

2018-2019

DISCOVERY

Resource Guide

AMELIA & EARHART

A vintage biplane is shown from a low angle, resting on a runway. The plane is dark with a lighter fuselage and a prominent propeller. The background is a blurred runway with yellow lights.

Presented by Lexington Children's Theatre

Written by Kathryn Schultz Miller
Produced by Lexington Children's Theatre



VICTORIA THEATRE ASSOCIATION

Tuesday, November 6, 2018
9:30 am & 11:30 am



Welcome to the 2018-Discovery Series at Victoria Theatre Association. We are very excited to be your education partner in providing professional arts experiences to you and your students!

Amelia Earhart's story is one of the most intriguing mysteries of modern times. In 1928, she solidified herself in the history of aviation by becoming the first woman to fly across the Atlantic Ocean as a crew member in a plane. Then, in 1932, Earhart became the first woman to fly solo across the Atlantic. Only five years later, Earhart, along with her navigator Fred Noonan, began their attempt to circumnavigate the globe. There have been many theories about her fateful flight's disappearance, but none that have definitively answered the haunting question: What happened to Amelia Earhart?

The information and activities in this resource guide have been carefully crafted to help you and your students explore the many ways a live theatre experience can open up learning opportunities. Grade level icons will help you determine which activities are good for students, too. And don't forget to take advantage of the local resources listed inside to extend the play-going experience and make even more curricular connections for you and your students. Thank you again and welcome!

Gary Minyard
Vice President of
Education & Engagement



Curriculum Connection



You will find these icons listed in the resource guide next to the activities that indicate curricular connections. Teachers and parents are encouraged to adapt all of the activities included in an appropriate way for your students' age and abilities. *Amelia Earhart* fulfills the following National and Ohio State Standards and Benchmarks for grades 3-8:

Ohio's Learning Standards for English/ Language Arts:

Grade 3- RL.3.1, RL.3.2, RL.3.3, W.3.4, SL.3.1, SL.3.3, L.3.1, L.3.2

Grade 4- RL.4.1, RL.4.2, RL.4.3, W.4.4, SL.4.1, SL.4.3, L.4.1, L.4.2

Grade 5- RL.5.1, RL.5.2, RL.5.3, RL.5.4, SL.5.1, SL.5.3, L.5.1, L.5.2

Ohio's New Learning Standards for Math

Grade 3-5- Operations & Algebraic Thinking, Measurement, & Data

Ohio's Social Studies Benchmarks:

Historical Thinking and Skills (Grades 2-8),
Heritage (Grades 2-8)

People Working Together (Grade 2)

Communities: Past and Present, Near, and Far (Grade 3)

Ohio's Learning Standards for Science

Grade 3- Matter and Forms of Energy

Grade 5- Light, Sound and Motion

Grade 6- Matter and Motion

Grade 8- Forces and Motion

National Core Arts Theatre Standards:

Grade 3- TH:Cr1.1.3, TH:Pr4.1.3, TH:Pr5.1.3, TH:Re7.1.3, TH:Re8.1.3, TH:Cn10.1.3

Grade 4- TH:Re7.1.4, TH:Cn10.1.4, TH:Cn11.1.4, TH:Cn11.2.4

Grade 5- TH:Re7.1.5, TH:Cn10.1.5, TH:Cn11.1.5, TH:Cn11.2.5

Grade 6- TH:Pr5.1.6, TH:Re7.1.6, TH:Re8.1.6, TH:Cn10.1.6, TH:Cn11.1.6, TH:Cn11.2.6

Grade 7- TH:Pr5.1.7, TH:Re7.1.7, TH:Re8.1.7, TH:Cn10.1.7, TH:Cn11.1.7, TH:Cn11.2.7

Grade 8- TH:Pr.5.1.8, TH:Re7.1.8, TH:Re8.1.8, TH:Cn10.1.8, TH:Cn11.1.8, TH:Cn11.2.8

This resource guide was created by Elaine Stoughton and Natalie Katona. All activities are available for distribution and use in the classroom or at home.

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About the Play

ENGLISH/
LANGUAGE
ARTS



Amelia Earhart

What happened to Amelia? The questions surrounding her disappearance, the theories of conspiracy and romance, the latest discoveries that may or may not confirm her fate—Amelia Earhart’s story has captured imaginations for generations. Step back in time with the First Lady of Flight to unravel the mysteries and fly along on her daring adventures across the world.



Spotlight on Amelia Earhart



Amelia Mary Earhart was born July 24, 1897. She grew up in Kansas with her sister, Grace. Amelia and Grace spent a majority of their childhood outdoors climbing trees, sledding downhill, and collecting small creatures like bugs and toads. They were homeschooled in their grandmother’s home by their mother and governess. Amelia had a great love for reading and used her family’s gigantic library to her advantage. She did not enter public school until she was twelve years old and beginning the seventh grade. Her adventurous spirit and critical thinking mind would serve her well in her future career.

During her life, she became a pioneer in American aviation and even wrote books about her flight adventures. Earhart was the first woman to fly alone across the Atlantic Ocean. She used her experiences and her reputation as a pilot to form an organization for other women pilots called The Ninety Nines and worked at Purdue University as an aeronautical engineer and career counselor to female students. She was also a fighter for equality and was an active member of the National Woman’s Party. Unfortunately, Amelia’s success and work had to come to an end when during an attempt to fly around the globe she disappeared along with her navigator, Fred Noonan, and plane. No trace of Amelia has since been found and there is still a lot of mystery surrounding her last flight.

Ohio Spotlight

SOCIAL
STUDIES

ENGLISH/
LANGUAGE
ARTS

Amelia Earhart is one of the most popular female pilots to study in history, but Ohio can also lay claim to another famous female pilot. Geraldine “Jerrie” Mock was the first woman to fly around the world on her own, completing Amelia’s attempted journey. In the year 1964—27 years after Amelia’s failed attempt — Jerrie began her trip in Columbus, Ohio. She flew in a plane with one engine that was named “The Spirit of Columbus,” but Jerrie called her plane “Charlie”. Her trip around the world took 29 days. What people forget is that Jerrie was in a race to be the first woman to travel around the world successfully. Joan Merriam Smith was also trying to fly around the world using Amelia Earhart’s same flight path. The news pinned both women against one another and tracked each pilot’s flight to see who would take the lead in becoming the first woman to fly around the world. You can celebrate Jerrie’s accomplishments by visiting her bronze statue in the courtyard of The Works Museum in Newark, Ohio.



Pre-Show Conversation Starters



Amelia Earhart is one of America's most well-known historical figures. Please familiarize your students with her story before coming to see AMELIA EARHART. Use these questions to help foster students' interests with Amelia and her mysterious story.

1. Amelia planned a trip where she would travel the circumference of the globe all on her own. Think about the longest trip you've taken, but imagine you were all alone. Infer:



-How do you feel about your trip?

-What are some things you need to bring with you?



-What will you do if you find yourself in a dangerous situation (i.e. car trouble, lost, etc..) on your trip?

-How will you prepare yourself for your long journey?

2. Read the following quotes from Amelia Earhart and then discuss:

"There's more to life than being a passenger."

"Courage is the price that life exacts for granting peace."

"Everyone has oceans to fly, if they have the heart to do it. Is it reckless? Maybe. But what do dreams know of boundaries?"

"Women, like men, should try to do the impossible. And when they fail, their failure should be a challenge to others."

- What personality traits can you infer Amelia Earhart has by reading her quotes? What was important to her? What did she believe in?
- Is Amelia Earhart someone who should be admired? Why or why not?
- Why would courage and bravery be so important to Amelia Earhart?

3. Amelia Earhart did not complete her trip around the world, and was never heard from again. What do you believe happened to her? What caused her to not make it safely back home?



Amelia Earhart: What Could Have Happened?



An Early Love for Flight: There are many theories on what could have happened to Amelia Earhart and Fred Noonan. Read through these theories and think about which one you think is the real cause of Amelia's disappearance:

Crash and Sink Theory: This theory states that Amelia's plane lost fuel as she tried to find her way to Howland Island, an island in the Pacific Ocean almost 2,000 miles away from Hawaii. The plane then crashed into the sea and sunk.

Gardner Island Thesis: This theory states that instead of wasting time and fuel trying to find Howland Island, Amelia gave up and landed on the next land she saw. The last radio transmission put the plane near Baker Island, an island in the Pacific Ocean that is almost halfway between Australia and Hawaii. Search teams combed through several locations on Amelia's path to Howland to try and find signs that she landed elsewhere. Those searches were unsuccessful.

Japanese Capture Theory: Another theory states that Amelia and Noonan were taken by the Japanese military during their journey. The theory presents that they would have crashed on the island Saipan, and then captured by Japanese forces upon impact. A tv show, *Unsolved Mysteries*, interviewed a woman from Saipan who claimed to have seen Amelia and Noonan on the island as prisoners. Some people also believe that Amelia could have been spying on the Japanese for Franklin D. Roosevelt, and that is why she would have been flying towards Saipan.



Questions to Consider:



What could have happened to Amelia Earhart? Do these theories make sense? What do they all have in common?

Encourage your students to have discussions on which theories seem possible. What makes each theory impossible to have been what happened to Amelia? You should take some time discussing your students' ideas on what they think happened to Amelia right before she disappeared.

Give students a copy of the worksheet on the next page where they will create their own theory on what happened to Amelia Earhart. Encourage them to be as creative as possible as they describe the last moments Amelia was heard from, and what lead up to her disappearance. Students may refer to the theories on this page as a guide but allow to expand on the theories and give new details.



Amelia Earhart Theory Worksheet



NAME: _____ **Date:** _____

Now it is your turn to decide Amelia Earhart’s fate! What do you believe happened right before Amelia disappeared? Write a description of the last moments anyone heard from Amelia Earhart. Some guiding questions to consider answering in your story:

- What was going on in Amelia’s plane? Was something wrong or not working?
- Where did Amelia Earhart end up?
- Why hasn’t anyone been able to find Amelia?
- If Amelia survived what happened to her, what did she do next?

Amelia's Final Flight

MATH

SOCIAL STUDIES

GRADES
K-2

NAME: _____

Date: _____



FLIGHT LOG

Date	Arrival	Departure	Miles
May 21	Oakland, California	Burbank, California	283
	Burbank, California	Tucson, Arizona	393
	Tucson, Arizona	New Orleans, Louisiana	1,070
June 1	New Orleans, Louisiana	Miami, Florida	582
	Miami, Florida	San Juan, Puerto Rico	908
	San Juan, Puerto Rico	Cumana, Venezuela	492
	Cumana, Venezuela	Paramaribo, Suriname	610
	Paramaribo, Suriname	Fortaleza, Brazil	1,142
	Fortaleza, Brazil	Natal, Brazil	235
	Natal, Brazil	St. Louis, Senegal	1,727
	St. Louis, Senegal	Dakar, Senegal	100
	Dakar, Senegal	Geo, Mali	1,016
	Geo, Mali	N'Djamena, Chad	910
	N'Djamena, Chad	El Fasher, Sudan	610
	El Fasher, Sudan	Khartoum, Sudan	437
	Massawa	Assab, Ethiopia	241
	Assab, Ethiopia	Karachi, Pakistan	1,627
June 16-17	Karachi, Pakistan	Calcutta, India	1,178
	Calcutta, India	Sittwe, Burma	291
	Sittwe, Burma	Rangoon, Burma	268
	Rangoon, Burma	Bangkok, Thailand	780
	Bangkok, Thailand	Singapore	315
	Singapore	Bandung, Indonesia	541
June 27	Bandung, Indonesia	Surabaya, Indonesia	310
	Surabaya, Indonesia	Kupang, Indonesia	668
	Kupang, Indonesia	Darwin, Australia	445
June 28-29	Darwin, Australia	Lae, New Guinea	1,012
	Lae, New Guinea	Howland Island	2,224
	Howland Island	Honolulu, Hawaii	1,648
	Honolulu, Hawaii	Oakland, California	2,090
			Total Miles: 24,557

NAME: _____ **Date:** _____

Answer the word problems based on Amelia Earhart's flight log on page 6:

1) How many miles did Amelia travel from Miami, Florida to Cumana, Venezuela?

2) Between what two cities did Amelia travel the longest on her final journey?

3) What two cities had the shortest distance for Amelia to travel?

4) How much farther is it from Dakar, Senegal to Gao, Mali than it is from Burbank to Tucson, Arizona?

5) If Amelia knew she could fly non-stop for 4,000 miles, could she make it from Howland Island to Oakland, California? Show your work.

NAME: _____ **Date:** _____

Answer the word problems based on Amelia Earhart's final flight using the distances traveled provided by her flight log on page 6:

1) Amelia starts her journey with up to 5,000 miles worth of fuel. If she starts in Oakland, California, what has to be her next stop according to the miles given in the flight log before she runs out of gas?

2) How many miles did Amelia travel between Calcutta, India and Bandung, Indonesia?

3) How much larger is the trip from Bangkok, Thailand to Bandung, Indonesia than the trip from Surabaya, Indonesia to Darwin, Australia?

4) Which trip is larger, the trip from El Fasher, Sudan to Assab, Ethiopia or the trip from Sitte, Burma to Bangkok, Thailand?

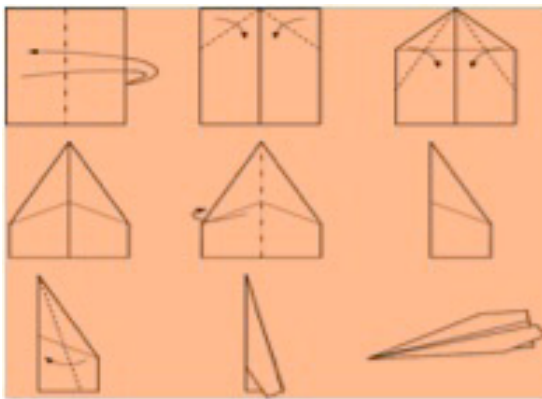
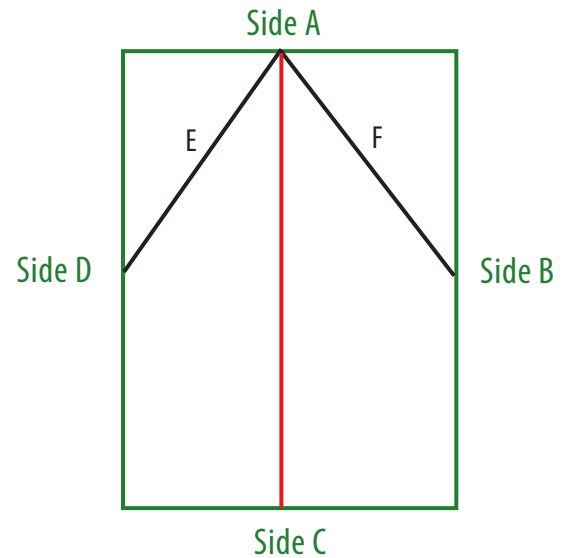
5) Amelia has enough fuel to go 3,000 more miles. How much fuel will she be left with after her trip from Assab, Ethiopia to Karachi, Pakistan? Does she have enough fuel to get to Sittwe, Burma?

A Paper Airplane Expedition



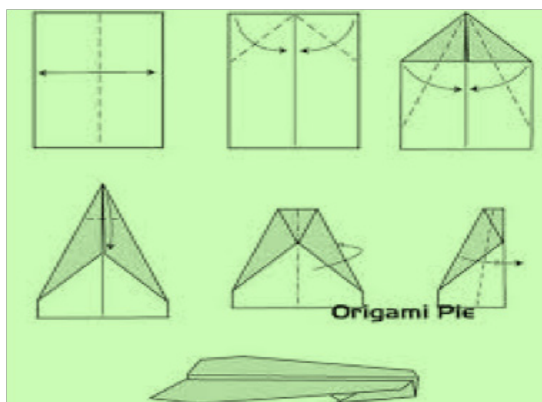
Amelia Earheart flew at rapid speeds and long distances that seemed almost impossible in the 1930s! In order to do this, she had to constantly fix and improve the designs of her airplane. She utilized the scientific method by forming a hypothesis – your best guess of the outcome of an experiment – and testing that hypothesis through observation and experimentation.

- Which one of these airplane designs would Amelia have chosen to fly across the world?
- Test the different paper airplane designs to ensure the most durable and long-lasting flight.



THE FLYER

1. Use a scrap piece of paper
2. Crease paper along the center line
3. Fold Side A's corners along lines E and F
4. Fold lines E and F again so they meet in the center
5. Turn over the airplane
6. Fold along the center line so that one long triangle is made
7. Take Side B and fold to meet the center line
8. Take Side D and fold to meet the center line
9. Pull up flaps and align
10. Smooth creases



THE DART

1. Use a Scrap piece of paper
2. Crease along the center Line
3. Fold Side A's corners along lines E and F
4. Fold lines E and F again so they meet in the center
5. Fold the point on Side A down to meet the *edges of line E and F* (the point of the upside-down V)
6. Fold along the center line
7. Take Side B and fold down
8. Take Side D and fold down
9. Pull up flaps and align
10. Smooth creases

Which plane will fly farther? Write Your Hypothesis Here: _____

Test Your Hypothesis



Put your hypothesis to the test! Record the condition of the two airplanes before you fly them. Remember to have these items before you start flying:

- A pencil
- A tape measure
- A timer

And now... it's time to fly!

	PRE FLIGHT CONDITION	TIME IN THE AIR	POST FLIGHT CONDITION	DISTANCE TRAVELED
The FLYER				
THE DART				

OTHER OBSERVATIONS?

Conclusions

1. Which plane flew the furthest? Why?

2. Which plane was stronger? How do you know?

3. Which plane would you use to fly around the world?

Make Your Own Plane!

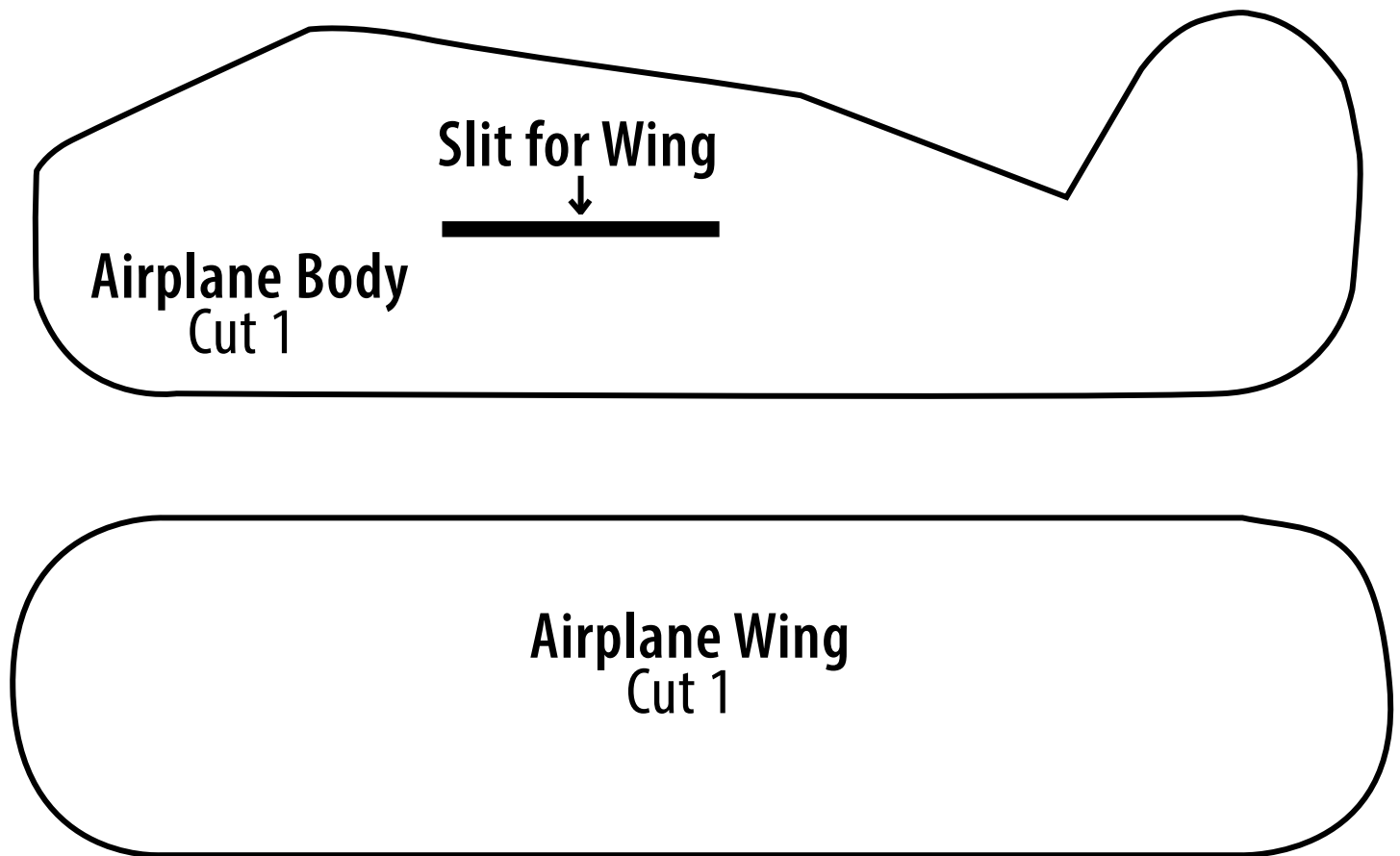


Are you inspired to take flight? Students can make their own plane with these few supplies:

1. One Styrofoam plane template
2. A Styrofoam plate, sheet, or the top of an egg carton
3. Scissors
4. Markers

Directions:

1. Copy and distribute one airplane template for each student.
2. Have students cut out their templates
3. Distribute one Styrofoam material to each student. Students will trace their two airplane templates onto the Styrofoam.
4. Carefully cut a slit into the cardboard on the dark line labeled "slit for wing."
5. Slide your wing carefully into the slit.

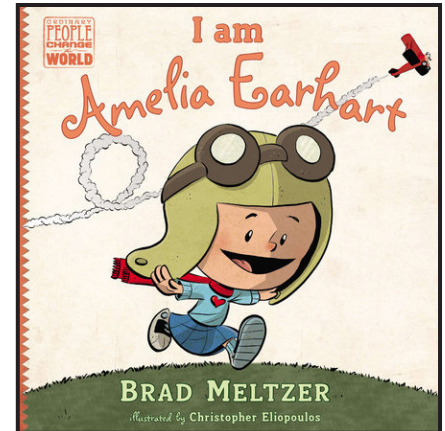


Books about Amelia Earhart and Aviation:

I am Amelia Earhart, Written by Brad Meltzer. Illustrated by Christopher Eliopoulos. Dial Books: 2014

When Amelia Earhart Built a Rollercoaster. Written by Markweakland. Illustrated by Oksana Grivina. Picture Window Books: 2016

Amelia Earhart: Flying into Adventure. Written by Tamara Hollingsworth. Teacher Created Materials: 2010.



Publications for Teachers and Parents:

Amelia Earhart: Last Flight. Written by Amelia Earhart. Crown Publishing Group: 1996

Amelia Lost: The Life and Disappearance of Amelia Earhart. Written by Candace Fleming. Schwartz and Wade: 2012

Amelia Earhart: A Biography. Written by Doris L. Rich. Smithsonian Press: 1996

Websites:

<https://www.history.com/topics/amelia-earhart>; This website from The History Channel offers a five minute video summary of Amelia's life and a brief article on her career and early life. It also has a radio recording Amelia Earhart speaking about women in aviation.

<https://www.pbs.org/wgbh/americanexperience/features/earhart-timeline/>; PBS offers a timeline of Amelia's life and career. It has several articles about Amelia Earhart and other women who influenced aviation.

<https://www.ameliaearhart.com/>; This is the official website of Amelia Earhart. It is a great resource for photos, biographies, and quotes from Amelia.

Victoria Fuse's Local Resource Discovery

Dayton is home to the National Museum of the United States Air Force. The museum has one of the world's largest collection of aircraft from America's history on display for patrons to get an up-close view. It is also home to a large theatre that shows a variety of historical films and has flight simulators. Students can get a feel for what it means to be a pilot of their own aircraft. Teachers can take a virtual tour of the museum with their classes at this site: <http://www.nmusafvirtualtour.com/full/tour-std.html>. If you would like to visit the museum please visit <https://>



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LEXINGTON CHILDREN'S THEATRE

Since 1938

Lexington Children's Theatre (Producer) Founded in 1938, Lexington Children's Theatre LCT is a fully professional, non profit organization dedicated to the intellectual and cultural enrichment of young people.

Mission Statement and Vision: LCT creates imaginative and compelling theatre experiences for young people and families. LCT shares a collective aspiration to impart, explore, foster, and develop artistry at all levels and ages in every theatrical discipline and educational opportunity.

LCT is one of the oldest continuously operating theatres for young people in the country and is proud to be the State Children's Theatre of Kentucky, a distinction granted to LCT by the Kentucky Legislature in 1986.

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