GROWING CHAMPION CLASSROOMS: Lesson Plans for Arkansas Educators

These lesson plans and accompanying poster files are based on the 2012-2014 traveling art exhibit *Arkansas Champion Trees: An Artist’s Journey, Drawings by Linda Williams Palmer*. The exhibit was organized for travel by the Arkansas Committee of the National Museum of Women in the Arts. “Growing Champion Classrooms” materials fulfill the mission of the Committee: to educate the public about Arkansas women artists and to contribute to the cultural life of our state. The Committee created this outreach material in support of teachers who encourage students to appreciate Arkansas’ natural resources.

“Growing Champion Classrooms” includes 2 art lesson plans, visual aids, and activities for K-2, 3-5, and 6-8th grade students. While the lesson plans relate to 6 of the 18 images from the original traveling exhibition, all images are provided online and educators are encouraged to use them as is appropriate to enrich units in a variety of disciplines. However, the “Growing Champion Classrooms” lesson plans are primarily organized to encourage original art making in honor of the artist and the art work that inspired this educational component. The plans are designed for traditional and non-traditional educators in our state, identify applicable State Frameworks, and include options for Common Core guidelines.

BARK, BARK...EVERYWHERE BARK!

**Grade Level:** Middle (6-8)  
**Subjects:** Visual Arts, English- Language Arts, Science  
**Time Required:** 3 sessions, 50 minutes per session  
**Authors:** Virmarie DePoyster, Lisa Krannichfeld Walden

The Arkansas Committee of the National Museum of Women in the Arts gratefully acknowledges the generous sponsors of “Growing Champion Classrooms” *Entergy Arkansas* and the *School of Forest Resources, University of Arkansas at Monticello*. “Growing Champion Classrooms” is supported in part by the Arkansas Arts Council, an agency of the Department of Arkansas Heritage, and by the National Endowment for the Arts.
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Lesson Overview:
Students will learn about color pencil artist Linda Williams Palmer and her works of art. Students will analyze her pieces *Shortleaf Pine/Needles* and will explore that to draw is learning how to see. Students will discuss the historical background behind this tree as stated by the artist. Students will study tree shapes and explore how branches grow. Students will also learn how to use line, and explore light and shadow in a drawing. Students will produce line drawings of trees and explore the bark shapes and texture with colored pencils. Students will also conduct a short research project in which they explore the various uses and functions of pine and oak trees both in an ecological and economic sense.

Learning Objectives:
Students will be able to:
- Study the photograph of Chinkapin Oak champion Tree and learn about the direction in which tree branches grow.
- Students will use line, value, texture, color and shading to render the majesty and bark of a tree.
- Students will create a sense of depth in an artwork by using perspective.
- Students will research various uses and functions that oak and pine trees serve ecologically and economically.

Standards utilized in this lesson:
Common Core:
CCSS.ELA-Literacy.W.6.7- Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
CCSS.ELA-Literacy.W.6.8- Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.

Visual Arts:
VA.5.7.1 Use various types of lines in a work of art
VA.5.8.4 Replicate simulated or implied texture using appropriate media choices
VA.6.7.3 Create various surface qualities using any medium
VA.6.7.4 Apply the knowledge of spatial relationships to create a work of art (e.g., visual measurements, figure, facial, linear perspective, drawings from direct observation)
VA.7.8.4 Utilize art criticism and aesthetic theories to discuss art

Materials:
- Linda Williams Palmer *Arkansas Champion Trees: An Artist’s Journey* poster, *Short Leaf Pine*
- Artist biography, artist’s process, attached
- Definition of a champion tree, attached
- Photograph of Linda Williams Palmer’s Chinkapin Oak tree, attached
• Photograph of tree grouping, Day 2, attached
• Historical background information, on poster
• Colored pencils, writing pencils
• 9” x 12” white drawing paper
• Colored drawing paper, rusty brown or deep dark red
• Writing paper
• Heavy weight white drawing paper, size 9” x 12”
• Ink or coffee wash (1 part ink, 8 parts water)
• Foam brushes
• Newspapers
• Shallow bowls for ink wash
• Iron (optional)

**Glossary:**
1. **Perspective:** the method by which solid objects drawn or painted on a flat surface are given the appearance of depth and distance
2. **Value:** an element of art that refers to lightness or darkness.
3. **Texture:** An element of art that refers to the surface quality of an object or composition (i.e., roughness, smoothness)
4. **Shape:** an element of art that refers to an enclosed space that is 2-D, or flat, and therefore, limited to the dimensions of length and width. Shapes can be geometric such as a circle, rectangle or free-form.

**Procedure:**

**Day 1**

1. Start a discussion about trees by discussing the following:
   - How does a tree grow? Answers should range from up to down.
   - From top up or from roots up? Don’t give them answer.
   - Have you ever seen initials carved in a tree?
   - Do bird-feeders have to be relocated and moved down every year?
   - How else do trees grow? Answer: Wider
   - Answers: Trees grow up from tips of branches and out at the sides. Once the wood has formed it does not move, so anything attached to one spot on a tree will not move. A branch or a bird feeder will be in the same place years from now. Branches are just like small trees. They grow from the tips (away from the trunk) and out just like the trunk. They are smaller at the ends of the branches because they are younger.

2. Display the photo that Linda used to draw her Chinkapin Oak champion tree from (attached) and allow students to take time to closely look at the tree. Optional, teacher can add more science.

3. Observe the tree photo.
   - Main shape of tree trunk… it gets smaller in size as it grows up.
   - Branches get smaller in size as they get higher.
   - Branches get smaller as they grow away from trunk.
   - Branches angle upwards towards the sun.
• The higher you go up in a tree, the smaller the branches get.
• Branches eventually get so small that the lines come together and end in points.

4. Display Linda Williams Palmer’s poster, *Needle/Shortleaf Pine* and allow students to take time to closely look at the work of art. Explore the size and shapes of the tree and branches. Reinforce how the artist drawing shows branches and tree trunk getting smaller as it grows up.

• This Shortleaf Pine grows in the Levi Wilcoxon Demonstration Forest, a 100-acre parcel of land set aside in 1939 as an example of an uncut virgin Pine stand. It is a remnant of the old-growth Pine forests that once covered much of Southern Arkansas in the “Prairie Terrace” formation. The land is composed of sediment left from ancient forms of the Mississippi, Missouri and Arkansas rivers. Most of the Pine trees in this stand are between 100 and 200 years old and over 100 feet tall.
• Circumference: 112 inches
• Crown Spread: 57 feet
• Height: 142 feet

5. Talk with students about the artist, Linda Williams Palmer. Biography, artist’s process, attached.

6. Discuss with students what inspired Linda to paint and her journey to documenting Arkansas champion trees. Definition of champion tree, attached.

7. Handout drawing paper and pencils and photograph of tree grouping, attached.

8. This is an exercise to learn how to “see” shapes in a tree. (drawing #1)
• Draw trunks only.
• No leaves.
• Notice tree trunks widths and how they change in size.
• Draw the smallest size trees in the background, towards the horizon line.
• Draw at least 3 trees from photo.
• Remember, the horizon line is where the earth meets the sky, so the roots even furthest away must be on or below horizon line.
• Overlap tree branches in foreground with trees in the middle ground to show greater sense of depth.
• Ask students to use photo to inspire them to make their own composition.

9. Towards the end of class period and in preparation for Day 3, have students will apply an ink wash or coffee wash to a piece of heavy white drawing paper as follows:
• Cut heavy weight white drawing paper to 9” x 12” size. Write name in back of paper.
• Crumple up paper to make lots of creases and create texture on paper.
• Unfold. Apply diluted india ink or coffee wash over paper with foam brush.
• Creases will trap wash and produce texture that will look like bark.
• Lay paper as flat as possible on newspapers and dry completely to use in Day 3.

10. Homework for Day 2: Ask students to observe trees in their neighborhood. In preparation for Day 2, students should observe different kinds of trees and the texture on the bark.
Day 2

1. Display Linda Williams Palmer’s poster, Shortleaf Pine/ Needles. Direct students again to take a close look at Linda Williams Palmer drawing.

2. Today we will focus on looking closely at the shapes and texture the artist used to create her drawing.

3. Start a discussion about the work of art by discussing the following:
   - On your assignment walk observing trees, what did you notice about the bark?
   - Have you ever lay down under a tree and looked up?
   - How did you feel?
   - Where was Linda standing when she took the photograph that inspired this drawing? From her viewpoint, what happens to the tree as it goes up?
   - In her drawing, what is happening to the width of the branches as they grow away from tree?
   - What shapes are in the bark on main trunk?
   - What is happening to those shapes as they go up towards the top of tree?
   - What is happening to the dark and light areas as the tree trunk goes up?

4. Explain that the sun allows us to have light; therefore we are able to see form. If there were no sun, we wouldn’t be able to distinguish shape and be in total darkness.

5. As the tree trunk moves up and gets smaller in width, the artist drew changing to a lighter color to give us a sense of majesty and give height to the tree.

6. Explore the dark shapes. They are bigger closer to the bottom of trunk and smaller in size as they go up the tree and get further away. This creates and illusion of depth.

7. Now, notice the tree branches up high, inside tree… the closest branches to the viewer are darker and as they go up the tree and get further away, they get lighter in color and value and also, smaller in size.

8. Explain that artist used darker areas in the shadows and lighter areas where the sun is shining.

9. Furthermore, the shapes on the foreground trunk are very visible and defined. The shapes in the back trunks are simple shapes, the bark is not as defined.

10. Define any art related vocabulary: Value, perspective, texture, shapes. See glossary.

11. Handout colored drawing paper and color pencils. For this exercise colored paper works best in a warm color, such as rusty brown, deep dark red.

12. Students will observe Linda’s “Needle” drawing (attached handout) and create a drawing focusing on light / dark areas and width of shapes. (drawing #2)

Day 3

1. Revisit Linda Williams Palmer’s poster with students.
2. Remind students of her use of shapes and decreasing use of shape size to show a depth of space. Also, of artists use of light and dark areas.

3. As things recede in space, they get smaller and lighter in color.

4. The closest items to the viewer are more defined and bigger.

5. Handout crumpled paper and colored pencils. Optional, iron paper if needed to flatten paper.

6. Ask students to use colored pencils to create a close up drawing of tree bark area from Linda’s poster. Leave some textured areas in drawing from ink wash. (drawing #3)

7. One way to create a color pencil drawing is by doing cross-hatching. Cross-hatching is layers of lines at right angles. You can use cross-hatching to create a darker area within a layer of hatching, or to create a visual blending effect of two different colors.

8. Upon completion, display all 3 drawings done over the 3 session period. Students can talk about their experience creating the drawings during critique discussion. Ask students if they were successful in using, line, darks and lights and texture.

9. Have students inquire on either 1) the economic impact that pine and oak trees have on society (lumber industry, tree farming, etc.) or 2) the ecological influence that these trees may have in nature. Students may pick which avenue they would like to research (organisms that use these trees for food/shelter, ecosystems thriving around an oak or pine tree). After researching have students site their sources and present their findings to the class.

Assessment:
Students will be assessed on:
· Three completed drawings: one emphasizing line, one emphasizing color and value, and the third emphasizing texture.
· The students used their personal observations of trees in nature to aid in drawing.
· Students researched ecological or economic impacts of pine and oak trees and presented their findings to the class.

Explorations and Extensions:

1. Students research other color pencil artists on internet and what research what inspired them. Students share with class what they found and if any similarities.

2. Students could use a sketchbook and practice doing quick 5 minute line drawings of trees in their backyard. Notice the different types of trees and how each “poses” differently. Share with class.
LINDA WILLIAMS PALMER
Arkansas Champion Trees: An Artist's Journey
SHORTLEAF PINE
(Pinus echinata) - Ashley County, Hamburg 2012
Colored pencil on paper by Linda Williams Palmer - 60" x 40" framed
Detail: Needle. "Shortleaf Pine" by Linda Williams Palmer - 14" x 11" framed

CHAMPION STATISTICS
Circumference: 112"  Crown Spread: 57"  Height: 143"  Bigness Index: 268

This Shortleaf Pine grows in the Lora Whiteside Demonstration Forest, a 1,100-acre tract of land set aside in 1939 as an example of an active single Pine stand. Extends south from Creek Timber Company now owns the land, a remnant of the old-growth Pine forest that once covered much of southern Arkansas in the "Fresno Fence" formations. The land is comprised of sandstone left from ancient forms of the Mississippi, Missouri, and Arkansas rivers. Most of the Pine trees in this stand are between 150 and 200 years old and over 100 feet tall. – 1939

EDUCATIONAL SPONSORS

"Growing Champion Classrooms" materials are based on the 2012-2014 exhibit Arkansas Champion Trees: An Artist's Journey. Drawings by Linda W. Palmer, and are provided by Entergy Arkansas and the School for Social Reasoning, University of Arkansas at Monticello, with support, in part, by the Arkansas Arts Council, an agency of the Department of Arkansas Heritage and by the National Endowment for the Arts.
Many of us have lived with trees so long that we take them for granted. We climb them as children, and we rest in their shade. We write poems about them, and we harvest them for our fireplaces, our furniture and our paper. We study them in school, and we mark the seasons by their foliage in spring and fall. This exhibit gives us an opportunity to contemplate the trees we sometimes take for granted: to notice their singular beauty and to consider what events have taken place in their presence over time.

Linda Williams Palmer is one of the few artists who have created a series based on individual trees. She is the only artist who has chosen to interpret the largest of each species in Arkansas: the champion trees. This exhibit tells why and how she did it, and shares the results of her artist’s journey through excellent colored-pencil drawings of trees that communicate majesty and familiarity at the same time.

Each tree portrait represents a specific place, time of day, and season chosen by the artist — often after multiple visits, copious notes, and interaction with the site. Photographs communicate the scale and size of the actual trees, and hint at the humble locations where they took root. Exhibit writing provides anecdotes and information about the trees and the artist’s process. It is our hope that this combination of information will encourage Arkansans to appreciate our state’s natural and artistic heritage, and inspire them to celebrate the beauty and history that is sometimes found in their own backyards.

The Arkansas Committee of the National Museum of Women in the Arts
Linda Palmer grew up playing in the woods by her family home in eastern Oklahoma. As a first-grader, she played under a large oak tree on the playground. These childhood experiences inspired her interest: many of her drawings included trees. Trees are still a significant part of Linda Palmer’s artistic life. She is captivated by how weather and season, light and shadow, and time of day affect the visual impression of a tree. She calls upon her preferred medium, Prismacolor Pencils, to accurately represent her observations while artistically interpreting the majesty of the champions.

Palmer developed her own technique of layering different colored pencils on textured paper. In this series, her mastery enables her to achieve colors found in nature, add implied texture to that of the paper, and suggest the fragility of delicate leaves and blossoms. For example, the trunk of the Shortleaf Pine is composed of 25 different colors. The brilliant autumn leaves of the Cherrybark Oak contrast with the partially-rendered ones to capture the thin dryness that precedes their fall to the ground.

Her technique is time-consuming, and demanding—especially for large work: colored-pencils make slim lines and layering cannot be erased. However, Palmer chose this medium because that’s how she pictured the drawings in her mind. She soon realized that the time required by her technique allowed her to interact with her subject, and therefore better translate her feelings and imaginings about each tree onto paper. The largest drawing in this series took her eight weeks to finish, working an average of 5 hours a day 6 days a week, or 240 hours.

Add actual drawing time and preparatory research to understand the investment Palmer has made over the past 5 years to bring this series to the public. Travel (in the thousands of miles), reference photographs, and interviews with landowners and residents combined to create an impression that helped her interpret the special thing she sees in each selected tree. Sometimes it’s the trunk that speaks of age and history. Sometimes it’s the composition of branches against the sky. Linda Palmer has developed her “artist’s eye” through many years of drawing and painting. She knows when a drawing is complete: “...when another stroke would detract from what I want to say.” Rather than thinking about the hours put into the work, Linda Palmer measures her success by her pleasure with the result: a drawing that becomes a visual statement honoring nature, memory, and time.
Arkansas Champion Trees: An Artist’s Journey

Champion Trees

An Arkansas champion tree is the largest example of its species. Trained foresters make the final assessment, but often the public is the first to notice a specimen and nominate it for the list maintained by the Arkansas Forestry Commission. A champion tree is re-measured every 10 years to confirm its status: younger examples of the species have champion potential, and existing champions can be felled in a storm or fall victim to an uninformed pruning.

Arkansas champions have been nominated by individuals, art museums, cities, churches and cemetery associations, hunting clubs and wildlife refuges, and the Arkansas Department of Veterans Affairs as well as timber and paper companies, national and state parks, and the Arkansas Fish and Wildlife Service. A wealth of information is available through the Arkansas Forestry Commission website to guide those who want to nominate a potential champion. Think of the trees you’ve seen and consider the three necessary measurements to that process.

- **Trunk Circumference** (inches): measure at 4.5’ above ground level
  If the tree forks at or below 4.5’, record the smallest trunk circumference below the fork; if the tree is on a slope, measure 4.5’ up the trunk on the high and low sides and average the numbers; if the tree is leaning, measure the circumference at 4.5’ along the axis of the trunk at a 90 degree angle to the trunk

- **Height** (feet): measure from the base of the trunk to the topmost twig
  Use a clinometer, laser, hypsometer. Or use a straight stick! Hold the stick vertically at arm’s length: the length of the stick above your hand must equal the distance from your hand to your eye. Walk backward away from the tree until the stick section above your hand is the same length as the tree in your field of vision. From where you are standing, measure the distance to the tree. This measurement is the approximate height.

- **Average Crown Spread** (feet): measure at points where water drips from the tree’s canopy to the ground
  Measure the widest crown spread (greatest distance between any two points along the drip line). Turn the axis of measurement 90 degrees and find the narrow crown spread. Average the two measurements with the formula: (wide spread + narrow spread) divided by 2 = average crown spread.

These measurements combine to calculate the official “Bigness Index (BI)” of a tree with a point system: one point for each inch of circumference, one point for each foot in height, and one point for every 4 feet of crown spread. The “bigness” point system accounts for the differences among species. Tree age calculations are not included in the index: boring into a trunk for a core sample is potentially damaging and not recommended. Bigness defines champions, and was calculated to confirm all 142 of the currently confirmed Arkansas species.
Day 1 Handout – Chinkapin Oak champion tree
Day 1- Photo for class assignment
Day 2 - Assignment Handout
The Arkansas Committee of the National Museum of Women in the Arts gratefully acknowledges generous support for the educational component “Growing Champion Classrooms”, poster sets and art lesson plans based on the content of the 2012-2014 touring exhibit “Arkansas Champion Trees: An Artist’s Journey.” Sponsors Entergy Arkansas and the School of Forest Resources, University of Arkansas at Monticello, have made it possible for traditional and non-traditional educators across the state to use the materials to inspire and enrich learning long after the tour concludes. “Growing Champion Classrooms” is supported in part by the Arkansas Arts Council, an agency of the Department of Arkansas Heritage, and by the National Endowment for the Arts.