

# “Virtual Greenhouse”



For further information contact

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## 2005-2006 IDEA CATALOG OF EXCELLENCE

### PROGRAM OVERVIEW

This unit came from the desire for my students to get to know what is essentially in their own backyard. I had 24 students mixed race and ability. Any ESE or ESOL students were paired with others to work. I wanted to give my students an understanding of the wonderful Florida flora and fauna that we have. We started by doing the plant unit in our Science book. However, it was a general scope of plants, how they are made up and what they need to survive. To be more specific, I wanted my students to learn about plants in Florida. I wanted them to learn about native and non-native plants and how they came about.

Students were asked to look up native and non-native plants on the internet, write down some facts, (using Kidspiration) and then make an e-book (narrated power point presentation) to share with the class. Students were then divided into groups for our major project the green house.

All the students checked out the class digital camera, took it home, and took 10 pictures of flowers or trees. We had extensive training and rules about the camera use. Parents signed a permission form I made up and only then could the camera go home. Cameras were brought back the next day and the pictures were printed out and numbered.

Another group would then step in and using the field guides (Florida's Fabulous Flowers and Trees) they identified as closely as possible the pictures.

A group of other students would type all the names and numbers in the computer and set up a scavenger hunt worksheet. As a class, we displayed the pictures in various ways and invited the whole school to come try their luck at our scavenger hunt. They had to use field guides and try to match the pictures with the names of the plants. My students who had worked so hard and knew most of the pictures, were available to assist when needed.

### OVERALL VALUE

My goal for this project was twofold. First I wanted my students to gain some perspective of what plants need and why some plants do better in Florida than others. Second I wanted to share the beautiful pictures that my students had taken with the rest of my school.

By using the various technology i.e. cameras and allowing them to take their own pictures, they took ownership of the project and really put forth their best effort when producing this project.

While all the students (who visited) did not get a chance to complete all 25 of their particular scavenger hunt

worksheet (there were 160 pictures total) they at least got a taste of the flora and fauna that they see everyday and were very complimentary to my students efforts.

### LESSON PLAN TITLES

- E-Book
- Collect and Conquer
- Interior Design

### MATERIALS

Materials for each lesson are listed with each lesson plan. Overall materials budget including pricing and vendors follows the lesson plans.

### ABOUT THE DEVELOPER

Valerie has been teaching for 12 years, the last 6 of which have been at Eagle Lake where she currently teaches 3rd grade.

Valerie graduated from Warner Southern College and will seek a Master's degree from USF in the fall of 2005. She has been a model technology teacher for 3 years and is also currently a Technology Peer Coach at her school.



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## LESSON PLAN No 1: E-Book



### SUBJECTS COVERED

Science/Language Arts

### GRADES

Two - Four

### OBJECTIVES

- To complete and PowerPoint/E-Book of invasive and native plants.
- Present the Slide show during the scavenger hunt for other classes.

### SUNSHINE STATE STANDARDS

#### SCIENCE

SC.F.1.2.3 The student knows that living things are different but share similar structures.

SC.G.1.2.1 The student knows ways that plants, animals, and protists interact.

SC.G.1.2.7 The student knows that variations in light, water, temperature, soil contents are largely responsible for the existence of different kinds of organisms and population densities in an ecosystem

#### LANGUAGE ARTS

LA.A 2.2.5 The student reads and organizes information for a variety of purposes including: making a report, conducting interviews, taking a test, and performing an authentic task.

LA.A 2.2.8 The student selects and uses a variety of appropriate reference materials including: maps, charts, photos, internet, computers to gather information for a research project

LA.B. 1.2.1 The student prepares for writing by recording thoughts, focusing on a central idea, grouping ideas, and identifying the purpose for writing.

### MATERIALS (PER GROUP)

- PowerPoint software
- Microphone for recording

### EVALUATION / ASSESSMENT

See Rubric on following page.

### DIRECTIONS

After compiling information from the many websites that were found for our project, students will complete an E book and Power Point presentation.

- 1 Use the bubble map from Kidspiration to prepare a 6-8 slide presentation on invasive Florida plants.
- 2 After creating the PowerPoint, students will record their own voices while reading what they wrote on each slide.
- 3 After recording, students will learn how to set timings on the presentation.
- 4 The presentations will be set up and shown during the greenhouse scavenger hunt.

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## **LESSON PLAN No 1: E-Book**



### **HyperStudio/Powerpoint Appearance and Content: E-Book**

<b>CATEGORY</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
Text - font Choice & Formatting	Font formats (e.g., color, bold, italic) have been carefully planned to enhance readability and content.	Font formats have been carefully planned to enhance readability.	Font formatting has been carefully planned to complement the content. It may be a little hard to read.	Font formatting makes it very difficult to read the material.
Content - Accuracy	All content throughout the presentation is accurate. There are no factual errors.	Most of the content is accurate but there is one piece of information that might be inaccurate.	The content is generally accurate, but one piece of information is clearly flawed or inaccurate.	Content is typically confusing or contains more than one factual error.
Spelling and Grammar	Presentation has no misspellings or grammatical errors.	Presentation has 1-2 misspellings, but no grammatical errors.	Presentation has 1-2 grammatical errors but no misspellings.	Presentation has more than 2 grammatical and/or spelling errors.
Effectiveness	Project includes all material needed to gain a comfortable understanding of the topic. It is a highly effective study guide.	Project includes most material needed to gain a comfortable understanding of the material but is lacking one or two key elements. It is an adequate study guide.	Project is missing more than two key elements. It would make an incomplete study guide.	Project is lacking several key elements and has inaccuracies that make it a poor study guide.

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## LESSON PLAN No 2: Collect and Conquer



### SUBJECTS COVERED

Science, Language Arts, Research

### GRADES

Two - Four

### OBJECTIVES

- Research invasive and native Florida plants
- Create an outline of information for use in a presentation.

### SUNSHINE STATE STANDARDS

#### SCIENCE

SC.F.1.2.3 The student knows that living things are different but share similar structures.

SC.G.1.2.1 The student knows ways that plants, animals, and protists interact.

SC.G.1.2.7 The student knows that variations in light, water, temperature, soil contents are largely responsible for the existence of different kinds of organisms and population densities in an ecosystem

#### LANGUAGE ARTS

LA.A 2.2.5 The student reads and organizes information for a variety of purposes including: making a report, conducting interviews, taking a test, and performing an authentic task.

LA.A 2.2.8 The student selects and uses a variety of appropriate reference materials including: maps, charts, photos, internet, computers to gather information for a research project

LA.B. 1.2.1 The student prepares for writing by recording thoughts, focusing on a central idea, grouping ideas, and identifying the purpose for writing.

### MATERIALS NEEDED

- Computer with internet access
- Kidspiration software

### DIRECTIONS

Using the program Kidspiration, students will: make a bubble map with information found on any of the particular website from the previously mentioned.

After the bubble map is complete, Students will switch to writing mode: where they will make an outline of information for use in their PowerPoint presentation.

### EVALUATION / ASSESSMENT

See information in box below.

### ADDL INFORMATION

Visit the following websites for information about invasive and non-invasive Florida plants:

[www.enature.com](http://www.enature.com)

[www.kidsplanet.org/](http://www.kidsplanet.org/)

[www.urbanext.uiuc.edu/gpe/](http://www.urbanext.uiuc.edu/gpe/)

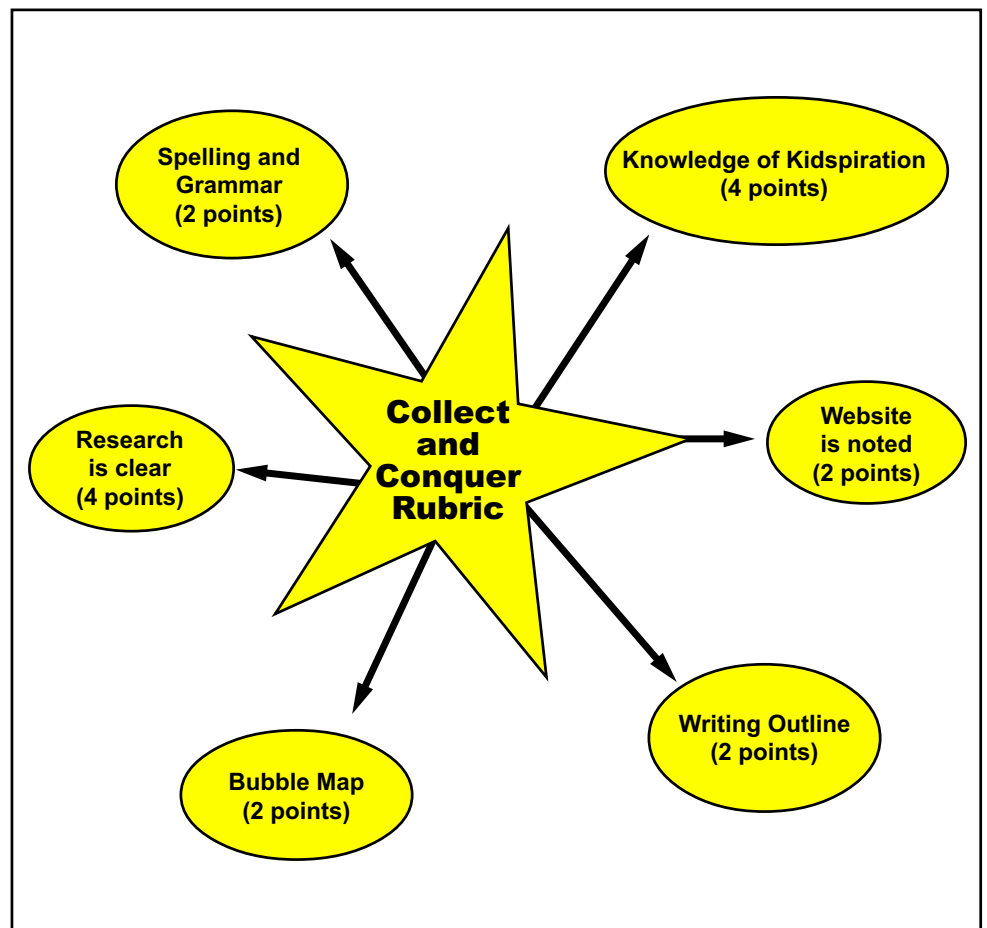
[www.nsis.org/index.html](http://www.nsis.org/index.html)

<http://webworldwonders.firm.edu/>

<http://www.floridaplants.com/native.htm>

<http://www.fnps.org/>

<http://www.fleppc.org/>



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## LESSON PLAN No 3: Interior Design



### SUBJECTS COVERED:

Science/Language Arts

### GRADES:

Two - Four

### OBJECTIVES

To create a display of digital photos for preview.

Use the photos for a scavenger hunt of Florida's flora and fauna.

### SUNSHINE STATE STANDARDS

#### SCIENCE

SC.F.1.2.3 The student knows that living things are different but share similar structures.

SC.G.1.2.1 The student knows ways that plants, animals, and protists interact.

SC.G.1.2.7 The student knows that variations in light, water, temperature, soil contents are largely responsible for the existence of different kinds of organisms and population densities in an ecosystem

#### LANGUAGE ARTS

LA.A 2.2.5 The student reads and organizes information for a variety of purposes including: making a report, conducting interviews, taking a test, and performing an authentic task.

LA.A 2.2.8 The student selects and uses a variety of appropriate reference materials including: maps, charts, photos, internet, computers to gather information for a research project

LA.B. 1.2.1 The student prepares for writing by recording thoughts, focusing on a central idea, grouping ideas, and identifying the purpose for writing.

### MATERIALS (PER GROUP)

- Digital photos taken by students.
- Various display items to showcase photos.  
(i.e. buckets, clothes line, plastic gating, easels, etc.)

### DIRECTIONS

Your students have taken several photos from their neighborhood ~ it is time to showcase them!

1. Identify the photos as closely as possible and assign each photo a number.
  2. Using several display items (some of which are mentioned above) glue or tape your photos to the items.
  3. Place your photo displays around the room or screen room if you have one.
  4. Using the Scavenger Hunt worksheet (see sample attached) and field guides such as [Florida's Fabulous Flowers](#) or [Florida's Fabulous Trees](#), visiting students will try and match the photos taken by the students to the photos in the books by matching the photos number on the Scavenger Hunt worksheet.
  5. A good frame of time is 10-15 min. Students may or may not find all of their photos. It is not necessary for them to, just to get a taste of what is in their 'backyard'.
  6. Have your own class available to assist students as needed.
- NOTE:** Kindergarteners don't need to fill out a sheet. They just match the pictures and point to them. It is much more fun for them.
7. As visiting students leave, have them keep their worksheet and give out plant or bug stickers and small candies (if desired).

### EVALUATION / ASSESSMENT

This questionnaire is given to teachers as their classes leave the Virtual Greenhouse. My students would look at the comments good and needs improvement to 'tweak' for the next time.

**Directions:** Please fill this questionnaire after your visit to our Virtual Greenhouse, and return it to Mrs. Meadows.

Thank you for visiting!

1. What grade level is your class?
2. How did you find our displays?
3. Was Mrs. Meadows' class helpful in assisting your students?
4. Did your class enjoy coming to the Virtual Greenhouse?
5. Did you see anything we might improve upon next time?
6. Tell us about your overall experience at the Virtual Greenhouse.

Please give any other comments you would like us to know about your experience.

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## LESSON PLANS MATERIALS BUDGET



### Materials Budget

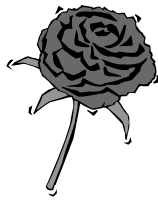
SUPPLIER	ITEM DESCRIPTION	COST	QUANTITY	TOTAL COST
Wal-Mart	Screen Room (any size ~ I got 14'x18')	\$58.00		
	<i>~The smaller the screen room, the cheaper it will be. ~</i>			
Wal-Mart	Digital Camera	\$50.00		
Big Lots	Various Display Items			
	i.e. poster board, wrapping paper, plastic			
	buckets, clothes pins, clothes line, shelf paper	\$30.00		
Wal-Mart	Printer Ink (Tri-Color or Photo)	\$ 28.00		
Wal-Mart	Photo Paper	\$15.00		
Books-A-Million	Field Guides (Florida's Fabulous Flowers ~ Trees)	\$ 9.95		
School Library	Books about Trees / Flowers	Free		
Teacher's Name <u><b>Valerie Meadows</b></u> School: <u><b>Eagle Lake Elementary</b></u>			<b>Subtotal</b>	\$201.00
			<b>Tax if applicable</b>	
			<b>Shipping if applicable</b>	
			<b>TOTAL BUDGET AMOUNT</b>	\$201.00



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## **Related Materials**



# Virtual Greenhouse

### **Directions:**

use the provided book to see if you can figure out which flowers are which.  
Write the letter of the plant/flower next to the number.

- 76. \_\_\_\_\_
- 77. \_\_\_\_\_
- 78. \_\_\_\_\_
- 79. \_\_\_\_\_
- 80. \_\_\_\_\_
- 81. \_\_\_\_\_
- 82. \_\_\_\_\_
- 83. \_\_\_\_\_
- 84. \_\_\_\_\_
- 85. \_\_\_\_\_
- 86. \_\_\_\_\_
- 87. \_\_\_\_\_
- 88. \_\_\_\_\_
- 89. \_\_\_\_\_
- 90. \_\_\_\_\_
- 91. \_\_\_\_\_
- 92. \_\_\_\_\_
- 93. \_\_\_\_\_
- 94. \_\_\_\_\_
- 95. \_\_\_\_\_
- 96. \_\_\_\_\_
- 97. \_\_\_\_\_
- 98. \_\_\_\_\_
- 99. \_\_\_\_\_
- 100. \_\_\_\_\_

- a Star Jasmine
- b Jelly Palm
- c Cabbage Palm
- d Selloum
- e Spanish Bayonet
- f Live Oak Tree
- g Mandevilla
- h Never could find
- i Casoarina
- j Snake Palnt
- k Weeds
- l Aloe
- m Magnolia
- n Live Oak
- o Lantana
- p Pine
- q Eucalyptus
- r Star Jasmine
- s Oleander
- t Hibiscus
- u Azalea
- v Fern
- w Mock Gardenia
- x Bromeliads
- y Brazilian Pepper