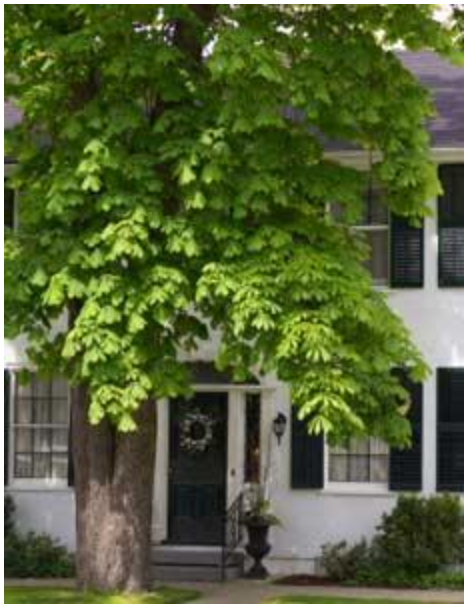
# Our Green City

**Instructional Unit Resource Guide**

Based on Principles of Universal Design and Differentiated Instruction





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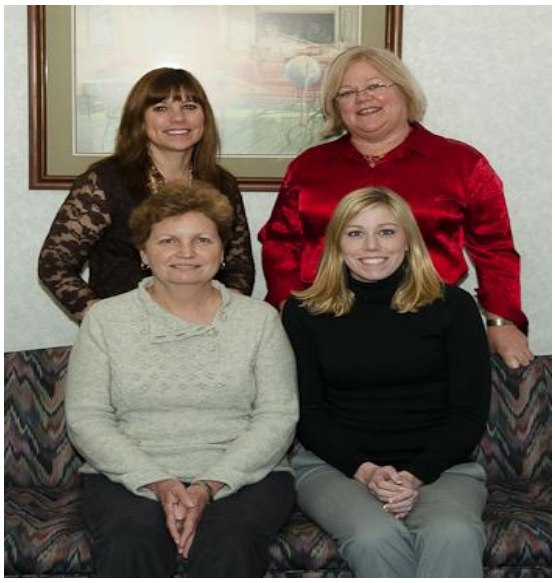
# Authors' Note

This unit was designed to promote the five big ideas in beginning reading within an environmental theme. The big ideas are phonemic awareness, the alphabetic principle, fluency and accuracy, comprehension, and vocabulary. Although the big ideas are actually taught all year, we anticipate using this unit at the end of the last quarter of the school year. The students will be able to combine their breadth of knowledge to create their own published books, stories and reader's theater which they will practice reading for presentations.

Environmental studies by nature promotes a wealth of student engagement. Students love being able to do something in which they feel they have power. What better power to have than to save your planet. This thematic unit begins with our students being city planners. They are going to plan where their homes will go, where the recycling facility belongs, where the local city dump will be located and any other major land features.

As the unit opens the students will be taught about recycling versus discarding into the trash. A field trip to our local city dump will be conducted. The intent is for the children to see the vast amount of land used to discard refuse. The driving questions will be: Who wants their home by the city dump? Are there better uses for this section of land rather than a dump? What do we do with refuse if we want to minimize the land used for a city dump? From these driving questions the students will be treated to an array of information on recycling, composting, solar power, the value of trees and plants, soil and water conservation, and how to be kind to our earth.

The technology we presently have will be used in several ways. The white board will be used for videos about the topics mentioned above. City planning can take place on the board. The children will use their ipods to record podcasts that can be played for the citizens of their town (classroom students)to learn about the environments. Students can take pictures and record videos on a drive through the town field trip to add to posters they will design to display in our school encouraging all grade levels to be environmentally conscious. Students will read information from web sites using text to speech capabilities.



Team members are (back row, left to right) Robin & Mary (front row) Susan & R

# READING STANDARDS


K.1.2
Follow words from left to right and from top to bottom on the printed page. (Core Standard)
1.3
Understand that printed materials provide information. (Core Standard)
K.1.4
Recognize that sentences in print are made up of separate words. (Core Standard)
K.1.5
Distinguish letters from words. (Core Standard)
K.1.6
Recognize and name all capital and lowercase letters of the alphabet. (Core Standard)

## Science

The Nature of Science and Technology

K.1
Students are actively engaged in beginning to explore how their world works. They explore, observe, ask questions, discuss observations, and seek answers.

Common Themes

K.6

Students begin to understand how things are similar and how they are different. They look for ways to distinguish between different objects by observation.

**To find more information on the Indiana State Standards click on the link below:**

***http://www.indianastandards.org/***

# Planning for Academic Diversity

Before you begin planning your unit, consider the following types of scaffolds that should be built into your unit to support diverse learners:

For **students that cannot read at grade level**...

Text to speech

| | |
|---|---|
| http://www.readplease.com | Read Please |
| http://www.donjohnston.com/products/read_outloud/ | Read Out Loud |
| http://www.kurzweiledu.com/ | Kurzweil |
| www.childrensbookradio.com | Books on iPod |

For students who has **difficulty comprehending the material**...

Cloze activities http://www.cricksoft.com/uk/products/clozepro/default.aspx

Early Reading Booster
http://www.meritsoftware.com/software/early_reading_booster/index.php

For students who have **difficulty mastering the vocabulary** of the unit…

Try a visual thesaurus http://www.visuwords.com

Kidspiration
http://www.softwaretime.com.au/product/product_list1.shtml?sid=&prod_code=MWDBV1
Bingo Dingo Primary Sight Word Bingo Software

For students who **need the instructional materials in a language other than English**...

Babel Fish http://babelfish.altavista.com

Google Translation box

For students who have **difficulty with handwriting**, (either speed or accuracy), then...

Consider dictation http://www.idictate.com Kidspiration

For **students to conduct research**...

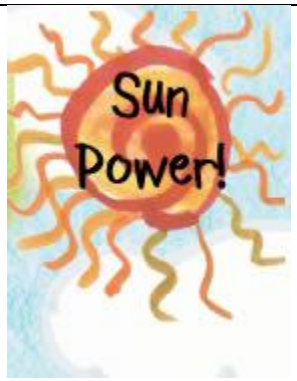
Google Toolbar http://toolbar.google.com/

Internet Search Engine for Kids http://www.ivyjoy.com/rayne/kidssearch.html

Inspire.org

# Teacher Library

Briefly describe instructional resources that will be useful to teachers when preparing this unit for diverse learners.

| | |
|---|---|
|  <br>Hello Cool Kids and the Wonderful People who Care about our Future ! | http://www.childrenoftheearth.org/<br><br>This is an exciting web page that has wonderful children's writing about nature and Awesome activities for children and teachers. |
|  | http://www.kidsforsavingearth.org/<br>Great site with so much information. Even as a newspaper that can be used to show students what they can make on their computer. Lovely Promise song about taking care of the earth. Topics include but not limited to :<br>Wildflowers<br>Bird Buddies<br>Dragon Flies<br>Global Warming |
|  | http://pbskids.org/rogers/buildANeighborhood.html<br>Mr. Rogers Build a Neighborhood<br>Interactive web site where students can |

# Content Accessibility

The UDL principle of multiple means of representation is an important design principle for creating accessible and engaging instruction. The following resources will be provided to ensure that diverse students have access to the instructional content presented in this unit.

**Text-based content:**
Changing font size in your browser or word processor
Accessing Digital Textbooks (Bookshare, NIMAS)
Public Domain e-books (Project Gutenberg)
Sylvan Dell eBooks (www.sylvandellpublishing.com/)
New York Public Library (http://www.tumblebooks.com/library/asp/home_tumblebooks.asp)
Smart Kids Software-Interactive Trade books
http://www.smartkidssoftware.com/livbks1.htm

**Web page content**:
Copy text to text-to-speech program (Macintosh: TextEdit – Windows: Readplease)
Commercial Products (Read, Write, Gold; Kurzweil 3000, WYNN)
Free Audio Books

**Video-based** BrainPop Discovery Education Pod Casts (National Geographic)
Michigan City Area Schools-United Streaming Link
www.mcas.k12.in.us

**How-to guide**
Wired How-to Wiki Atomic Learning (Assistive Technology and More)
Promoting Reading Success
http://sz0114.ev.mail.comcast.net/zimbra/public/launchNewWindow.jsp?skin=velodrome2&localeId=en_US&full=1

http://www.learninginhand.com/podcasting/index.html Podcasting

Podcasting -newsletter
http://www.hsmjs.org/assistive%20technology%20news%20letters/AT%20News%201-07%20newsletter.doc

http://atiapodcast.wikispaces.com/ Steps for podcasting

**Simplified language:**
Simple English Wikipedia

Cognitive Rescaling (using AutoSummary in Word, PDF download)

**Concept Map (Graphic Organizer):**
Kidspiration Graphic Organizers (print templates)

**Vocabulary support**
VisuWords
Visual Thesaurus
The Internet Picture Dictionary

My Reading Coach http://udlresources.com/index.html

**Physical and sensory access**
Tools for Access
Alternative Access: Keyboards and Alternative Input Devices
Alternative Access: Pointing Devices
Braille and Low Vision Aids
Assistive Technology Evaluation
http://www.bergen.edu/documents/ccde/working%20with%20SLI%20in%20your%20classroom.pdf Sign Language in the classroom

# Learner Activities

The UDL principle of multiple means of engagement is an important design principle for creating meaningful learning activities. The following materials will be used to engage diverse learners in the subject matter of this unit.

www.wildernessclassroom.com- This website gives information and pictures for students to use.

http://www.kidsplanet.org/ - This is a place where kids can go to play WILD games and read information.

http://www.nrdc.org/reference/kids.asp
Multitude of links which include endangered species trading cards, music.

http://www.epa.gov/kids/garbage.htm
Site with activites for recycling versus garbage

http://www.epa.gov/epawaste/education/kids/planetprotectors/index.htm
Children become Planet Protectors. Also discussed recycling

http://www.epa.gov/kids/garbage.htm
Recycling crossword puzzle.

http://yucky.discovery.com/flash/worm/
*How worms are good for the environment.*

http://dnr.wi.gov/eek/
*People who work in environmental jobs.*

http://www.epa.gov/region01/students/poem.html
Earth artists

http://www.epa.gov/region5/publications/happy/happy.htm
Earth Day Activities

http://www.epa.gov/safewater/kids/pdfs/activity_grades_k-3_activitybook.pdf
Protecting and conserving drinking water

http://www.epa.gov/ozone/science/missoz/index.htm
Teaches about the ozone layer and why it is important

http://www.epa.gov/espp/poster/
Save our species, about plants and animals that are endangered.

http://pbskids.org/eekoworld/
PBS sites that teachers children about the environment.

http://pbskids.org/eekoworld/index.html?load=environment
Discusses biomes.

# Assessment

The UDL principle of multiple means of expression is an important design principle for assessment. The following materials and resources will be useful for assessing student knowledge, skills, and application of their learning.

Resources that could be used:

Readingassistant.com- Students will read a passage on the screen into the microphone. The computer then checks for errors. Scored by rubric.
Tim Rasinski "Three Minute Assessments" Students can read into the ipod and record.
Acuity-Computer based assessment
NWEA-Computer based assessment
Rubrics-
Student response systems for teacher made assessments.
i pods with microphones- students will read into ipod microphone and then listen back. Teachers could also listen for errors and scored by rubric. Mp3 could be put on cd and sent home for parents to listen.

My Own Bookshelf- students create and read their own rainforest book. This would assess fluency but also the science standard.

Running Records- done one on one with student. This could be done with a subscription with AIMS Web or DIBELS on a PDA.