A Trail To Every Classroom (TTEC) Curriculum Development Tool

UNIT DESIGN COVER SHEET

Author contact: Anita Smith

School name, state and town: China Middle School, China, ME

Title: Questing in the China School Forest

Abstract/Vignette: What can people learn about the learning stations and trails at the China School Forest? Students will create a QUEST to teach visitors about the different outdoor classrooms and learning stations in the China Schools Forest.

Grade level(s): Please check all that apply.

☐ K-2  ☐ 3-5  ☑ 6-8  ☐ 9-12  ☐ College and Lifelong Learning

Discipline: Please check all that apply.

☐ Art and Music  ☐ Health and PE  ☐ Foreign Language

☑ Literature and Language Arts  ☑ Mathematics  ☑ Science

☑ Social Studies and Geography  ☐ History  ☑ Technology

Year Developed: 2007

Period (month, week, year): 4-6 weeks

Teaching environment:

☑ In the Classroom (indoors)  ☑ Outdoors

☑ In the Community  ☐ Online/Virtual
**Big Idea**

What is the main idea you want your students to come away from the unit knowing?

What can people learn about the learning stations and trails at the China School Forest?

**State Standards/Outcomes**

Which elements of the state framework of standards does this unit address? What are the skills and outcomes you are working towards?

- **Science & Technology** – A1 (grades 6-8): Students describe and apply principles of systems in man-made things, natural things and processes…
- **Social Studies** – A3 (gr 6-8): Students select, plan and implement a civic action or service learning project…
- **English/Language Arts** – A1 (gr 6-8): Students read and make generalizations from texts…
- A3 (gr 6-8)- Students read various informational texts, making decisions about the usefulness based on purpose…
- B1 (gr 6-8)- Students use a writing process to communicate for a variety of audiences and purposes.

**Essential Questions (Content)**

*What are the essential questions that will help guide students toward understanding the Big Idea?*

What is important for people to learn at each learning station?

What are the different types of forest management?

What types of habitats are in the forest?

How does the forest impact the China Lake watershed?

**Skills and Habits of Mind**

*What are the academic or life skills students will gain from this unit? What habits of mind do you expect them to demonstrate? Think all disciplines.*

- Map Reading skills
- Cooperative learning
- Writing skills – note taking, poetry, rhyming, final brochure
- Observation
- Listening
- Focusing on key concepts
- Computer skills – brochure making
- Appreciation for school forest
- Forest Ecology Concepts
- Pride in completed project

**Community-Based Learning Opportunity**

What opportunities exist in the school or community that could serve as an experiential and integrating focus for your students’ learning? Also include any opportunities for interdisciplinary learning.

Community resources to contact:
- Vite V., Steve G., Andy S. – forestry
- Philip dM & Lisa K. – animals
- Troy S. – geology
- David L & Peter W. – watersheds
- Sue C – local history
- Friends of Unity Wetlands
- Maine Project Learning Tree
- Maine Project Wild
- China Lake Association
- Town Line newspaper
- Town office, town libraries & local stores – places to put quest brochures
- School web site - publication

**Proposed Unit Project(s)**

What project(s) could your class undertake that would actively engage your students in learning about this theme?

Students will create a QUEST to teach visitors about the different outdoor classrooms and learning stations in the China School Forest.

**Vocabulary**

*What vocabulary do you expect children to learn through the unit?*

| Silviculture | seed tree | shelterwood |
| Wetland | cord of wood | acre |
| Boardfeet | plantation | clear cut |
| Managed plot | unmanaged plot | habitat |
| Wolf tree | watershed | forestry |
| Tree Farm | sustainable | renewable resource |
| non-renewable resource | | |
| Demonstration Forest | | |

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| Demonstration Forest | | |
Project Name: China School Forest Quest
Teacher: Anita Smith
Time Frame: Fall 2007
This is a pre / post plan

Related Texts
Which books or local source readings will you use to support this unit?
Habitat books
PLT silviculture activity
Forest books & Forests of Maine book

Models
How will students understand where they’re supposed to get? What exemplars of student work will they see? What opportunities will there be for them to critique each other’s work?
*Book Resource- Questing: A guide to Crating Community Treasure Hunts by Delia Clark and Steven Glazer
*www.valleyquest.org
*Teacher-made model of quest for school area
*Have students practice by creating a quest for the classroom or playground

Activities
What steps and individual elements or activities will your unit include?
1- Forest hikes and lessons – take students to forest to learn about area. Visit each learning station and highlight forest concepts and understanding the habitat of the area.
2- Study the Overview of each learning station. Have students sketch each area & decide what is important for others to learn.
3- Have students put up new paper signs at each learning station. Complete trail maintenance projects.
4- Arrange guest speakers (as time allows) so students can learn about the different learning stations.
5- Decide route for Quest.
6- Write clues.
7- Test run of Quest
8- Install Quest box.
9- Share Quest with community – Forest Day 2008, Town Line publication, brochures in local venues.
10- Publish Quest on school web site for visitors to use.

Create virtual Quest Power Point Presentation to share at local and state conferences to share project with others.

Analysis & Interpretation of Literature
What will you ask your students to write as a response to the literature?
Use non-fiction resources to create quest that uses accurate vocabulary & concepts

Product
What will be the final class product(s) for this unit? How will you share it with the community?
1- Completed QUEST brochure
2- Share QUEST at school forest day in June 2008
3- Publish brochure & place in town office, local libraries, stores.
4- Publish QUEST in local newspaper.
Power Point Presentation to local and state groups to share project with others.

Assessment
How will you assess student learning? How will you know if they have met the goals for the established outcomes?
Student written clues – draft & final forms
Science journals
Pre & post map of school forest- label the map with learning stations & other features
# of visitors to Quest box by next fall.

Final Celebration
How will you celebrate the success of your unit and share its results with the school and community?
Forest Day QUEST celebration
Publish in local paper & brochures around town

Evaluation of Unit
How will you evaluate the unit and make note of what worked well and what could be improved?
Student reflection & feedback
Community feedback including Quest logbook
On-going assessment throughout unit
“Questing in the China School Forest”  
A Trail to Every Classroom Project  
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207-445-1500  

Grade Level: 6th grade science & social studies class  
Time Frame: 4-6 weeks, Fall 2007. Reveal and publish Quest projects in spring 2008  

Purpose: The following unit was created to teach students about creating a Quest as a service learning project for the China School Forest. Students will learn about the China School Forest, study each of the learning stations in the forest and create a Quest to share with the community to teach others about this unique educational resource. We will create three Quests to publish in a brochure to share with our community. The goal of this project is to provide a positive service-learning project for the students. Hopefully this will start to instill a desire to participate in additional service-learning projects in the future.  

Background: The China School Forest is located on approximately 70 acres of town-owned land adjacent to the China Primary and China Middle Schools. The area is a certified Tree Farm. There are trails throughout the forest which allow access to 15 outdoor classrooms. These trails literally start and end at our school doorsteps. The outdoor classrooms feature various forest management strategies, habitat study areas and other learning stations related to the Maine forest. Forest lessons are integrated into many curricular areas across the grade levels (K-8) and the CSF is also open for public access. The outdoor classrooms have evolved over the last 20 years and students, teachers and the community are invited to participate in stewardship projects to maintain the current outdoor classrooms and to add new learning stations as needed. In 1997, our school received the Outstanding Maine Tree Farm Award and also the National Arbor Day Foundation Education Award. Several teachers have received local, state and national awards for their work with students in the China School Forest.  

Lessons (Inside lessons will take 40-60 minutes. Outside lessons take 80 minutes.)  
Lesson 1 - Introduce students to Quests.  
Have students go on a teacher-made Quest of the school.  
Discuss purpose of a Quest – “to introduce and teach others about a chosen area.”  
Lesson 2 – Have students draw a map of the school forest. They should draw in and label with as much detail as they can. This map will be used at the end of the unit to evaluate how much the student has learned about the forest during the unit.  
Lesson 3 – (Outside lesson) Have students create a “What/So What/Now What” chart.  
Take a walk through the school forest and record information in chart  
Students may also make sketches of things of interest while on the walk.  
Discuss chart in class. Plan what our next steps will be. Find volunteer to build a Quest box.
Lesson 4 – Students read information brochure of school forest, study school forest map and read information about each learning station (see information on school web site). Take notes on what students think are important and what they want to learn more about.

Lesson 5 – (Outside lesson) Hike in school forest. Replace worn out paper signs for each learning station. Stop at several learning stations to discuss forest concepts and answer student questions about area. Students take notes and make sketches.

Lesson 6 – (Outside lesson) Continue forest hike to learn more about the rest of the learning stations and forestry concepts.

Lesson 7 – Share model Quest projects with students, including samples from the Pine Tree State Arboretum and *Questing: A Guide to Community Treasure Hunts* by Delia Clark and Steven Glazer

Discuss purpose and types of clues. Begin planning our Quest.

Lesson 8-10 - Students decide what they want to share in their class Quest. Plan Quest route and where to start and end the Quest. Discuss rhyming strategies and skills. Decide on “final clue word” of Quest. Write clues as a class and plan out how to move Quest participants from one station to another in the forest.

Lesson 11 – (Outside lesson) Trial run of Quest. Go out into forest and see if Quest works. Install Quest box. Include journal, pen, stamp pad and stamp.

Lesson 12 - Make final revisions of Quest.

Lesson 13 – (Outside lesson) Have classes test out other group’s Quests to make sure they work.

Lesson 14 – Create brochure for Quests. Students draw designs on Quest to illustrate.

Lesson 15 – Have students draw and label a new map of the school forest based on what they have learned during the Quest development lessons. Have students write an essay to compare their first (see lesson 2) and their new maps. What have they learned about the school forest and the learning stations?

Lesson 16- Prepare brochures for distribution.

**Spring 2008**– During our school-wide Forest Day in June 2008, we will reveal our Quests to the school and our community. We will then place our Quest brochures at various venues around town (Town Office, local libraries & stores) and throughout the summer have our local newspaper publish the three Quests we created. We will also post our Quests on our school web site for visitors to print out and explore our forest trails.

**Final Evaluation:**
Read student journals about what they have learned from this Quest experience.
Read student essays and review maps to see what they learned from the Quest lessons.
Written and verbal feedback from Quest celebration during Forest Day 2008
Next fall, check log entries in the Quest box journals to see who has visited and read their entries.
Share teacher-created Power Point Presentation about project with local groups and state conferences. Presentations already made to Maine Project Learning Tree Annual Conference, October 2007 and A Trail To Every Classroom Final Weekend, October 2007. Other possible future presentations: China School staff, Friends of Unity Wetlands Board of Directors. Also share Quest project during China Community Days in August, 2008
Resources:

**Questing: A Guide to Community Treasure Hunts** by Delia Clark and Steven Glazer  
[www.valleyquests.org](http://www.valleyquests.org)

A Trail To Every Classroom -  [http://www.nps.gov/appa/forteachers/index.htm](http://www.nps.gov/appa/forteachers/index.htm)

China School Forest web site -  [www.chinaclippers.org](http://www.chinaclippers.org)

Project Learning Tree –  [www.plt.org](http://www.plt.org)

Appalachian Trail web sites:  
National Park Service site -  [http://www.nps.gov/appa/](http://www.nps.gov/appa/)

Appalachian Trail Conservancy  
[http://www.appalachiantrail.org/site/c.jkLXJ8MQKtH/b.1423119/k.BEA0/Home.htm](http://www.appalachiantrail.org/site/c.jkLXJ8MQKtH/b.1423119/k.BEA0/Home.htm)

Appalachian Mountain Club  

Appalachian Trail Hopmpage state information -  [http://www.fred.net/kathy/at/atstate.html](http://www.fred.net/kathy/at/atstate.html)

Appalachian Trail Homepage  
[http://www.fred.net/kathy/at.html](http://www.fred.net/kathy/at.html)

Maine Appalachian Trail Club -  [http://www.mate.org/](http://www.mate.org/)