Welcome to Show Time,
a performing arts resource guide
published for the CSB/SJU Fine Arts
Education series. This edition of Show
Time is designed to be used before or after
a performance of First in Flight: The Wright
Brothers.

Suggested activities in this issue in-
clude background information and ideas for
integrating the performance with several
subject areas. The activities are designed
to be adapted to meet your classroom time
and needs.

Watch for Show Time for Kids, a one-
page student-ready activity that is designed
for independent or small group work.

Please feel free to copy pages in this
guide as needed for student use.

How May We Help You?

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“There is destiny which makes us brother. None goes his way alone.”
~Edwin Markham

Presented by
TheatreWorksUSA
The musical opens in December 1903 on a windy beach in Kitty Hawk, North Carolina. Wilbur and Orville Wright, self-made inventors in their 30s, are trying to get their new flying machine off the ground. They had chosen this location after careful research with the U.S. Weather Bureau. Kitty Hawk offered high winds and soft, low impact sands; the perfect place to launch their motorized kite-glider named the "Wright Flyer." But this first-ever-flight test ends with the fragile glider and the brothers' hopes dashed into the sand.

As the brothers bicker about the failed flight, the audience is transported back in time to the Wright's childhood home in Dayton, Ohio. Here the brothers are bickering over a new toy - similar to a modern day helicopter - that their father brought home from his traveling job as a minister. Wilbur's active imagination reasons that if a toy powered by an elastic band can fly, then surely humans can fly someday too! Wilbur dreams of creating a flying machine and is influenced by the work of the great German glider inventor, Otto Lilienthal.

The mechanically gifted Orville opens a shop where he repairs, sells, and designs bicycles, the newest rage in America. Meanwhile, Wilbur dutifully focuses on following his father into the ministry.

When their father suggests that Orville finance Wilbur's college education with his profits from a bicycle race, Orville draws the line. Instead, the brothers combine their knowledge and their competitive natures into a strong partnership. Their goal is to work as a team to be the first to solve the thousand-year-old riddle of human flight.

Wilbur and Orville learn to mend their differences and the audience rejoins them on the beach on December 17, 1903. Their flying machine has also been mended and Orville takes the pilot's seat (lying like an eagle on top of the cloth wings of the flyer) for a 12 second, 120 foot joyride through the air. A ride that leads the world into flight!

NOTE: Please remind your students that the playwrights, director, and actors will be using "artistic freedom" to interpret history in this musical.

The creators of this performance use their "poetic license" to transport the Wright brothers back and forth in time. This allows the brothers to interact with other characters - real or imagined - who inspired the superhuman accomplishment of human flight.

This musical is not a documentary, but an exploration of the Wright family in theatrical terms. The Wright brothers did in fact communicate with many of the leading aerial experimenters of their day. Their discoveries were the result of careful scientific research and technical expertise.
The Wright brothers created the single greatest cultural achievement since the invention of writing. The airplane became the first World Wide Web, bringing people, languages, ideas, and values together.”

~Bill Gates, Microsoft Corporation

Journal It!

Invite students to respond to the Bill Gates’ quote. Do they agree with his statement? Why or why not? Ask students to compare and contrast the World Wide Web with the airplane.
FIRST IN FLIGHT:  
THE WRIGHT BROTHERS

IT’S IN THE MAIL: HONORING HISTORY

It was an air mail postage stamp that got the business of commercial aviation off the ground. The United States Postal Service began flying the mail between New York in 1919. Both Charles Lindbergh and Amelia Earhart, who made history with their solo flights over the Atlantic, were air mail carriers early in their aviation careers.

Three different postage stamps honoring the Wright's first flight have been issued by the United States Postal Service.

Questions To Ask

What year anniversary was being celebrated by each stamp?

Do you think the Wrights deserved to have a stamp honoring their accomplishments, why or why not?

What other famous Americans or accomplishments have been honored on postage stamps?

In what other public ways is history remembered?

CREATING HISTORY

The Wrights weren't the only ones to make history in 1903! Read on for a few other “firsts” from the same year.

The teddy bear was introduced in America.

The first World Series was held with the Boston Pilgrims defeating the Pittsburgh Pirates in eight games.

The United States began construction on the Panama Canal.

Binney and Smith invented the first crayons and sold them in boxes of eight colors.

Henry Ford began manufacturing and selling the Ford “Model A” for $850.

The wire coat hanger was invented.

President Theodore Roosevelt sent the first message across the Pacific Cable from San Francisco to Manila.

A Stamp of Approval

Option 1: Design a stamp to celebrate the Wright's first flight.

Option 2: Design a stamp that honors another invention or inventor from 1903.

Questions To Ask

What will you emphasize in your design?

Will your design be realistic or abstract?

What symbols will best fit your ideas?

What colors will best fit your ideas?

The North Carolina quarter features the Wright’s historic flight in 1903.
SHOWTIME FOR KIDS: OH, BROTHER!

Name__________________________________________

inventor~ one who designs or builds new devices
mechanically gifted~ one who is good at repairing or making machines
mischievous~ behaving in a playful way that annoys or harms others

When most people think of inventors, like the Wright brothers, two words come to mind: smart and mechanically gifted. In reality, the brothers were mischievous students who never graduated from high school! Instead, Wilbur and Orville used their imaginations and problem solving skills to succeed in life. The two boys were lifelong friends. Wilbur, the oldest brother was thoughtful, quiet, and book smart. His own health and his mother’s illness prevented Wilbur from graduating from high school.

Orville was the more adventurous of the Wright brothers. He was a champion cyclist and always on the lookout for new ideas. When he was eighteen, Orville left school to open a printing business and Wilbur became his partner.

The two brothers eventually opened the famous Wright Cycle Company repair shop and produced their own bicycles. Later, they used the shop as a work place for building airplane parts.

Once, when he was caught by his teacher working on a toy helicopter in class, Orville explained that one day he was going to build a flying machine big enough to carry them both!

Journal It!
Imagine that it is sometime in the 1880s and you are Orville’s teacher. How would you respond to his statement about building a flying machine? Write your response below using your best teacher "voice."

__________________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________________

Act On It!
Work together with your friends to create a skit illustrating the exchange between Orville and his teacher. How might the teacher respond? What might Orville say next? How might Orville’s classmates respond? Present your skit to your class members.

Orville or Wilbur?
Do you think it is more important to be "book smart" or "mechanically smart?" Why?__________________________________________________________

__________________________________________________________________________________________________________________________________________

In what other areas are people smart? ____________________________________________________________________________

Complete this sentence: I am _______________ smart. I am good at________________________________________________________

A Good Match!
Wilbur and Orville Wright were not only brothers, but they were a good match because of their "smarts." Who would you like to team up with (brother, sister, or friend) to start a successful business or invent a new device? Why did you choose this person? What kind of business or invention might you work together at?

__________________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________________
__________________________________________________________________________________________________________________________________________
The world’s first motor propelled, pilot controlled flight...

...lasted only 12 seconds and traveled a distance of 120 feet.

...was watched by 5 people and reported in 2 newspapers.

The Wright Flyer
Cost less than $1,000 to build.
Was made of cloth, wood, and bicycle parts.
Measured 40 feet from wing tip to wing tip.

Orville Wright piloted the airplane on this historic flight while Wilbur Wright ran alongside to steady the wing at takeoff. Three more flights were made that day, the longest being Wilbur’s, which lasted 59 seconds and went 852 feet.
FIRST IN FLIGHT:  
THE WRIGHT BROTHERS

DO THE MATH!

Fly In My Footsteps

Post the information on page 5 in the classroom (or make a transparency of the page) to introduce students to the facts about the first successful flight of the Wright Flyer.

Figure It Out # 1

Divide students into pairs or small groups. Working in a large open area, ask the students to walk off what they estimate to be a distance of 120 feet. Use a stationary point (like the side of a building or a sidewalk) as a starting place. Direct the students to place a marker (a popsicle stick with their names on works well) at their estimated 120 foot mark.

Hand out tape measures to each group and instruct them to measure the actual distance.

How far under the actual distance was their estimate?

How far over the actual distance was their estimate?

Which group came closest to the actual distance?

Figure It Out # 2

Ask students to measure the length of their own stockinged foot in inches.

How many inches are there in 120 feet?

How many of their own feet would it take to measure a distance of 120 feet?

Figure It Out # 3

Ask each group to select a random object in the classroom. Invite them to predict how many of that object laid end-to-end it would take to equal the distance of the flight (120 feet).

Hand out rulers and instruct the students to measure the object and determine how many objects they would need to cover 120 feet.

Figure It Out # 4

How many feet per second did Orville fly on his 12 second flight?

There are 5,280 feet in one mile. What would Orville’s mile-per-hour speed have been if he had continued at the same speed for one mile?

Figure It Out # 5

Measure off 120 feet from a stationary point in a large open area (use your school’s track if possible). Divide the class into small groups or pairs of students. Instruct them to use a stopwatch to time one another in either walking or running 120 feet.

How many seconds does it take each person to cover 120 feet?

Ask students to determine what their mile per hour speed would be at that rate.

Figure It Out # 6

The longest flight on December 17, 1903 was made by Wilbur Wright. He flew 852 feet in 59 seconds.

What was Wilbur’s mile-per-hour speed?

A regulation football field is 360 feet long from goal post to goal post. Approximately how many football fields would Wilbur have covered in his longest flight?

Did You Know?

The Boeing 747-400 has a typical cruise speed of 567 miles-per-hour (at 35,000 feet). Its wing span is 211 feet long and the overall length of the plane is 232 feet. The 747-400 has a maximum distance range of 7,260 nautical miles and it holds up to 57,285 gallons of gas!

Ready, Set, Go!

Canadian geese can fly at an average speed of 30 miles-per-hour. Ducks can reach up to 60 miles-per-hour. A peregrine falcon was once recorded flying at 145 miles-per-hour!

Like airplane flight, weather conditions and wind speed affect the speed of birds as well.

"Aviation" is a French word that means “to operate aircraft.” It comes from the Latin avis, which means bird.
ICARUS: Too Hot To Fly!

Icarus was imprisoned with his father Daedalus in a labyrinth. Daedalus had designed the labyrinth and he knew that there was no way out but to fly. Daedalus made two pairs of wings by attaching feathers to a wooden frame with wax. Father and son strapped on their wings to make their escape. Daedalus warned Icarus not to fly too low over the ocean lest his wings become wet and useless. He also warned Icarus about flying too close to the sun lest the heat melt the wax that held his wings together. In the excitement of flying, Icarus forgot his father’s warning and flew toward the sun. As Daedalus had predicted, the wax melted and Icarus lost his wings. He plunged into the ocean and drowned while his father watched in grief.

Landscape With Fall of Icarus by Pieter Bruegel, was painted in 1558. The painting is an allusion to the legend of Icarus.

Questions to Ask

Ask students to locate Icarus in the painting (his legs are visible in the lower right corner).

What part of the legend does the painting allude to?

How are the people in the painting reacting to this event?

Why might Icarus be such a small visual part in the painting?

For a larger view of this painting, students may wish to visit:

http://www.haderslev-katedralskole.dk/kf/breughel.jpg

W.H. Auden wrote Musee des Beaux Arts in 1938. The poem is an allusion to Bruegel’s painting and to the museum in Brussels where the painting hangs.

Ask students to read or listen to the last part of the poem:

In Bruegel’s Icarus, for instance: how everything turns away
Quite leisurely from the disaster; the ploughman may
Have heard the splash, the forsaken cry,
But for him it was not an important failure; the sun shone
As it had to on the white legs disappearing into the green
Water, and the expensive delicate ship that must have seen
Something amazing, a boy falling out of the sky,
Had somewhere to get to and sailed calmly on.

Journal It!

Invite students to paraphrase this part of W.H. Auden’s poem.
FIRST IN FLIGHT:  THE WRIGHT BROTHERS

CUT IT OUT, MATISSE!

Icarus Jazz was painted by Henri Matisse in 1943. It was part of a book that was published in 1947, a few years before Matisse died.

The artwork was made by cutting large shapes of brightly painted paper and pasting them down.

Questions to Ask:

How does the Matisse painting differ from the painting by Pieter Bruegel?

What part of the legend of Icarus do you think the Matisse painting alludes to and why?

Why might the arms of Icarus be spread out from his sides?

Why do you think Matisse put a red dot on the body of Icarus?

Journal It!

Do you think Icarus is falling or climbing higher in this painting? Why?

Which of the two paintings speaks more loudly to you? Why?

The Wright Allusion

Invite your students to create a cut paper work of art that alludes to the story of Orville and Wilbur Wright. The art work may relate to any part of the Wright’s lives including their childhood. It could also allude to historic events the Wrights were involved in.

Directions:

* Give students some time to brainstorm ideas that are based on the events of the Wright brother’s lives.

* Students will choose one idea and sketch a plan for their artwork on extra paper. Instruct them to use large simple shapes with few details.

* Ask students to label the colors they will use for their shapes.

* Students may choose to use colored paper or create their own colors by painting on white paper.

* Let the painted paper dry thoroughly, if using. Invite students to cut shapes from the colored paper based on the plan they sketched earlier.

* Instruct students to choose paper of a contrasting color for the background of their composition.

* Students will arrange their paper shapes before gluing the shapes to the background paper.

* Post the paintings in the classroom and invite the students to guess what the “Wright allusions” are.
“Landscape With the Fall of Icarus.”

“Allusion, Artistry, and the Fall of Icarus.” Legend of Icarus and Daedalus.


“About Wilbur and Orville.” Learning to Fly: The Wright Brothers’ Adventure.


“The Wright Brothers.”


Bellis, Mary. “Crayola Crayon History.” Inventors.

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Reuther, Kate. “Meet the Wright Brothers.” Celebrating 100 Years of Flight.


“Wright Brothers’ First Flight Honored on New U.S. Postage Stamp.” United States Postal Service.

“1902-1903.” History’s Home on the Internet.
“North Carolina.” *United States Mint.*

“Technical Characteristics - Boeing 747-400.”


Laughlin, Nicholas. “Jazz by Henri Matisse.” *Book Reviews and Online Bookstore.*
http://community.wow.net/folio/Matisse.html  October 1, 2004.
Each year, thousands of teachers, students, bus drivers, and parents take part in CSB/SJU’s Fine Arts Education Series. Please review the LOOKING AND LISTENING information with your students to help make your theater experience the best it can be.

LOOKING AND LISTENING

Attending Theatreworks/USA live musical performance of First in Flight will be interesting and enjoyable for everyone if you remember to...
~listen in order to understand the dialogue between the actors
~listen in order to understand the lyrics of the songs
~watch for facial expressions to help you understand what the actors are feeling

The performers in First in Flight need help from you, the audience. You are an important part of the play. Being an audience member in a theater is different from watching a movie or television show. The performers are in the same room with you and are affected by what you do. To do their best, the performers need you to watch and listen closely. Other audience members also depend on your quiet attention during the performance so they can watch and listen, too. Please applaud when it is appropriate.

Please review the PROCEDURES information below to help your theater visit go smoothly.

PROCEDURES
~Please bring a minimum of one adult chaperone for every fifteen students.
~Prepare your students to enter the theater in single file in order of seating.
~Position your chaperones to maximize adult supervision of your group.
~Trips to the restroom must wait until your group has been seated in the theater, then students may go in small groups with the teacher’s permission. Younger students will need to be chaperoned.
~The theater is a food, gum, drink, radio, camera, tape, and video recorder free zone!
~Please leave inappropriate behaviors behind when visiting the theater.
~Please remain seated following the performance. Your group will be dismissed from the theater by a Fine Arts Programming staff member.