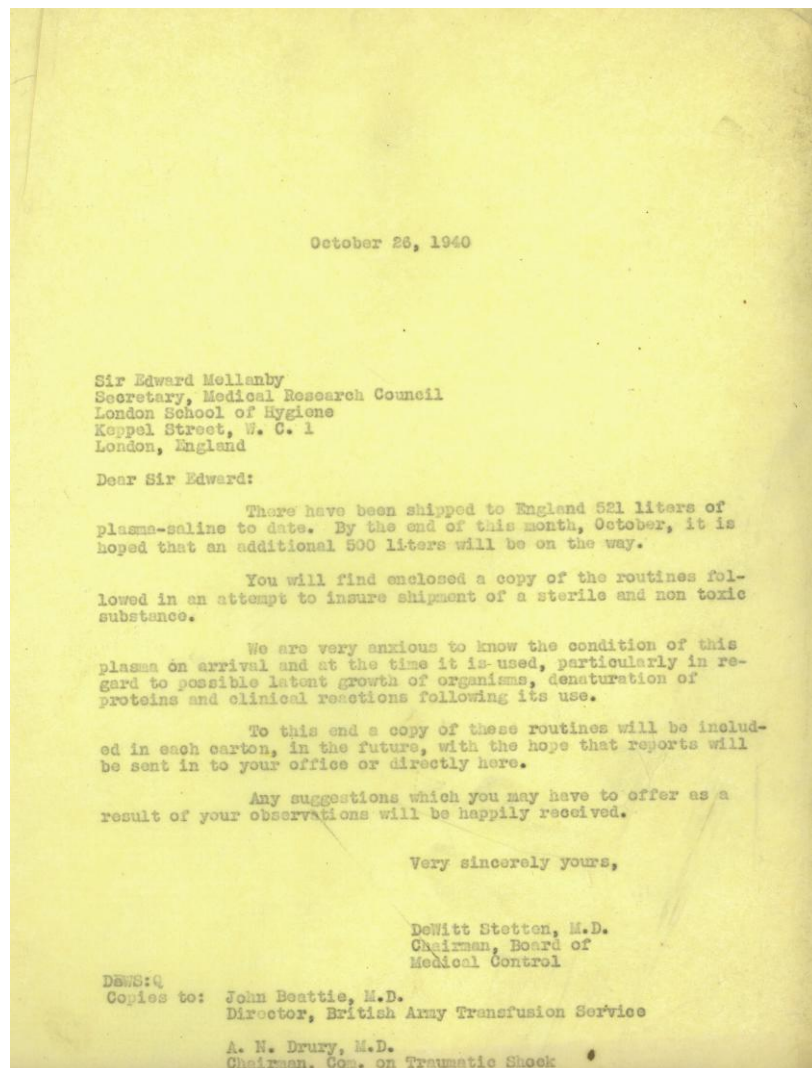
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thinking and feeling, so much so that
though separated [sic] from them, never
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intangible bond which holds so tightly is
you.

This place is so immense and
has so many ramifications that I haven't
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Handwritten letter from Charles R. Drew to his mother, Nora (June 18, 1938) Courtesy of the Moorland-Spingarn Research Center. Available online at <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGF>.



Charles Drew (top row, far left) with the rest of the Dunbar High School basketball team. [ca. 1921]. Courtesy of the Moorland-Spingarn Research Center. Available online at <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFR>.

*Transcript of the letter image on the left:*

October 26, 1940

Sir Edward Mellanby
Secretary, Medical Research Council
London School of Hygiene
Keppel Street, W. C. 1
London, England

Dear Sir Edward:

There have been shipped to England 521 liters of plasma-saline to date. By the end of this month, October, it is hoped that an additional 500 liters will be on the way.

You will find enclosed a copy of the routines followed in an attempt to insure shipment of a sterile and non toxic substance.

We are very anxious to know the condition of this plasma on arrival and at the time it is used, particularly in regard to possible latent growth of organisms, denaturation of proteins and clinical reactions following its use.

To this end a copy of these routines will be included in each carton, in the future, with the hope that reports will be sent in to your office or directly here.

Any suggestions which you may have to offer as a result of your observations will be happily received.

Very sincerely yours,
DeWitt Stetten, M.D.
Chairman, Board of Medical Control

Copies to: John Beattie, M.D.
Director, British Army Transfusion Service

A. N. Drury, M. D.
Chairman, Com. on Traumatic Shock

Typed letter from DeWitt Stetten to Edward Mellanby (October 26, 1940). Courtesy of the Moorland-Spangarn Research Center. Available online at <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBCB>

DREW, CHARLES—"Charlie"

"You can do anything you think you can."

Ambitious, popular, athletic, sturdy.

Pres. Class '21; Pres., Athletic Association '21; Pres. Rex Club,
'22; Capt. Baseball Team '22; Champion High Jumper; Capt.
Co. F; Holder of two Walker Memorial Medals.

To be an Electrical Engineer.



Charles Drew's entry in 1922 Dunbar High School yearbook. [1922] Courtesy of the Moorland-Spingarn Research Center. Available online at <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGQ>.

Am delighted to know that you are doing a biography of Charlie Drew. You have a splendid subject. I do not know where among my papers to begin to look for clippings and documentations on Drew's records and achievements at Amherst. About all that I can do is to give you my story from memory of my friendship and association with him. I was his football coach at Amherst for all four years and his coach in the field events in track - high jump and shot put - during the same period.]

It just so happens that Ellsworth "Red" Richardson, who played center during Charlie's last two years at Amherst, is the athletic director at Amherst and I know that he will go overboard to cooperate with you and obtain for your use any material and records that are in the college archives. X

You say in your letter that you have visited Howard University, talked with Charlie's wife and others of his family. I hope that you contacted Dr. Montague Cobb who heads the Anatomy Department at Howard Medical. He and Charlie were close friends at Amherst - maybe room mates - and on the track team together. X

(As a football player, Drew was great. He could have played regular on any team in the country, both in his era, and any time since. I am qualified to say this because I coached in the East-West Shrine Game four years, the Chicago All Star Game and twice in the one in New York, and when I was not coaching, saw these games as a spectator. Each year the players included the very best of the previous season. Charlie was a halfback of tremendous speed and quick reactions, a great second effort, a splendid passer. He could hit a bull's eye with the old ball at any distance up to 50 yards. Furthermore, he was a tiger on defense. When he tackled, the runner went down as though he were shot. His playing weight was 190-195 and his height was six feet plus. His physique and walking carriage were superb.)

In track he was good enough to win four first places in many dual meets in the shot, high jump, and both hurdles. I believe the high hurdles were his best event. He was captain of the McGill University track team when he was there in medical school several years later.

Charlie graduated with distinction from Amherst in 1926 and then spent a year or two teaching and coaching to pay off his debts and augment his resources.

Partial image of the letter from D. O. McLaughry (Dr. Drew's football coach at Amherst College) to Richard Hardwick (August 17, 1966). Courtesy of the Moorland-Spingarn Research Center. Available online at <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBJN>.



Dr. Charles Drew teaching interns and residents during rounds at Freedmen's Hospital, ca. 1947. Courtesy of the Moorland-Spingarn Research Center. Available on line at <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFQ>.

KWL Chart: Charles R. Drew, MD

<u>K</u> NO <u>W</u>	<u>W</u> ANT TO KNOW	<u>L</u> EARNED
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.

Biographical Information: Paragraph Assignment #1

“ . . . So much of our energy is spent in overcoming the constricting environment in which we live that little energy is left for creating new ideas or things. Whenever, however, one breaks out of this rather high-walled prison of the "Negro problem" by virtue of some worthwhile contribution, not only is he himself allowed more freedom, but part of the wall crumbles. And so it should be the aim of every student in science to knock down at least one or two bricks of that wall by virtue of his own accomplishment.”

--Charles R. Drew to Mrs. J. F. Bates, a Fort Worth, Texas schoolteacher, January 27, 1947

“Charles Richard Drew, the African American surgeon and researcher who organized America's first large-scale blood bank and trained a generation of black physicians at Howard University, was born in Washington, DC, on June 3, 1904. His father, Richard, was a carpet layer and financial secretary of the Carpet, Linoleum, and Soft-Tile Layers Union--and its only non-white member. His mother, Nora Burrell Drew, was a graduate of the Miner Normal School, though she never worked as a school teacher. Charles and his younger siblings, Joseph, Elsie, and Nora, grew up in the largely middle-class and interracial neighborhood of Foggy Bottom (a third sister, Eva, was born after the family moved to Arlington, Virginia, in 1920.) Their upbringing emphasized academic education and church membership, as well as civic knowledge and personal competence, responsibility, and independence. At the age of twelve, Charlie (as he was called, even as an adult) became a paper boy, selling several Washington papers from a street corner stand; within a year, he had six other boys working for him and covering a wider area. As he got older, his after-school and summer jobs included supervising at city playgrounds, lifeguarding at the local swimming pool, and working construction jobs.”

“Biographical Information” in *Profiles in Science: The Charles R. Drew Papers*.

<http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>

Courtesy National Library of Medicine

Biographical Information: Paragraph Assignment #2

“Washington was still racially segregated during that era, but its large African American community included many prosperous and well-educated families, and their public schools were often excellent. Drew attended Stevens Elementary and then Dunbar High School, which was then one of the best college preparatory schools--for blacks or whites--in the country. Though bright, he was not an outstanding student; instead, he devoted much of his effort to athletics, where he excelled. Ambitious and competitive, he lettered in four sports, and won the James E. Walker Medal for all-round athletic performance in both his junior and senior years. He was voted "best athlete," "most popular student," and "student who has done the most for the school." He also served as captain of Company B in the Third Regiment of the High School Cadet Corps during his senior year. Drew did not express any early medical ambitions; his senior yearbook entry noted that he aspired to become an electrical engineer.”

“Drew graduated from Dunbar in 1922 and went to Amherst College in Massachusetts on an athletic scholarship. His achievements on the Amherst track and football teams were legendary; long after he distinguished himself as a blood banking pioneer and medical educator, many still remembered him best as an athlete. As in high school, Drew did not excel scholastically. He did, however, develop an interest in the medical sciences through his biology courses with Otto Glaser. Later, he would also cite the death of his oldest sister, Elsie (from tuberculosis complicated by influenza), in 1920, and his own hospitalization for a college football injury as events that fostered his interest in medicine. Drew received his AB from Amherst in 1926. To earn money for medical school, he took a job as athletic director and instructor of biology and chemistry at Morgan College (now Morgan State University), in Baltimore. During his two years at Morgan, his coaching transformed its mediocre sports teams into serious collegiate competitors.”

“Biographical Information” in *Profiles in Science: The Charles R. Drew Papers*.

<http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>

Courtesy National Library of Medicine

Biographical Information: Paragraph Assignment #3

“The racial segregation of the pre-Civil Rights era constrained Drew's options for medical training. Some prominent medical schools, such as Harvard, accepted a few non-white students each year, but most African Americans aspiring to medical careers trained at black institutions such as the Howard University College of Medicine in Washington, DC, or Meharry Medical College in Nashville, Tennessee. Drew applied to Howard, but was not accepted because he lacked enough credits in English from Amherst. Harvard accepted him, but wanted to defer his admission to the following year. Not wanting to wait, Drew applied to the McGill University Faculty of Medicine in Montréal, which had a reputation for better treatment of minorities.”

“McGill University allowed its graduate and professional students to play on school teams, and Drew once again became a star athlete. But he also became a star student, winning several important prizes and fellowships, and graduating second in a class of 137, in 1933. During his internship and surgical residency at Montréal General Hospital, 1933-1935, he worked closely with bacteriology professor John Beattie, who was exploring ways to treat shock with transfusion and other fluid replacement. This work fostered an interest in transfusion medicine that Drew would later pursue in his blood bank research. Drew hoped to extend his training with a surgical residency in the United States, preferably at the Mayo Clinic, but major American medical centers rarely took on African American residents, partly because many white patients in that era would refuse to be treated by black physicians. In 1935, he joined the faculty at Howard University College of Medicine, starting as a pathology instructor, and then progressing to surgical instructor and to chief surgical resident at Freedmen's Hospital.”

“Biographical Information” in *Profiles in Science: The Charles R. Drew Papers*.

<http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>

Courtesy National Library of Medicine

Biographical Information: Paragraph Assignment #4

“Howard's College of Medicine was upgrading its programs with help from the Rockefeller Foundation's General Education Board. This effort included appointing well-qualified white department chairs to set up and run residency programs and train black successors, along with fellowships for further training of junior faculty. Drew trained with Department of Surgery chair Edward Lee Howes for three years and then got a fellowship to train with eminent surgeon Allen O. Whipple at New York's Presbyterian Hospital, while earning a doctorate in medical science from Columbia University. At Presbyterian, he worked with John Scudder on studies relating to treating shock, fluid balance, blood chemistry and preservation, and transfusion. His main project with Scudder--and the basis for his dissertation--was an experimental blood bank at Presbyterian, opened in August 1939. In June 1940, Drew received his doctorate in medical science from Columbia, becoming the first African American to earn the degree there.”

“While attending a conference in April 1939, Drew met Minnie Lenore Robbins, a professor of home economics at Spelman College in Atlanta. They married in September of that year, and had three daughters and a son. (The eldest daughter, Bebe, born in 1940, was named for the blood bank--BB--project her father was immersed in at the time.)”

“Biographical Information” in *Profiles in Science: The Charles R. Drew Papers*.

<http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>

Courtesy National Library of Medicine

Biographical Information: Paragraph Assignment #5

“With his fellowship completed, Drew returned to Howard University to take up duties as assistant professor of surgery. He was called back to New York in September 1940 to direct the Blood for Britain project. Great Britain, then under attack by Germany, was in desperate need of blood and plasma to treat military and civilian casualties. In August, Presbyterian and five other New York hospitals had begun a collaborative effort to collect and ship plasma (the fluid, non-cellular portion of blood) to Britain. Although others had developed the basic methods for plasma use, Drew, as medical director, instituted uniform procedures and standards for collecting blood and processing blood plasma at the participating hospitals. When the program ended in January 1941, Drew was appointed assistant director of a pilot program for a national blood banking system, jointly sponsored by the National Research Council and the American Red Cross. Among his innovations were mobile blood donation stations, later called "bloodmobiles." Ironically, as the blood bank effort expanded in preparation for America's entry into the war, the armed forces initially stipulated that the Red Cross exclude African Americans from donating; thus Drew, a leading expert in blood banking, was ineligible to participate in the program he helped establish. The policy was soon modified to accept blood donations from blacks, but required that these be segregated. Throughout the war, Drew criticized these policies as unscientific and insulting to African Americans.”

“Biographical Information” in *Profiles in Science: The Charles R. Drew Papers*.

<http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>

Courtesy National Library of Medicine

Biographical Information: Paragraph Assignment #6

While working on the Blood for Britain project, Drew also passed his American Board of Surgery exams, receiving certification early in 1941. He returned to Howard University and in October became chair of the Department of Surgery and Chief of Surgery at Freedmen's Hospital. He also became the first African American to be appointed an examiner for the American Board of Surgery. For the next nine years he devoted himself to training and mentoring his medical students and surgical residents, and raising standards in black medical education. He also campaigned against the exclusion of black physicians from local medical societies, medical specialty organizations, and the American Medical Association.

Drew's innovative work was recognized by awards and honors including the 1942 E. S. Jones Award for Research in Medical Science from the John A. Andrew Clinic in Tuskegee, AL; an appointment to the American-Soviet Committee on Science in 1943; the 1944 Spingarn Medal from the NAACP, for his work on blood and plasma; honorary doctorates from Virginia State College (1945) and Amherst College (1947); and election to the International College of Surgeons in 1946.

Drew died on April 1, 1950, in Burlington, North Carolina, from injuries sustained in a car accident while en route to a conference. Despite the prompt and competent care he received from the white physicians at a nearby hospital, he was too badly injured to survive. Drew's tragic death generated a persistent myth that he died because he was denied admission to the white hospital, or was denied a transfusion, but such stories have been debunked repeatedly. Though he died prematurely, Drew left a substantial legacy, embodied in his blood bank work and especially in the graduates of the Howard University College of Medicine.

"Biographical Information" in *Profiles in Science: The Charles R. Drew Papers*.

<http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>

Courtesy National Library of Medicine

Biography Summary: Charles R. Drew, MD

1. Write your partner's name: _____
2. List below first and last 3-4 words from each of paragraph your team is assigned:

	First 3-4 words	Last 3-4 words
Paragraph 1		
Paragraph 2		

3. List vocabulary words and their meanings that you looked up and learned in order to comprehend the paragraph text.
4. Write a brief summary of each paragraph you read of Dr. Drew's biography.

Teacher's Biography Summary: Charles R. Drew, MD

1. Write your partner's name: _____ To be noted based on working pair
2. List below first and last 3-4 words from each of paragraph your team is assigned: Student's answer to this task identifies the paragraph(s) assigned to the student pair that will be the focus for the remainder of the handout.

	First 3-4 words	Last 3-4 words
Paragraph 1		
Paragraph 2		

3. List vocabulary words and their meanings that you looked up and learned in order to comprehend the paragraph text. The vocabulary work addresses both acquisition of new words and ensuring comprehension among students. Teachers may provide additional activities or guidance based on specific needs of their students.
4. Write a brief summary of each paragraph you read of Dr. Drew's biography. The key task here is for students to demonstrate their comprehension and writing abilities.

5. List below key events or information about Dr. Drew that the paragraph(s) provide. *Students will identify key events that may correlate to the items listed on the Brief Chronology handout. This task prepares students to map what they have learned about Dr. Drew the items listed on the Chronology.*
6. Review the **Brief Chronology** timeline of Dr. Drew's life and underline those related to what you have learned from your paragraph(s). *Answer will vary based on assigned paragraphs. This task again requires students to demonstrate their understanding of what they have learned about Dr. Drew from the paragraph reading. They then apply their partial knowledge about Dr. Drew in the context of the milestones during his lifetime.*
7. Identify at least three visual or document items (primary sources) that provide evidence for Dr. Drew's biographical information in your paragraph(s). Be ready to explain your selections. *Students will identify various items, demonstrating their understanding of how source materials serve as evidence of historical fact about Dr. Drew. Students put in to practice how to select evidentiary materials for biographical information.*
8. List what you have learned from reading the paragraph(s) under the "Learned" column of your KWL Chart handout. *Students' answers will vary, and they will present an overview of what they have learned about Dr. Drew. This task relates to the "Charles Drew Timeline" activity where students contextualize his milestones within the historical events and setting of his lifetime.*

Biographical Information: Brief Chronology

- **1904** --Born June 3 in Washington, DC to Richard and Nora Drew
- **1922** --Graduated from Dunbar High School, Washington, DC
- **1926** --Received AB from Amherst College, Amherst, Massachusetts
- **1926-28** --Athletic Director and Instructor in Biology and Chemistry at Morgan College, Baltimore, Maryland
- **1933** --Received MD and Master of Surgery from McGill University Faculty of Medicine, Montréal, Canada
- **1933-35** --Internship and residency at Montréal General Hospital
- **1935-36** --Instructor in Pathology at Howard University School of Medicine, Washington, DC
- **1936-37** --Assistant instructor in Surgery at Howard University and surgical resident at Freedmen's Hospital
- **1937-38** --Instructor in Surgery at Howard University and Assistant Surgeon at Freedmen's Hospital
- **1938-40** --Graduate work at Columbia University and surgical resident at Presbyterian Hospital, New York
- **1939** --Married Minnie Lenore Robbins on September 23; they had three daughters (Bebe, Charlene, and Rhea) and a son (Charles Jr.)
- **1940** --Received Doctorate in Medical Science from Columbia University for research and dissertation on blood banking; returned to Howard University School of Medicine as assistant professor of surgery and surgeon at Freedmen's Hospital (June)
- **September 1940-January 1941** --Medical supervisor for the Blood for Britain project organized by the Blood Transfusion Betterment Association in New York
- **February 1941** --Appointed Assistant Director of the first American Red Cross Blood Bank (Presbyterian Hospital, New York) and Assistant Director of Blood Procurement for the National Research Council, in charge of blood for use by the U.S. Army and Navy
- **April 1941** --Certified a diplomate of the American Board of Surgery, returned to Howard University School of Medicine
- **October 1941** --Appointed professor and Head of the Department of Surgery at Howard University, and chief surgeon at Freedmen's Hospital, certified as an examiner for the American Board of Surgery

Brief Chronology (continued)

- **1944-46** --Chief of Staff, Freedmen's Hospital
- **1944** --Received the NAACP's Spingarn Medal for work on the British and American blood plasma projects
- **1946** --Elected fellow of International College of Surgeons
- **1946-48** --Medical Director, Freedmen's Hospital
- **1949** --Consultant to U.S. Army Surgeon General's Office, part of a team to assess health care in post-war Europe
- **1950** --Died April 1 of injuries received in car accident near Burlington, North Carolina

"Biographical Information" in *Profiles in Science: The Charles R. Drew Papers*.

<http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>

Courtesy National Library of Medicine

Teacher's Primary Sources

In place of the Internet access, students may be provided with the following visual and document primary sources, in accomplishing the task #7 of "Biography Summary: Charles R. Drew, MD" assignment. Teachers may choose other or additional items from *Profiles in Science: The Charles R. Drew Papers* website at <http://profiles.nlm.nih.gov/ps/retrieve/Narrative/BG/p-nid/336>.

Photographs

1. Charles Drew and his siblings (ca. 1914)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGL>
2. Charles Drew with Dunbar HS Football team (1920)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFS>
3. Charles Drew in his Amherst College football uniform (1923)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFW>
4. Charles Drew's graduation photograph (ca. 1926)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBCX>
5. Charles Drew as a Lifeguard (1930)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBCY>
6. Charles Drew with other resident staff at Montreal General Hospital (ca. 1935)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBCX>
7. Charles Drew with laboratory apparatus (ca. 1940)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBCP>
8. Dr. Drew with staff at the first American Red Cross blood bank (February 1, 1941)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFM>
9. Dr. Drew with the first mobile blood collecting unit (February 1941)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFL>
10. Dr. Drew and eight others wearing hard hats at Freedmen's Hospital (ca. 1945)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFH>
11. Charles and Lenore Drew with their children (ca. 1947)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGM>
12. Dr. Drew and his wife Lenore, outdoors with their children (ca. 1945-1950)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGN>
13. Dr. Drew speaking at a meeting (ca. 1950)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBFG>

Documents

14. Curriculum vitae of Dr. Drew (ca. 1950)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBBY>
15. Dr. Drew's Things-to-Do note (May 11, 1939)
<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBJQ>

16. Memorandum from Dr. Drew to John bush on the establishment of a permanent "blood bank" (January 31, 1940) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBBZ>
17. "Studies in blood Preservation: Some Effects of Carbon Dioxide" (April 1 1940) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBBG>
18. "Newer Knowledge of Blood Transfusions" (May 1941) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBBJ>
19. Letter from Charles R. Drew to Edwin B. Henderson (May 31, 1940) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGD>
20. Letter from Dr. Drew to Lenore (Robins) Drew (September 29, 1940) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBCM>
21. Letter from Dr. Drew to John Beattie (December 7, 1940) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBCD>
22. Minutes from Special Meeting of Research Group at Memorial Hospital (December 13, 1940) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBCH>
23. Letter from Jacob Billikopf to Dr. Drew (April 1, 1944) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGX>
24. Letter from Dr. Drew to Jacob Billikopf (April 15, 1944) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGW>
25. Dr. Drew's letter to the editor of the Journal of American Medical Association (January 13, 1947) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBHZ>
26. Dr. Drew's letter to Mrs. J. F. Bakes (January 27, 1947) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBHK>
27. Dr. Drew's letter to Robert J. Coffey (January 18, 1950) <http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBHR>

Charles R. Drew Timeline

In the chart below, document what you know and what you learn today about the time period in which Charles Drew lived. The primary and secondary source materials provided for you about Drew will help us understand both Drew and the time and place in which he lived.

Timeline by Decade	Charles R. Drew Biography	Relevant Primary Sources	HISTORICAL CONTEXT
1904-1919			
1920s			
1930s			
1940s			

Teacher's Charles R. Drew Timeline

In the chart below, document what you know and what you learn today about the time period in which Charles Drew lived. The primary and secondary source materials provided for you about Drew will help us understand both Drew and the time and place in which he lived.

Timeline by Decade	Charles R. Drew Biography	Relevant Primary Sources	HISTORICAL CONTEXT
1904-1919	Childhood 4 siblings DC	Photos of siblings, football and basketball teams Letter from HS coach	World War I Segregation in the U.S.
1920s	Amherst College Instructor at Morgan State McGill Medical school	Letter from college coach AC Graduation photograph	Prohibition Segregation in the U.S.
1930s	McGill Medical school graduation Residency in Montreal General Hospital Instructor at Howard University Marriage in 1939	Drew as Lifeguard Drew with MGH staff New Year's letter excerpt Letters to Lenore	Great Depression Segregation in the U.S.
1940s	Growing family – daughters & son PhD from Columbia Blood for Britain project Work for blood bank Professorship at Howard U. NAACP's Spingarn Medal	Family portraits with Lenore and daughters and son Drew in the lab Leffall oral history Drew with first mobile blood unit	World War II Segregation in the U.S.

Essay: Charles R. Drew, MD

Write an essay in which you identify:

- how what you have learned about Dr. Drew's life/work has deepened your understanding of the US or world history; or
- what you think makes Dr. Drew a truly influential American.

In your essay, use at least one visual primary source, one written primary source, and one quotation from a secondary source from the Profiles in Science: The Charles R. Drew Papers website. Also, reference at least one historical event or context that affected Dr. Drew's life.

A successful essay will have three distinct parts: an introduction, body paragraphs, and a conclusion.

The introduction should:

- Provide context for the main point you want to make
- Provide a clear focus for the essay
- Include a thesis, a sentence in which you state the main point of your essay
- Include a thesis that is original, honest, and insightful

Each body paragraph should:

- Make a single point that supports the thesis
- Begin with a topic sentence that states the main point of the essay
- Provide supporting quotations/details from primary and secondary source materials
- Explain how each detail connects to the main points you want to make

The conclusion should:

- Wrap up the main point of your essay
- Elaborate on what you want your readers to learn from the essay

Extension Activity Excerpts

EXCERPT 1

Pages 7-8, Charles Drew's New Year's Diary Entry (January 1, 1930)

<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBDJ>

Profiles in Science: The Charles R. Drew Papers. Courtesy National Library of Medicine

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"...I have wondered far in the three hours I have been writing, many things I have thought are not put down, many things written are not clearly so, for in my mind I am not clear. So many thoughts rush in, I am almost swamped. Why do I go on like I am? Living harder than I ever did. I don't know. I only know I must. It would be so much easier to do many other things. I gave up the chance to be a real leader in the field of physical training and athletics for my whole race. In it was honor enough to gratify most men, money enough to live on, social position if I desired, and close proximity to everything that I had known as dear and close to me. Yet here I am, a stranger amongst strangers in a strange land, broke busted, almost disgusted, doing my family no good, myself little that is now demonstrable. Yet I know I must go on somehow -- I must finish what I have started -- though no sure reward waits for me when I again go out to begin once more at the bottom and work up. This series of steps up to now are but stepping stones to reach the bottom round of the ladder which should lead me after many days of thinking to that common place of

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"all who pass this way. This is not a beautiful future, yet this is my life and my life it shall be. I like to take the responsibility for the finished products of this life by thinking as someone has said that "Life is the final expression of the universal Will" It is the inner meaning of evolution. That "this Will be done" in me I suppose is the final end of my daily aspirations and struggles. To something like this I must attribute the urge which forces me on, for I can find in my conscious experience any inspiration capable of such dynamic power..."

EXCERPT #2:

Pages 1-3, letter from Charles Drew to his wife, Lenore Robbins Drew (April 16, 1939)

<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBCK>

Profiles in Science: The Charles R. Drew Papers. Courtesy National Library of Medicine

[page 1]

"My Sweet,

*Man at his best is an odd creature and I as the least of men am the oddest of creatures at best, but never have I, even at my worst, acted as **strange** as I have for the past week. For years I have done little but work, plan and dream of making myself a good doctor, an able surgeon and in my wildest moments perhaps also playing some part in establishing a real school of thought among Negro physicians and guiding some of the younger fellows to levels of accomplishment not yet **attained** by any of us. I have known the cost of such desires and have been*

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*quite willing to do without many of the things that one usually regards as but natural. Then I met you and for the first time **mistress medicine** met her match and went down almost without a fight. Life suddenly widened the horizons and took on new meaning, I knew dear by just how lonely I had become, just how badly I needed some one rather than just something to cling to, some one to work for, rather than just a goal to aim at, some one to dream with, cherish from day to day, and share the little things with, the smile and if need be the*

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tears that will sometimes come..."

EXCERPT #3:

Letter from Charles R. Drew to his high school coach, Edwin b. Henderson (May 31, 1940)

<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBGD>

Profiles in Science: The Charles R. Drew Papers. Courtesy National Library of Medicine

"...My work here is about finished. I've gone as far as I can go in formal medicine so I guess I'll have to go to work now. It has been good fun. Chiefly I suppose because it has never been done by a Negro before and it is felt that the higher realms of medicine are not the place for him. On Tuesday I get the degree of Doctor of Science in Medicine. Now that all is over but the shouting it feels just about like the day after a big race is won. One wonders why all the excitement before the race was run, the anxious days of training, the striving for form, the all too slow increase in speed, the fine edge on the day of the meet, the gun and then the whole thing is over. The only thing in medicine is that it takes so much longer. When it is all over it is just another medal in the box and we begin looking forward to the next seasons' competition. My next big meet is at Howard in the department of Surgery. There the situation is comparable to the sport situation when I took over at Morgan College. They were playing high school teams and getting licked. In two years they had won three college Championships and had a nucleus for one of the best series of teams ever seen in the colored colleges. Those boys who made that first great team for Morgan on the football field were the men I started as freshmen and seniors in the Morgan Academy. I count it as one of the most pleasing experiences I have had. In medicine we still are in the scholastic class. Whether I can do anything about that or not is a challenge that is well worth taking on. Seventy years there has been a Howard Med School but still there is no tradition, no able surgeon has ever been trained there, no school of thought has been born there, few of their stars have ever hit the headlines. In American surgery there are no Negro representatives, in so far as the men who count know, all Negro doctors are just country practitioners, capable of sitting with the poor and the sick of their race but not given to too much intellectual activity and not particularly interested in advancing medicine. This attitude I should like to help change. It should be great sport. If at the end of another 25 years I can look back over my steps and feel that I have kept the faith in my sphere of activity in a manner comparable to that in which you have carried on in yours I shall be very happy..."

EXCERPT #4

Letter from D. O. McLaughry, Drew's football coach at Amherst, to Richard Hardwick who was writing a biography of Dr. Drew (August 17, 1966)

<http://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/BGBBJN>

Profiles in Science: The Charles R. Drew Papers. Courtesy National Library of Medicine

"...I was his football coach at Amherst for all four years and his coach in the field events in track - high jump and shot put - during the same period....As a football player, Drew was great. He could have played regular on any team in the country, both in his era, and any time since. ... Charlie was a halfback of tremendous speed and quick reactions, a great second effort, a splendid passer. He could hit a bull's eye with the old ball at any distance up to 50 yards. Furthermore, he was a tiger on defense. When he tackled, the runner went down as though he were shot. ...

*Charlie graduated with distinction from Amherst in 1926 and then spent a year or two teaching and coaching to pay off his debts and augment his resources. ...In 1925 Amherst had one of her greatest football seasons in history, losing only to Princeton in a close game. During the latter part of the fall, Charlie developed ankle trouble in his right leg. ... Charlie's injury was diagnosed as a periosteal tear with complications. The orthopedic surgeon, however, taped him in such a way that he could compete. ... That afternoon Drew won four first places, the shot put, high jump and both hurdles. He was a champion and this incident is an **illustration**. Charlie played rugby football and was captain of the track team at McGill University. During one of his years he wrote to me - I was at Brown University then - telling me that his ankle injury was acting up again and that it was so painful when standing on it that it looked as though he would have to give up his waiting on table job. If he did this, he would be unable to stay in school as he had no funds to pay for his food. I wrote back to him at once and told him to hang on until I had a chance to get him help. This was during the depth of **the depression** in the very early thirties.*

*I immediately wrote to some of his class mates and told them of Charlie's **predicament** and his need of a loan. Within a few days, I received enough money to pay his board for an extended period. Years later, after he had completed his broad medical education, and was beginning to earn money, he paid back every cent of the loan. He never knew the names of the friends who helped him. All I ever told Drew was that they were class mates who considered it a privilege to be able to come to his aid..."*