

TEACHER RESOURCE

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for the Indiana Historical Society Press publication:

Spinning Through Clouds

Tales from an Early Hoosier Aviator

by Max E. Knight



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Overview/Description

Famed World War I fighter pilot and race car driver Eddie Rickenbacker once said, “Aviation is proof that—given the will—we can do the impossible.” Hoosier Max E. Knight is living proof that given the will, we *can* do the seemingly impossible. By the age of ten, Knight had already begun flying through the skies of his Hoosier homeland. Flying was obviously in his genes. Knight’s father purchased a Standard J-1 airplane of World War I vintage in 1925, unfazed by the fact that he did not even know how to fly. When the elder Knight asked the deliverymen who dropped off the plane to him who was going to teach him how to fly, one of the men replied, “Don’t know, mister. We just deliver.”

In 1936 at his father’s airport in Lynn, Indiana, Knight discovered his life’s passion at a very young age as he learned how to fly from some of the state’s aviation pioneers. Despite the fact that this adventuresome ten-year-old needed two cushions—one for his back and one for a seat—nothing seemed impossible to Knight when he was spinning through the clouds in early planes such as the Piper Cub and the Tin Goose, the first transcontinental passenger plane. Like most boys his age, Knight enjoyed having fun, but for Knight fun was the dangerous flying known as “hedge hopping.” While “hedge hopping,” Knight would literally fly his airplane hopping over objects, almost at ground level, terrifying anyone who was caught unaware, including his friends’ fuming parents and frightened neighbors who did not find Knight’s source of adolescent amusement very amusing at all.

Knight tells about his early flying adventures in his book *Spinning Through Clouds: Tales from an Early Hoosier Aviator* (Indianapolis: Indiana Historical Society Press, 2007). Specifically, he discusses his aerial exploits from 1936 to 1941 when he spent most of his time in the air in eastern Indiana while other kids were playing on the ground below. Although Knight never became a commercial pilot, he enjoyed his hobby for forty-three years. The book also includes stories from

the early period of national aviation. Readers will be entertained by tales about air racing champions such as Roscoe Turner and Jacqueline Cochran as well as more famous pilots such as Amelia Earhart and Howard Hughes.

In this lesson students will read *Spinning Through Clouds* and complete multidisciplinary activities that provide cross-curricular connections in social studies and language arts.

Academic Standards for Social Studies

• **Indiana Standards:** USH.4.7, USH.9.2 and USH.9.5

• **National Standards (National Council for Social Studies):** I Culture; II Time, Continuity, and Change; III People, Places, and Environment; VIII Science, Technology, and Society

Social Studies/Historical Concepts

historical change and perspective, chronological thinking, technology, courage, heroism, and culture

Learning/Instructional Objectives

Students will:

- read and discuss the book *Spinning Through Clouds*
- discuss Knight’s boyhood as a young Hoosier aviator and compare/contrast their lives to Knight’s at a similar age
- review significant aviation historical events and create a chronological time line of famous events in modern aviation history (1900 to the present)
- write a bio-historical poem about Knight and present the poem to the class
- locate and utilize sources found in archival collections and on electronic sites
- write a biographical account about a famous aviator of their choice
- research aviation-related careers and identify the educational and skill requirements of an occupation and potential salary

- create a glossary of aviation terms using words from *Spinning Through Clouds* (pages 183–85)
- engage in a competition to increase vocabulary
- create an illustrated “Airplane ABC” book with information about planes from A through Z
- participate in a cooperative learning activity
- create a crossword puzzle consisting of vocabulary words from *Spinning Through Clouds*
- research famous women aviators

Time Required

Multiple class periods depending on the classroom needs and the activities selected. Teachers may select from one or more of the activities described on the following pages.

Materials Required

- Copies of *Spinning Through Clouds*
- Student handouts: instructions for writing a bio-historical poem (attached), teacher-selected example(s) of a chronological time line
- Whiteboard or projector
- Paper and pencils or pens
- 8.5 x 14 inch white paper for creating time lines; markers or colored pencils
- Poster boards
- 3 x 5 inch index cards for vocabulary bee words
- Internet access
- School library access

Background/Historical Context

In *Spinning through Clouds* Hoosier Max E. Knight recounts his lifelong love of flying, a passion that he discovered in 1936 at the age of ten when he flew his first plane. Clarence Knight, Max’s father, owned an airport near Lynn, Indiana, where Max was able to learn how to fly from several aviation pioneers. Two days before Max turned ten, his father asked him if he would like to take a ride in

an airplane. Soon thereafter, Max was *piloting* a plane. By the summer of 1937 Max had mastered the basics of flying.

“A good landing is one from which you can walk away. A great landing is one in which you can fly the plane again,” Knight said. Knight continued to have “great landings” for the next forty-three years. Besides his own flying tales, Knight explores stories of early aviation pioneers, both state and national.

Source: *Spinning Through Clouds: Tales from an Early Hoosier Aviator* (Indianapolis: Indiana Historical Society Press, 2007)

ACTIVITY 1:

“Important Events in Modern Aviation History” time line

The purpose of this activity is for students to learn how to sequence events and visually tie together events in aviation history. Discuss the meaning of the term *time line* and explain to students that a time line is a visual representation of events and dates shown in the order in which they occurred. Show students examples of chronological time lines from school textbooks or online sources in case students have not previously created a time line.

Next, give students a time frame from which to create their time line and then have them draw a horizontal line on 8.5 x 14 inch white paper. Then have students divide the line into equal parts, each representing a ten-year period in aviation history. Suggest students begin with the Wright Brothers’ December 7, 1903, flight, which was the first controlled and powered flight (page 19, *Spinning Through Clouds*), and conclude with recent aviation milestones such as the first flight of a hot-air balloon around the world in 1999.

Students may work on this activity individually or with a partner, then display their time lines around the room.

ACTIVITY 2:

“My Favorite Aviator” biography report

Students will write a biography about an aviation pioneer of their choice. They may select an aviator from *Spinning Through Clouds* or select one of their own through library or Internet research.

For an enrichment activity, students may present a five-minute speech about their aviator.

ACTIVITY 3:

“Flying High: Careers in Aviation” research

Using the Internet and school library, students will conduct aviation career research including education required and average salaries. Suggest students begin with the U.S. Department of Labor’s *Occupational Outlook Handbook* located at www.bls.gov. This site includes information about working conditions, education and training requirements, job outlook, earnings, and related occupations.

Another great Web site for student research about aviation careers is the Federal Aviation Administration (FAA) site located at <http://www.faa.gov/jobs/>.

ACTIVITY 4:

“A Plane Poster” art activity

Students will create a poster with pictures or drawings of some of the planes Knight piloted and discussed in *Spinning Through Clouds*. These planes included: Standard J-1, Twin Beech, J-2 Taylor Cub, Taylorcraft, and a Stearman Model 75 biplane.

Students can find pictures on the Internet or from the school library, or they may draw their own illustrations.

ACTIVITY 5:

“Words that Soar!” Aviation Glossary

Students will create a glossary of aviation terms using *Spinning Through Clouds* (see glossary on pages 183–85).

Students can utilize this glossary to prepare for activity six, the aviation vocabulary bee.

The book’s glossary contains thirty-six words. Teachers may want to select key terms and reduce the number of terms based on their students’ abilities.

ACTIVITY 6:

Aviation Vocabulary Bee

Model this activity after a spelling bee. Students learn and study definitions of common aviation terms that are found in the glossary students created in activity five.

Give each student enough index cards for all the words. Next, have students write the terms on one side of the card and the definitions on the back.

Teacher should divide class in half for the vocabulary bee.

ACTIVITY 7:

“The History of the Indianapolis Metropolitan Airport” Internet research

(formerly Weir Cook Airport)

Students will utilize the Internet to learn about the airport’s history as well as print images from the IHS digital images collection at <http://www.indianahistory.org>. For more information about the first major airfield in Indiana, students should refer to pages 116–17 in *Spinning Through Clouds*.

This activity can be adapted for students in other cities who will research their own airport’s history.

Next, for an informal assessment, ask students discussion questions about the airport's history, changes through the years, etc. As an enrichment activity, teachers can have the class complete a KWL chart. (See handout on page 7.)

ACTIVITY 8:

“Bio-historical Poem” writing activity

Students will create a bio-historical poem about Max Knight. (See handout on page 8 for instructions and an example). If time permits, have students present their poems to the class.

ACTIVITY 9:

“Airplane ABC Book” class project

Give each student a letter of the alphabet that he/she will be responsible for finding information and locating or drawing a picture about an airplane whose name begins with that particular letter (e.g., “B” for Boeing, “C” for Curtiss-Wright Pusher, etc.)

Students will create one “Airplane ABC” picture book containing basic facts and pictures or illustrations about various airplanes from A through Z.

ACTIVITY 10:

“Jigsaw” cooperative learning activity

Divide students into groups of five or six. Give each member in the group a different chapter in *Spinning Through Clouds* to become the “experts” about and teach their peers.

Next, students will meet with those students who have the identical chapter from the other groups (one from each jigsaw group). This is the “expert” group. Once each presenter is ready, the jigsaw groups reconvene in their original groups. The expert in each group teaches the other group members about his/her chapter.

Later, students are tested on what they have learned from their fellow group member.

ENRICHMENT ACTIVITIES

(completed after reading the book)

“Female Flyers” essay

(homework assignment)

Have students choose one of the women aviators from *Spinning Through Clouds* (see “Women Aviation Firsts” pages 86–87) or another female pilot mentioned in the book. Students will write a one-page report about their pilot.

“Make Your Own Crossword Puzzle” activity

Using the Internet, students will create their own puzzle utilizing words from their *Spinning Through Clouds* glossary. Have students proceed to <http://www.variety-games.com/CW> and select “free crossword puzzle maker.”

“If Only I Could Make the Rules” group activity

On page 155 of *Spinning Through Clouds* is a list titled “Regulations for the Operation of Aircraft, January 1920” that hung on the wall of the Lynn, Indiana, airport. Knight especially liked rule twenty-one: “Pilots will not wear spurs while flying.”

Read aloud to class the list of rules and discuss what students think. Next, divide class into groups. Groups will create their own rules for an airport today. Are there any of the Lynn airport rules that they would want to preserve? Groups will then present their rules to the class and explain the reason(s) they selected these rules.

ACTIVITY 7:

Student Handout - KWL Chart

The “K” column is used to describe what you already know about a topic, the “W” column is used to list what you want to know about the topic, and the “L” column will be used to describe what you learned from an investigation of the topic.

K-What I Know	W-What I Want to Know	L-What I Learned

ACTIVITY 8:

Student Handout

Bio-Historical Poem Instructions

- Title:** First and last name of historical figure
- Line 1:** First name
- Line 2:** Four traits that describe this person (e.g., occupation)
- Line 3:** Brother/sister of . . . or son/daughter of . . .
- Line 4:** Lover of . . . (names of three ideas or people)
- Line 5:** Who feels . . . (three feelings)
- Line 6:** Who fears . . . (three items)
- Line 7:** Who would like to see . . . (three items)
- Line 8:** Resident of . . . (city and state)
- Line 9:** Last name

Example:

Ben Franklin

Ben

Inventor, politician, ambassador, founding father

Son of Josiah and Abiah Franklin

Lover of liberty, education, and his country

Who feels curious, inventive, and determined

Who fears failure, boredom, and British tyranny

Who would like to see freedom, justice, and America succeed

Resident of Philadelphia, Pennsylvania

Franklin