



# Infinite Skies:

Bessie Coleman,  
Mae Jemison, and  
Ellen Ochoa



Denver Public Schools

In partnership with Metropolitan State College of Denver

THE ALMA PROJECT  
*A Cultural Curriculum Infusion Model*



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# Infinite Skies:

Bessie Coleman, Mae Jemison, and Ellen Ochoa

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# **Infinite Skies: Bessie Coleman, Mae Jemison, and Ellen Ochoa**

## **Unit Concepts**

- Gender Equity
- Women's History
- Role Modeling
- Racism
- Work Ethics
- Justice

## **Standards Addressed by This Unit**

### **History**

Students understand the chronological organization of history and know how to organize events and people into major eras to identify and explain historical relationships. (H1)

Students know how to use the processes and resources of historical inquiry. (H2)

Students understand that societies are diverse and have changed over time. (H3)

Students understand how science, technology, and economic activity have developed, changed, and affected societies throughout history. (H4)

Students understand political institution and theories that have developed and changed over time. (H5)

Students know that religious and philosophical ideas have been powerful forces throughout history. (H6)

Students use appropriate technologies to obtain historical information: to study and/or model historical information and concepts; and to access, process, and communicate information related to the study of history. (H7)

### **Reading/Writing**

Students write and speak for a variety of purposes. (RW2)

Students write and speak using formal grammar, usage, sentence structure, punctuation, capitalization, and spelling. (RW3)

Students read to locate, select, evaluate, and make use of relevant information from a variety of media, reference, and technological sources. (RW5)

Students read and recognize literature as a record of human experience. (RW6)

### **Work Place**

Student demonstrates the ability to receive and relay information clearly and effectively. (W1)

Students demonstrate the ability to work effectively and efficiently. (W2)

Students demonstrate the ability to use reasoning. (W3)

Students demonstrate the characteristics of an effective worker. (W4)

Students demonstrate the ability to work with a variety of technologies and equipment. (W5)

#### Visual Arts

Students recognize and use the visual arts as a form of creativity and communications. (VA1)

Students know and apply visual arts materials, tools, techniques, and process. (VA3)

## Introduction

Bessie Coleman, Mae Jemison, and Ellen Ochoa are women who demonstrated courage as they challenged the status quo. All three have reached their goals. Mae Jemison and Ellen Ochoa continue to break records.

Bessie Coleman was the first African-American woman in the United States to earn a pilot's license in 1924. To fully appreciate this feat, one must look at America during this period. While all three women encountered the obstacles of racism, gender bias, and varying degrees of poverty, Bessie was the most vulnerable to these obstacles. Her plight was further complicated by the fact that America in the 1920s could not conceive a black woman enjoying national acclaim. She lived in a time when a woman's place was in the home, and a black woman had no place. In this period of extreme conservatism, liberalized ideas of women flying were unheard of. Yet, Bessie Coleman got her pilot's license and, for an all-too-brief period, was an *aviateur*.

Mae Jemison and Ellen Ochoa came along at a very different time in United States history. Women were asserting their rights to equality by the 1960s. Both Mae Jemison and Ellen Ochoa benefited greatly when NASA opened astronaut training to women in 1978.

Mae Jemison grew up in Chicago during the 1960s and 1970s. She wore an Afro and bell-bottoms, and danced to the music popular at that time. Mae witnessed the riots of the late 1960s up close. Those riots, though frightening, made her determined to become and remain a positive part of American society. Mae speaks several languages, including Swahili. She also attended Stanford University in California. While at the University, for first time she experienced real discrimination, but Mae kept her cool. Mae joined the Peace Corp and traveled extensively. Today, she is a doctor, scientist, entrepreneur, and humanitarian. She became the first female African-American astronaut. Though Mae resigned from the astronaut program, she emphatically states that there is no single success for her, but that life will always be a series of successes. She lectures to young people and gets them involved in science through a company she created. Also, she has written a book about her life for adolescent girls.

Dr. Ellen Ochoa is a part of a legacy of battling against the odds. A brief overview of the history of Latino women in the United States reveals that Latinas were not invisible. During the first half of the 20th century, they were a definite force in the labor movement. Ellen has been described as *la nueva Latina*. She does not have to fight for her rights under threat of destruction as her predecessors did.

She is multitalented. Ellen flies airplanes and is an accomplished flutist. By the age of 33, she was on a team of co-inventors who received three patents. Dr. Ochoa is both a team player and leader in the field of space science. Her dream is to continue to participate in the building and maintaining of the International Space Station. She's involved in significant research of the ozone layer—research that is vital to our survival on Earth. Ellen is married and the mother of two children. She finds motherhood as much of a challenge as space travel, but she handles both with elegance. Both career and family make up her successful world.

Several common denominators characterize the lives of these three women, but most prominent is the commitment to future generations. Bessie Coleman wanted to start an aviation school for young African Americans. Mae Jemison and Ellen Ochoa are actively involved with young people. They recognize that young people face tremendous peer pressure. But, they are determined to give these young people the tools to aim high.

## Implementation Guidelines

It is recommended that this unit be taught in the 11th and 12th grades as a part of the American History 2 course. This unit supports the study of American history during the first half of the 20th century. The unit also accommodates many of the workplace standards. Whenever possible, career choices should be highlighted for the student and behaviors necessary to achieve those choices is a focal point in this unit. The unit relies heavily on cooperative learning and group activities. As students work together, the teacher should encourage positive peer interactions. When possible, the expertise of career and other counselors should be incorporated to help the young people cope with peer pressure and issues.

Parts of the unit may be sensitive because of the issues discussed. The teacher is advised to pre-read all of the material carefully. It would be permissible at times to have either the counselor or other teachers provide input on strategies for discussions. Use available resources in your school and community. A major premise of this unit is that our young people need guidance and motivation. Some students may have issues that the unit brings to the surface. Since we want to help our students stay physically and mentally healthy, the teacher should observe students as discussions proceed. If there is a need for follow up because of these observations, teachers should consult the necessary school personnel. Students should keep all the information and materials in a folder or binder. The historical overviews offer material that is relevant to the same decades in the history of our country. This information will provide an excellent reference in future studies.

## Instructional Materials and Resources

**The following resources (books) are needed for implementating this unit:**

*Fly, Bessie, Fly* by Lynn Joseph  
*The Collected Poems of Langston Hughes* by Arnold Rampersad  
*Nobody Owns the Sky* by Reeve Lindberg  
*Fly High: The Story of Bessie Coleman* by Louise Borden and Mary Kay Kroeger  
*Up in the Air: The Story of Bessie Coleman* by Philip S. Hart  
*Queen Bess: Daredevil Aviator* by Doril L. Rich  
*Mae Jemison* by Sonia Black  
*The Voyage of Mae Jemison* by Susan Canizares  
*Whitman College Speech and Debate, Preparing Informative and Persuasive Speeches*  
*Mastering Public Speaking* by George L. Grice and John F. Skinner  
*Struggle in the Fields* by Cesar Chavez  
*Latinas: Hispanic Women in the United States* by Hedda Garza  
*The Mexican Family Album* by Dorothy and Thomas Hoobler  
*Cannery Women: Cannery Lives* by Vicki L. Ruiz  
*From Out of the Shadows* by Vicki L. Ruiz  
*Notable Hispanic American Women, Book II*, edited by Joseph Palmisano  
*Hispanic Scientists* by Jetty St. John

*Real People: Ellen Ochoa* by Pamela Walker

*Life of An Astronaut* by Niki Walker

*Encyclopedia of Careers and Vocational Guidance, 11th Ed* by Holli R. Cosgrove

*Professional Careers Sourcebook, 6th Ed.* by Christine Mauer, and Kathleen Savage

*The Big Book of Jobs*, published by the Department of Labor, Bureau of Labor Statistics

**The following are resources and materials for each lesson:**

**Lesson 1:**

*Fly, Bessie, Fly* by Lynn Joseph

*The Collected Poems of Langston Hughes* by Arnold Rampersad

*A History of Us: War, Peace and All That Jazz* by Joy Hakim

*Tell All the Children Our Story: Memories and Mementos of Being Young and Black in America* by Tonya Bolden

**Lesson 2:**

*Nobody Owns the Sky* by Reeve Lindbergh

*A Picture Book of Amelia Earhart* by David A. Adler

*Women Pilots of World War II* by Amy Nathan

**Lesson 3:**

*Fly High: The Story of Bessie Coleman* by Louise Borden and Mary Kay Kroeger

*Up in the Air: The Story of Bessie Coleman* by Philip S. Hart

*Fly, Bessie, Fly* by Joseph Lynn

*Queen Bess: Daredevil Aviator* by Doris L. Rich

**Lesson 4:**

*The Faces of Our Past* by Hilary Austin and Kathleen Thompson

**Lesson 5:**

*Preparing Informative and Persuasive Speeches* by George L. Grice and John F. Skinner

**Lesson 6:**

*Mae Jemison* by Sonia Black

*The Voyage of Mae Jemison* by Susan Canizares

*Find Where the Wind Goes* by Mae Jemison

**Lesson 7:**

*Struggle in the Fields* by Cesar Chavez

*Latinas: Hispanic Women in the United States* by Hedda Garza

*The Mexican Family Album* by Dorothy and Thomas Hoobler

*Cannery Women: Cannery Lives* by Vicki L. Ruiz

*From Out of the Shadows* by Vicki L. Ruiz

**Lesson 8:**

*Notable Hispanic American Women, Book II* by Joseph Palmisano

*Real People: Ellen Ochoa* by Pamela Walker

**Lesson 9:**

*Life of an Astronaut* by Niki Walker.

*Encyclopedia of Careers and Vocational Guidance* by Holli R. Cosgrove

*Professional Careers Sourcebook* by Christine Mauer and Kathleen Savage

*The Big Book of Jobs*, issued by the Department of Labor, Bureau of Labor Statistics

## Lesson Summary

Lesson 1:	The Life and Times of Bessie Coleman ..... 6 This lesson is an overview of history, from reconstruction to the roaring twenties. It allows the student to explore the racial climate during the time Bessie lived.	
Lesson 2:	Look to the Sky ..... 18 The life of Bessie Coleman is presented as a beautiful poem written by Reeve Lindbergh. It's a gentle and lyrical introduction to a life of challenges.	
Lesson 3:	Bessie Coleman: A Life of Challenges ..... 22 A detailed biography is presented at a level of understanding for a more mature audience.	
Lesson 4:	Legacy ..... 30 Students will explore the concept of legacy and how legacies affect our lives. Students will be introduced to specific legacies of Bessie Coleman. As a culminating activity, students will celebrate the history of black women through photographs.	
Lesson 5:	Mae Jemison: The Legacy Continues ..... 38 In this lesson, the biography of Mae Jemison is used to analyze the events and ideas that can direct young women toward success.	
Lesson 6:	Mae Jemison Speaks ..... 48 Learn what Mae Jemison thinks and says today, from a speech she gave in Denver, Colorado, in 2002.	
Lesson 7:	Latinas in American History ..... 54 Latino women have been referred to as a forgotten and, at times, even nonexistent part of American history. This lesson explores the important role they had in the labor movement.	
Lesson 8:	Aim High: The Ellen Ochoa Story ..... 66 This is the biography of the life of a woman who is still very much a success in progress. Her life and accomplishments present a roadmap for young adults pursuing a career.	
Lesson 9:	Countdown to Success ..... 73 Students explore the requirements necessary to become an astronaut. These requirements are compared to the characteristics necessary for a successful career in any field.	
Unit Assessment	..... 79 Students will complete an assessment that requires active participation in the review and interpretation of the material presented in lessons 1-9.	

# Lesson 1:

## The Life and Times of Bessie Coleman

### What will students be learning?

#### STANDARDS

Students understand the chronological organization of history and know how to organize events and people into major eras to identify and explain historical relationships. (H1)

Students understand that societies are diverse and have changed over time. (H3)

Students understand political institutions and theories that have developed. (H4)

Students know that religious and philosophical ideas have been powerful forces throughout history. (H6)

#### BENCHMARKS

Students will know the general chronological order of events and people in history.

Students will use chronology to examine and explain historical relationships.

Students will apply knowledge of the past to compare and contrast present-day issues and events from multiple, historically objective perspectives.

Students will know how various societies have been affected by contacts and exchanges among diverse peoples.

Students will know how various systems of government have developed and functioned throughout history.

Students will know how political power has been acquired, maintained, used, and or lost throughout history.

#### OBJECTIVES

Students will demonstrate knowledge of the era in which Bessie Coleman lived.

Students will identify the major social, political, and cultural events of this period.

Students will explain how the laws of the period shaped the lives of African Americans during this time.

Students will read examples of literature that reflect the philosophical values of various cultural groups in the United States.

#### SPECIFICS

Bessie Coleman had dreams as vast as the skies. References are made over and over to her looking upward to skies and waving her arms as if a bird in flight. Racism, gender bias, and poverty were realities. Yet, she refused to allow the political and social climate imposed on her by Jim Crow laws to diminish her dreams. Leaving the south, venturing to Chicago and later to France, showed great courage. While this was a time of conservatism, it was also a period of experimentation. Bessie pushed the experimentation to the limits, often with mixed results.

## What will be done to help students learn this?

### INSTRUCTIONAL STRATEGIES

Read Aloud

Lecture

Whole-Group Discussion

Cooperative Group Response

Poetry Analysis

### PRELIMINARY LESSON PREPARATION

Prepare copies of The Life and Times of Bessie Coleman handout (on page 14), a brief overview of United States history from reconstruction to the 1920s. Distribute copies of the Vocabulary and Events worksheet. Prepare a chart paper copy of “Mother to Son” by Langston Hughes.

### ACTIVITIES

Read aloud from *Fly, Bessie, Fly* by Lynn Joseph. Picture-walk the text, noting the dominance of the sky and the body language of Bessie Coleman on these pages. Note especially the use of her hands. Explain to students that this is Bessie’s story. Tell students that now we will look at America’s story during this time.

Distribute copies of the history overview, The Life and Times of Bessie Coleman. The text is divided into sections. Divide the class into the same number of groups for a cooperative read and oral report. Allow six to eight minutes. Tell the students that they are to report on the most salient facts/events.

Conduct a report-back segment and a whole-group discussion of the events. As the reporting is presented, allow students to complete the Vocabulary and Event worksheet by taking brief notes.

Culminate the lesson by reading aloud “Mother to Son” by Langston Hughes. Make an oral comparison of the lines in the poem to events and circumstances described in the history overview. Ask, “What was this mother saying that was indicative of the times in which she lived?” Use the historical events discussed to support the statements.

### RESOURCES/MATERIALS

*Fly, Bessie, Fly* by Lynn Joseph

*The Collected Poems of Langston Hughes* by Arnold Rampersad

*A History of Us: War, Peace and All That Jazz* by Joy Hakim

*Tell All the Children Our Story: Memories and Mementos of Being Young and Black in America* by Tonya Bolden

<http://afroamhistory.about.com>

[http://www.nilevalley.net/history/jim\\_crow\\_laws.html](http://www.nilevalley.net/history/jim_crow_laws.html)

[http://www.pbs.org/blackpress/news\\_bios/defender.html](http://www.pbs.org/blackpress/news_bios/defender.html)

<http://www.nhnccd.cc.tx.us/contracts/lrc/kc/decade20.html>

## ASSESSMENT

### 1. Biography

For homework, have students write a fictitious, one-page biography for a young black man or woman from the south during this period. Select a career not traditionally open to blacks at this time. Include the obstacles to be overcome and the political, social, and cultural restrictions placed on the individual. Give examples of how the individual overcomes the obstacles by problem solving.

#### Rubric

Evaluate the student's biography on the following:

1. Was the fictitious character clearly identified? ..... 4 points
2. Was the career selection appropriate to the assignment? ..... 1 point
3. Were the elements of biography followed (birthplace and date; information about the family; an indication of how the career dreams developed; clear indication of the obstacles, statements on how the obstacles were overcome; and a clear conclusion of success or failure)? ..... 10 points
4. Is the spelling correct? ..... 2 points
5. Is the punctuation correct? ..... 2 points
6. Is the capitalization correct? ..... 2 points
7. Are complete sentences used? ..... 4 points
8. Are the events and details true to the history of the time? ..... 6 points
9. Is the assignment neatly presented? ..... 2 points
- Total points ..... 33 points

### 2. Gender Bias

Respond in writing to one of the two following quotes about gender bias.

1. "The glass ceiling is a solid but invisible barrier against women's advancement in business and other institutions. Women could all stop wearing lipstick and blusher tomorrow, and I doubt it would help them break through the glass ceiling." (*New York Times*)
2. "Tremendous amounts of talent are being lost to our society just because that talent wears a skirt." (Shirley Chisholm)

#### Rubric

Evaluate the student's response on the following:

1. Is the problem clearly defined? ..... 2
2. Are the implications clearly stated? ..... 2
3. Are examples used to support your statements? ..... 4
4. Has the situation changed over time? ..... 2
5. Whether in agreement or disagreement, are supporting statements used? ..... 4
- Total points ..... 14

## **EXTENSIONS**

Jim Crow laws make for fascinating reading when compared to laws today. Refer to [www.nilevalley.net/history/jim\\_crow\\_laws.html](http://www.nilevalley.net/history/jim_crow_laws.html) to read more of these laws. Remember, many of them were the basis for the civil rights movement of the 1960s. Beautiful illustrations of the flapper dress are depicted in books about Bessie Coleman. Design an outfit for Bessie as aviatrix, or a child or adult. Design an outfit for each season.

Read more about Langston Hughes. Go to [Poet.com](http://Poet.com). Read and compare these three poems to the history we have discussed: "Let America Be America Again," "I, Too, Sing America," "The Negro Speaks of Rivers."

Name \_\_\_\_\_ Page 1 of 2

## Vocabulary and Events Worksheet

Write your notes directly on this sheet.

1. Prohibition \_\_\_\_\_  
\_\_\_\_\_
2. 13th Amendment \_\_\_\_\_  
\_\_\_\_\_
3. 14th Amendment \_\_\_\_\_  
\_\_\_\_\_
4. 15th Amendment \_\_\_\_\_  
\_\_\_\_\_
5. 18th Amendment \_\_\_\_\_  
\_\_\_\_\_
6. Gender Bias \_\_\_\_\_  
\_\_\_\_\_
7. Expatriates \_\_\_\_\_  
\_\_\_\_\_
8. Roaring Twenties \_\_\_\_\_  
\_\_\_\_\_
9. Isolationists \_\_\_\_\_  
\_\_\_\_\_
10. Reconstruction \_\_\_\_\_  
\_\_\_\_\_
11. Harlem Renaissance \_\_\_\_\_  
\_\_\_\_\_

Name \_\_\_\_\_ Page 2 of 2

12. Jim Crow Laws \_\_\_\_\_

\_\_\_\_\_

13. Emancipation \_\_\_\_\_

\_\_\_\_\_

14. Great Migration \_\_\_\_\_

\_\_\_\_\_

15. Sharecroppers \_\_\_\_\_

\_\_\_\_\_

16. Carpetbaggers \_\_\_\_\_

\_\_\_\_\_

17. White Supremacy \_\_\_\_\_

\_\_\_\_\_

18. Urban \_\_\_\_\_

\_\_\_\_\_

19. Rural \_\_\_\_\_

\_\_\_\_\_

20. Script \_\_\_\_\_

\_\_\_\_\_

21. Racism \_\_\_\_\_

\_\_\_\_\_

22. 19th Amendment \_\_\_\_\_

\_\_\_\_\_

23. Isolationism \_\_\_\_\_

\_\_\_\_\_

## TEACHER'S COPY

### Vocabulary Study Sheet

1. Prohibition was a period in U.S. history when the Constitution banned the use and circulation of alcoholic beverages.
2. Amendment 13 emancipated all U.S. slaves in 1863.
3. Amendment 14 gave the right of citizenship to all freed slaves.
4. Amendment 15 allowed all males the right to vote in 1870.
5. Amendment 18 prohibited the consumption, circulation, transportation, and manufacture of alcohol.
6. Gender bias is discrimination and or preferential treatment accorded to a group based on their sex. A basic element is the belief that the sex of an individual determines certain behaviors and places limits on ability.
7. An expatriate is someone who gives up residence in their homeland. Expatriates after World War I were talented young authors and artists who left the country seeking more liberalized environments. They rebelled against the Victorian mores dominating a conservative America after World War I. Some of these writers and artists were black. Many of these artists settled in France. One of the more famous expatriates was Paul Robeson. Other names in the world of literature were Ernest Hemingway and Gertrude Stein.
8. Roaring twenties—a name used to describe a period in American history characterized by an anything-goes attitude. This was a time of liberation for some women.
9. Isolationists were people and political groups who wanted the United States out of international affairs, especially the part of international relationships related to the League of Nations
10. Reconstruction (1866 to 1877) was a period whereby the southern states were to reenter the Union. Also, it was the period of time in which basic rights were to be secured for the former slaves.
11. Harlem Renaissance was a period after World War I when blacks were expressing their culture through arts and literature.
12. Jim Crow Laws were enforced from the 1880s into the 1960s. These were laws enacted at the state level that maintained segregation in the south and some northern areas. States and cities could punish violators of these laws. The laws strictly forbade intermarriage and ordered separation of the races in businesses and public institutions.
13. Emancipation is the process of freeing people from slavery. The Emancipation Proclamation was issued during the civil war on January 1, 1863. The proclamation abolished slavery, but it was not totally a moral edict. Rather, it was a strategic move to weaken the south.
14. The Great Migration was the migration or movement of large numbers of blacks from the south to the north after World War I. They were enticed by the promise of jobs and more freedom. Black activists, like Robert Abbot, founder of the *Chicago Defender*, would write stories promoting the northern cities as places to escape Jim Crow laws and bigotry.

## TEACHER'S COPY

### Vocabulary Study Sheet (cont)

15. Sharecroppers were usually former slaves who worked an owner's land and shared the profits in hope of saving enough money to buy land.
16. Carpetbagger is a term applied to white northerners who supposedly came to the south to assist in the reconstruction process. Their activities were focused on helping newly freed slaves become a part of American society. However, their efforts fueled hatred of both northerners and newly freed slaves.
17. White supremacy is a social, political, and intellectual belief that the white races are functioning at a higher level than other races and therefore better equipped to govern. This belief forms the basis for suppression of nonwhites.
18. Urban refers to the city.
19. Rural refers to areas outside the city that are less populated and geared to specific industry, usually agricultural in nature.
20. Script was payment made to sharecroppers instead of currency. The owners prescribed the value.
21. Racism is a belief that inherent differences among groups dictates the value of that group and prescribes the limits of a group. These differences are used to define the group's relationship to the majority of society.
22. 19th Amendment gave women the right to vote.
23. Isolationism was a view held by many Americans that America should not be a part of the international community. This conservative view was especially opposed to continued immigration and participation in the League of Nations.

# The Life and Times of Bessie Coleman: A History Overview

## Group 1

Bessie Coleman and her family were not fully aware of the dynamic forces that shaped her childhood and her adult life. The period of reconstruction through the roaring twenties spoke loudly in her life. Bessie was born into the cycle of poverty that existed for most blacks in the south. The promise of reconstruction was clearly gone. Sharecropping had become a new form of slavery. In many ways, sharecropping was as insidious as pre-Civil War slavery. Blacks worked a small parcel of land owned by a white landlord. Sharecroppers hoped to one day own the land they worked. But, ownership was contingent on turning a profit and paying for the needs of the family. Few could ever break even, much less gain economic independence. Each time there was a setback, the sharecropper went deeper into debt to the landowner. Most often, the sharecroppers were actually paid script rather than real money. Bessie's family, like most of that era, was large. She was from a family of 13. Large families were considered economically feasible as a source of labor. During these times, the prevailing view in white society was that a woman's work was in the home. This declaration really didn't include black women. Their work was in the field or in domestic service. Many black women were live-in domestics for white families while their own children were cared for by the oldest siblings in the family and the men worked in the fields. Once children were old enough, they joined their parents in the cotton fields.

Reconstruction, 1866 to 1877, occurred before Bessie was born. Yet, the repercussions of this period were as influential on the political freedom of blacks as was the Civil War. The goal of reconstruction was to secure basic rights for former slaves. Constitutional amendments and other laws created by the federal government were intended to give full citizenship to former slaves. Also, reconstruction was to be the means by which the south would reenter the Union. While some blacks were able to exercise some modicum of political freedom, reconstruction was short lived. An influx of carpetbaggers and other opportunists intensified the bitter feelings of the southern whites. White southerners felt compelled to defend the concept of white supremacy. Vicious and vengeful vigilante groups called the Ku Klux Klan (KKK) developed to challenge reconstruction. Intimidation and murder kept blacks in economic, political, and educational servitude. Things had changed, but in theory only. The 13th, 14th, and 15th Amendments to the United States Constitution could not ensure freedom.

## Group 2

The 13th Amendment to the United States Constitution emancipated all United States slaves (1863.) The 14th Amendment to the United States Constitution granted citizenship to the former slaves (1868). The 15th Amendment to the United States Constitution gave all male citizens the right to vote (1870). Reactionary legislation was evolved to counter any advances made by blacks. During the 1880s and well into the 1960s, states across the nation enforced strict segregation through Jim Crow laws. Not until the 1960s was there a serious challenge to these laws, which imposed stiff penalties for any intermingling of the races. Most common of these laws forbade intermarriage and demanded that business owners and public accommodations separate blacks and whites. Examples of these laws are:

1. Education: Separate free schools shall be established for the education of children of African descent; and it shall be unlawful for any colored child to attend any white school, or any white child to attend a colored school. (Missouri)
2. Barbers: No colored barber shall serve as a barber to white women or girls. (Georgia)

3. Restaurants: All persons licensed to conduct a restaurant, shall serve either white people exclusively or colored people exclusively and shall not sell to the races within the same room or serve the two races anywhere under the same license. (Georgia)
4. Intermarriage: The marriage between a white person of Caucasian blood with a Negro, Mongolian, Malay, or Hindu shall be null and void. (Arizona)
5. Amateur Baseball: It shall be unlawful for any amateur white baseball team to play baseball on any vacant lot or baseball diamond within two blocks of a playground devoted to the Negro race, and it shall be unlawful for any amateur colored baseball team to play baseball in any vacant lot or baseball diamond
6. Circus Tickets: All circuses, shows, and tent exhibitions, to which the attendance of...more than one race is invited or expected to attend shall provide for the convenience of its patrons not less than two ticket offices with individual ticket sellers, and not less than two entrances to the said performance, with individual ticket takers and receivers, and in the case of outside or tent performances, the said ticket offices shall not be less than 25 feet apart. (Louisiana)
7. Railroad: The conductor of each passenger train is authorized and required to assign each passenger to the car or the division of the car, when it is divided by a partition, designated for the race to which such passenger belongs. (Alabama)

A ludicrous extension of the last example is detailed in *An Autobiography of Black Chicago*. The book describes how the blankets of the train porters were to be used exclusively by them. Pullman company directives stated that porters were to use only old and faded linens. To ensure that these linens were restricted to their use only, the linens were to be dyed blue.

### Group 3

Actual prohibitions against teaching blacks to read existed during pre-Civil War days. Reconstruction saw an influx of white women from the north coming south to teach newly freed slaves. The classrooms filled quickly. Interesting, these classrooms were filled with not only children but also the grandparents of these children. It should be noted that the intent of most of these educational endeavors was to create artisans and skilled laborers. Another focus was on moral education. The zeal by which the former slaves sought education was seen as a threat to the conservative white southerners. Education would become and remain a focus of contempt on the part of the conservative white leadership. With the decline of reconstruction efforts, educational efforts decreased. Younger children were forced into schools where teachers were equipped only with a desire to teach. Attendance at these schools was sporadic, sandwiched between the demands of working at home and in the cotton fields. Bright spots did surface. An outgrowth of this era was the agricultural college. The goal again was more vocational than academic. Another bright spot was the establishment of Wilberforce University. The purpose of the University was to “promote education, religion, and morality amongst the colored race.” Interestingly, though this University was established by and for blacks, the articles of association stated that no one was to be turned away purely on the basis of race or color.

As Bessie grew into womanhood, her life was strongly influenced by the events and exposure to World War I. During this time, the mood of country changed dramatically. This was the period of the roaring twenties, Harlem Renaissance, repudiation of internationalism, reorganization of the KKK, prohibition, and women’s suffrage. Bessie was also influenced by the great migration, a movement starting in the early 1900s. Robert Abbott and others encouraged blacks to leave the south and come north. Between 1916 and 1921, over a half-million blacks left the south for the promise of economic and social freedom in the north. At least 110,000 came to Chicago alone from 1916 to 1918, nearly tripling the city’s black population.

World War I opened up America to new and sometimes foreign ideas. Both of Bessie's brothers signed up and served in the army. They brought back stories about the more liberal continental ways of thinking. These experiences and ideas would not only strongly influence Bessie but other black Americans seeking to demonstrate their talents. This was a period of experimentation sandwiched between two world wars. While some wanted a nostalgic return to the past, others had a need to push the limits. The new conflict was at home there was a constant clash between old-line conservatism and an almost frenzied need for the new and innovative. It was an era of excesses and contradictions. Urban centers attracted the new thinkers. In time an obvious clash occurred between this urban secular society and the older rural traditions. The Scopes trial was a signature event for this period. The conservatives sought to close the doors to the new ideas and to Woodrow Wilson's call for an international outlook. Internationalism was repudiated. All things foreign were viewed with suspicion and downright hatred. Immigration was curtailed as the fears of the foreign and darker (in complexion and customs) newcomers spread. The arrival of Jews, Catholics and others, especially from southern and eastern Europe, fueled a resurgence of the KKK. Their banner was "100% Americanism." This broader appeal gained many converts in the north and the midwest. Membership in the KKK climbed to four million in the 1920s.

#### **Group 4**

The anything-goes atmosphere clashed with the moral correctness expressed by Prohibition. Prohibition was an attempt to ban alcohol in public places. This noble experiment led to different forms of criminality. Finally, prohibition was repealed in 1933.

Hemlines went up. By 1925, the rage was the short skirt and the cloche hat. Several illustrations of Bessie Coleman show this new, freer dress. The 19th Amendment to the United States constitution gave women the right to vote. Yet, a woman's place was still in the home. Working outside the home, especially in supposedly male domains, was viewed with suspicion. The fads and slang of the day revealed that the gentle pristine young lady was now called a broad, a bunny, or a canary. A young woman's chastity was often called to question by using such terms as charity girl, a dame, doll, or the cat's meow. Cosmetic manufacturing has its roots in this period. Everything from colored nails to bleached hair became the rage. And, for fun, this modern woman could now dance more provocatively. She could really show her stuff in the dance marathons. Dance marathons became the rage during this time. Most assuredly there was strong opposition to these trends. Women were punished for this unladylike behavior. Such opposition today would be called domestic violence.

Opposition to the conservative and restrictive aspects of American life was led by a band of writers, poets, and musicians. Many of them centered their activities in New York. Others, feeling even more disenfranchised, moved to Europe, centering many of their activities in France. This rebellious group of expatriates was called the lost generation. Some of the greatest names in the arts were in this group.

#### **Group 5**

African Americans also felt restrictions on their creative voice. Starting in the early 1900s, a movement called the Harlem Renaissance reflected the frustration and determination of black artists. The Harlem Renaissance expressed the cultural heritage of the Negro through literature, art, music, dance, and social commentary. This movement defined and celebrated the talents of Negroes. In New York, Philadelphia, and, to some extent, Chicago, this movement flourished. Now, all Americans were being given the opportunity to read and experience through the arts and literature the history, abuses, and life of African Americans. Langston Hughes was a premiere spokesperson for this movement. His literary metaphors told an intense history of suffering and triumph. His works were related and influenced by the growth of the jazz age. Hughes wrote poetry, novels, plays, and short stories. At all times, he was aware that his personal experiences were linked to experiences of his people.

## Mother to Son

Well, son, I'll tell you,  
Life for me ain't been no crystal stair,  
It's had tacks in it,  
And splinters,  
And boards torn up,  
And places with no carpet on the floor—  
Bare.  
But all the time,  
I've been a-climbin' on,  
And reachin' landin's  
And turnin' corners  
An sometimes goin' in the dark  
Where there ain't been no light.  
So, boy, don't you turn back.  
Don't you set down on the steps.  
Cause you finds it's kinder hard.  
Don't you fall now—  
For I've still goin' honey,  
I've still climbin',  
and life for me ain't been no crystal stair.  
— *Langston Hughes*

It was against this backdrop that a poor young woman from Waxahachie, Texas,  
came to Chicago to explore possibilities.

## Lesson 2: Look to the Sky

### What will students be learning?

#### STANDARDS

Students read and recognize literature as a record of human experience. (RW6)

Students recognize and use the visual arts as a form of creativity and communication. (VA1)

Students know and apply visual arts materials, tools, techniques, and process. (VA3)

#### BENCHMARKS

Students read literature to investigate common issues and interests in relation to self and others.

Students read literature that reflects the uniqueness, diversity, and integrity of the American experience.

Students will select and use visual images, themes, and ideas in their own works of art to create and communicate meaning.

Students will use different materials, tools, techniques, and processes in creating their own works of art.

#### OBJECTIVES

Students will explore poetry as a means of understanding events, people, and emotions.

Students will discuss how an author and illustrator create a mood for understanding and expressing emotions.

Students will create a work of art to correspond to the emotions and content of the life of this character.

#### SPECIFICS

Reeve Lindbergh, daughter of aviator Charles Lindbergh and poet Anne Morrow Lindbergh, has written a beautifully moving poem that gives an almost soothing biography of a woman who faced enormous obstacles. Her book, *Nobody Owns the Sky*, is a delight for any age. This presentation is enhanced by beautiful folkart illustrations by Pamela Paparone. The focus is the life of Bessie Coleman, minus the harshness she often faced. While the harshness of racial and gender discrimination cannot be neglected, this gentle genre is precursor to the often-sad story that follows. Bessie Coleman was not a woman who would have dwelled on the negative. This is a poem she would have loved.

### What will be done to help students learn this?

#### INSTRUCTIONAL STRATEGIES

Guided Imagery

Picture Walk

Read Aloud

Discuss

Creation of Art

Comparing and Contrasting

### **PRELIMINARY LESSON PREPARATION**

Guided imagery is using words, visuals, or music to sensitize the mind for an experience or event. One can imagine an event and the emotional content of that event. The goal is to relax and open one's mind to the dynamics of an experience. Students are advised to release the tension of the day and open themselves to the beauty and vastness of the sky. The teacher may play some classical music to accompany this process. (Note: At a later point in this lesson, the teacher may wish to play "I Believe I Can Fly." This song is a bit too rousing for the initial guided imagery.) Ahead of time, the teacher may want to select several readers for the book. Or, the teacher may read the entire book.

Art materials for the lesson should be available and copies of the themes, "Language of the Sky." Suggested materials are: 11x18-inch white or blue construction paper, pastels, markers, charcoal, crayons, and watercolors.

Have books on Amelia Earhart and Charles Lindbergh available for students.

### **ACTIVITIES**

Ask students to relax and get comfortable as they listen to a beautiful poem about Bessie Coleman. Go on to say that they are to picture the vastness and beauty of a sky that is alive with promise. Play background music softly.

Teacher shows the cover of the book, identifying the author and illustrator. She alerts the students to look at the artwork as she does a picture walk through the book. The teacher and/or students read the text. Students then discuss why Bessie was usually pictured looking to the sky. Go further saying how visionaries, scientists, and writers looked to the sky for inspiration. Explain that the sky has a language and beauty that speaks to our emotions.

Tell the students that you have a list of themes relating to this language of the sky. Explain that they will draw a picture of the sky motivated by one of these themes or another that they create. Refer to *Language of the Sky: Themes for Artwork*. Set up the room for the art experience. Allow the students to read the list of themes. Each student is to select one or create a montage of several themes and draw them on the sheet. Allow students time to complete their pictures during this session. Tell them to write a title for their picture. Share the pictures.

### **RESOURCES/MATERIALS**

*Nobody Owns the Sky* by Reeve Lindberg

*A Picture Book of Amelia Earhart* by David A. Adler

*Women Pilots of World War II* by Amy Nathan

<http://www.serenitymusic.com>

Art paper, blue gray, white (11x18 inch)

Markers

Crayons

Pastels

Charcoal

Watercolors

Classical music (optional)

Writing paper

### **ASSESSMENT**

Write a paragraph or essay telling why you think Bessie is often depicted looking to the sky. What did the sky mean to her?

### **Rubric**

Seven points if the paragraph includes references to the following. An additional point is for any other creative response.

- Freedom
- Opportunity
- Adventure
- No boundaries
- Beauty
- Hope
- Escape

### **EXTENSIONS**

Read more about Charles Lindbergh and Anne Morrow Lindbergh. Why were they famous historical figures?

Read about Amelia Earhart. Compare the support she received in her flying career to that of Bessie Coleman. Did she face obstacles?

## **Language of the Sky: Themes for Artwork**

Select one or more of the following themes and draw a picture illustrating the theme(s). You may also create your own theme to use as inspiration for your art. Create a title for your artwork.

1. Above the clouds: a picture from an airplane
2. Skywriting
3. Sunset (perhaps a red one)
4. Sunrise
5. Cloudy day
6. Rainbows (perhaps a double rainbow)
7. Sunny blue sky
8. Foreboding sky
9. Full moon
10. Crescent moon sky
11. Birds flying
12. Sky as a background for insects
13. Viewing the sky from my window
14. Treetops against the sky
15. Night sky
16. Starry sky
17. Approaching storm
18. Sky at war (bombs, rockets, smoke)
19. Looking down on Earth
20. Hot-air balloons in the sky
21. Tall mountains against the sky
22. Small plane in the sky with a banner trailing it (What would that banner say?)

## **Lesson 3:**

# **Bessie Coleman: A Life of Challenges**

### **What will students be learning?**

#### **STANDARDS**

Students know how to use the processes and resources of historical inquiry. (H2)

Students understand that societies are diverse and have changed over time. (H3)

Students understand political institution and theories that have developed and changed over time. (H5)

#### **BENCHMARKS**

Students will know how to interpret and evaluate primary and secondary sources of historical information.

Students will know how various societies have been affected by contacts and exchanges among diverse people.

Students will understand how democratic ideas and institutions in the United States have developed, changed, and been maintained.

#### **OBJECTIVES**

Students will use historical information to analyze and interpret decisions regarding past and current issues.

Students will identify and analyze interactions of diverse populations in the United States.

Students will determine how ideas from the Constitution and laws (written and unwritten) affect past and contemporary United States.

#### **SPECIFICS**

Bessie Coleman was before her time in career choices and independent nature. She received much criticism for this, but she persevered. *Queen Bess: Daredevil Aviator* is the most comprehensive and academic biography of her life. The reader gains insight to the obstacles and realities of the time.

### **What will be done to help students learn this?**

#### **INSTRUCTIONAL STRATEGIES**

Lecture

Small-group study

Cooperative learning

#### **PRELIMINARY LESSON PREPARATION**

At this point, students should be allowed to peruse books about Bessie in addition to texts about this time period. Also, the lecture notes for this session and the accompanying study questions should be prepared. The assessment segment will require students to create skits. The teacher should take time at the end of the lesson to define the nature of skits to be performed.

Gather history resources that contain information on Jim Crow laws.

**ACTIVITIES**

Use the information provided in “A Life of Challenges” in this lesson to give a lecture. Allow questions and discussion during the lecture. Distribute the study questions. Put students in groups of four to answer the questions. Each group will select a recorder and a presenter. Regroup the students and share the completed study question sheet.

**RESOURCES/MATERIALS**

*Fly High: The Story of Bessie Coleman* by Louise Borden and Mary Kay Kroeger

*Up in the Air: The Story of Bessie Coleman* by Philip S. Hart

*Fly, Bessie, Fly* by Joseph Lynn

*Queen Bess: Daredevil Aviator* by Doris L. Rich

**ASSESSMENT**

Skits are cooperative group presentations. Each group is composed of at least three members. All members are participants; one or more members may be speakers. Each group is to create a minimum three-minute text presented in a play format where Bessie talks with other critical people in her life. The group must not only create the presentation but also critique their performance and encourage those with speaking parts. Remember, some may well become the speakers but everyone has input. Speakers may speak or read their written parts. Written parts must be turned in.

**Rubric**

Participation

- 4 ..... members had input on an equal basis with each adding to the creative process
- 2 ..... members had input on an equal basis
- 0 ..... evidence that all group members did not participate

Text

- 4 ..... text is factual, demonstrating depth of feeling, poetic license, and empathetic responses
- 2 ..... text is factual, demonstrating emotion and poetic license
- 1 ..... text is very factual and concrete, almost a narrative of the situation

Presentation

- 6 ..... a smooth presentation indicating that all participated and practiced
- 4 ..... given with proof of practice and critique
- 1 ..... given without practice

Total Points:

- 14 to 12 ..... A
- 11 to 8 ..... B

7 and below ..... C

## Skits

***Skit 1, The White-Only Sign***—Scene: One day Bessie’s mom gave her and Georgia a shiny half-dollar to spend at the circus. This reprieve from the work routine brought both girls pleasure. The anxious girls lined up in a whites-only shorter line to ensure their entrance to the main show. The ticket man pointed to the sign and rebuffed the girls. Bessie, believing in the principles of equality taught by her mother, maintained her dignity. However, her younger sister, Georgia does not feel the freedom of the boundless skies (a reference to the way Bessie looks to the skies and measures her own worth limits). What would Bessie say to her sister Georgia to free her from the ties of racism? What body language and actions would accompany her words?

***Skit 2, Inspired by Walter***—Walter, Bessie’s older brother, now lives in Chicago. He writes Bessie and entices her to leave home and come to Chicago. How does this young woman tell a very skeptical and fearful mother about such an adventure? Create a dialogue between mother and daughter depicting Bessie’s determination to go and her mother’s many reservations about this move to a big city. Show the conflict between a mother’s love and young adult wishing to strike out independently.

***Skit 3, Opportunity in a Foreign Land***—We don’t know for sure if Bessie gave any attention to the Statue of Liberty as she sailed out of New York harbor. But, how ironic that she was leaving the land of opportunity to seek her new life in France. Using poetic license when appropriate, picture yourself holding on to the railing of the ship looking at this statue. Give voice to your thoughts as you leave your native land.

***Skit 4, Triumph Return***—Bessie returns to America from France in September 1921. Both the white and black press was there to meet her. She is a star as the first black American female to earn a pilot’s license. Frame a question and answer session between the reporters and Bessie. Express the jubilation and pride she must have felt. Don’t be afraid to exaggerate; remember Bessie was good at this.

***Skit 5, The Dream***—Bessie stated that it was not her goal to break records. What she really wanted was to open a flight school so people of her race, especially children, could learn to fly. Some of her most successful speeches directed at this goal were given before her death in Florida. Set this scene in an elementary school. An elegant Bessie in her flight uniform speaks to eager elementary school children trying to encourage them to dream big and consider flying as a career. What would Bessie say to these children? What would some of the responses of this young audience be?

## Lecture: A Life of Challenges

Most of Bessie's life she was ignored by white society, including the press. However, she was embraced by blacks. She was doing what so many could only dream about. In many ways she was a role model, yet she was human as all role models are. Doris Rich describes "Queen Bess" as a reluctant cotton picker. This statement exemplifies the fact that early on Bessie went against the common mores and directed her talents toward the unusual. Bessie was born in Waxahachie, Texas, in a small one-room cabin on January 26, 1892. It should be noted that a few sources give her birth date as 1893. Such discrepancies were common among poor people. Birth certificates were not issued. Usually, births were recorded in the family Bible. It is believed that Susan, her mother, may have been a former slave. Her father George was part Indian; he too might have been a former slave.

A series of racial incidents, some culminating in lynchings and torture, brought financial devastation to the small community into which Bessie was born. Many of the atrocities directed against blacks during this time were viewed as entertainment. Often, schools were dismissed so that children and their families could gather and witness public lynchings. Frustrated and unable to adequately support his family, George Coleman urged his family to go with him to the Indian Territory. Later, he would leave his family and return to the Oklahoma territory. Nine-year-old Bessie would now be raised by her mother.

While neither of Bessie's parents could read or write, Bessie's mother wanted more for her children. Bessie embraced reading at an early age. She would read to her mother, brothers, and sisters. Accounts vary as to the actual number of brothers and sisters, but most historians agree there were 13 siblings. Before Bessie's father left, Bessie enjoyed attending school between the demands of play activities and strenuous family chores. Once her father left, Bessie was the eldest of the children left at home. At that time, four younger girls remained in the home. Susan Coleman in a way left home too. She was forced to work as a live-in cook and housekeeper for a white couple. This necessary change interrupted Bessie's basic education in the one-room-school house. Still her mom managed to get books for her children from a wagon library that came to the community sporadically.

By the age of 10, Bessie joined her family in the cotton fields, as did thousands of other minority children. Bessie was not submissive in her work. She was an aggressive family accountant when it came to weighing and paying out earnings for cotton picked.

Students should explore the illustrations in *Fly High! The Story of Bessie Coleman*. Page 8 demonstrates the tenacity she exhibits when negotiating the family's accounts. Page 9 is an illustration depicting the kind of poverty and pride Bessie had as she left for school.

Bessie was sure she was headed for the success she and her mother dreamed of. But, this educational adventure was short lived, soon she returned to Waxahachie to help care for her family. Again education was interrupted by work.

Bessie had an older brother, Walter, who she wrote to often. He painted a picture of opportunity in Chicago. Now a young woman of 23, a new opportunity was unfolding. She reluctantly told her mother of her decision to leave. Later, her mother and remaining family in Texas would also come north. In 1923, she boarded a Jim Crow train bound for Chicago. Once again she became a risk taker as she became a part of that Great Migration.

Once in Chicago, Bessie became a member of the crowded Coleman household headed by her brother Walter. At that time, 90 percent of the African American population in the city of Chicago was crammed into housing in an area bordered by 12th and 39th on the north and south and Lake Michigan and

Wentworth avenues on the east and west. One day, this would become prime real estate leading to the dislocation of blacks lasting to this day. To earn her keep and lessen confrontations with Walter's wife, Bessie took a job as a manicurist. Bessie had not made this perilous journey to become a cook, maid, or laundress.

The beauty industry was the trendy thing at this time. A growing racial pride was translating into and emulation and imitation of white society. Madam C.J. Walker became a millionaire selling her beauty products as blacks attempted to groom as fashion dictated. While this behavior did elicit criticism from some segments of black society, it was the roaring twenties. All of this worked to Bessie's advantage. She worked in an area called The Stroll.

The Stroll also reflected the times. This was a popular stretch where entertainment, politics, and crime mingled freely. Here all were in pursuit of the American Dream. Evidence of this dream mentality among blacks led to the sale of dream books. Dream books were much like today's legal lotteries. This lucrative business translated one's dreams into numbers that were played for nickels and dimes. There were always enough winners to keep the fantasy alive. The policy or numbers game brought various kinds of crime into the community. Games were played from the basements of buildings. Numbers were usually selected in the morning; then in the afternoon and early evening winning numbers were made known. Bessie was in the center of all of this. She enjoyed dancing in the many clubs along The Stroll. She heard the music of such greats as Louie Armstrong and Bessie Smith. Surrounded by so much that seemed unreal and exciting, why wouldn't a young woman dream? On The Stroll she met influential people. One such person was Robert Abbott. He was the editor of the *Chicago Daily Defender*. He had created a newspaper whose readership soon numbered a half-million blacks. Robert Abbot would become not only a role model for Bessie, but also a staunch supporter.

Both of Bessie's brothers served in France during World War I. Once her brothers returned, they found that they were in steep competition for jobs and living space. This competition with the white community led to the worst race riots in Chicago history in 1919. Yet, the return of her brothers and other black soldiers from France brought another kind of news that would mark a turning point in Bessie's life. Tales of French women who could fly airplanes intrigued Bessie. Soldiers returning with stories of a more liberal French society impressed many black Americans. The possibility of escaping American racism led to the exodus of several black entertainers and writers. It is not totally clear whether Bessie came to Chicago with thoughts of flight, or developed them while in Chicago or after her brothers returned. The best guess is that such feelings evolved over time with bits and pieces of exposure culminating with the stories her brothers told. As early as 1912, it is believed that Bessie was reading an article about Harriet Quimby, the first American woman to be licensed as a pilot. Quimby's death may have been pivotal in encouraging Bessie to leave for Chicago. Ruth Law and Katherine Stinson were two young white women flyers in Chicago who may well have further encouraged Bessie's flying. Segregated movie theaters gave her another role model, Eugene Bullard. She followed his escapades as a brave young black pilot in France. *Up in the Air* (pages 18, 19, and 25) provide pictures of these early aviators. Now this female, with dark skin, no money, living in post-World War I America knew she must fly. White flying schools would not even consider her request. At this time, even the black male pilots numbered less than five. What to do? She turned to her friend Robert Abbott. He told her the only way would be to learn French and go to a school in France. Robert Abbott could see the potential readership increase by detailing her exploits as the first black female aviator. Bessie enrolled in a language school and got a better paying job at a chili parlor.

Finally, in 1920 Bessie applied for an American passport. She backed her birth date to 1896. It should be noted that in those days, women were considered middle age at 40. A characteristic dress and behavior were ascribed to middle-aged females. Bessie was surely passing her prime. Again, there was confusion about her birth date, this time it was clearly perpetuated by Bessie herself. A detail in a picture *Queen*

*Bess* (page 49) shows commemorative buttons struck before her birth date was authenticated. On November 20, 1920, Bessie sailed from New York to France on the S.S. *Imperator*. What thoughts she must have had as she passed the Statue of Liberty in New York harbor.

Once in France, Bessie enrolled in *Ecole d'Aviation des Freres Caudron*. The flying lessons included fancy flying maneuvers and aircraft maintenance. The realization that her dreams were coming through helped her overcome feelings of isolation and loneliness. In June 1921 she was issued a pilot's license from the *Federation Aeronautique Internationale*. The 29-year-old Bessie had become the first black woman to earn a pilot's license. She continued her lessons until September 1921. Then on September 16, 1921, she sailed for home on the S.S. *Manchuria*. In French terms, she was now a *tres chic aviatrix*. When she reached New York, Bessie was astonished at the welcome. Both the black and white press had come out to see this phenomenon. Robert Abbott's *Defender* published numerous accounts of her adventures in France. Often, both Bessie and Abbott embellished these escapades to further increase readership. But, there was no doubt Bessie was in the spotlight. She was a success in demand as a guest speaker at black churches and social clubs. Her flight dreams seemed to be within her reach.

Soon, the luster dimmed as Bessie realized it was difficult for a female pilot to earn a living, much less a black female pilot. To earn a living, her best approach was to become a barnstormer, giving thrills and stunts in a flying circus. This prompted a return to Europe. This time she spent six months in France, Germany, and Holland. She was dubbed "Brave Bess" as she demonstrated her new-found flying skills in September 1922. She visited more churches and schools promoting a message to her admirers: All of us are created equal.

Despite conflict about her career and its direction, she remained an independent voice. While critics called her eccentric and flighty, she kept her eyes on her goals ignoring those critics who sought to pigeonhole her and her talents. She was accused of attempting to liberalize women beyond the normal bounds of nature. After all, she was attempting to enter a male domain. And it was one that even black males had not made any major inroads. Furthermore, she married late and was estranged from her husband. She seemed more like a modern-day feminist. Was she a rebel?

A persistent dream of Bessie's was to open a school so that others of her race could fly. But first, she needed an airplane of her own. A stockpile of surplus planes owned by the U.S. military were available. These planes were selling for about \$400. Bessie shopped in her price range and purchased a near-obsolete Curtiss JN-4 for \$300. Now, she was ready to show her skills in her own plane. She was the sole attraction at a Santa Monica park. Nearly 10,000 had gathered to see her perform on February 4, 1923. The short-lived flight ended as her motor stalled at 300 feet. This crash left Bessie with a broken leg, fractured ribs, cuts and bruises, and some internal injuries. Even more painful to Bessie was the loss of her plane. Even as she was being patched up she knew she would fly again, but in what? A less-than-sympathetic crowd of spectators demanded their money back, prompting Dora Mitchell, a reporter for the *California Eagle* to write:

"A brave little Race girl was condemned without a hearing while she lay on a bed of pain, unable even to send a message... although such a message would doubtless have been received with sneers and incredulity. Certain people on Sunday night even declared this poor girl's injuries to be a punishment from on high for the sin of attempting to fly on Sunday," (p.70 *Queen Bess*).

Delayed for six months because of her injuries, but she was not derailed. A telegram message to the press said, "Tell them all that as soon as I can walk, I m going to fly." After recuperating in the California home of a friend, she returned to Chicago. Her return was less than triumphant. She was broke. A number of canceled air shows caused a brief retreat. Even staunch supporters like Robert Abbott were backing off. His newspaper no longer published stories about Brave Bessie. She retreated to her south side apartment and love of her family.

Bessie regained her fighting spirit in 1925—the now 33-year-old Bessie decided to return to Texas. She once again shared her unique experiences with eager audiences. She was more sophisticated and spoke fluent French, all of which added to her successful comeback. Her Texas tour was a success. She was able to schedule a flying demonstration to coincide with an important African-American celebration in Texas, Juneteenth. Juneteenth was the anniversary of the day blacks in Texas gained their freedom. While President Lincoln issued the Emancipation Proclamation in 1863, confederate-governed Texas was able to delay this reality for almost two and a half years. Lincoln’s birthday was still not a legal holiday in Texas. Only weeks before Bessie’s flight, the conservative legislature had once again blocked the Lincoln holiday. How ironic that a defiant Bessie would fly freely in the sky over a racially divided Texas. And fly she did, loop-the-loops and stunning figure eights thrilled the spectators. The leading black newspaper noted that this historical event was even more memorable because there were several other planes on which several citizens of the community took their first flight. Even more noteworthy was that some of these black passengers were females. This event left others clamoring to fly. At this same time, people were fleeing Texas because of some of the most oppressive Jim Crow laws in the south. Bessie went on to have other successes in Texas. Often she engaged others to perform stunts to enhance her flying circus. Once again, she was attracting admirers and even financial support.

On April 29, 1926, Bessie spent most of the day doing what she now loved best: speaking at elementary schools in Jacksonville, Florida. She was now turning her attention to children as potential aviators of the future. Bessie mesmerized students in her stunning uniform.

Bessie now had another plane—the JN-4 Jenny. The plane had been prepared for flight by a white mechanic, William Wills. He would ride in the cockpit while Bessie surveyed and planned in the back seat. Though friends expressed concern about Wills, Bessie took off from Paxon Field in Jacksonville on a preliminary flight. The airplane went into a tailspin at 1,000 feet and flipped over at 500 feet. Bessie was not wearing a seatbelt and was thrown from the plane, falling head over heels until she hit the ground, crushing nearly every bone in her body. Had the dream ended with her death? Wills survived but the plane was engulfed in flames.

Speculation ensued. Why was the always-so-careful Bessie not strapped in? Was the wrench that slid into the controls and gears left carelessly or intentionally? Many noted that her plane was an old wreck anyway and it was right for a calamity. Others suspected sabotage based on racial or political reasons. Yet, others during this era had fallen from airplanes to their death. Was this death mysterious?

When Bessie’s coffin arrived in Chicago, several thousand were on hand to see the coffin of “The Darling Manicure Girl.” Bessie was buried at Chicago’s Lincoln Cemetery at Kedzie Avenue and 123rd Street. African-American poet Mari Evans memorialized Bessie with “The Rebel”:

**The Rebel**  
*When I die,  
I'm sure  
I will have a  
Big funeral.  
Curiosity seekers  
coming to see  
if I am really  
Dead  
or just  
trying to make  
Trouble.*

## Study Guide Questions

In your small group, record comments and responses to the following questions/statements. Select a recorder and a reporter who will deliver your responses to the large group.

1. What were the reasons for the Great Migration? In retrospect, was this move for blacks from the south to northern states a success? Date your comments by time periods and observations you have made of urban areas during recent decades.
2. Many blacks were criticized for imitating whites by using makeup and adopting straight hairstyles. Was and is such criticisms valid?
3. During Bessie's time, women over 40 were considered well past their prime. What in our society brought about changes in this belief? How are women over 40 viewed today? Do these views exist today?
4. Do you suspect foul play in the death of Bessie Coleman? Or, is this the American tendency to see conspiracies in all aspects of life.
5. Black children in the south in the 1920s and well into recent history received sporadic and unequal educational opportunities to learn. What opportunities do you see minorities receiving today in your school? Do you feel these opportunities are fully taken advantage of? What changes would you recommend?
6. Bessie's dream was to open a flight school for blacks. Was this a realistic dream for the 1920s? Why or why not?

## Lesson 4: Legacy

### What will students be learning?

#### STANDARDS

Students understand the chronological organization of history and know how to organize events and people into major eras to identify and explain historical relationships. (H1)

Students know how to use the processes and resources of historical inquiry. (H2)

Students understand that societies are diverse and have changed over time. (H3)

#### BENCHMARKS

Students will know the general chronological order of events and people.

Students know how to interpret and evaluate primary and secondary sources of historical information.

Students will identify and analyze interactions of diverse populations in the United States.

#### OBJECTIVES

Students will organize and complete a flow chart showing the chronology of influence of key people who motivated Bessie and the impact she has had on others.

Students will identify an individual in their life who has or is creating a positive legacy for them to inherit.

Students will be introduced to women who were a part of a legacy of determination.

#### SPECIFICS

This lesson has three important elements, all inspired by the life of Bessie Coleman. First, we clearly define what a legacy involves. A discussion outline defines a legacy and related terms. Students will have the opportunity to expand and evaluate the meaning of the word in this context. Students will be asked to identify someone in their life who is building or has built a positive legacy for them. Secondly, we will get into the specifics of Bessie's legacy to those who followed her. And, finally, to celebrate the life of Bessie Coleman and other black women from history, students will look at pictures of black women from the past and use their voices to tell America their story.

### What will be done to help students learn this?

#### INSTRUCTIONAL STRATEGIES

Discussion

Lecture

Photograph Viewing

Photography

Interviews

#### PRELIMINARY LESSON PREPARATION

Review the outline for the legacy discussion. Other examples can be used. Lecture notes about events that occurred after Bessie's death clarifies further what a legacy is. The teacher should view and select two or three pictures from *The Face of Our Past*. These beautiful pictures will give insight to the history

of black women. An assignment will require students to obtain or take a picture of a person they feel has left or is leaving them a legacy. Later, students will be asked to mount a picture of this person on paper and write a text explaining the legacy of the individual.

**ACTIVITIES**

Use the outline to define and discuss what a legacy is. Ask students to define a legacy. Have them give examples of those who have left a legacies, clearly stating what the legacy is. Compare receiving a legacy to being a role model. Share the legacy of Bessie Coleman through the lecture notes about her. Have a large group summary of what her legacy was. Chart this using the topic sentence: “Bessie Coleman influenced several individuals immediately after her death and many others as time went on” (a flow chart example is on page 37). Use an overhead projector to show some of the many pictures in *The Face of Our Past*. Select two or three of the pictures and demonstrate how to evaluate the pictures from a historical perspective.

**RESOURCES/MATERIALS**

- Legacy discussion outline
- Legacy lecture notes
- Polaroid or other instant camera
- The Face of Our Past* by Kathleen Thompson and Hilary MacAustin

**ASSESSMENT**

Assess students using the Assessment Assignment worksheet on page 36.

**Rubric**

1. Picture—creative or unusual presentation .....	3 points
2. Paragraph about this individual (grammar, spelling and content) .....	5 points
3. Definition of the legacy (specificity) .....	6 points
4. Use of the legacy (clarity of the impact on ones life) .....	6 points
5. Communication with this individual .....	4 points
Maximum points .....	24 points
24 to 20 .....	A
19 to 15 .....	B
14 to 9 .....	C
8 and below .....	discuss with the student to improve the score

**EXTENSIONS**

1. “Didn’t get much encouragement when she whimsically decided to leave her job as a manicurist and pursue her dream of flying airplanes.” This sounds like Bessie Coleman, but it isn’t. This is Esther Horn, who earned her pilot’s license in 1972. She retired in April 2002 at age 60. Her father told her she was going to flight school to catch a man. Read her story in the Thursday, April 4, 2002, *Denver Post* article by Joel Anderson. Comment: Does gender bias still exist? Use this article to support your statements.
2. Shades of Blue is a nonprofit foundation for students who want careers in aviation and aerospace. Contact them for information at [www.shades-of-blue.org](http://www.shades-of-blue.org).

## What Does Legacy Mean? Discussion Outline

The term legacy is defined as something from an ancestor or predecessor passed on to posterity. A legacy can be in the form of property, money, behaviors, ideas, and ways of thinking and feeling. When the legacy is an idea, behavior, or way of thinking the ancestor may not be fully aware of the subsequent responses. Some may say that, in time, a legacy may become a tradition. Those who practice the tradition are usually unaware of its origins.

A legacy is usually considered positive and inspirational in the sense that one uses the legacy to succeed in life. A positive legacy can be measured by the number of people who support and perpetuate it. The legacy grows and is embellished with time. Gandhi's legacy was that of nonviolence. Dr. Martin Luther King expanded this legacy. Dr. King developed it into a strategy that was crucial to the civil rights movement. There are negative legacies. Most would agree Hitler left a legacy of hate called Nazism. Give an example of two positive and two negative legacies that have affected American history. Rachel Carson left a legacy of caring for the Earth. Today, there is a respect for the Earth backed up by the actions of many. The fictional Marlboro Man left a "he-man" legacy based on looking manly by smoking cigarettes.

### Positive Legacies

1. \_\_\_\_\_
2. \_\_\_\_\_

### Negative Legacies

1. \_\_\_\_\_
2. \_\_\_\_\_

While a legacy is an inheritance from one who is dead, inspiration and ideas can come from living persons. Role models also inspire and demonstrate actions that we emulate. Role models can be positive or negative. The Tuskegee airmen are positive role models. Negative role models would be racist organizations like the Ku Klux Klan.

Name other role models. What are some concerns when one selects to follow a particular role model?

A legacy can be perpetuated when its originator establishes schools, endowments, and scholarships to continue it. Scholarships, like the Robert McNair Scholarship, support African Americans who want to study science.

Clubs and organizations also keep a legacy alive. The Girl Scouts of America and the Flying Doctors are two examples. Name other organizations or clubs.

## Legacy Lecture Notes

While there is little doubt that the white world ignored the contributions and life of Bessie Coleman, at times she didn't fare much better in the black community. In Chicago she is slowly gaining recognition. Her life story is becoming a legitimate area of study during Black History month. There is a street, once named Manheim Road, leading to O'Hare airport that has been renamed Bessie Coleman Drive. Also, in Chicago there is a public library that bears her name. But, the true legacy can't be measured because we'll never know the numbers who were inspired not only to fly, but also to think and act freely.

Here we'll attempt to document some events and people who followed in the Coleman tradition. Coleman Manor was an apartment named after her in 1927. At that time blacks were admonished for not creating a more lasting monument to this black Joan of Arc.

A Chicago-based pilots' group led by Cornelius R. Coffey flew their planes over her gravesite at Lincoln cemetery, dropping flowers to commemorate her death. This was an annual event until the death of Mr. Coffey.

On the west coast, a number of Bessie Coleman Aero Clubs were created after her death. William J. Powell, a successful Chicago businessman, was so motivated by Bessie's life that he moved to Los Angeles and opened The Bessie Coleman Aero Club in 1929. Now there was a school for blacks named after a black woman. James H. Banning was the instructor at the school. He had earned his license in 1926. One of his first students was Marie Dickerson, an entertainer. She earned her license and went on to perform at all-black air shows.

Banning and his ace mechanic, Thomas Allen, went on to complete the first transcontinental flight by black pilots in 1932. Again, like Bessie they flew secondhand planes with little financial support. The two were called the Flying Hobos. The demeaning statement is really a tribute to their success.

Mildred Carter was among the first women to earn a pilot's license from the Tuskegee Institute's civilian air training school. She dared to dream of flying combat missions in World War II. While white women were also fighting for these rights, she received little support because of Jim Crow laws in Alabama and the military's strict code of segregation. She received a painful letter that clearly stated that she was ineligible because of her race. But, these days of overt racism were numbered. Willa Brown was the first African-American woman to become an officer in the Illinois Civil Air Patrol. And, yes, one day Mae Jemison would lead the way in space flight.

Other advancements have no doubt been lost in the archives of federal and state governments. Not lost to Americans are the exploits and achievements of the Tuskegee Airmen. Motivated by a desire to serve and better their country faced discrimination and humiliation. This select group of black males was chosen for aviation cadet training. These cadets were trained to support a segregated air force and squadron or ground support unit. Training took place at Tuskegee Army Air Field (TAAF). Five of the 13 men who started the training completed it nine months later. Benjamin O. Davis, a West Point graduate, was one of the distinguished graduates receiving Army Air Corps silver pilot wings. From 1942 to 1946, 992 African Americans graduated from TAAF. These airmen distinguished themselves during World War II. More importantly, they dispelled the myth that they lacked ability, dedication, and patriotism. Daily experiences of racism didn't deter these young Americans from achieving an incredible record of flying all of its bomber missions.

While white units needed qualified personnel, they were unable to recruit Tuskegee airmen because of segregation. In 1948, President Harry Truman enacted Executive Order Number 9981 requiring equality of treatment and opportunity in all branches of the military.

In 1976, Benjamin Thomas, a black airline pilot with Eastern Airlines, devoted his energies to creating an Organization of Black Airline Pilots (OBAP). Its purpose is to advance the goals of black pilots, address their concerns, provide a vehicle for communication among black pilots and prepare young people for careers in aviation. In 1986, United Airlines had fewer than 35 black pilots—today they employ over 200 pilots, including eight African-American females. OBAP also sponsors career education camps and other flying experiences for young people.

Today, pilots and veterans of the pioneering Tuskegee Airmen dedicate their time to encourage young African Americans in math, science, and life. United Airlines captain Willie L. Daniels II, told students recently at a Expanding Visions Conference at Montbello High School in Denver, Colorado: “You may encounter turbulence, but get past it and get back on course...” Other pilots spoke to the children about feats that even Bessie could not fathom. Aspiring young aviator Cornell Ingram said, “I like how they went for their dreams and got there. Bessie would have loved it.”

Yes, Bessie was before her time. But, if she had not had her time, African-American women would have been delayed even more in their exploration of the skies.

## Picture Evaluation Questions

As you look at the pictures, put yourself in this time period:

1. What do the pictures say about black females in American life during the time period depicted?
2. Do the pictures give you new information about the life and aspirations of black women? Were they different from those of white women? Support your response.
3. How do the pictures support the historical facts of the time?

Name \_\_\_\_\_

## Assessment Assignment

### Who is (has) shaping a legacy for you?

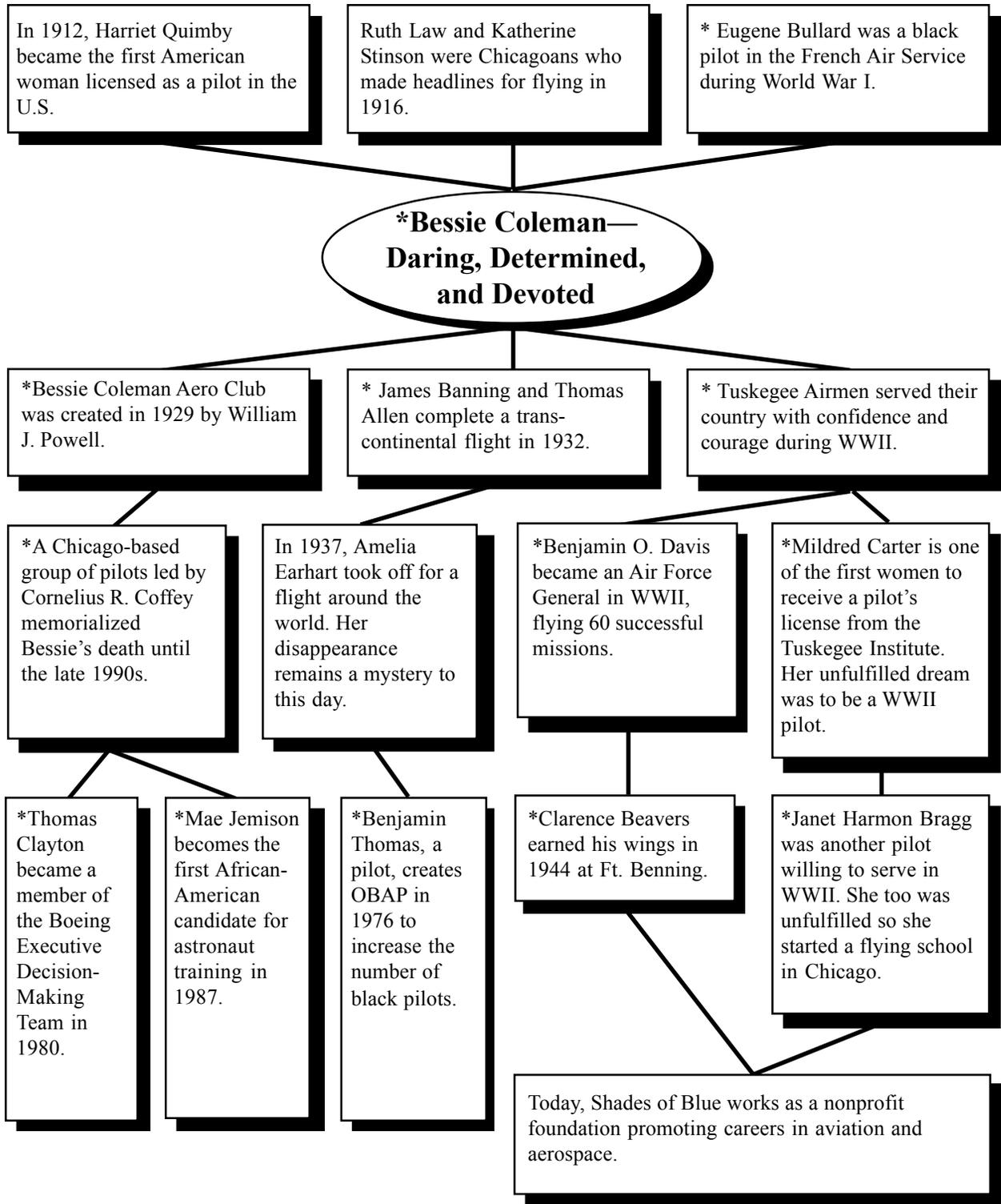
1. Take, create, or find a picture of someone who can be described as a legacy in your life, hopefully someone you know personally (or they can be a celebrity). Mount this picture as a part of your assignment. Creative and/or decorative mounting will enhance your presentation.
2. Write a paragraph describing this person. What does he or she do; how do they behave; what is inspiring about them?
3. Define specifically the legacy this person has or is leaving you. State clearly what this person has taught, demonstrated, or inspired in you.
4. How will you use this legacy in planning your life? Has this person influenced others you know?
5. What have you said to this person about how you feel? Or, what would you like to say to this person?

Please sign here if you are willing to share your presentation \_\_\_\_\_

## Chronology of Influence Flow Chart

(Use this as an example—have students create their own flow chart)

\* Indicates African-American Expeditions



## **Lesson 5:**

# **Mae Jemison: The Legacy Continues**

### **What will the students be learning?**

#### **STANDARDS**

Students know how to use the processes and resources of historical inquiry. (H2)

Students write and speak for a variety of purposes. (RW2)

Students demonstrate the ability to receive and relay information clearly and effectively. (W1)

Students demonstrate the ability to work effectively and efficiently. (W2)

#### **BENCHMARKS**

Students know how to formulate questions regarding what happened in the past and to obtain and analyze historical data to answer questions.

Students expand vocabulary development using a variety of methods.

Students delineate and analyze oral and written information and synthesizes information into a conclusion.

Students devise and outline a process to achieve a goal and timeline.

#### **OBJECTIVES**

Students will compare and contrast the lives of Bessie Coleman and Mae Jemison.

Students will identify life experiences and concerns common to adolescent lifestyles and development.

Students will identify people and terms crucial to an understanding of the life of Mae Jemison.

Students will relate the vocational/scientific elements of the vocabulary into their respective careers.

Students will understand and articulate challenges to career choices.

Students will develop a personal timeline for career success.

#### **SPECIFICS**

*Where the Wind Goes* chronicles the extraordinary and continuing life of Mae Jemison. At times the reader will be astounded by her many accomplishments. Mae speaks Swahili, Russian, and German. Her biography demonstrates the power of being a well-rounded individual. The tenacity she displayed as she pursued a high school science project on sickle cell anemia led her to a laboratory at the famous Cook County Hospital in Chicago. A telephone call started the chain of events that culminated with meeting a renowned doctor who taught her how to conduct research. Her goal in writing *Find Where the Wind Goes* is to inspire adolescent girls to act boldly in their pursuit of excellence. While some of her accomplishments seem almost overwhelming, one must agree that the high standards demonstrated are those needed in the 21st century. Mae uses the analogy of the wind to describe the twists and turns in her life; sometimes the wind is gentle, like a breeze; at other times it is tumultuous, like the winds of a hurricane. However, essential in her message is that one is never at the mercy of nature's forces or the opinions of others. Rather than reading facts about Mae's life, the approach will be to listen to the wind by analyzing selected Moments from her life that speak to the issues and obstacles faced by adolescent girls in the 21st century. These Moments represent opportunities for growth and reflection. A timeline for the life of Mae Jemison demonstrates major events in her life that are not a part of the Moments. The timeline has a historical component that highlights some of the social, cultural, and political events occurring at crucial points in her life. This is written into the timeline so that the student remains aware of those events that might have influenced her life.

## What will be done to help students learn this?

### INSTRUCTIONAL STRATEGIES

Interpret a Quotation  
Analyze and Evaluate Biographical Material  
Discussion  
Create Timelines  
Study Guide

### PRELIMINARY LESSON PREPARATION

In Moments, each vignette is prefaced with a title. The teacher should invite students to comment/define what is meant by these titles today in their own lives to gain a perspective on what Mae was trying to convey about growing up. Complete “Moments: People and Terms” as preparation for understanding the time period in which Mae Jemison grew up.

### ACTIVITIES

Read the following quotation from the chalkboard: “It’s important not only for a little black girl growing up to know, yeah, you can become an astronaut because here’s Mae Jemison. But, it’s important for older white males who sometimes make decisions on those career of those little black girls.” (Mae Jemison) Discuss the implications of the statement. How does the statement imply that there must be a change in the way minorities and women are viewed in our society? Assign one Moment paragraph to a pair of students. Give them five to 10 minutes to read and respond in writing to the paragraph. Comments and questions follow each paragraph to guide their written statements. Emphasize that each member of the group should have input, and that students should record conflicting views also. One member of the group will present their response to the class. Distribute the Mae Jemison Timeline. Discuss this and, when possible, match the events on the timeline to the appropriate Moments paragraph. When possible, compare the 1920s to the Mae Jemison era.

### ASSESSMENT

Students will create My Personal Timeline. This timeline will be patterned after the one developed for Mae Jemison. A major difference is that the timeline starts with 1984. This should mark the time most students were born. Students may then use the Mae Jemison Timeline and/or other information to complete their own timeline. Dark lines will indicate U.S./world events. Red lines will indicate events in the student’s life. Events will be biographical in nature. Students are to project their timeline up to 2008. To complete the timeline beyond 2002, students are to predict events based on current information.

### Rubrics

Major events in U.S./World History:

Time span of 1984 to 2008 ..... 24 maximum points  
Biographical inserts ..... 14 maximum points  
**Total points ..... 38**

### RESOURCES/MATERIALS

*Mae Jemison* by Sonia Black  
*The Voyage of Mae Jemison* by Susan Canizares  
*Find Where the Wind Goes* by Mae Jemison  
<http://www.quest.arc.nasa.gov/women/TODTWD/jemison.bio.html>  
<http://search.biography.com>

## Moments

### Learn to Study

No matter how bright you were, how quick on the uptake, you still had to study. This was Cornell Medical and Mae understood that a prestigious school could not accept a “sort-of” knowing the answers. She asks the reader would you want a doctor who sort of knew what medicine was best for you? When she entered medical school and met her roommate before classes started, Mae was struck by her roommate’s purchase of her medical texts weeks before the classes started. But, Mae caught on quick. She describes how she read and reread material after class. Mae became a real premed student. She joined her friend Joan in study groups. She learned new techniques from Joan, who rewrote her class notes, filed them, and classified them in subject binders. Mae learned the study patterns that were best for her. Rather than staying up all night, she would get up at 5 a.m. to top off her studying. She learned that rest was good for the mind.

1. How does one develop an individual plan for study that will give the optimum results? What do you need to know about yourself to make a study plan?
2. What are some study techniques that you have found to be successful?
3. Brainstorm a list of common study mistakes made by students.

### Hold on to Your Dreams

At the age of six, Mae declared that she wanted to be a scientist. Her first-grade teacher translated this statement for her—it meant she wanted to be a nurse. This was 1961 and a little colored girl was not suppose to think big. But, little Mae defiantly restated her position, No, I mean a scientist. Mae was confronting a harsh reality. Her teacher, who probably had not intended to be cruel, was responding to stereotypes that persist to this day.

1. Can you remember a time when a significant person in your life attempted to destroy your dream? How did you respond?
2. Why did the teacher change scientist to nurse? What are the implications of the job change?
3. What is something you can do to keep people from destroying your dreams?
4. How do think a teacher would respond in the year 2002?

### Being an American

Mae recalled standing at her door in the Woodlawn neighborhood and seeing the National Guard patrol the streets. It was the Democratic National convention in 1968; Mayor Daley had called out the National Guard to curb rioting and violence. The Mayor had issued a shoot-to-kill order. Ten-year-old Mae felt like the enemy in her own country. Yet, the fear that gripped her sparked a determination that she would not accept being the enemy in her own country. “I reminded myself I was as much a part of this United States as the guardsmen or anyone else.” Mae remains determined to contribute and build her country. Knowing also that her country has certain responsibilities to her.

1. Mae affirms her rights as citizen of this country. At the same time, she refused to accept any type of denial of these rights. She is saying that she will not accept second-class citizenship. What are some internal threats facing this country? What does this mean in an American democracy?
2. Mae has vowed that she will contribute to her country. Democracy imposes a reciprocal responsibility on its citizens. Americans have an obligation to contribute to and monitor this democracy if it is to survive. How do you as individual contribute to the our democracy?

### **Role Models vs. Images**

Today we hear so much about role models and images. Mae takes a unique position when distinguishing between the two. Images represent the many faces and lifestyles we are confronted with in the media. These images make the impossible seem possible. Images give one an opportunity to try a role. However, Mae makes an interesting point that one rarely meets and interacts with these images. Miriam Makeba, Shirley Chisolm, and Che Chavarra were some of the images in her life. Yet, she speaks of role models as the more pervasive influences. I lived with and interacted with every day: my mother and father, siblings, teachers, uncles and aunts, next-door neighbors, and friends. These people were my role models. Role models are those you observe in the good times and the bad. These are the ones who literally touch you. Role models take care of you. Children watch role models in action as they problem-solve and approach life daily. With role models, what you see is what you get. While Mae was fortunate to have some very positive role models, all children are not so lucky. Both negative images and negative role models exist. Most injurious is when the negative role models are right there in your home. Too often this is the real challenge.

1. What can you do to counteract the effects of negative role models? How do we maneuver or guide our lives so that we come in contact with positive images and role models?
2. How can one resolve chaos that might exist when role models are physically and/or psychologically abusive? What are the signs that we have images or role models are indeed negative?
3. Identify people who you consider positive role models and images. Are you a role model for someone?

### **Becoming Well Rounded**

To be well rounded is to be involved. Usually involvement springs from personal interest and hobbies. Interests and hobbies often lead to career choices. Unexpected opportunities surface when we are active in our own lives and the lives of others. One of Mae's passions was dance. This interest was a confidence builder. Yes, she tried out for the part of Maria in *West Side Story*. She didn't get the lead, but she did realize that she could compete. Later, while studying at Cornell, she states how she relieved the tedium of study by attending a performance of the Alvin Ailey Dance Theater. Being well rounded gives you choices, information, and resources. Mae learned to speak Swahili because she loved African-American history. Later this knowledge helped her as a Peace Corp representative in Africa. Knowing the language in Kenya helped Mae bring a greater understanding to Kenyans about America. Most Kenyans, like some Americans, still accepted the stereotyped notions of African Americans as primitive. Ironically, Africans share some of these same stereotypes about African Americans. Some Kenyans thought that blacks from America were those black folks in the Tarzan movies. Interests and hobbies are another type of knowledge and knowledge keeps us in touch with our fellow man. Having interests and hobbies help us realize our talents. They also occupy our time.

1. Some would say being well rounded is knowing a little bit about a lot things. Is this what "well rounded" means?
2. The most fortunate people in the world are those whose careers and hobbies are one in the same. Think of example careers where this is true.
3. Make a list of the hobbies and interests that are represented in your group.

### **The 1960s**

How fortunate Mae was to live during this era. Civil Rights were on the front burner. The slogan “Black is Beautiful” made it easy for Mae to wear her natural hairstyle. Black Americans were asserting their rights for equal housing, education, and opportunity. Equal education was seen as a right for all Americans. Sit-ins, shutdowns, and walkouts were strategies used to push for those rights. Young people were questioning the establishment. Stokely Carmichael said Black Power was a banner giving legitimacy to the efforts of African Americans for political participation. Thurgood Marshall became the first black justice of the U.S. Supreme Court. Dr. King was now broadening his efforts to include the poor and disenfranchised. The Vietnam War raged on, but so did dissent. America was awake and aware. President Johnson declared a war on poverty. America was in the midst of a cold war with the USSR and the threat of nuclear annihilation was real. Yet, there was an openness in America that had not existed before. The women’s movement was in its infancy. But, Americans were becoming aware that women had a right to enter the nontraditional fields. Soul music was the rage as it appealed to all segments of society and crossed racial barriers. These were the times when Americans were attempting to address the true meaning of equality for everyone.

1. Compare the era of the 1960s to those of the 1920s when Bessie Coleman lived? Select one or two aspects in the above discussion.
2. What aspects of the 1960s would have benefited Bessie in her career pursuits?
3. Do you think this period in history was as scary as we perceive times to be today?

### **Friendships and Relationships**

During the adolescent years, nothing seems to cause more confusion, and sometimes pain, than relationships. Mae makes some points about friends and boyfriends that serve as a starting point for a discussion on relationships. Mae was fiercely independent and knew what she wanted. She aspired to careers in science and dance. She was fortunate in that her friends shared her interests and goals. Her best friends gave her comfort and support, and were close to having a like mind. One is most fortunate when friends remain through all of your stages and phases. Boyfriends seem like the adolescent’s initiation into adulthood. Mae experienced the exhilaration of this experience and down sides. She offers this advice:

“At this stage in life, very few people actually know what they want. Those who believe they do, often want something or someone that is not appropriate or beneficial to them. As a young adult, you are still learning not only about the world but also about yourself at a very fast pace. Crucial to all these relationships is time. There is so much to do and learn in the future. In time, your feelings usually change no matter how intense they maybe at the present. Everyone wants to have a place and have others think of them as having a place. Yet, one must evaluate the cost of having this place. Ask, ‘Will this person and this relationship stand the test of time?’ The strength of being well rounded is that it provides one with opportunities for short-term and long-term relationships. Abnormal fear in adolescent years is being alone or lonely. Distinguish between loneliness and being alone. Few of us are truly alone. But, loneliness is usually a temporary feeling that everyone experiences. With the boy/girl stuff know that you can plan for your survival. Make sure that these relationships do not lead you into dangerous places. Make sure friendships and relationships do not change who you are or who you want to become. Positive relationships accept you where you are.”

1. How can you tell that friendships or boy/girl stuff is leading you into bad places?
2. What suggestions do you have for getting out of abusive relationships?
3. What are some useful guidelines for friendships?

### **A Science Passion**

“The Eagle has Landed,” was great news for the 12-year-old stargazer. Mae recalled walking up the hill on Hoyne Avenue on her way home from the public library. Here Mae eagerly read science fiction, astronomy books, chemistry books, and anything that involved the stars and planets. Mae often stayed at the library until closing. These late-night walks gave her opportunities to feed her passion. “I have come to believe that my fascination with the stars is because of their timelessness,” she said. She fueled this passion with frequent trips to the Chicago’s Adler Planetarium. She searched for answers about the vastness of the universe. Often she explored the mystery of space by reading science fiction and became keenly aware that women had supporting roles in these books. A determined Mae was preparing to play a major role. NASA began actively recruiting women and minorities in the late 1970s. Mae was working as a doctor at Cigna Health Plans in Los Angeles. Again, she acted boldly and applied to become one of those women in space. On January 28, 1986, the Challenger disaster occurred. This horrific event delayed the selection process. NASA interviewed 100 applicants from a pool of 2,000. Against all odds, Mae was one of the 15 selected. For a while, it looked like minor medical concerns were a problem, but these concerns were cleared up. She moved to Houston, Texas, and trained at the Johnson Space Center. Mae joined the team as a mission specialist. Again, there was school and a lot to learn. The training was intense, focusing on how the human body reacted in space. These experiments and others on frogs and insects occupied the night and daytime hours. “We learned about the history of human space flight, what happened to cause the Challenger accident, the innards of the space shuttle, NASA sites, aerospace contractors, and research,” Mae said. In 1989, Mae was assigned to a mission on the space shuttle Endeavour as a science specialist. Launch day was September 12, 1992. Mae was proud and excited. The commander of the flight called Mae to the flight deck. Once there, he pointed out Chicago on the Earth below. Thoughts of childhood and all the years of preparation reeled in her mind. Too quickly, the sight passed. The space mission was a success. Mae received awards and honors for her pioneering mission in space. But then, in 1993, she resigned. The winds were carrying her in still another direction.

1. Some would say Mae had prepared for Endeavour all of her life. What supports such a statement?
2. Some say you never stop going to school in your lifetime. What does this mean?

### **The Basement**

In Chicago, many homes have big basements. These basements are cool in the summer and cold in the winter. To most children growing up in an older home, these basements are dark, mysterious places that are home to spiders and other creepy crawlers. Many young children have had some harrowing experiences in these basements. Mae was no exception. Characteristics of these basements are nooks and crannies, storage spaces, and trunks and boxes that provide ideal hiding places for siblings ready for a prank. Mae’s mother, like most parents, often sent her children to the basement to retrieve laundry or bring up jams from cold storage places. It’s no wonder that Mae viewed trips to the basements as threats to her well being. But even our greatest fears hold lessons for life. Mae learned to use her analytical skills to navigate this mysterious place. She learned to check and recheck for mischievous siblings waiting to give her a scare. But, she always appreciated the magic and mystery of the basement. Magic and mystery are the tools of a scientist. Childhood fears can be as common as going to the basement, or more compelling as many children today encounter trauma that robs them of the magic and mystery of childhood. Abuse, war, poverty, drugs, illness, and crime are major threats to childhood. Yet, we have many examples in history of people who faced such threats and went on to do great things.

1. What famous person in history faced adversity and overcame to make major contributions to mankind?
2. We know some fears are very real and can be life threatening. Give an example and discuss possible solutions.

Name \_\_\_\_\_

## Titles

Mae Jemison discusses certain milestones in her life that affected her choices as an adult. We will examine these reflections, but first, let's take a moment to identify these life experiences and concerns as they refer to your own life right now.

1. What does it mean to truly, "Learn to Study?" \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

2. How does one "Hold on to Your Dreams?" \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

3. In light of all that has happened recently, what does it mean to be an American? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

4. In your own words, define "well rounded." \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

5. Mae Jemison speaks of the people and events of the 1960s. What events and people of the late 1990s and early 21st century have influenced you? Who are your heroes? Mae danced to soul music and danced the funky chicken. What music and dances are your favorites? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

6. Mae has several passions; science being uppermost in her life. What are your passions (fashion, reading, sports, dance)? \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

7. The basement represents the irrational fears of childhood. Do you have a "basement?" \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

## Moments: People and Terms, 1960s

1. Shirley Chisolm was the first black woman to serve in the United States House of Representatives. She was also the first black woman to run for president.
2. Miriam Makeba is a renowned South African singer from Johannesburg. The quality of her voice is very unusual and melodic. Her work against apartheid led to her exile from her country in the 1960s. She became a “citizen of the world.”
3. Swahili is the language spoken in Kenya and other parts of Africa, especially along the east coast of Africa.
4. West Side Story is a contemporary musical version of Romeo and Juliet depicting the feud between Hispanic and Anglo gangs in New York City.
5. Che Guevara was a revolutionary figure who helped mastermind the Cuban revolution along with Fidel Castro. He hoped his anticapitalistic views would spread throughout Latin America.
6. Black Power was the battle cry of black activists during the 1960s. The Black Panthers, a militant group, advocated a more violent approach to gaining civil rights.
7. Stokely Carmichael was a black activist who, in 1966, broke from the Student Nonviolent Coordination Committee (SNCC) to advocate a more militant approach.
8. “The Eagle Has Landed” were the words spoken by Neil Armstrong to announce a successful landing on the moon by American Astronauts.
9. The 1968 Democratic National Convention saw the coming together of many youth groups, each having their own agenda. The Vietnam War was raging, so many anti-war protesters descended in Chicago. Civil rights protesters, including the Black Panthers, were also present. Both pacifists and anarchists were there to champion their cause. The pot was boiling. Mayor Richard Daley, last of the big city bosses, was determined to maintain order. He had 11,000 city police, 7,500 National Guardsmen, and 6,000 U.S. troops patrol the city. He called the protesters “leftists with strong links to communists.” The rioting started downtown, in the jewel section of the city. This infamous event drew worldwide attention. The convention did nominate Hubert Humphrey for president. He lost to Richard Nixon in the national election.
10. Riots were sparked by unrest on college campuses, the assassination of Dr. Martin Luther King, and protests against the Vietnam War. The riots received their energy from the youth movement of the “baby boomers,” a generation that reached their teens and young adulthood during this period. The radical changes and unrest were similar to the post-World War I period.

## Mae Jemison Timeline

The dark lines represent events in Mae Jemison’s life. The lighter lines are events in history that might have influenced her life.

- 1954 ... Brown vs. Board of Education
- 1956 ... **Mae Jemison is born in Decatur, Alabama**
- 1962 ... Rachel Carson writes *Silent Spring*
- 1963 ... **The Jemison family moves to Chicago**; Martin Luther King delivers, “I Have a Dream” speech to 200,000 people in Washington, D.C.
- 1965 ... Black leader Malcolm X is assassinated
- 1966 ... Vietnam War is extended to Cambodia
- 1967 ... **Mae’s family moves to more affluent Morgan Park neighborhood**
- 1968 ... Martin Luther King is assassinated in Memphis, TN; Riots erupt at the Democratic Convention
- 1969 ... **Mae enters Morgan Park High School**; Neil Armstrong walks on the moon.
- 1970 ... Kent State University riots
- 1972 ... Watergate Scandal during the Nixon Administration
- 1973 ... **Mae graduates from high school and enters Stanford University**
- 1976 ... The year of the Bicentennial
- 1977 ... **Mae graduates Stanford at age 16 and enters Cornell Medical School in New York**
- 1978 ... Jonestown massacre occurs—917 members of the Peoples Temple cult die in murder-suicide
- 1980 ... Microcomputers are entering homes and businesses
- 1981 ... **Mae receives her M.D.**; Acquired Immune Deficiency Syndrome (AIDS) is discovered
- 1984 ... First female candidate runs for U.S. Vice President, Geraldine Ferraro
- 1985 ... Space Shuttle Challenger explodes on takeoff, killing all seven crew members
- 1986 ... **Mae is chosen for NASA astronaut training**
- 1990 ... Gulf War starts in the Middle East
- 1992 ... **The Space Shuttle Endeavor lifts-off with Mae Jemison onboard**
- 1993 ... **Mae resigns from NASA and starts to teach environmental studies at Dartmouth**
- 1994 ... **Mae uses her company, The Jemison Group, to further scientific development. She helps sponsor an International Space Camp for children**
- 1995 ... Oklahoma City Bombing
- 1997 ... Dolly, a sheep, is the result of the first successful cloning
- 1999 ... Presidential election controversy over miscounted votes
- 2000 ... George Bush becomes president; **Mae Jemison writes her autobiography**
- 2001 ... September 11 terrorist attack on the World Trade Center and the Pentagon
- 2002 ... Mae Jemison delivers a speech in Unique Women Series in Denver, CO; War on Terrorism

## My Personal Timeline

Use dark lines (or red lines) to indicate events in your life. Use lighter lines to indicate events in history that might influence your life. Include your birthdate and place. Ask your parents about highlights you might not remember. Write in your responses.

1984 \_\_\_\_\_

1985 \_\_\_\_\_

1986 \_\_\_\_\_

1987 \_\_\_\_\_

1988 \_\_\_\_\_

1989 \_\_\_\_\_

1990 \_\_\_\_\_

1991 \_\_\_\_\_

1992 \_\_\_\_\_

1993 \_\_\_\_\_

1994 \_\_\_\_\_

1995 \_\_\_\_\_

1996 \_\_\_\_\_

1997 \_\_\_\_\_

1998 \_\_\_\_\_

1999 \_\_\_\_\_

2000 \_\_\_\_\_

2001 \_\_\_\_\_

2002 \_\_\_\_\_

Predict from 2003 on ...

2003 \_\_\_\_\_

2004 \_\_\_\_\_

2005 \_\_\_\_\_

2006 \_\_\_\_\_

2007 \_\_\_\_\_

2008 \_\_\_\_\_

## **Lesson 6: Mae Jemison Speaks**

### **What will students be learning?**

#### **STANDARDS**

Students demonstrate the ability to receive and relay information clearly and effectively. (W1)

Students demonstrate the ability to use reasoning. (W3)

Students demonstrate the characteristics of an effective worker. (W4)

Students write and speak for a variety of purposes. (RW2)

#### **BENCHMARKS**

Students receive, attend to, understand and respond to verbal and nonverbal messages.

Students communicate ideas to justify position, overcome resistance, and convince others.

Students identify and recognize a problem, consider alternatives, devise and implement a logical plan of action.

Students contribute to group effort through cooperation and consensus.

Students prepare written and oral presentations using strategies such as problem and solution.

#### **OBJECTIVES**

Students will listen to excerpts from a speech.

Students will respond to excerpts from the speech by writing an analysis.

Students will read and analyze the elements of a persuasive speech.

Students will write, outline, and present a persuasive speech.

#### **SPECIFICS**

Mae Jemison spoke on March 11, 2002, in Denver, Colorado. She gave a very personal interpretation of her life as America's first African-American female astronaut. Her speech clearly represented those concerns she feels all Americans should embrace. Currently, she is devoting her time to technologies that benefit third-world countries. A second major focus is recruiting minorities into science careers. Her speech challenges us to read and open our minds to science. Science is seen as having the possibility to solve many of our social and political problems. According to Ms. Jemison, we can no longer afford to be ignorant of what is happening in world of science.

### **What will be done to help students learn this?**

#### **INSTRUCTIONAL STRATEGIES**

Lecture

Writing

Speaking

**PRELIMINARY LESSON PREPARATION**

Briefly prepare a statement about each woman in the lecture series. Madeline Albright was Secretary of State in the Clinton administration. Linda Ellerbee was a premiere anchorperson on television. She later sued the TV station for age discrimination. She is also a cancer survivor. Marie Osmond is one of the singers from the Osmonds. Her life has had many challenges in real contrast to the assumed Hollywood storybook picture. Gloria Steinem is a leading feminist. She married for the first time in her sixties.

**ACTIVITIES**

Give a brief biography of Mae Jemison. Explain that her speech was part of a women’s lecture series held in Denver, Colorado. Others included in the lecture series are Madeleine Albright, Linda Ellerbee, Marie Osmond, and Gloria Steinem.

Tell the students they will listen to notes taken from the speech. Explain that the notetaker has remained as true to the lecture as possible.

Explain that many of her comments come from her book *Find Where the Wind Goes*. The major intent of the book is to encourage participation in science by minorities and females.

Read the notes to the entire group. Allow time for comments and reflection as you read.

Define the word “persuade.” Tell students that they will deliver a speech to *persuade* minorities and females to enter an area of science. Give some examples: biology, chemistry, pharmacology, hematology, medicine, and geology. Explain that these are, for the most part, categories. And, each category has many specialized areas under its umbrellas.

Read and discuss the Persuasive Speech Lesson. Discuss how to complete the Persuasive Speech Outline.

**RESOURCES/MATERIALS**

[http://www.whitman.edu/offices\\_department/rhetoric/39inform.htm](http://www.whitman.edu/offices_department/rhetoric/39inform.htm)

*Preparing Informative and Persuasive Speeches* by George L. Grice and John F. Skinner

**ASSESSMENT**

Each student will give a persuasive speech of five to seven minutes encouraging women to go into science.

**Rubrics**

Introduction .....	2 points
Statement of Purpose .....	4 points
Body/Message .....	6 points
Summary .....	4 points
Conclusion Statement .....	2 points
Overall Delivery .....	4 points
Total Points Possible .....	22 points

## Mae Jemison Speaks

The following are notes from a speech given by Mae Jemison on March 11, 2002, in Denver, Colorado. This speaking engagement was sponsored by *Denver Post's* Unique Lives and Experiences.

### Background

In 1993, Mae Jemison resigned from NASA and formed Jemison Company. The goals of her company are to work to improve conditions in poor countries and advance technology in developing countries. Ms. Jemison was a professor of environment studies at Dartmouth College. She spends time traveling and giving speeches. Another important aspect is encouraging young people to follow their dreams. She delivers elegant and often humorous speeches as she challenges us to be concerned for the less-developed countries of the world.

### Notes

Currently, her company is working on bringing thermal generators and satellite communications to health care programs in South Africa.

Mae advises her audience to use time wisely. She then proceeds to actually break down the number of seconds in a day.

She describes herself as a doctor, engineer, businesswoman, and a little girl who enjoyed stargazing. Her point is that successful women are multidimensional.

When referring to the riots in Chicago in 1968, she states, “The wrong is in the individual, not the philosophy.”

She says that all of us must achieve “Science Literacy.” Jokingly, she tells the audience that too many of us learn our science from TV shows like “X Files” and “Alien Autopsy.”

She challenges the audience to read the newspapers and understand environmental issues and vote accordingly. Environmental issues are seen as a major concern for the 21st century.

The heart of science is defined as: “I Think, I Wonder, I Understand.”

Throughout her talk she challenges the notion that the “hard” sciences are higher in the pecking order than the social science.

The challenge according to Ms. Jemison is to use science to solve some of those ongoing problems. Science is a part of the beauty we see, peace we yearn for, warfare we want to end, and medicines we use to heal.

Science has the potential of solving social issues. We are reminded that through science we can grow enough food to feed the starving. We’re admonished because we actually waste enough food to feed the starving people of the world. Change will not occur until we force government to use scientific advancements to solve human problems.

Again, those entering science fields are declining. Declining also is the recruitment of science teachers.

Ours is a country that boasts of research and development, but, we are more inclined to development—research lags behind. This, in the long run, will leave our country behind other countries in the world.

The need is to develop critical thinkers. People who will lead us away from just throwing money at the trend of the day.

Most assuredly, women need to be in leadership positions.

When she resigned from NASA, people asked how could you give up such a grand success. Her reply was: In life, do we get only one success?

Ideas are seen as potential energy. But, nothing happens until ideas are put into action.

Mae warns that we must not “play small.”

### **Questions and Answers**

#### **Were you afraid sitting in the space shuttle Endeavour?**

No, but I had a healthy respect for sitting on tons of explosives. Also, there were many, many concerned people in the Endeavour and on the ground making sure we were successful

#### **How did your race affect your interactions with the crew?**

In this situation, you are a team player, not a black player. You are on a team, part of a crew with a job to do that affects the success of the entire mission.

#### **What do you think should be done to encourage women to go into science?**

It is not a matter of encouraging students to go into science. Rather, it’s an issue of *not* discouraging. Often we *discourage* by showing images in the media that don’t make this line of work possible or probable. Girls and minorities drop out of science areas at an alarming rate due to subtle messages.

#### **What can be done to promote young people, especially women, to go into science?**

*Where the Wind Goes* was written for adolescent girls. Also, the Earth We Share Project is a program (created by Ms. Jemison) to help girls do hands-on problem solving to build self-confidence. The images that girls see in magazines and in other media must be addressed.

#### **What are some major scientific concerns?**

Environmental issues top the list. In 1960, the sky was blue when pictures were taken from satellites. Today, it is yellow. Pollution is prevalent, and the United States is the main polluter.

Ms. Jemison stressed that science had the potential of solving just about every problem we face. When asked about women and our concerns about the fattening of America, she responded that this too could be dealt with through science.

America grows fatter because of the images seen on TV. She said that most Americans don’t know that they are looking at youthful advertisers dressed to look much older, eating as many calories as they want. Nutrition is a concern that science can address.

She went on to discussing the pecking order of the sciences. Most scientists would put at the very top of the list the so-called hard science and at the bottom the social sciences. She contends that while science questions usually have finite answers, social science questions have more complex and multi dimensional answers. The challenge if we are to survive is to address the human issues. Social sciences have many variables that are ever changing.

(Earlier she told the story of a major company whose human resources person complained to her that they just couldn’t recruit Asians. Mae stated how such statements make her a little suspicious. She questioned further and found the point at which failure often occurred was with this question: Tell me why you are the best person for this job? Mae outlined this “failure” as being culturally based. Asian society feels it’s inappropriate to boast and brag about one’s accomplishments. So, on this point the applicants were usually quiet. Hence, they didn’t get the job.)

## Persuasive Speech Lesson: What is a persuasive speech?

This is a discussion of how to organize and deliver a persuasive speech.

Persuasive speeches fall into three categories. They can *convince*, *move one to action*, or *inspire*. The purpose of your persuasive speech is to move girls entering college to pursue courses and careers in science.

One aspect of a persuasive speech delivered to move one to action is that the person delivering the speech speaks with “authority.” To ensure this, you will take the role of a current scientist. Select any science area that appeals to you. You will speak as one who has made this selection and recognizes the obstacles and the rewards. You can literally tell how selecting a career in science is done. Your approach is: I’ve been there and it will work. Don’t forget to paint a picture that demonstrates exciting possibilities.

Grice and Skinner discuss for us the organization of a persuasive speech.

SO: Plan your speech around terms such as: Initially, first, second, and finally.

S2: Make a clear statement about your major idea.

S3: Support your major ideas with information, facts, or emotion.

S4: Summarize your major ideas.

Since you are moving your audience to action, tell them what they must do to achieve this goal. Consult the Vocational Reference Book, found in the reference section of the library. Any college catalog is another source of information could be any college catalog. Also, feel free to use statistics, research, pictures, or quotes.

As you deliver your speech, keep in mind these techniques:

- Articulation
- Speech volume
- Body language
- Movement
- Emotion
- Articulation
- Concise speech (no bird walking)

Use humor or a joke if appropriate

Practice your speech in front of a friend or your friend, the mirror.

Remember you have five to seven minutes. A timekeeper will hold up five fingers when you reached the five-minute mark.

Turn in an outline for your speech before you deliver it to the class.

## Persuasive Speech Outline

Initial Statements:

1. Introduce yourself. Who are you? Tell what you do (This is a fictional background.)
2. State the major purpose of your speech. You make a statement of fact as you see it. Or, this can be a question.

Body of your speech: this is your main message. Use your topic sentence for each step.

1. First, ...
2. Second, ...
3. Finally, ...

Remember to support each major ideas when giving your speech.

Write out your summary. This is a brief restatement of your major points. These will support your concluding statement. Tell this in three to four sentences.

Include this concluding statement in this outline.

## Lesson 7: Latinas in American History

### What will students be learning?

#### STANDARDS

Students understand the chronological organization of history and know how to organize events and people into major eras to identify and explain historical relationships. (H1)

Students understand that societies are diverse and have changed over time. (H3)

Students understand how science, technology, and economic activity have developed. (H4)

#### BENCHMARKS

Students will use chronology to examine and explain historical relationships.

Students will know how various societies have been affected by contacts and exchanges among diverse peoples.

Students will understand how economic factors have influenced historical events.

#### OBJECTIVES

Students will identify Latinas who significantly influenced civil and labor rights in the United States.

Students will determine how social organization has been related to the distribution of wealth, privilege, and power throughout United States history.

Students will analyze the relationship between economic factors and social and political policies.

#### SPECIFICS

Women of Mexican decent had important roles in American history from the period of westward expansion to the Chicano student movement of the 1960s. Their influence continues today. Under Mexican law, women had inheritance rights that European women did not. While these were progressive laws, they had the negative effect of putting these women in peril. At times their fathers would encourage marriages to white Americans with the intention of protecting their land and daughters through marriage. Such arrangements failed to protect them against aggressive expansionists policies. Nevertheless, Mexicanas were the glue that held families together. They provided the necessities of life and actively supported the fight for equal opportunity. Vicki Ruiz actually takes oral histories and interviews that document the tenacity of these women who faced poverty, racism, and gender bias. Their stories and other accounts from this period paint a picture of active involvement during a volatile period in labor history. *Cannery Women: Cannery Lives* focuses on unionization in the California food processing industry from 1930 to 1950. Ruiz presents a comprehensive study of this unionization period. Especially interesting are the personal accounts and insights that make their lives poignant. By the early 1950s one of the most powerful CIO affiliates had emerged in California. However, the demise of this affiliate at the hands of McCarthyism did not end the story. The efforts Latinas formed the backbone for the United Farm Workers movement led by Cesar Chavez. This overview can become the basis for a larger, more detailed research by students.

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## What will be done to help students learn this?

### INSTRUCTIONAL STRATEGIES

Lecture  
Whole-Group Discussion  
Pause and Respond in Writing  
Student Term Sheet

### PRELIMINARY LESSON PREPARATION

This overview is a sampling of some important historical events, episodes, and women of this period. Much of the presentation coincides with the history (turn of the century through post-World War II) discussed in the Bessie Coleman lessons. Some of these same tensions between a very conservative America and blacks impact the lives of the Latinas. A review of this period in history will provide a background for understanding the events discussed. Students should always view this history in the larger context of American history. Many of the stereotypes and myths about Mexican Americans can only be dispelled when students gain insight into the economic forces at play during the waves of deportation and repatriation. Students should be encouraged to identify the parallels of this history with the larger history of minorities in America. It is recommended that a reading of *Cannery Women: Cannery Lives* by the teacher should occur before the lessons are presented to students. Prepare a brief explanation of the pause and write strategy. Alert the students that at times you will stop after presenting a segment and ask them to write their responses to what has been said. Explain that their responses will be personal and if they choose, they can share them with the whole group. Explain that the purpose of the written responses is to help the students explore their own feelings, clarify the impact of events, and formulate questions about this history. Note the pause periods are not to extend to more than five or six minutes. At the end of the lesson, allow the students time to reread their responses.

### ACTIVITIES

Students will read and discuss the Student Term Sheet. Additional information from other sources can expand the sheet. Pace the review of terms with the delivery of the lecture notes. Explain that we will study the history of Latinas in the context of American history. Invite the students to articulate why such a study is essential to an understanding of American history. Address the issue of making history complete by attending to all of the players and correcting misconceptions. Students will identify how factors of racism, economics, and gender bias have made the inclusion of Latinas in American history. Allow students to discuss why Latina participation is considered a neglected area of history. Read the lecture notes aloud and incorporate poignant excerpts from *Cannery Women: Cannery Lives*. Explain that the pause and write sections are to give the student a chance to reflect on the information. Read and complete as a group Pause 1 and Pause 2. Discuss that the prompt can focus the written response or the student can write spontaneously.

### RESOURCES/MATERIALS

*Struggle in the Fields* by Cesar Chavez  
*Latinas: Hispanic Women in the United States* by Hedda Garza  
*The Mexican Family Album* by Dorothy and Thomas Hoobler  
*Cannery Women: Cannery Lives* by Vicki L. Ruiz  
*From Out of the Shadows* by Vicki L. Ruiz

### ASSESSMENT

Each student will complete an assessment by responding in writing to the social, economic and political implications of the issues addressed in this historical overview.

#### Rubrics—Score students on their answers to the Reflections worksheet:

Question No.	Maximum Points
1	a ..... 4
	b ..... 5
	c ..... 4
2	a ..... 2
	b ..... 4
	c ..... 2
3	a ..... 4
	b ..... 4
4	a ..... 4
	b ..... 5
5	..... 4
Total points possible ..... 42	

### EXTENSIONS

1. Students may wish to explore other strikes during this period in which Mexican-American women and Mexicans exerted significant influence: Farah Industries, California Sanitary District, and Texas Shellers.
2. While the major focus was on the Hispanic women’s labor movement, this is in no way to mean that this was the only area where women were breaking down barriers. Hispanic women did exist and made their presence felt in the arts, government, and education. Some of these women are:
  - Verneda Rodriguez, an Air Force pilot in World War II
  - Wana Gutierrez, organized Mothers of East Los Angeles
  - Vicki Ruiz, author and professor at University of Arizona
  - Vilma Martinez, helped found the Mexican American Legal Defense and Education Fund
  - Judy Baca, a pioneer in the mural movement
3. Analyze this quote: “It’s ironic that those who till the soil, cultivate and harvest the fruits, vegetables, and other foods that fill your tables with abundance have nothing left for themselves.” (Cesar Chavez)
4. Immigration has been a topic of heated debate since the turn of the century. Students may want to debate the pros and cons of our immigration policy, past and present.

## Lecture Notes

Vicki Ruiz helps dispel the myth that Mexican-American women were timid bystanders who stood idle as events in history impacted their families and communities. The involvement of these women was intense and ongoing, though the historical accounts of their actions is scant.

*“With pickets, baskets, and ballots, they created tapestries of resistance.” — Vicki Ruiz*

Vicki Ruiz chronicles their involvement in the labor movement and the community. Through oral histories and interviews she introduces us to energetic, courageous, and ingenious women who scratched out a living for the families while advancing the cause of freedom for all Mexican Americans and working-class people. History will not allow us to ignore these women.

### Pause 1: Tapestries of Resistance

**Prompt: Poverty was a way of life for these women yet they refused to accept these conditions for themselves and their families. The Ruiz quote above characterizes this refusal.** Waves of immigration into the United States often put these women and their families in peril. Historians describe both legal and illegal immigration as a push-pull phenomenon supported by the United States government. Immigrants were lured into the country to work the farms, railroads, and industries. However, when competition for jobs increased or economic conditions worsened the Mexican Nationals and Mexican Americans were deported or repatriated.

The term, *comradrazgo* was used for women networking with other women to ensure their survival. Resourceful Mexican-American women learned early on that reciprocal relationships with other women could protect them while providing for their own needs. Along the Spanish/Mexican frontier, women settlers acted as midwives and wet nurses to mission Indians. This support went far beyond daycare. Important information was no doubt passed from family to family through these interactions. *Comradrazgo* would have far-reaching implications as women banded together to promote their rights on the job.

The discovery of gold in California and the Treaty of Guadalupe changed the American view of Mexican settlers. Initially Mexican, Peruvian, and Chilean craftsmen shared many of the rights that white miners had. These craftsmen actually taught the whites the gold mining process. But, as the gold ran out, the once-tolerated relationships changed.

Expansion onto land owned by Mexico was given the go ahead with the Treaty of Guadalupe. Courts interpreted the Treaty in such way that territorial expansion by the United States was not only justified but encouraged. Exploitation of Spanish-speaking women and men soon followed. The Mexicans were depicted in degrading and derogatory ways to further support the Manifest Destiny mindset.

In 1911, the railroad linked northern Mexico to United States territories. The railroads provided the transportation and the Mexican Revolution provided the impetus for a mass immigration. Railroads would become a pull as laborers came to the United States to build them. The 10-year, bloody Mexican Revolution provided additional motivation. With no more than the shirts on their backs, men and women came for jobs and freedom. Women, called the *solederas*, fought in the Revolution in Mexico. When they could no longer fight, they too crossed the border with their families, providing protection and support.

### Pause 2, Push-Pull Immigration Policy

**Prompt: The discovery of gold, the Treaty of Guadalupe, and Manifest Destiny were critical factors in encouraging and repelling immigration.** Ruiz documents a double-day existence for Mexican women once they arrived in this country. They would work all day in the fields and then spend the night preparing for the next day. Ruiz describes how women pickers carefully picked fruits, often scaling ladders to reach berries or other fruits. Paid by the sack, these women had to be careful to pick as much

as they could without bruising any of the fruit. Some sacks weighed as much as a 100 pounds. Excruciating pain from the picking was complicated by the fact that many women carried their babies on top of these sacks. Whether picking peaches in Delhi or cotton in California, these were the women who lived the double day.

Two other groups of women deserve attention. The women of the boxcar communities and the solas. Railroad workers and their families traveled from town to town in train cars. One can only imagine the resiliency of the women who endeavored to make a boxcar into a home. Boxcar communities were a common form of housing. Some wheels were removed from the train cars. Then the cars were grouped to form little villages. These villages were almost always far away from the main town. Thus, these residents were at the mercy of the company commissary. High prices and low wages perpetuated a spiraling debt that few could escape. To further complicate the situation, workers were often paid in script. Railroad wives devised ingenious methods to supplement their meager income. Women took in laundry, boarders, and even babies. Some were wet nurses. One boxcar often housed more than one family. In the winter, the inhabitants froze. When summer came the sweltering heat was unbearable. Some industrious workers were able to build more permanent communities over time.

The women of this period provided for all of the family's needs food, clothing, and health care. Women literally created cottage industries to meet their needs and those of their neighbors. Numerous accounts exist that demonstrate that any provisions were not hoarded but shared with the extended family and the families in need. While there existed a women's work mentality among those in the community, the harsh realities tended to blur a gender-based division of labor.

Families came to the United States, but women also came alone with their children. These solas experienced unique risks. These women had to earn a living too. But, they had to be particularly concerned about immigration inspectors who would deport them quickly for fear they would go on the public dole. These hard-working women often left the older children in charge of younger children. Ruiz chronicles the story of one such sola, Pasqula. Pasqula maintained a precarious balance between working as a domestic and caring for her family. During her stopover in El Paso, Pasqula's nine-year-old daughter cared for her month-old infant during the day when her mother worked in the home of her wealthy employer. Then, very carefully the nine-year-old would maneuver through the town with the infant. Once they arrived at the home of the employer, the mother would slip food to her daughter and feed the infant. Then the two would navigate the dangerous streets home and wait for their mother's late-night arrival. After several months, Pasqula saved enough money to go to California.

### **Pause 3, Childcare**

***Prompt: Today, families still face problems in the area of childcare. The Latinas demonstrated true ingenuity in addressing issues of family support and childcare.*** Teresa Urrea was born in Sinaloa, Mexico. She learned healing arts from a servant on her father's ranch. After surviving three months in a coma, she began using her herbal remedies to treat the Indians living in the area. As her success at healing grew, so did her reputation. Her compassionate treatment of the Indians did not go unnoticed by the local landowners. A natural next step was to call for more rights for the Indians. Opposition from the church and the local government increased as some Indians began to speak of her as a saint. In 1892, Teresa and her father were exiled from Mexico. Father and daughter moved several times, finally settling in Clifton, Arizona. Teresa provided care for the poor miners and their families. She even toured the United States in what was described as a curing crusade. She died at the age of 33, but she is remembered as one who risked her own safety for others. She established a hospital based on cooperative self-help. The concept of the mutualistas, or self-help societies, spread throughout the country, strengthening the bonds among women.

Mexican-American women did not turn a blind eye to the suffrage movement, though the movement

never truly embraced them. Under the threat of violence, women from Texas, California, New Mexico, and Arizona dared to demand inclusion in the movement. President Howard Taft warned the leaders of the National American Woman Suffrage Association (NAWSA) that fears of undesirable elements would tarnish their image. These undesirables were black, Latina, and immigrant women. Elizabeth Cady Stanton acquiesced to these demands by calling for literacy and educational qualifications for voting. Women, like Lucy Gonzales Parsons, and organizations pulled their support for the movement. Poll taxes, fear of deportation, and literacy tests postponed this dream for Latinas, black women, and immigrant women.

#### **Pause 4, The Power of the Vote**

**Prompt: Poll taxes, literacy tests, and fear tactics successfully disenfranchised many Americans. Is the right to vote still a cherished right among Americans?** Mexican families were proud of their cultural heritage and determined to preserve it. The Houchen settlement was a chapter in history where this heritage was challenged in the name of Americanization. The Methodists founded the Rose Gregory Houchen Settlement in 1912. The programs in the settlement were directed toward the assimilation of Mexican Americans. These programs were quite similar to those created to assimilate Eastern-European immigrants. While many would frown on these activities today, the settlement did offer medical care, especially for pregnant women. The children were offered hygiene classes, cooking, and citizenship classes. Staff members also opened a day nursery. A bilingual kindergarten was established. As a part of Americanization program, scouting programs were offered. How did they get the children to come? While mothers warned their children to stay away, the Houchen had created an inviting playground to entice the children into the facility. But the goal was clear to the community. Houchen attempted to impose white middle-class standards on people who wanted to preserve their cultural heritage. Ruiz retells the story of Minerva Franco who, as a child, attended cooking classes at Houchen. Minerva recalled the shocked look on her mother's face when she first cooked Eggs Benedict. Some Houchen workers later admitted to having anti-Catholic sentiments, though they dared not openly admit this during the heyday of the settlement. The Houchen settlement remained a vibrant part of the community from 1912 to 1962. A number of Mexicanas volunteered there and some even gained employment at the settlement. This imposing building covered a city block. As recently as 1991, recreational and daycare activities were still there.

#### **Pause 5, The Settlement House Movement**

**Prompt: America was determined to Americanize immigrants and minorities, but their efforts failed. Or did they?** Mexican families came to the United States to flee the violence of the Mexican revolution. Anti-Mexican sentiment grew as economic conditions worsened during the recession of 1913. On April 20, 1914, in the coal-mining town of Ludlow, Colorado, a large tent colony of miners and their families were sprayed with machine-gunfire. The strike had started in September of 1913. Colorado law had given the workers some very basic rights, including the elimination of the dreaded script for wages. The occupants of these tent colonies banded together, sharing resources to resist the mine owners. Families resisted constant violence against them. Mothers taught children how to hide under cots and use what can best be described as bomb shelters. After surviving the harsh winter, the spring brought horrific violence. Flaming torches thrown into the camp ignited the ragged tents. When the fires died, 26 people had died. More violence and deaths occurred as miners came to Ludlow to protest the violence. As news of the violence spread across the country, cooperate owners attempted to repair their tarnished images. The Rockefeller interest were major players in this event. In time, small concessions were made. However, these small concessions did not address the loss of life.

The union movement originated in the booming commerce growing out of the industrial boon starting at the turn of the century. What did these unions want? Ironically, the demands were not different from those called for today: safety in the workplace, fair wages, shorter hours, respectful treatment, child-labor

requirements, and an end to discrimination based on race and/or gender. Initially, the new unions encouraged Mexican membership. But, as soon as an oversupply of workers occurred, this token recognition ended. Often, the Mexican workers were forced by necessity to accept strikebreaking positions and were called scabs. This only heightened the anger against the Mexican-American workers. Lucia Eldine Gonzales, referred to by her detractors as “that colored woman,” became a champion of these disenfranchised workers. In 1871, she married Albert Parsons, a newspaperman. They moved to Chicago, where Lucia founded the Chicago Working Woman’s Union. Part of the platform called for wages for housework and equal pay. These were concepts ahead of their time. The Chicago Working Woman’s Union later joined the Knights of Labor.

Garment workers were putting in a 16-hour day. Lucia and other women organized to push for an eight-hour day. A major strike ensued. The call for eight-hour days culminated with organized labors’ first May Day parade in 1886. Two days later, police killed strikers at the McCormick farm machine factory. Both Lucia and Albert spoke out against the murders in Haymarket Square. A bomb exploded, killing one police officer. Albert was arrested and accused of conspiring to riot though friends and others presented evidence of his innocence. He was sent to the gallows. Lucia launched a protest movement that spread across the country. In 1893 her husband received a posthumous pardon from Illinois governor John Peter Altgeld. Lucia later wrote a story for a labor newspaper about the Haymarket affair. Lucy continued to travel and speak on behalf of the worker(s). She helped found the International Labor Defense (ILD), an association that provided legal assistance to workers and political dissidents. Lucia continued her crusading effort for workers until her death in 1942 at the age of 90. She energetically met the needs of Mexican Americans in Chicago and elsewhere. She wanted full inclusion for Mexican workers in labor unions. Some unions started affiliates to accommodate Mexican immigrants rather than grant full inclusion.

By 1930, more than 150,00 Mexican-born people settled into the barrios of Los Angeles. Following the tradition of *Compadrazgo*, families moved in together for financial survival. The food processing industries welcomed this supply of workers. Many of these workers were young and single Mexicanas. This youthful wage-earning group of women posed a challenge to the long-held concepts of chaperonage or the old *la duena* tradition. While the trends and lifestyles of the larger society were making minor inroads, the culture traditions still prevailed. But at the same time the family did recognize the economic possibilities as these young breadwinners brought in money to buy the extras. Many young girls took jobs after completing eighth grade. But, women were becoming aware of the power of education as a means to advancement. This trend continues today among minority women.

**Pause 6, Trends toward early employment.**

**Prompt:** *While this trend at one time was encouraged for the survival of the family, today it can have the reverse effect.* The cannery industry gained importance during 1939 and 1950. The canning process was needed to preserve and provide food for soldiers during World War I and World War II. Canneries within the California boundaries processed everything from apricots to cherries to vegetables. Packing houses handled walnuts, almonds, oranges, and varieties of lettuce. Women performed the seasonal work of washing, cutting, and packing the produce. These workers were at the bottom of the pay scale. Domestic work paid more, but cannery work was seen as a step up. The women faced a number of obstacles. Racism was pervasive. Employers openly declared to the public that white women handled the fruit in the final packaging process. Such a statement implied that their participation was the only one that counted. Ethnic and sexual discrimination readily translated into wage differentials. Promotions were limited to Anglos. While employment outside the home was still frowned on, women were able to justify working under the guise that it was temporary. In reality, the cannery industry was a seasonal activity dependent on the fruit of the season. But, the seasonal work may well have satisfied the tradition of women not working, it did relegate these women to low-paying jobs since they were temporary. As

women stood side-by-side on the assembly line they shared concerns and aspirations. Whites, Latinas, immigrants and blacks stood together for long hours doing this hard labor. The women forged a bond and solidarity of purpose. A cannery culture actually developed. The fruit cut and bruised them. Health issues surfaced. A worker describes how the peach fuzz and other byproducts of the processing caused allergies and pain. The United Cannery, Agricultural, Packing, and Allied Workers of America (UCAPAWA) represented a diverse population. Worker solidarity across racial, gender, religious and occupational lines did not go unnoticed. Owners quickly labeled the solidarity as communist. Such labels inflamed the public sentiments. Accusations such as these were costly to the union. Nevertheless, membership grew. But, opposition solidified. Then, the United States entered World War II, many farm workers moved to the city looking for higher-paying jobs. While most historians overlook female membership, this membership rose from 500,000 in 1937 to 3.5 million by 1944.

Labor issues caused a coalition of white, African Americans, and Mexican pickers to walk out of the fields in October 12, 1939. Pickers protested the low wages. They found support from locals and outside support from groups and people with substantial voices. Again violence ensued. But, the cause was bigger than the violence. Finally, the Madera strikers, as they were known, received minimum-wage increases. A major result was that the union recognized the militancy of Mexican Americans, especially women. This recognition spread from the San Antonio pecan shelling plants to the Los Angeles peach canneries.

Another example of Mexicana militancy can be documented with the events in the Los Angeles Canning Company (Cal San) in 1939. At the height of peach-growing season, workers walked off the job, protesting wage disparities between white and Mexican workers. Peaches were left to rot on the ground. Workers actually picketed the homes of the wealthy owners, carrying their impoverished children with them. These brave women won a closed shop. Also, they had a particularly sexist foreman replaced; this was unheard of during this time. Shades of what today is called sexual harassment were usually an a hushed issue during this time. Another rare aspect of the settlement provided for the hiring of blacks. The UCAPAWA/FTA's success was short lived. It collapsed under the weight of the red scare and witch hunts of the McCarthy period. Some of labor's best leaders were accused and thus robbed of their effectiveness.

Red scare tactics and a brief recession led to deportation of a half million Mexicans, many of whom were legal citizens. Future farm worker organizer, Dolores Huerta, led staunch opposition through organizations such as Community Service Organization (CSO). Women were even more-active participants in the Association Nacional Mexico Americana (ANMA). This organization and many of its courageous members, like Luna Mount, spoke out against practices that violated civil rights.

### **Pause 7, Victories that have far reaching effects**

**Prompt: Many of the issues addressed during this time are still relevant today.** Women activists never abandoned the labor causes. But, later they turned their attention to public accommodations and education. The first successful school desegregation suit was filed by Latino parents in Lemon Grove, California. In 1946, a federal judge ruled in *Mendez v. Westminster* that segregation of Mexican schoolchildren was unconstitutional. This decision would form the basis for the *Brown Board of Education* case. The impetus for Chicano Movement of the 1960s can be traced to the militancy demonstrated in the labor movement. This movement asserted strong feeling about cultural identity and furthered the demands for civil rights. Its goal was to rally and unite people as a political force.

This brief sampling of the history that these women, whether in the labor movement or everyday life, never had an interest in becoming powerful, but in empowering others.

## Sample Responses for Pause 1 and Pause 2

Remember to allow the students to write freely.

### **Pause 1, Tapestries of Resistance**

Prompt: Poverty was a way of life for these women yet they refused to accept these conditions for themselves and their families. This Ruiz quote characterizes this refusal. Response These women lived in poverty. Yet, they dared to challenge injustices. Baskets were, in a sense, their weapons. In these baskets, they carried food for the community, their children and their meager possessions. Ballots represent the hope that these women had for the future. Also, it demonstrated that though they were not well educated they knew the power of the vote. They were compared to a tapestry because these were complicated women not just peasants. And, they used creative and complex methods to assert themselves.

### **Pause 2, Push-Pull Immigration Policy**

Prompt: The discovery of gold, the Treaty of Guadalupe and Manifest Destiny were critical factors in encouraging and repelling immigration. Early immigrants were encouraged to settle in America when workers were needed in the fields or on the railroads. Latinos actually taught the early miners how to process and mine gold. Yet, when the gold started to dry up the Americans devised ways and issues to force them out. The Treaty of Guadalupe and Manifest Destiny were examples of the push side of immigration. Anglos wanted the land of Mexican Americans and they wanted to prevent the creation of new settlements. Throughout American history when cheap labor was needed the welcome mat was out. However, when the real Americans needed jobs the pull factors disappeared. Immigrants and minorities were expelled usually with force.

## **Reflections:**

# **Mexican American Women and American History**

Instructions to student: Answer the following questions on a separate piece of paper.

1. The immigration policy has been described as a push-pull phenomenon meeting the selfish needs of the vast economic machinery of the United States. Respond the following questions.
  - a. What is the push-pull phenomenon as it applies to immigration?
  - b. Give an example from the lecture of both a push and pull period in American history?
  - c. How would you describe the current immigration policies with Mexico?
2. Compadrazgo, mutualistas, and the self-help societies advocated by Teresa Urrea promoted women helping women.
  - a. What are two components of all three of these examples?
  - b. Why do such organizations usually have their origins among poor women?
  - c. Name or describe any current support systems that function as these earlier organization did?
3. The Houchen society can best be described as an Americanization program. These programs were prevalent in cities like Chicago and New York. Their goal was the preservation of the American way of life.
  - a. Some would say these programs both failed and succeeded at the same time. How would you explain this response?
  - b. Why did so many Mexican Americans, blacks, and immigrants resist these settlement efforts?
4. The unionization process was established to address worker demands.
  - a. List four of the major reoccurring demands of labor.
  - b. Select two of these demands and compare their status during past decades and today. Describe any innovations that have been created to address these labor demands.
5. The cannery industry was spurred on by the need to provide and preserve foods for soldiers during World War I. This new industry created as many problems as it solved. But, at the same time it solved other problems. Innovations seemed to bring about a spiraling cycle of good and bad. Respond to this statement in the light of what we have discussed. Remember the hardships of the women in this industry.

## TEACHER'S COPY

### Reflections: Mexican American Women and American History

Grading Recommendations: The answers to these questions can reflect student awareness of current events and knowledge gained from the study of other aspects of American history.

- 1a Push: immigrants are deported and often stereotyped to encourage them to leave in times of crisis or unemployment. Pull: the government and businesses entice immigrants to come to the country when there are jobs to be filled.
- 1b War industries, economic good times, discoveries (gold), and the need for specialized workers are examples of pull periods. Bad economic times, unemployment, and national periods of crisis are examples of push periods.
- 1c The 1990s were periods of economic growth so immigrants came to fill skilled and unskilled jobs.
- 2a Components of self-help organizations provide: care for children; parenting; provisions for basic needs; rudimentary education; and general information.
- 2b Organizations such as these have their origins among poor women; fewer services are provided to them by the larger group as services are harder to assess. Isolation and mobility result.
- 2c Bean Project, support groups, agencies for battered women and medical support groups (cancer support)
- 3a Students can support a position that these settlements both failed and succeeded. They failed because they never fully respected or valued diversity. They succeeded because they did provide education, and health care.
- 3b Some programs and/or classes did not respect the cultural heritage of the participants.
- 4a Labor issues were: fair wages, safety in the work place, child protection, reasonable work day, daycare, promotions and advancements, sexual harassment, sex discrimination, job security, race and ethnic intimidation.
- 4b To better working conditions, union have established: job sharing, flexible hours, day care, day care, equal opportunity laws, and sexual harassment legislation.
- 5 The basis of this response is that science and technology created new and better ways that benefit society, but at the same time new problems are created.

## Student Term Sheet: Latinas in American History

1. **Tapestry:** A heavy decorative rug or wall hanging. Carpets with intricate pictures and designs.
2. **Immigrate:** To leave ones native country and enter another country.
3. **Migrate:** To move from one country or place to another often in search of work or political freedom.
4. **Repatriate:** To return to one's native home or country of origin.
5. **Treaty of Guadalupe (1848):** Protected the land rights of Mexicans living under the rule of the United States. Enforcement of these rights did not occur in an atmosphere of expansionism. Soon after the treaty was signed gold was discovered making enforcement impossible.
6. **Mexican Revolution (1910-1917):** This violent war for the control of Mexico was between the revolutionaries (usually lawless opportunists) and the wealthy landowners. Those who suffered the most were the common people, many of whom fled to the United States for safety and jobs.
7. **Manifest Destiny:** A belief motivated by expansionists policies that justified Americas annexation of lands especially in the west. Inherent in this policy was the political view that America had an almost divine right to occupy these lands and in essence save them from those less endowed with a right to govern.
8. **Suffrage movement:** Refers to the campaign by American women to win the right to vote.
9. **Poll tax:** A monetary requirement imposed on citizens before they were permitted to vote. These taxes were used as a form of payment that prevented the poor and minorities from voting.
10. **Settlement houses:** Created in the early 20th century to Americanize immigrants coming into the country.
11. **Hay Market Riot (May 4, 1886):** A violent labor protest in Chicago that ended in the deaths of 11 people. One of those killed when a bomb was thrown into the crowd was a police officer. Labor protestors were a combination of socialists, labor activists, and ordinary workers. Four people were hanged because of the riot.
12. **Militancy:** Aggressive and assertive behavior waged for a cause espoused by a group usually against a dominant group.
13. **Red scare:** A term used to describe a period in the 1950s when many Americans and organizations were branded communists. This period of terrorism was orchestrated by Senator Joseph McCarthy. Scrutiny by the Senator meant economic, political, and career disaster.
14. **Cannery industry:** Refers to food processing of fruits and vegetables. This industry flourished as the need to preserve and provide foods for the armed forces in World War I and II. The canning and packing industry were especially lucrative in California.

## **Lesson 8:**

# **Aim High: The Ellen Ochoa Story**

### **What will the students be learning?**

#### **STANDARDS**

Students understand that societies are diverse and have changed over time. (H3)

Students demonstrate the characteristics of an effective worker. (W4)

Students write and speak for a variety of purposes. (RW2)

#### **BENCHMARKS**

Students identify and analyze interactions of diverse populations in the United States.

Students accept differences and work well with individuals from a variety of backgrounds.

Students write and speak to peers, teachers and community.

#### **OBJECTIVES**

Students will be introduced to the contributions of Ellen Ochoa.

Students analyze the strengths, conflicts, and barriers that propelled Ellen Ochoa to success.

Students will learn the importance of effective working relationships with various ethnicities.

Students develop interview questions for a mock TV presentation.

#### **SPECIFICS**

Dr. Ellen Ochoa exemplifies the modern Latina. She is versatile, well educated, and dedicated to helping others achieve. Ellen says that when she was a child she was discouraged from speaking Spanish in the home. Today, she embraces her heritage that provides a positive link when she speaks with minorities. Her life demonstrates how far she and our country have come. By the age of 33 she distinguished herself as a co-inventor and had received three patents. There are so many positive descriptors that can be used to describe this woman. One of the most important is scholarly. Her life sends a message to all young women that the pursuit of education is rewarded in our society. Another dominant theme in her life is her devotion to her family. Ellen Ochoa is a well-rounded young woman who has an active career as an astronaut and a researcher. She is also an accomplished flutist. Ellen speaks to young people encouraging them to have careers in science.

Dr. Ochoa clearly demonstrates the components of a successful life that should inspire future generations of scientists.

Recommendation: Extension 2 would make an excellent homework assignment and prepare students for the assessment.

### **What will be done to help students learn this?**

#### **INSTRUCTIONAL STRATEGIES**

Lecture

Website

Mock Interview

Note Taking

### **PRELIMINARY LESSON PREPARATION**

Prepare a list of descriptors that characterize Ellen Ochoa. Include examples supported by events in her life. Create a blank word web for students. Define a retelling as a sequential summary of the information, focusing on the highlights.

Prepare a brief presentation on basic interview techniques. The purpose of the interview is to review the information presented. Also, it gives students an opportunity to write questions. Help students craft questions that demand more than just a yes/no response. Make available the books on Ellen and, if possible, the articles from the Internet. Briefly discuss the interview techniques students have observed on television.

### **VOCABULARY**

- Optics ..... The study of light. Dr. Ochoa’s research focused on how light can be used to maneuver robots around objects.
- Patent ..... A legal document securing for the inventor the exclusive right to make, use, or sell an invention for a term of years.
- Doctorate ..... One of the highest postgraduate academic degrees conferred by a university; designated as PhD.
- Tapestry ..... A hand-woven textile used for hangings, carpet, curtains, or upholstery.
- Payload commander ..... Supervises astronauts who work in the Space Shuttle’s laboratory; the International Space Station (ISS) will become a permanent laboratory and temporary home for astronauts who will conduct experiments and study how space affects the human body.

### **ACTIVITIES**

Tell the students that we are going to study the life of the first Latino female astronaut, Ellen Ochoa. Explain that as the discussion proceeds they are to listen for descriptors that characterize this woman and her life. The purpose is to identify those characteristics that are pivotal for planning a career.

Ask the students to take note on the lecture and discussion. Lecture about her life and many accomplishments. Match several of the descriptors to events in her life that support the words used. Have the students retell the story of Ellen’s life.

Tell the students that much of the information about Ellen comes from interviews conducted by students. Have each student write four questions they would use to interview this celebrity. Randomly pair off students. Have them select from a box either interviewer or interviewee. Once the roles are established, the students will conduct their interview. Circulate among the partners giving suggestions and support. Ask for volunteers to present their interview to the entire class.

### **RESOURCES/MATERIALS**

[www.jsc.nasa.gov/Bios/htmlbios/ochoa.html](http://www.jsc.nasa.gov/Bios/htmlbios/ochoa.html)

[www.lasmujeres.com/ellenochoa/astronaut.shtml](http://www.lasmujeres.com/ellenochoa/astronaut.shtml)

<http://teacher.scholastic.com/hispanic/ochoascript.htm>

*Notable Hispanic American Women, Book II* by Joseph Palmisano

*Real People: Ellen Ochoa* by Pamela Walker

### **ASSESSMENT**

Students will select six descriptors from the list. Then write the selected descriptors on the literacy web. Beneath each descriptor, the student will write a paragraph using the lecture notes and discussion to support the descriptor.

<b>Grading Scale</b>	<b>Possible Points</b>
Paragraph construction and grammar .....	24
Content supporting descriptor .....	2 per descriptor (maximum 12 points)
Total possible points .....	36
36 to 24 points .....	A
23 to 12 points .....	B
11 to 6 points .....	C
5 or fewer points .....	D

**EXTENSIONS**

1. One of Ellen’s goals is to spread the word about staying in school. She wants to reach young girls, encouraging them to study math and science. You are to spread her message. Select a younger sibling or relative and tell them about Ellen Ochoa. Share your notes with them. If you are speaking to a child of five to 10 years of age, read *Real People: Ellen Ochoa* by Pamela Walker. Multiple copies of this book will be needed so that students can take them home to read to the children.
2. The ozone layer and its significance to our survival is a heated environmental issue today. Scientists feel that our activities are damaging this layer thus exposing us to dangerous levels of radiation and changing the natural weather patterns. Do an online search and gather more information about this environmental issue.

## Lecture Notes:

# Aim High: The Ellen Ochoa Story

### Priority One, Education

Education was top priority in the Ochoa household. Rosanne, Ellen's mother, set the standard by example. She finished college while raising a family of five and holding down a full-time job. At times, Rosanne could only take one course a semester. But, after 22 years, she received her college degree. Rosanne Ochoa's determination was a model for the entire family. Most of her children are professionals.

Ellen Ochoa was born May 10, 1958, in Los Angeles, California. At age 13, Ellen won the San Diego County spelling bee. She excelled in all of her coursework. Ellen took her education seriously. She graduated as valedictorian from Grossmont High School in La Mesa, California, and received a four-year scholarship to attend college. Ellen always knew she would attend college. Ellen received her bachelor's degree in physics in 1980. Later, she attended graduate school at Stanford University. Ellen completed her studies at Stanford, receiving a doctorate in electrical engineering.

### Secure Your Future

When Dr. Ochoa addresses audiences of young people, she encourages students to stay in school and study, and to "shoot for the stars." Her goal would be to have future generations view their lives as having unlimited potential. Often she tells students that finding what is right for them is not always an easy task. In fifth grade, she wanted to be president of the United States. She changed her major three times while in college. Finally, she decided to study physics. Her advice would be to explore every avenue, especially the sciences. It would be entirely acceptable for high school students to visit different classes in school to see what the content of subject areas have to offer. Ellen kept all options open and it worked beautifully.

"Don't be afraid to reach for the stars," she says. "I believe a good education can take you anywhere on Earth and beyond."

Her many achievements attest to the power of a good education. Spreading her educational message is a passion. She has addressed more than 75 student assemblies. She capitalizes on the enthusiasm students display upon meeting a real astronaut. Then she tells them to "get excited about science." Ellen acknowledges that becoming an astronaut was not an easy road. But, she quickly dispels the myth that race and gender are limiting. She reflects and says that her background neither made it easier nor harder. She's been described as a perfect role model for students from moderate- and low-income backgrounds.

### Awards and Recognition for a Job Well Done

In no time, Ellen had made quite a name for herself. While completing her doctoral studies and later as a researcher, Dr. Ochoa investigated optical systems for performing information processing. Ellen is a co-inventor on three patents for optical inspection system, optical-recognition methods, and a method for noise removal in images. All of this was achieved by the age of 33. She was an outstanding researcher for National Aeronautics and Space Administration (NASA). Advancements came quickly. Ellen found herself supervising almost 40 scientists before her selection as an astronaut. Her team recalls her as being assertive and willing to defend the budget and supplies needed for her department.

Her roles as an inventor, engineer, astronaut, leader, and humanitarian have earned her an impressive number of awards. Some include The Hispanic Engineer Albert Baez Award for Outstanding Technical contribution to Humanity, the Hispanic Heritage Leadership Award, the Women in Aerospace Outstanding Achievement Award, the San Diego State University's Alumna of the Year in 1998, NASA Outstanding Leadership Medal, and Exceptional Service Medal.

### **Chosen from Thousands**

The path to becoming an astronaut started two years before she graduated from college. In 1978, NASA opened up the space program to females. When Sally Ride became the first female U.S. astronaut, Ellen realized that this was what she wanted too. Ride's historical flight was all the encouragement Ellen needed. Ellen Ochoa became an astronaut in July 1991. Dr. Ochoa is a veteran of three space flights logging more than 700 hours in space. Her most recent mission was from May 27 to June 6, 1999. On this 10-day mission her team carried out docking procedures at the International Space Station. The International Space Station is one of her major interests. She coordinated the stocking of supplies to the Space Station. She operated a robotic arm called the Remote Manipulator System (RMS) during an eight-hour space walk. Robots can go places and endure temperatures that humans cannot. Expertise in robotics is essential to space exploration. All of this was accomplished while traveling four million miles in 235 hours and 13 minutes. Ellen is looking forward to another mission to the International Space Station, hopefully sometime this year. Building the Space Station to allow human exploration in space is her dream for the future. The Space Station will have the capacity to function as a major laboratory in space.

### **Ozone Issues**

Other space flight experiences have given Ellen the opportunity to conduct atmospheric and solar studies to understand the relationship of the solar activity and the Earth's climate and environment. As payload commander, she has directed space lab flights to study the effects of energy from the sun. These experiments and research have serious implications as scientists seek to assess the sun's effects on our ozone layer. Scientists know that the ozone layer is being damaged. This layer surrounding the Earth protects us from radiation. The goal is to examine the extent of the damage, and evaluate the causes of the damage. Changes in the ozone layer can cause extreme climate conditions including drought and long periods of hot or cold weather. Another aspect of her work in space is to modify and keep operational the sensitive measuring instruments used aboard the space satellites. Exposure to the sun makes these instruments less accurate. Making sure that readings from these instruments are precise is a complicated process. The instruments Ochoa monitors are vital to the regulation of other instruments on the spacecraft.

### **Not Too Busy for Family and Fun**

Ellen's busy career has not caused her to neglect her personal life. She maintains a healthy balance that nurtures her success. She is married and has two children. When asked if it is hard being an astronaut and a mother, her response was, "I think it's hard being anything and a mother." But, she goes on to say that a career and motherhood are both full-time jobs. Yet, she readily acknowledges that one can be successful at both. She recalls how successful her own mother was under some most trying conditions.

After work, music keeps Ellen alert and positive. Ellen is an accomplished classical flutist and she has given numerous recitals where her talents were showcased. At one time, she even considered becoming a classical flutist as a career. She decided against it, saying that this was not a career that would pay the bills. Another hobby is flying a small airplane.

Staying healthy is a prerequisite for astronauts. Exercise is necessary for her career and for keeping up with two young children. Also, she enjoys volleyball and bicycling. NASA requires that their astronauts make public appearances to promote the study of sciences and make the public aware of the space program. Ellen welcomes these opportunities to speak to groups, especially girls. To her, this is not a requirement, but a pause from her busy schedule.

"The most exciting thing was looking out at Earth up there. It was beautiful."

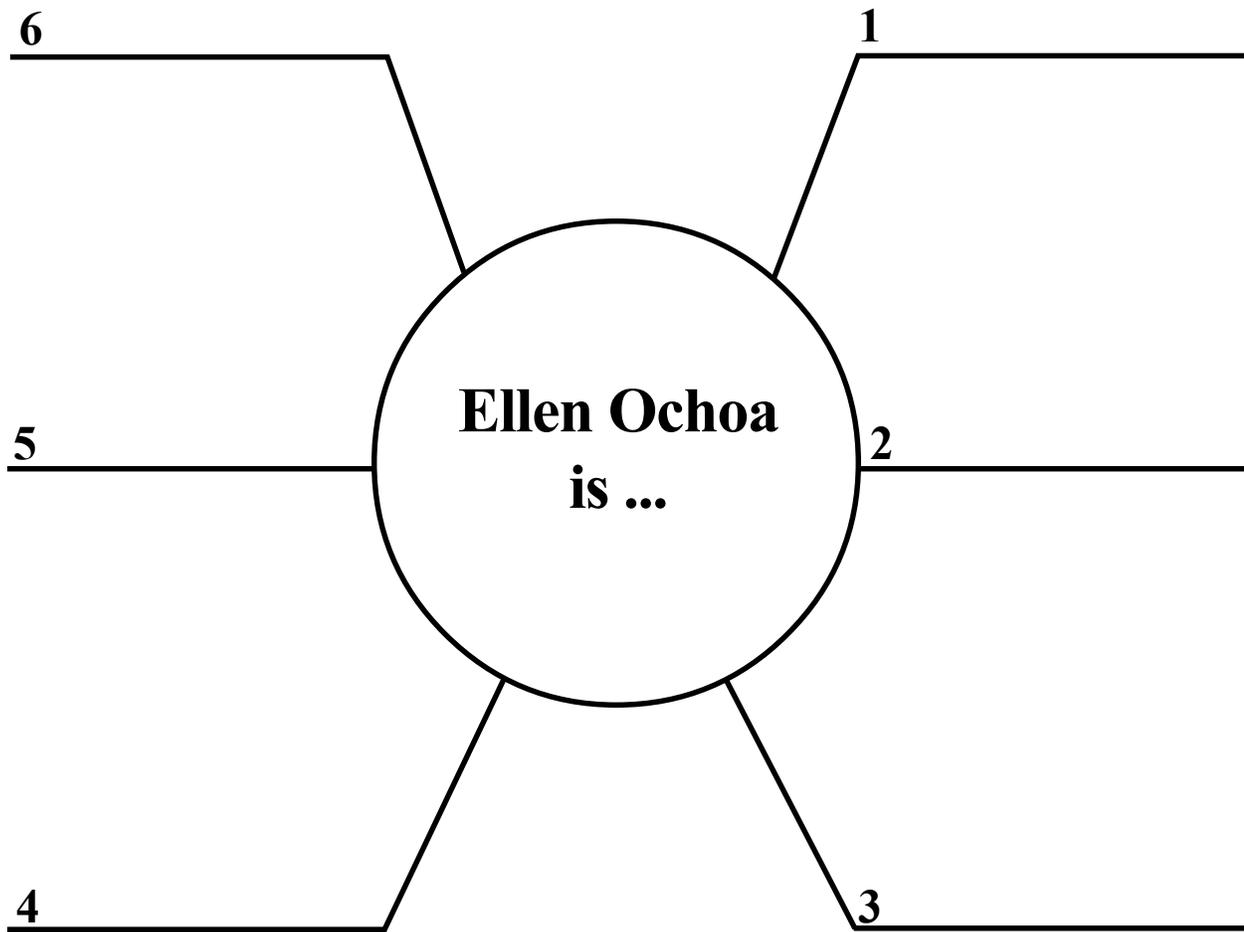
## List of Descriptors for Ellen Ochoa

Latina  
Explorer  
Scholar  
Visionary  
Inventor  
Scientist  
Researcher  
Pioneer  
Disciplined  
Impressive  
Exceptional  
Committed  
Proud  
Versatile  
Proud  
Adventurous  
Energetic  
Versatile  
Determined  
Talented  
Dedicated  
Inspired  
Inspirational  
Well rounded

Name \_\_\_\_\_

## Descriptors for Success

Write your descriptor and a paragraph supporting your description. Use a separate sheet if necessary.



## **Lesson 9: Countdown to Success**

### **What will students be learning?**

#### **STANDARDS**

Student demonstrates the ability to receive and relay information clearly and effectively. (W1)

Student demonstrated the ability to work effectively and efficiently. (W2)

Student demonstrates the ability to use reasoning. (W3)

Student demonstrates the characteristics of an effective worker. (W4)

Students write and speak for a variety of purposes. (RW2)

#### **BENCHMARKS**

Student clearly organizes and effectively presents ideas orally.

Student devises and outlines a process to achieve a goal and timeline.

Student uses efficient techniques to acquire and apply new knowledge and skills.

Student contributes to group effort through cooperation and consensus.

Students write and speak to peers, teachers and the community.

#### **OBJECTIVES**

Students will organize and present a written career plan for their future.

Students will research the content, requirements, and components of a specific career.

Students will investigate the content of a specific career by using reference materials in their public library.

Students will identify the components of working successfully on a team.

Students will write a mission statement related to the career research project.

#### **SPECIFICS**

Astronaut training is a complicated and grueling endeavor. Before an astronaut goes on a mission they go through a training period of up to two years. During this time work on simulators is done to prepare astronauts for the real thing. Since physiological changes occur in space, training is done in microgravity. Astronauts must also train to become a team member and a specialist. Much of this training speaks to the kind of preparation young adults must complete to have successful careers. Each time a space shuttle is launched a very specific mission is defined. In this lesson, students will write a mission statement related to a career of their choosing. Then as we go through the phases of astronaut training, students will apply these skills to the career of their choice using questions developed at the different phases.

### **What will be done to help students learn this?**

#### **INSTRUCTIONAL STRATEGIES**

Lecture

Note Taking

Definition of Terms

Peer Conferencing

### **PRELIMINARY LESSON PREPARATION**

Review the vocabulary. Some preteaching may be necessary to enable the students to peer conference the tentative writing project on the career choice. Some suggestions are given. Read the lecture notes. Each section is tied to questions for the student to address in their career research project. Evaluate these questions based on your students' resources and grade level. Collect examples of mission statement from your school or businesses. Explain that the purpose of such a statement is to focus the energy of the company or individual in a specified direction.

### **VOCABULARY**

- Quarantine ..... To keep someone isolated from situations or environments that have a potential of causing disease
- Microgravity ..... The existence of low levels of gravity
- Simulators ..... Reproduce experiences and situations comparable to real events giving the participants an opportunity to practice
- Egress ..... An emergency exit
- Debriefing ..... Occurs after a mission; At this time those having a vested interest gather information for evaluation and future planning

### **ACTIVITIES**

Ask students if they have considered career choices after leaving high school. Explain to them that they are going to explore the type of training required of astronauts before they participate in a mission. Tell the students that many of these requirements and behaviors are also necessary in successful career planning in other areas. Present the lecture notes. Discuss how the different phases of training apply to almost any preparation for a career. Highlight the basic components of a mission statement. Present examples of mission statements from your school district and your school. Present information on the mission statement. Allow students time to form small groups and write mission statements. Proceed with how the mission statement should sound for the career choices students made. These need not be the final topic for research. Talk with students about reference materials in their school or public library. Explain that they will need to consult these references for information about their career. Tell them that they will not be allowed to check out reference materials.

### **RESOURCES/MATERIALS**

*Life of an Astronaut* by Niki Walker

Reference Books:

*Encyclopedia of Careers and Vocational Guidance* by Holli R. Cosgrove

*Professional Careers Sourcebook* by Christine Mauer and Kathleen Savage

*The Big Book of Jobs*, issued by the Department of Labor, Bureau of Labor Statistics

## **ASSESSMENT**

### Career Research Project

#### **Part I—Define Your Topic and the Mission Statement**

**Allow** the students two to three days to select a career to research. Then students should bring in their topic and a mission statement about it. Allow a class session where students meet for 20 to 30 minutes discussing their topic with others in the group. At this time students should read their mission statements. Remember the mission statement helps focus your energy and helps evaluate the abilities needed for success. It helps define specifically your purpose. The group will act as peer coaches making suggestions and sharing information.

#### **Part II—Countdown to Success, Career Research Project Directions:**

Note that the questions in the project parallel the lecture and discussion of how astronauts train for a mission. This should help you get ideas for your own presentation. Explain: Reference materials usually remain in the library. Discuss the kind of information that can be gotten from the reference books listed. To complete your project, use library resources, interviews and information from the Internet. Type the entire presentation. Proofread. Use complete sentences. Allow someone else to read the presentation before you submit it. Remember writers usually have several drafts of their work before they have a final project. Make sure it is typed or that you use the word processor. Outline is at the end.

#### **EXTENSIONS:**

1. Plan a formal request with your instructor to have a public appearance by an astronaut. This request can be accompanied by letters telling why the students at your school feel this is important. A formal request guide appears at: <http://www.nasa.gov/events/procedure.html>
2. Microgravity or what we call weightlessness is a major part of training for space flight. Consult sources to learn more about what this is and how it affects the human body. This is an excellent science topic.

## The Astronaut Training Program

When an astronaut travels in space, this is called a mission. Missions indicate a task, goal or major purpose for the exploration. Missions have been planned to:

1. Explore planets or celestial bodies,
2. Record information to plan for man living in space,
3. Prepare for space experiments, and
4. Monitor and retrieve satellites.

Most recently, a major goal is to construct and maintain an International Space Station (ISS).

Astronauts conduct their work wearing space suits because of the hazards they may encounter such as extreme temperatures. A part of this equipment is gear for an emergency exit called an egress. An egress occurs when the astronaut leaves the shuttle before it reaches space. The astronaut then parachutes back to Earth. Though only three deadly accidents have occurred, training for emergencies is a crucial part of training. The only major accident was in 1986 when the Space Shuttle Challenger exploded, killing all seven crewmembers.

NASA was created in 1959 partly in response to Soviet advancements. In 1957, a dog, named Laika, was launched into space to evaluate the safety factors for humans. Then in 1961, the Soviet cosmonaut, Yuri Gagarin became the first human in space.

The International Space Station will become a more permanent science laboratory in space. Astronauts will live at the station conducting experiments and staging launches to the moon and planets.

Initially, launches were capsules at the end of large rockets. Today, reusable space shuttles are used. This is economically more feasible. Space shuttle missions usually have a crew or team of from five to seven astronauts. This crew is made up of two pilots, three mission specialists and one or two payload specialists. Ellen Ochoa worked as a payload commander. Her major responsibility was to supervise the maintenance of the robotic arm. Another function of the payload commander is to communicate with team members and mission control at Johnson Space Center.

Candidates for astronaut training must complete a maximum of two years. During this time, they practice using every part of the spacecraft from the toilet to equipment storage. They train using simulators.

Another aspect of the training program involves learning to work in microgravity commonly referred to as weightlessness. Astronauts must learn to perform tasks in an environment where everything floats. To assist in this process, a jet, jokingly called the vomit comet, is used. This jet creates conditions similar to those on the spacecraft. When one eats, suspension in weightlessness causes sickness (vomit comet). Scuba diving is another method to train for weightlessness.

Before countdown, astronauts remain in quarantine to prevent any contamination. After the launch, astronauts wait several days before actually working in space. Their bodies must adjust to microgravity. In space, astronauts can grow up to two inches taller. This bone stretching process can cause a great deal of discomfort. It is necessary that astronauts enter and maintain optimum wellness and conditioning.

Once the wait period ends, the flight plan is implemented. Jobs are performed both inside the shuttle and in space. Every moment is detailed from the waking hours until the time the astronauts sleep. There is no down time. Astronauts are on tasks deploying payloads, conducting experiments and walking in space. Experiments are performed in the areas of biology, electronics, metals and chemistry. All of this is preparation for the time when man actually lives in space.

Eating, sleeping, and staying healthy are essential tasks for a successful space mission. Microgravity sometimes complicates these processes, but the astronauts have trained to perform these tasks. A wide variety of foods are prepackaged so that they only need to be heated up. Other items are dehydrated so that all they need is water. Astronauts sleeping their seats in sleeping bags surround by metal retainers. Microgravity eliminates the need to sleep horizontally. Any position will do even being strapped to the walls. They get eight hours of sleep a day. While part of the crew works, the others sleep. Astronauts do not have the luxury of using all the water they want. Water does not flow the same way in a state of microgravity. Baths and showers are replaced with soapy lathers and then a wipe down. They even have a kind of shampoo that doesn't need to be rinsed. Space toilets use air to carry away waste products from the body. A vacuum like apparatus pulls waste products from the astronaut's body. All these products go into special storage tanks. Hygiene and health are important issues to the success of the mission.

Astronauts have very little free time. The precious moments that they do have are spent listening to music, watching the universe from shuttle window, and challenging microgravity with a series of gymnastic routines. Music is one of most comforting aspects of these brief moments of leisure. We all remember the wake up calls from the command center featuring popular tunes. NASA provides the astronauts with a cassette player. They are allowed to bring their six favorite tapes.

Reentry is returning from space to Earth. This marks the completion of the mission. After their return, astronauts are tested by doctors and debriefed by other members of the ground crew. Then, the planning for the next mission starts.

NASA requires that its astronauts devote time to speaking to the community. This is their way of garnering support for future space projects and encouraging young people to enter the sciences and perhaps train for careers in space. This program is a way of impacting future generations. NASA astronauts appear before a variety of groups including schools, universities, community organizations, and military organizations.

## Countdown to Success Career Research Project

Name \_\_\_\_\_ Career Topic \_\_\_\_\_

Mission Statement:

1. Explain and describe any special uniforms, tools or materials used in your career. What is appropriate dress for your career?
2. Who are some pioneers in your field? Briefly, what were their contributions? Select no more than two persons.
3. Name and describe at least one advancement in your field that has changed it significantly. Tell what the impact is. (Example: the use of computers)
4. Describe your work environment.
5. Who are your coworkers? Are they all at the same level as you? Identify at least three people you will have day-to-day contacts with on the job. What are two behaviors that make it possible to communicate positively with coworkers? (Remember your parents probably have some good suggestions.)
6. Identify the specific training and education required for your career. Include possibilities for internships, practicums, volunteering, etc., Note: Your instructor will tell you about job and career references that will help you get this information. Also, you may want to consult a college or university catalog.
7. Identify any hazards or safety concerns associated with your career. Are there any ethical issues associated with your job?
8. Write your job description. What will you do? What skills will you use?
9. How will you stay healthy to accomplish your mission? Consider: hours of sleep, kind of diet, exercise and recreation (any hobbies).
10. How will you know you are successful at the career you have chosen?
11. What comes next after you've accomplished this task? Graduate work? Additional training? A related career? Remember life isn't just one success.
12. How will you give back to the community? How will you use your expertise to support and encourage future generations? List resources, the names of those interviewed and any references (books, journals, Internet, etc.).

## Unit Assessment

### How will students demonstrate proficiency?

#### PERFORMANCE TASK

1. The student will create a portfolio (notebook, pocket folder or other form of containment) including:
  - Lecture notes
  - Assignments
  - Assessments
  - Extensions (at least 2)
  - Projects
1. The information should be prefaced with a table of contents and distinct sections with appropriate titles written by the students that reflect the spirit and outlook of the women studied.
2. The students will present an oral overview of their portfolio highlighting sections or activities that had special meaning to them. The instructor will allot each student five minutes.
3. Students will write and submit to the school newspaper a one- to two-page article (researched and referenced) or editorial on: Does gender bias persist as a threat to the career choices, planning and aspirations of young women?
4. Students will read three personal accounts from *The Mexican American Family Album* by Dorothy and Thomas Hoobler. Analyze these accounts:
  - a. Identify the chapter and in general the historical context in which the speaker is involved.
  - b. Identify the speaker
  - c. Write a paragraph stating what the individual wants to relate. Draw any parallels that exist between this speaker and those individuals we have studied.

Example: p. 85

Chapter Five: Putting Down Roots

Write a personal account by Dolores Huerta.

Dolores Huerta speaks briefly about her school experiences in Stockton, California. Though she was an excellent student, her teachers often gave her grades lower than what she deserved. While she was obviously crushed by these injustices she wasn't defeated. Dolores had the confidence to continue to excel. Her message to others is to have faith in yourself and never give up because of negative comments. Her experiences are similar to the encounter that Mae Jemison had when she announced to her first grade teacher that she wanted to become a "scientist." While both women no doubt experienced racism, neither let it stand in the way of their success. Mae Jemison went on to become the first African American astronaut and Dolores Huerta became a labor organizer working closely with Cesar Chavez.

5. Design a Career Survey reflecting the career aspirations of 9th and 12th grade girls. Students will devise their own questions centering around the following:

1. Confidentiality \_\_\_\_\_  
Identify by grade level and first name.

**Questions**

2. How do you describe your self academically?  
 A student  
 B student  
 C student  
 D student
3. Have you talked with your parents about your future career plans?  
 yes  no
4. Have you talked with your teachers about your future career plans?  
 yes  no
5. Do you plan on going to a college or university after high school?  
 yes  no
6. What would you consider an unusual or unique career choice for a woman? \_\_\_\_\_  
\_\_\_\_\_
7. Who is one of your role models? (friend, celebrity, relative) \_\_\_\_\_  
\_\_\_\_\_
8. Have you ever heard of:  
 Mae Jemison  
 Ellen Ochoa  
 Dolores Huerta  
 Cesar Chavez  
 Bessie Coleman

After administering your survey, tabulate your results. Compare the results of the 9th graders to that of the 12th graders. Speculate on the implications of your results. Write up your results. Do you see any patterns in your results?

Remember these were sample questions. You may create others or add on not to exceed 10 questions.

**Grading Recommendations for the Unit Assessment**

Note to the teacher: The instructor should evaluate the quality of the survey, arrange for dissemination and collection. A total of 12 points at each grade level is sufficient. Students should identify their surveys with initials and or codes.

- 1. Did the student address each tasks ..... 6 points
- 2. The presentation should be typed using a word processor or typewriter ..... 6 points
- 3. Grammar, punctuation, spelling, organization and neatness ..... 6 points
- 4. The oral presentation on the portfolio as well organized and clearly distinguished aspects of interest to the student ..... 6 points
- 5. The written article clearly addressed the issue and illuminated the concerns. If the article was truly submitted and considered ..... 10 points
- 6. The four personal accounts (worth four points each) ..... 16 points
- 7. The completed survey and its analysis ..... 20 points
- Total possible ..... 60 points**

## Bibliography

- Adler, David A. *A Picture Book of Amelia Earhart*. Holiday House, New York, 1998.  
This biography is a first step in the understanding of the life and motivation of Amelia Earhart. The reader becomes aware of some of the challenges she had to face. The book ends with the mystery of her disappearance and the challenge to speculate about it.
- Austin, Hilary and Thompson, Kathleen. *The Face of Our Past*. Indiana University Press, 1999.  
This is a pictorial history of African American women in the United States. Images are of women from the 19th century to the present. The strength of this book is that it depicts women in every walk of life and easily dispels the myth that these women were one-dimensional.
- Black, Sonia W. *Mae Jemison*. Mondo Publishing, New York, 2002.  
A basic and easy read biography is presented in this book. The book documents Mae Jemison's life up to the mid-1990s. This book with other sketches will help fill in any information voids.
- Bolden, Tonya. *Tell All the Children Our Story: Memoirs and Mementos of Being Young and Black in America*. Harry N. Abrams, New York, 2002.  
This book chronicles the history of children during some very bitter and joyful periods of history. Poignant and thought-provoking pictures and the actual words of children help us gain insight to childhood from the time of slavery to modern days.
- Bolden, Tonya. *33 Things Every Girl Should Know About Women's History*. Crown Publishers, New York, 2002.  
This is a book of brief biographies of women from many ethnic backgrounds. Some are quite famous while other names represent inspirational discoveries about women who have made a difference.
- Borden, Louise. *Fly High!* Margaret K. McElderry Books, New York, 2001.  
Again this is a basic biography, but it is enriched and enhanced by beautiful illustrations that enliven the story. The illustrations help develop the tone and spirit of the early 20th century.
- Garza, Hedda. *Latinas: Hispanic Women in the United States*. University of New Mexico Press, Albuquerque, 2001.  
The reader gains insights into the darker side of Latinas in United States history. The beginning chapters are not appropriate for the less mature reader. This is an resource more for the teacher as background information is prepared for the students.
- Hart, Philip S. *Up in the Air: The Story of Bessie Coleman*. Carolrhoda Books, Inc. Minneapolis, 1996.  
A comprehensive and age-appropriate biography is written by a Denver author who was inspired to write by his own personal connections to Herman Banning, another pioneer black aviator.
- Hakim, Joy. *A History of Us: War, Peace and All That Jazz, 1918–1945, Book 9*. Oxford University Press, 1999.  
The cultural, social, political, and economic events of this period are presented in text and pictures. This is an abbreviated historical read of a time that forever changed America.
- Hoobler, Dorothy and Thomas. *The Mexican Family Album*. Oxford University Press, New York, 1994.  
This book presents the history of the first Mexican Americans through the 1990s in the United States. Photographs and personal accounts give real insights into the hopes and fears of families during this time period. Highlighted also are brief sketches of notable Hispanics who have contributed to the American scene.

Jemison, Mae. *Find Where the Wind Goes*. Scholastic Press, New York, 2001.

This autobiography is a very personal account of Mae Jemison's life. Family, friends, and events that brought her to NASA are detailed through this very personal view of her life. Some young people may be in awe from the intense pursuit of high academic standards even as a child. Yet, the message is that what she accomplished does not have to be the exception.

Joseph, Lynn. *Fly, Bessie, Fly*. Simon and Schuster, New York, 1998.

Again the illustrations overwhelm the story. This is an excellent read aloud where the story and the spirit of this woman are even more evident in the illustrations. The dress of the period is a parallel history of the 1920s flapper style.

Lindbergh, Reeve. *Nobody Owns the Sky*. Candlewick Press, Cambridge, 1998.

Totally beautiful and lyrical, Reeve Lindbergh presents this biography in poetic style that should inspire students to try the same with others presented in the unit.

Nathan, Amy. *Women Pilots of World War II*. National Geographic Society, 2001.

The history of women aviators is detailed. The book attests to the fact that there were qualified African-American women ready to fly. A brief section is devoted to one such woman, Janet Harmon Bragg.

Newstrom, John and Scannell, Edward. *The Big Book of Team Building Games: Trust-Building Activities, Team Spirit Exercises, and Other Fun Things To Do*. McGraw Hill, New York, 1998.

This book is recommended for building communication skills in the group. Each activity clearly states objectives that are in line with the objectives of this unit. Young people explore breaking the ice; developing inclusion, maintaining team spirit, asking good questions, and focusing energy.

Palmisano, Joseph, Ed. *Notable Hispanic American Women, Book II*, Gale Research, Detroit, 1998.

This is a two-volume book of biographical sketches of famous Hispanic women. Information on Ellen Ochoa is given that was not available in other sources.

Rampersad, Arnold, ed., *The Collected Poems of Langston Hughes*. Vintage Books: New York, 1994.

While most of the poems are a historical insight into the lives of African Americans some may be a bit too provocative for young adults. Yet, this is an excellent foray into the world of dialect and metaphor.

Rich, Doris L. *Queen Bess: Daredevil Aviator*. Smithsonian Institution Press, Washington, 1993.

This is a biography appropriate for young adults. It is comprehensive and raises some controversial issues. Extensive resources are documented in this scholarly presentation.

Ruiz de, Catherine Dana and Larlos, Richard. *The Migrant Farmworkers Story*. Raintree Steck-Vaughn, Austin, TX, 1993.

This story of Cesar Chavez and Dolores Huerta and their work to end the exploitation of migrant farmworkers would make excellent reading for a book report. The reader is actually introduced at a personal level.

Ruiz, Vicki. *Cannery Women: Cannery Lives*. University of New Mexico, Albuquerque, 1987.

Obviously, Ruiz is becoming an authority in the area of Latina history. The accounts of the lives she researched for this book are mature depictions of an at times brutal and unjust political history. While this is a mature book, young adults who have studied labor history of the 20th century should have the background to read this text.

Ruiz, Vicki. *From Out of the Shadows*. Oxford University Press, New York, 1998.

The involvement of Latinas in American history is clearly documented in this text. A comprehensive history documents the active involvement of these women. A clear link is given between their activities and the Chicano Movement of the 1960s to the opposition to Proposition 187.

St. John, Jetty. *Capstone Short Biographies: Hispanic Scientists*, Capstone Press, Mankoto, 1996.

Brief biographies are given for both men and women in many areas of Science. Ellen Ochoa is included in this book.

Travis, Dempsey. *An Autobiography of Black Chicago*. Urban Research Institute, Inc. Chicago, 1981.

This local real estate mogul has written both a personal and objective history of this city. The events of the civil rights movement are interesting integrated with events in the political and economic developments of this major city.

Walker, Niki. *Eye on the Universe: The Life of an Astronaut*. Crabtree Publishing Company, New York, 2001.

Students receive a close-up look at the preparation and expectations of astronauts in training. The terminology of the space industry is defined in words the reader can understand.

Youth Leaders. *Youth Leadership in Action: A Guide to Cooperative Games and Group Activities*. Kendall Hunt Publishing Company, Dubuque, IA, 1995.

This book introduces young people to the concepts of cooperation, leadership, and teamwork. All the activities and games are upbeat and some are just plain fun. This book offers the teacher excellent preactivities for the lessons in this unit.

Walker, Pamela. *Ellen Ochoa*. Children's Press, New York, 2001.

This is a primary level biography of the astronaut. The pictures are great. Yet, the book is best used as a read aloud for young children.

## About the Author

Barbara J. Williams was born in Chicago, Illinois. She lived in a segregated community and attended an all-black elementary school. During high school and college in the late 1950s and early 1960s, her education took place in schools that were being integrated for the first time. While at times there were ugly racial incidents, this introduction to cultures other than that of the black culture was an opportunity for growth. Her parents, along with several high school teachers, starting putting the idea of college on her mind. Her parents were very eager to send a son off to school to study engineering, but this enthusiasm waned when it came to career choices for their daughter. Ms. Williams remembers vividly the career choices her parents offered if she were to attend college. The three choices were nursing, social work, or teaching. To her, the latter held the most potential. And to this day, she feels this was the correct choice. She recalls that five of her very best friends were given similar choices. All became teachers.

Ms. Williams teaches first grade at Jessie Whaley Maxwell School in Montbello. This is an elementary school named after a pioneering African-American female educator. Jessie Whaley Maxwell was the first black female principal in Denver Public Schools. Ms. Williams' teaching career has given her an opportunity to teach not only first graders but every grade between first and community college. As her teaching career winds down, she reflects on the joy and satisfaction of a career well spent. But, there is a note of "what if." She would have loved to "explore" other career options. Especially appealing to her while in college was the study of political science and United States history. This became a minor area of study.

Interestingly, it seems the closer we are to some things we are at the same time far way. Though, majoring in United States history she recalls only occasional glimpses of the role women, in general, played in history. Minority women in history were relegated to a few who seemingly played supporting roles. Today, the role of women, especially minority women, comes as a revelation of enormous importance. African-American women were usually portrayed in stereotypic fashion. Leading one to believe if you've met one you've met them all. Even more blatant was the total absence of Latinas in American history. Today, history is not becoming politically correct, but accurate.

Ms. Williams wrote her first Alma unit, *Lessons in Courage: Martin Luther King, Rosa Parks and Ruby Bridges*. Now, she feels it is time to address that lingering "what If" in behalf of all the young women who have been given narrow career choices or no choices at all. While not a card-carrying feminist, she does believe minority females are still unable to dream big. Years of observation in classrooms have demonstrated to her that girls will not independently venture into nontraditional roles or play activities. When given a choice, girls usually will select housekeeping activities over building with Legos. The goal, according to Ms. Williams, is to give support and information so that young girls and young women feel free to make the unusual and unexpected career choices.