STEM+C 5E Model Lesson Plan

nit Title: Florida's Diversity		
esson Number: 1		
Collection Number: 1		
Established Goals (STANDARDS)		
English Language Arts (ELA)	Science	Social Studies
• LAFS.4.W.1.2	• SC.4.L.17.4	• SS.4.G.1.1
• LAFS.4.RI.3.7	• SC.4.N.1.1	• SS.4.G.1.2
• LAFS.4.RI.1.2	• SC.4.N.1.2	• SS.4.G.1.4
• LAFS.4.RI.2.4	• SC.4.N.1.6	
	• SC.4.N.3.1	
Materials Needed:		
• Computer		
• Projector		
• TIME Magazine Video: Pyth	ons Devour Florida – Help Wa	nted
• Florida Studies – Social Stud	lies textbook	
• Relief Map Materials (see di	rections for relief map you sele	ct)
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Time to Complete the Lesson: 90 n	ninutes	
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Lesson Essential Question: What a		s and how do they help us understand
		s and how do they help us understand
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Lesson Essential Question: What as places? Lesson Objectives: • Students will be able to deve	re the essential map component	
Lesson Essential Question: What as places? Lesson Objectives: • Students will be able to deve • Create and label a 3-D relief	re the essential map component lop a clear understanding of the map of the Everglades	e main components of a map
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TIME Magazine Video: Pythons Devour Florida - Help Wanted

- Show students a video regarding the Burmese Python's effects on the Florida Everglades, especially the Marsh Rabbit.
 - The video is about 4:54 minutes
 - There is a scene at 0:12 seconds in the video of a python jumping at and wrapping around a rabbit. You could avoid this scene by starting the movie at 0:19 seconds.
 - \circ There is a dead red fox shown at 4:27 that you may need to address with your students.
- Questions for discussion after the video:
 - How have the Burmese python effected the Everglades? (*both positive and negative effects*)
 - How have humans effected the Everglades? (*both positive and negative effects*)
 - What steps can humans take to repair the damage that has occurred to the Everglades?
 - Who can the people of Florida enlist to help repair the damage that has occurred to the Everglades?

EXPLORE (Students work together on an interactive activity; students begin constructing knowledge):

GRASP Introduction Letter

- Tell students that they have an opportunity to learn how to help save the Everglades from an invasive species.
- Read the letter to the students
- Have students generate the information they think they will need to learn to complete the final project.
 - Point out to students that they may feel strongly about this topic so you want them to set up two pages next to each other in their journal that they will use to track their opinions and facts as they are collected.
 - Give them the opportunity to add a few facts they have learned from the video.
 - \circ You will refer to this page throughout the module and add to it.
 - At intervals, have students label the statements as facts or opinion (non-facts)

EXPLAIN (Students explain their thinking, misconceptions addressed here, teacher introduces vocabulary):

Florida Studies – Social Studies Textbook, pages 10 – 13

- Read, discuss, and take notes on pages 10 13 in *Florida History* textbook.
 - The class will engage in Tier 1 instruction relating to Main Idea/Details as they move through the text.
 - Use the ACTIVE TEACHING guidelines.
- Questions for discussion:
 - Why is it important to learn how to read maps?
 - What are some tools that are used to help us find directions?
 - How do you use a map legend?
 - How has the development of maps impacted the environment? (both positive and negative effects)

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ELABORATE/EXTEND (Students apply new learning to a new or similar situation)

Relief Map of the Florida Everglades – <u>Everglades Map</u>

- Students work in collaborative teams to build a relief map of the Florida Everglades.
 - This activity will take a few days to complete.
 - Groups can work during center rotations or during whole group as the teacher circulates and assists.
 - The teacher may want to circulate and assist for the first few days and then allow the groups to work independently to complete the short project.
- There are several ways to make relief maps depending on your budget. Directions from several sources have been linked below. Use the version that fits your supplies and class time.
- You will need to allow the relief map time to dry before adding any details, like labels.
 - Social Studies Learning Village using Celluclay: <u>Teacher Guide</u>, Student <u>Directions</u>, <u>Samples</u>
 - $\circ \quad Ms. \ Dunlap \ in \ California salt \ map: \ Teacher \ / \ Student \ \underline{Directions}$
 - Play dough map <u>suggestions</u> from online
- The relief map must be developed and labeled with the domain specific vocabulary associated with the *Florida History* text.
 - The teacher may add additional specific locations to label, such as: bodies of water, Visitor Centers, major ecosystems etc.
 - The students will independently summarize the details of their relief maps in paragraph form using domain specific vocabulary.
- Students will continue to add to this relief map through the next few lessons.

SUPPLEMENTAL SUGGESTION:

Students will create a compass rose at home using only "found" items. Cardinal and intermediate directions must be labeled. Creativity is rewarded when choosing the materials for the compass rose.

EVALUATE (Students demonstrate understanding; can be written, verbal, visual, or performance/task)

- Assess student relief maps using the provided <u>rubric</u>. (<u>Excel version</u>, if you wish to edit)
- The students will respond to the following question in their journals:
 - How has the development of maps impacted the environment? (both positive and negative effects)
- Assign and review all vocabulary from the text

Observation of Journal:

Monitor student responses and summaries regarding their relief maps and discussion questions Observe student's oral discussion responses both during whole group and in collaborative small groups.

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ESOL Strategies:

ESOL Strategies Matrix

A. Accommodations A1 Heritage Dictionary A2 Heritage Language (L1) Support A3 Flexible Scheduling A4 Flexible Setting A5 Flexible timing

B. Clear Communication

B1 Concise Language **B2** Clear Directions **B3** Enunciation **B4** Pauses & Pacing **B5** Pointing **B6** Repeating/Paraphrasing **B7** Gestures B8 Show Examples & Non-Examples **B9** Demonstrations B10 Anecdote/Storytelling

C. Assessments

C1 Rubrics C2 Presentations C3 Portfolio C4 Checklist C5 Labeling C6 Interview C7 Response Cards C8 Oral Assessment **C9** Observation C10 Context Embedded Text C11 Voting Devices C12 Cloze Test C13 Visual Representations C14 Self/Peer Assessment C15 Samples C16 Sentence Frames

D. Vocabulary

D1 Etymology/Cognates **D2** Semantic Feature Analysis D3 Context Clues **D4** Tier 2/ Tier 3 Analysis D5 Interactive Word Walls D6 Vocabulary Games **D7** Multiple Meanings **D8** Phonology **D9** Vocabulary Banks

E. Collaboration & Conversation

E1 Heterogeneous Grouping (Language/Content Readiness. Learner Profiles, & Interests) E2 Homogeneous Grouping (Language/Content Readiness, Learner Profiles, & Interests) E3 Jigsaw E4 Peer Pair E5 Reader's Theater E6 Think/Pair/Share E7 Academic Games E8 Group Presentation/Projects E9 Socratic Seminar E10 Panel Discussion E11 Debate/Defend with Evidence

F. Metacognitive & Metalinguistic

F1 L1 Transfer F2 Mnemonic Devices F3 Dialogue Journals F4 Self-Correction F5 Self-Evaluation F6 Self-Monitoring F7 Peer Editing F8 Associations

G. Context Embedded Supports & Close Reading

G1 Activation and/or Building Prior Knowledge G2 Chunking Text G3 Annotations & Symbols G5 Ask Clarifying Questions G6 Modeling G7 Read Aloud G8 Think Aloud **G9** Multimodal Tests G10 Visualization/ Illustration G11 Summarizing G12 Dramatic Enactments/ Role Play G13 Identify Key Concepts G14 Similarities & Differences G15 Language Experience Approach G16 Note-Taking/ Outline Notes G17 Question-Answer-Relationship (QAR) G18 Reading with Specific Purpose G19 Reread Text

G20 Text Features & Structural Analysis G21 Survey, Question, Read, Recite, Review (SQ3R) G22 Text Connections G23 Total Physical Response (TPR) G24 Vary Complexity of Assignment G25 Realia/ Manipulatives G26 Captioning

H. Multimodal & Multimedia

H1 Audio-Visual Applications H2 Digital Books H3 Computer Software H4 Document Camera H5 Interactive White Board H6 Tablet/ Interactive Devices H7 Language Master H8 Video/ Film/ CD/ MP3 H9 Digital Simulations H10 Translation Devices

I. Advance Organizers

I1 Charts (Flowcharts, T-Charts, Etc.) I2 Anticipation Guides 13 Cornell Notes I4 Digital Tools/Software **I5** Foldables I6 Graphs/Diagrams 17 K-W-L 18 Reading and Analyzing Non-Fiction (RAN) **I9** Notes TM I10 Webbing/ Mapping I11 Story Maps I12 Timelines **I13** Venn Diagrams I14 Vocabulary Improvement Strategy (VIS)

J. Additional Resources

J1 Art Integration J2 Community Resources J3 Cultural Sharings J4 Celebrations J5 Field Trips J6 Guest Speakers J7 Holiday Programs J8 Multicultural Resources J9 Music/ Songs/ Jazz Chants

ESE Strategies:

ESE Interventions & Accommodations:

- 1. Teacher-Student Conference
- 5. Specialized equipment 9. Small Group for testing
- 13. Open Notes/Book Test
- 16. Differentiated test
- 2. Outlined Notes 6. Flexible Setting 10. Read directions
- 14. Lessons Broken to small segment
 - 17. ESL/ESE/Reading Specialist
- 3. Proximity Control
- 7. Preferential Seating
- 4. Peer Tutoring/Study Buddy
 - 8. Flexible Scheduling & Extra Time
- 11. Reduced Assignments 12. Highlight/Underline/Circle key info & key vocab 15. Flexible Presentation (repeat, clarify, paraphrase, summarize directions)
 - 18. Redo/Correct Assignments& Test pull out.