Arbor Day is the celebration of trees where we live, work, learn and play. Communities set aside one day each year to plant and care for trees, usually on public property, such as a school or park. Students can provide the leadership for a project to plant or care for trees – either on school grounds or in the surrounding community.

**Goal & Objectives**

**Goal:** Students will design and conduct a service learning project.

**Objectives:** Students will

1. Conduct an informal or formal needs assessment for services for the class or community.
2. Design and develop a tree or forest related service project for the class or community.
3. Apply knowledge gained from the Tree Trails modules to the service project.
4. Conduct a service learning project for students and/or parents, administrators, etc.
5. Develop, administer and analyze an evaluation of the Student Service Learning Project.
6. Evaluate their experience during the Student Service Leader Module.

**Content Area TEKS/STAAR**

**Language Arts:** 5.13 (A) interpret details from procedural text to complete a task, solve a problem, or perform procedures.
5.26 (A) compiles important information from multiple sources.
5.27 (B) follow, restate, and give oral instructions that include multiple action steps.

**Mathematics:** 5.14 (B) solve problems that incorporate understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.

**Science:** 5.1 (B) make informed choices in the conservation, disposal, and recycling of materials.
5.13 (D) connect grade-level appropriate science concepts with the history of science, science careers, and contributions of scientists.
5.2 (E) Demonstrate that repeated investigations may increase reliability of results.

**Social Studies:** 5.25 (C) express ideas orally based on research and experiences.

**Technology Applications:**

b (3) (D) acquire information appropriate to specific tasks.

b (4) (D) evaluate technology tools applicable for solving problems.

**Materials**

- Tablet(s) or computer(s) with internet access
- Projector and screen
- Whiteboard or chart paper and markers
- Butcher paper or copy paper and markers
- Charades Directions and Cards
- Stop Watch or timer or phone with alarm
- Tree Trails Portfolio, Learning Log/Journal
- (Optional) Cameras or camera phones

**Time & Resources**

- Preparation Time: 1 hour
- Instructional Time: 3 sessions, 45 minutes each plus additional time for the service learning project
- Tree Tag template
- Sample Needs Assessment Format handout
- Service Learning Sample Projects handout
- Student Service Learning Project Invitation Sample
- Arbor Day Foundation
  http://www.arborday.org/
- Texas A&M Forest Service Urban Forestry
  tfsweb.tamu.edu/urbanforestry
- Texas Tree Planting Guide
  http://tfsweb.tamu.edu/urbanforestry/
- Getting Started in Service Learning
  https://gsn.nylc.org/topics/292
I. Engage/Excite

A. Large Group Discussion: Ask students if they can name careers related to the modules they have experienced. Start with a review of the module topics and careers associated with them; for example, tree identification is important to foresters, biologists, landscapers and nurserymen. Tell them they are going to play a game of Charades to identify related careers. Discuss the directions/rules for playing Charades and demonstrate or select students to demonstrate the pantomime actions.

Teacher Tip: You may want to provide a short set of directions printed on cards for playing Charades or provide the directions on a chart.

B. Small Group Activity: Divide the class into four teams: Team A, Team B, Team C and Team D. A and B will play against each other and C and D will do the same. Pass out career cards to Teams A and B and to Teams C and D. Team A and Team C selects a student to act out the first career card. Remind students not to reveal the career on the card to the opposing team. A different student should be chosen each turn. Team B and Team D is given two to three minutes to name the career. If Team B or Team D names the career, they are given a point and the next turn. If they cannot name the career within the time limit, Team A or Team C gets the point and the next turn. Each set of teams are given three turns to try before the teams change turns. When all cards are used, the points are added and the winner announced. The winner of Teams A and B will play the winner of Teams C and D in the final round. The final winner is declared.

C. Large Group Discussion: Ask students to think about which career they might choose or if there is a different related career they might choose. Discuss activities each career might perform. Tell students they will have fun creating a project that uses some of the skills these careers require. Have students write in their Learning Logs/Portfolios their first choice of a career and name one or two activities the job might require.

D. (Optional) Individual Activity: Have the students take the Student Service Leader pretest.

Teacher Tip: Explain that the test is only to make sure the learning activities are appropriate and not something they already know. The pretest will help them know more about what they will be learning.

To administer the tests by paper, copy from the teacher lesson module. To administer the test electronically, recreate the test in an online survey program. Free programs allow the creator to see results from a class set.

II. Explore

A. Large Group Discussion: Lead a discussion about the importance of student leaders who can inform their school and community about the virtues of trees and forests, their beauty and the enormous benefits and values we receive from them. The Tree Trail students have had a special opportunity few schools have experienced, an in-depth study of trees and forests that opens the door to all fields of study. Now they can share their knowledge as student leaders by providing their services to the school and community.
II. Explore continued

B. Large Group Discussion continued: Explore services that students could provide for their class, school or community related to the Tree Trail modules, including the careers portrayed in the Charades game. Record their ideas on a chart/whiteboard.

*Teacher Tip: There are lots of different ways students can be student service leaders. The following list of activities is provided as a suggestion for the class to consider. As appropriate, the total service project and activities may be performed by an individual, teams or as one class project. It is the decision of the teacher and students which student service leader projects to provide and what students will be involved. However, every student must play a role.*

*Teacher Tip: To review the basics of a service learning project visit the Generator School Network’s Getting Started in Service-Learning website.*

C. Large Group Discussion: If deemed appropriate, display on a chart/whiteboard the following sample learning services as a possible choice. This list of learning services are suggestions. While Arbor Day is listed as a separate project, most Arbor Day activities can be incorporated into any service learning project. It is up to the class and teacher to decide the most appropriate learning service. (See Teacher Tip above.) These suggestions are followed by a simple lesson plan.

1. Plan and host an Arbor Day event.
   Coordinate dates, school calendar, Texas Arbor Day (which is the first Friday in November, but can be celebrated at the local level at any time) and National Arbor Day schedules for the Arbor Day event, brainstorm activity ideas, create a schedule of events, select hosts or docents, assign tasks, and plan an evaluation for participants.

2. Plant a tree.
   Research where trees are needed, what trees are best for the site - visit Texas A&M Forest Service’s Tree Planting Guide, who will fund the tree(s), what materials are needed and who will plant the tree, who will water the tree, plan dedication of the tree and develop and conduct an evaluation of the activity.

3. Install signage for the Tree Trail.
   Prepare and install signage for the Tree Trail, one for each trail tree. A template is provided to develop a marker for each tree. Possible items to include on a tree sign: tree outline, tree number, common and scientific name, measurement, date entered as a trail tree, etc. Place signs in holders and on stakes, decide where to place in ground and install the signage.

4. Host a Tree Trail Tour for other classrooms, administrators, parents, or other guests.
   Prepare a Tree Trail Tour outline that includes objectives for the tour, route of tour, schedule, narrative at each stop, evaluation for tourist, and brochure for the Tree Trail Tour. Include audio or visuals needed.

5. Create a script for each tree that can be uploaded as a podcast on the school website.
   Prepare an outline for the script, develop the goal, purpose and objective statements, write narrative for each tree, including the signage information, tree history, and future plans for the Tree Trail, and develop an evaluation of event.

D. Large Group Discussion: Tell students they will use all ideas and suggestions to develop, conduct and analyze a needs assessment to determine the best service project for the class, school and
II. Explore continued

community. They will survey other classes, teachers, administrators and parents using informal or formal assessment questions. Once the needs assessment results are tallied, the class will decide on specific student service leadership to provide.

E. Small Group Activity: As desired, divide the class into small groups to develop the needs assessment format and style. A suggested format follows:
   - Title such as Tree Trails Student Service Learning Project
   - Name of Participants and Date
   - Introduction and Purpose (Written by the teacher)
   - Deadline to return survey
   - List of possible projects and rating system to decide the most important
   - Lines to list suggested projects
   - Lines to provide comments and recommendations

F. Large Group Activity: Conduct the needs assessment. Remember to involve as many school personnel, such as other teachers and students, administrators, etc. as possible.

G. Large Group Discussion: Project the results of the needs assessment to review. Allow students to use the results to decide on the service project they want to perform. Organize the students to work on their services. Students may be assigned individual or group tasks. If the class chooses one service, assigned individuals to a task for that service.

III. Explain

A. Large Group Directions: Remind students to develop an evaluation form for the service project chosen. It may look like the module evaluations but it may have as few as four to five questions.

B. Large Group Discussion: Inform students that they need to develop an invitation for guests to attend the dedication of the service learning project. Provide a sample invitation and get feedback from the students. Then develop the chosen invitation format.

C. Large Group Activities: Develop a schedule for students to work on their project.
   (Optional: Develop a project timeline and have students plan to check progress toward completion or have the students make their own project timeline to share or post.)

D. Large Group Activities continued: Provide the materials needed and plan the activities to complete the project within the preferred time period. Encourage students to plan to take pictures and/or use a variety of media during their project and its development.

IV. Extend/Elaborate

A. Large Group Activity: Provide time for students to work on their Service Learning Project(s). Periodically check on their progress. Post a notice and/or a list of the Service Learning Project statuses as they are completed.

B. Individual Activity: Have students complete invitations for the guests they wish to invite, including the principal, other classes and special guests such as public officials, the local newspaper and
IV. Extend/Elaborate continued

- television/media journalists. Provide students with the number of invitations needed for their family and guests and have them complete the invitations and deliver these.

  *Teacher Tip: Discuss the event with administrators and faculty and decide on a time and location for the project dedication and include on the invitation.*

C. Large Group Presentation: Conduct the Tree Trails Student Service Learning Project Dedication. Record the presentation, if possible.

D. Large Group Activity: Remind the students that all visitors or anyone involved in the project should complete an evaluation form. Have students inform the audience where to leave their completed evaluations.

V. Evaluate

- A. Large Group Discussion: Have students tally the evaluations and summarize the results. Conduct a discussion of the results of the evaluations of the project.

- B. Small Group Activity: Have each student or team share their learning experience with the class by presenting a short synopsis of what they did for the project and the results of the evaluations. They may download their pictures and share with the classroom.

- C. Individual Activity: Have each student record in their Learning Logs/Portfolios a summary of their services and how they feel about the results.

- D. (Optional) Individual Activity: Have students take the *Student Service Leader* posttest. Have them compare their results to self-evaluate what they learned and what they did not know.

  *Teacher Tip: You may use the results to determine the need for Extra Mileage/Attention.*

VI. Extra Mileage/Attention

- **Extra Mileage:** Produce a video of the activities conducted during all the modules and/or for the final module.

- **Extra Attention:** Have students draw and/or describe their favorite part of the Student Service Learning Project.

Tree Trails curriculum was developed by Texas A&M Forest Service in cooperation with Texas Urban Forestry Council and was supported by a grant from the USDA Forest Service.
Student Service Leader
Directions: Answer the following questions by rating your response 1-5, with 5 being the highest.

Key: 1 = Not Sure   2 = Poor   3 = OK   4 = Good   5 = Great

1. I can plan a Tree Trail service to perform for my school.  1  2  3  4  5

2. I can organize and conduct a needs assessment.  1  2  3  4  5

3. I can develop an evaluation form for a service project.  1  2  3  4  5

4. I can name three reasons why Tree Trail student services are important.  1  2  3  4  5

5. My Trail Tree experiences have boosted my knowledge of how important trees are to our community.  1  2  3  4  5

6. I want to apply my Tree Trails learning to become a Service Leader for my school.  1  2  3  4  5

7. I can perform at least two Tree Trails Services for my family.  1  2  3  4  5

8. I will apply three of my Tree Trails learning experiences to preserve the health of our trees and forests.  1  2  3  4  5

9. I am interested in learning more about ways I can be involved in forestry services.  1  2  3  4  5

Comments:
Certificate of Achievement

awarded to

for their service leadership
in the Tree Trails program at

Date  Teacher

TREER TRAILS
I am a ____________________________
Tree species

on ____________________________
Tree Trail name

I provide ecological benefits valued at

$ ____________________________

Find our trail online at
http://www.texasforestinfo.com/treetrails/
Tree Trails Service Learning Project

Name of Survey Participant:___________________________ Date:__________________

Introduction and Purpose of the project:

Deadline to return survey:

List of possible projects, please rank the most to least important (1 being most important):

Suggest other important projects not found in the above list:

Comments and recommendations:

Thank you for taking the time to add your valuable input and assist with our needs assessment.
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2. Plant a tree.

Research where trees are needed, what trees are best for the site - visit Texas A&M Forest Service’s Tree Planting Guide (http://tfsweb.tamu.edu/urbanforestry/), who will fund the tree(s), what materials are needed and who will plant the tree, who will water the tree, plan dedication of the tree and develop and conduct an evaluation of the activity.

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Career List

Accountant
Arborist
Archeologist
Christmas Tree Farmer
Engineer
Entomologist or Insect Scientist
Forester
Hydrologist or Water Scientist
Landscape Architect
Law Enforcement Officer
Mechanic
Nurseryman
Soil Scientist
Teacher
Technology or Computer Specialist
Wildland Firefighter
Wildlife Biologist
Writer
Accountant
a person who keeps the financial records of a business or person

Arborist
a person who is trained in properly planting and taking care of individual trees, such as pruning, fertilizing, or controlling disease.

Archeologist
a person that deals with past human life and activities by studying the bones, tools, etc., of ancient people

Christmas Tree Farmer
a person who grows and shapes trees for the winter holiday season

Engineer
a person that designs and creates new systems or structures

Entomologist or Insect Scientist
a person that studies insects

Forester
a person who takes care of forests by planting trees, cutting down trees, etc.
Hydrologist or Water Scientist
a person who studies how water moves through the Earth, the water quality, and water supply.

Landscape Architect
a person who plans and creates large outdoor spaces such as gardens, parks, etc.

Law Enforcement Officer
a person who enforces the law

Mechanic
a person who repairs machines (such as car engines) and keeps them running properly

Nurseryman
a person who owns or works in a place where trees and shrubs are grown and sold

Soil Scientist
a person that deals with the methods used by farmers to raise crops like trees and care for the soil

Teacher
a person who teaches students about certain subjects
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<tr>
<th>Career Card</th>
<th>Description</th>
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<tbody>
<tr>
<td>Technology or Computer Specialist</td>
<td>a person that uses computers to create and maintain data and maps</td>
</tr>
<tr>
<td>Wildland Firefighter</td>
<td>a person puts out a fire that occurs in a wildland area</td>
</tr>
<tr>
<td>Wildlife Biologist</td>
<td>a person that manages, protects, and enhances habitat for wildlife</td>
</tr>
<tr>
<td>Writer</td>
<td>a person who writes books, poems, stories, news articles etc.</td>
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