

LONGWOOD GARDENS

Canopy Career Chronicles

Toolkit Activities

This toolkit is designed for use by teachers / librarians / after-school advisors / parents to enhance learning moments with children in grades 6-12.

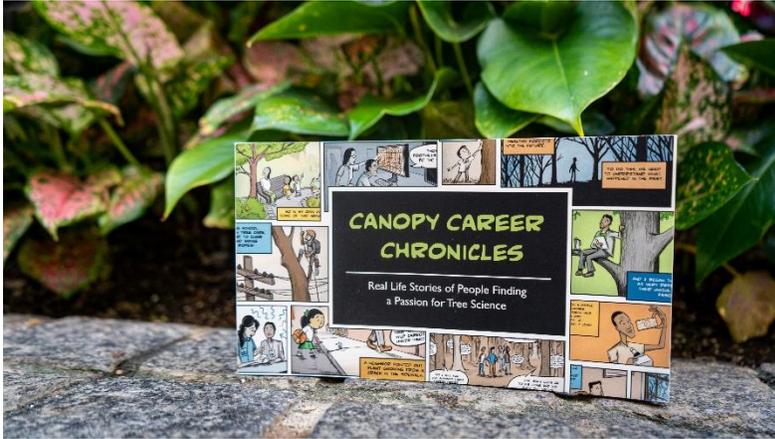
The Longwood Gardens Community Read is a program designed to encourage reading for pleasure and start a conversation. Focusing on literature about gardens, plants, and the natural world, we feature an exceptional book annually (paired with similarly-themed younger readers' book) through a variety of programs, discussions, and lectures across all community partner organizations. For more information about the Community Read, go to www.longwoodgardens.org/community-read.



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Canopy Career Chronicles by Greg Mercer
Illustrated by Pat Bradley



Overview / Synopsis

In this graphic novel discover real life stories of people finding a passion for tree science.

Activities

Lights, Camera, Science!
Towering Treehouses
Creative Careers

Extend the Story

Project Learning Tree
Nature Lab
Arbor Day

This toolkit was developed by the Longwood Gardens School and Youth team.



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Activities meet the following Pennsylvania Career Education and Work Academic Standards:

13.1.8.B

Relate careers to personal interests, abilities, and aptitudes.

13.1.11.B

Analyze career options based on personal interests, abilities, aptitudes, achievements and goals.

Activities meet the following Common Core State Standards:

CCSS.ELA-Literacy.W.6-12.3

Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences.



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Lights, Camera, Science!

Materials Needed

Nature Journal:

- Blank paper
- Construction paper
- Stapler
- Arts and crafts supplies

Photography:

- Digital camera or digital device to take photos
- Tree / plant ID sources
- Pencils / pens

Directions

Nature Journal:

- Before students head out to take photos of trees, have them create their own nature journal.
- To create a nature journal, students will need to fold the construction paper in half and decorate it. This will become the cover of the nature journal.
- Have the students fold a few pieces of blank paper in half and staple them inside the cover of the nature journal.
- For further information:
https://longwoodgardens.org/sites/default/files/wysiwyg/ED_activity_nature_journal%20%282%29.pdf

Photography:

- Now that students have created a nature journal, show them examples of how photojournalists take pictures. Some examples include:
 - <https://www.nationalgeographic.com/science/>
 - <https://www.nature.com/news>
- As students head outside to take photos of trees and nature around them, they should pick one natural object to focus on. They will be taking three different images of this one object.
 - Wide shot – The bigger picture
 - Close up



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- Partial shot of one characteristic taken from a creative perspective or unique angle
- As students are exploring and taking their photos, they should document the following information about the natural object:
 - Location
 - Their senses – what they see, hear, feel or smell
 - Date and time
 - Identification of the natural object
 - <https://greenarborists.com/tree-identification-apps-smart-phone/>
 - <https://backgarden.org/tree-identification-apps/>
- Once students have their three photos, they can brainstorm possible titles for their photo series in their nature journal.
- Students can also write an interesting, creative or descriptive fact that would pull others into their pictures, a hook to capture their reader.



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Towering Treehouses

Materials Needed

- Building materials
 - Construction paper
 - Popsicle sticks
 - Cardboard
 - Pipe cleaners
 - Recycled materials
 - Natural materials
 - Legos
 - Building blocks
 - Other desired building materials
- Tape
- Glue
- Rubber bands
- Scissors
- Paint
- Paint brushes
- Blank paper
- Colored pencils, markers or crayons
- Yardstick or measuring tape

Directions

- Divide students into groups of up to three. Give each group some blank paper and writing utensils.
- Show students a clip of Treehouse Masters which features the Canopy Cathedral treehouse at Longwood Gardens.
 - <https://www.youtube.com/watch?v=zhsmlG5JQjA>
- Ask students to work in their groups to design and build a treehouse.
- Let students know this will be a competition, to see which group can build the tallest, freestanding treehouse.
- Once students have their design down on paper, they can begin to build the design. You can provide specific time frames with which to design and build as needed.
- Once students are finished, measure the height of the treehouses to see which group has the tallest creation.



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Creative Careers

Materials Needed

- Copies of the graphic novel layout
- Colored pencils
- Digital devices

Directions

- After reading *Canopy Career Chronicles*, it's time for students to explore possible green collar careers that may be of interest to them.
- Have students visit: <https://www.wearebloom.org/>
 - Students should take the quiz to determine what green collar careers they might be interested in
- After taking the quiz, students can learn more about green collar careers by visiting the following websites:
 - <https://www.seedyourfuture.org/careers> - To learn more about the careers you discovered by taking the quiz
 - <https://planted-podcast.libsyn.com/> - Planted: Finding Your Roots in STEM Careers Podcast series
 - <https://mortonarb.org/educators/canopy-career-chronicles/#career-resources> - To learn more about the careers brought up in canopy career chronicles
- Once students have chosen a career of interest to them, they can begin to write their future story in a graphic novel layout or through another creative storytelling means.
- Have students share their completed stories.



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Extend the Story

Project Learning Tree

- Learning is in our nature. Project Learning Tree's *Teaching with i-Tree* unit includes three hands-on activities that help middle and high school students discover and analyze the many ecosystem services that trees provide. More information can be found by visiting:
<https://www.plt.org/curriculum/teaching-with-itree/>
- Additionally, PLT offers a wide variety of activity ideas for families which can be found by visiting:
<https://www.plt.org/activities-for-families/>

Nature Lab

- Interactive nature-based lesson plans for middle school students can be found by visiting:
<https://www.nature.org/en-us/about-us/who-we-are/how-we-work/youth-engagement/nature-lab/middle-school-lesson-plans/>

Arbor Day Celebration

- National Arbor Day is celebrated on the last Friday in April. However, some states observe Arbor Day on different dates throughout the year. Check out this calendar to see when your state celebrates:
<https://www.arborday.org/celebrate/dates.cfm>
- The National Arbor Day Foundation also offers a wide variety of educational resources which can be found by visiting:
<https://www.arborday.org/celebrate/educational-resources.cfm>



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