

CURRICULAR UNIT

How Do Plants, Animals, and
People Need Each Other?



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About Harris Elementary School...

Faculty

- Total number of teachers: 48
- Teachers with advanced degrees: 31
- Average years of experience: 7

Students

- Total students (PreK-5): 533
- African-American: 24%
- Hispanic: 69%
- White: 5%
- Multi-racial: 2%

Advanced Academics

- Students in gifted education: 16
- Percentage in gifted education: 3%



J.J. Harris
Elementary Charter School

Academic Performance

Reading/English Language Arts – YES

- All Students – 82.7%
- Black Students – 82.7%
- Economically Disadv. Students–82.1%
- Hispanic Students – 83%
- English Language Learners– 74.3%
- White Students - *
- Students with Disabilities – 40.7%



Academic Performance

Mathematics – YES

- All Students – 86.1%
- Black Students – 83.6%
- Economically Disadv. Students– 85.6%
- Hispanic Students –87.4%
- English Language Learners-79.4%
- White Students - *
- Students with Disabilities – 55.6%



3rd grade – Classroom Context

- **Educators**

- Mainstream teacher.
- Student Teacher.
- ESOL teacher.

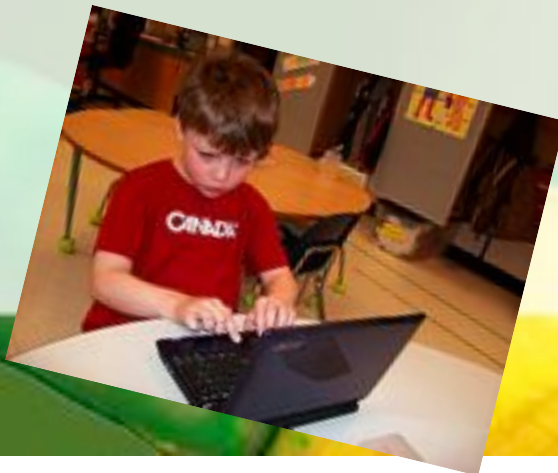
- **Students**

- 14 males and 8 females.
- 20 Hispanic and 2 Caucasian.
- 2 gifted students.
- Most of the Hispanic students speak English and Spanish fluently.
- 15 ESOL students and 4 monitored ESOL students.



Available Resources

- TV Broadcast Studio
- Computer lab
- SMART Boards
- LCD projectors
- Mobile wireless laptop computers



Standards

Focus Standards

S3L1. Students will investigate the habitats of different organisms and the dependence of organisms on their habitat.

- a. Differentiate between habitats of Georgia (mountains, marsh/swamp, coast, Piedmont, Atlantic Ocean) and the organisms that live there.
- b. Identify features of green plants that allow them to live and thrive in different regions of Georgia.
- c. Identify features of animals that allow them to live and thrive in different regions of Georgia.
- d. Explain what will happen to an organism if the habitat is changed.

Supporting standards

S3CS1. Students will be aware of the importance of curiosity, honesty, openness, and skepticism in science and will exhibit these traits in their own efforts to understand how the world works

- a. Keep records of investigations and observations and do not alter records later.
- b. Offer reasons for findings and consider reasons suggested by others.

Theoretical Framework

- ❑ Sociocultural Theory
- ❑ Systemic Functional Linguistics (SFL)



Sociocultural Theory

- “Learners need to be engaged with authentic and cognitively challenging learning tasks and support must be given that is responsive to the particular demands made on children learning through the medium of a second language” (Gibbons, 2002, p.10).
- “Sociocultural theory sees human development as intrinsically social rather than individualistic. Individual development is a product of education” (Gibbons, 2002, p. 8).



Systemic Functional Linguistics (SFL)

- It provides a framework for demonstrating how meaning is constructed in particular language choices (Fang, Z., & Schleppegrell, M., 2008, p. 10).
- It offers teachers strategies for evaluating the difficulty of reading materials and the quality of students' writing (Fang, Z. & Schleppegrell, M., 2008, p.12).

Systemic Functional Linguistics (SFL)

A curricular unit that integrates language and learning:

1. Focus on meaning

- Comprehensible Input
- Development of Critical Literacy

2. Focus on language:

- Development of children's' awareness of language forms and uses
- Ability to critically analyze language.

3. Focus on use:

- Using language to transform what has been learned
 - ✓ Generating new knowledge
 - ✓ Creating literature and art
 - ✓ Acting on social realities.

Language and literacy demands in Science

Language demands

- Students will learn some technical vocabulary used in the texts. (e.g. pollen, stigma, handler, Egyptian plover bird, hygiene, domesticated, symbiosis, germination)
- Students will be able to recognize the differences between the simple texts and the more complex ones (zig-zag pattern used in the upper-grade scientific textbooks)

Literacy demands

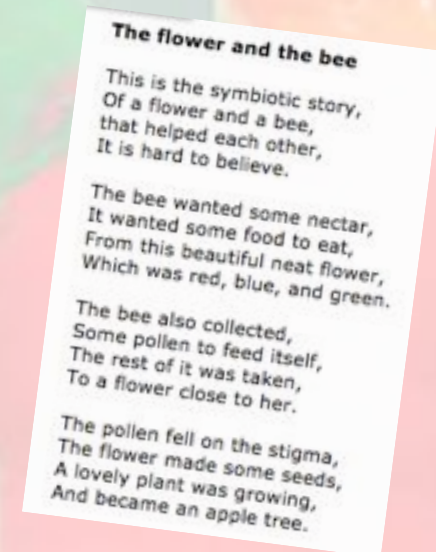
- Students will need to read and identify different patterns in the sample expository texts, both simple and complex ones.
- Students will need to write their own scientific texts.

Critical & Multiliteracies

- Students will learn how plants, animals, and human need each other in authentic contexts and will understand and value these symbiotic relationships.
 - ✓ Video clips
 - ✓ Cards with pictures and print
 - ✓ Big book
 - ✓ Smart Board
 - ✓ Multimodal Poster: It will shape students' attitudes and beliefs towards other living things, and will encourage respect and civility towards nature.

Curricular Resources

- Movie: How do plants, animals, and people need each other?
- Cards matching
- Big book reading
- Small group: Work with scientific texts
- Small group: Writing workshop
- Whole group reading: Vanishing cloze



Students Assessments

- ☐ Formal Assessments
- ☐ Informal Assessments

Formal Assessment (Rubric)

1. General Comments	2. Text Type	3. Overall Organization	4. Cohesion	5. Vocabulary	6. Sentence Grammar	7. Spelling
Is the overall meaning clear?	What kind of text is this?	Is the overall structural organization appropriate to the text type?	Are the ideas linked with the appropriate connectives?	Is appropriate vocabulary used?	Is this accurate?	Is this accurate?
Are the main ideas develop?	Is this appropriate for the writer's purpose?	Are any stages missing?	Is there an appropriate variety of these connectives?	Is there semantic variety?		If the writer does not yet produce correct spelling, what does the writer know about spelling?
Does the writing reflect the writer's other classroom language experiences?	Has the writer written this text type before?		Are pronouns used correctly?			
What is your overall impression compared to other things the learner has written?			Do pronouns have a clear referent?			

Informal Assessment

- In-class assignments
- Class discussions
- Participation in the various activities



Curricular Unit

- **DAY 1:** Introduction of the unit- Movie and discussion.
- **DAY 2:** Card game followed by group discussion and whole class sharing.
- **DAY 3:** Guided reading- Big book- teacher scaffolding
- **DAY 4:** Teacher instruction-modeling of two expository texts
- **DAY 5:** Cloze activity and discussion using the Smart Board
- **DAY 6:** Creation of a multimodal poster
- **DAY 7:** Presentation of the poster.
- **DAY 8:** Explanation of characteristics of expository texts- Brainstorming in groups
- **DAY 9:** Drafting: Participants, processes, and circumstances
- **DAY 10:** Revising: Is it cohesive?
- **DAY 11:** Publishing/sharing
- **DAY 12:** End of the curricular unit: Vanishing cloze

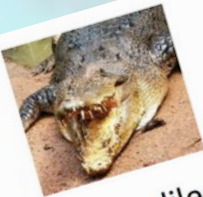


Lesson Plan (Coile Middle School)

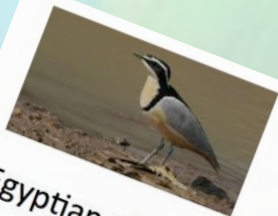
- ☐ Pre – Literacy
- ☐ During – Literacy
- ☐ Post - Literacy

Pre-Literacy

- **Video Clip:** Example of how the Egyptian Plover bird cleans the crocodile's teeth.
- **Matching cards** and discussion in small group and sharing.



Crocodile



Egyptian plover bird



Hygiene



During – Literacy Activity

- **Explicit instruction** on the use of language in textbooks.
- Use of the Smart Board to **model** how to identify the author's language choices:

Text 1

There are many types of birds. Most birds fly, but some birds like penguins swim and cannot fly. Birds use things they find to make their nests. Large birds use broken branches they find in the forest to make nests. Littler birds use smaller branches called twigs to make their nests. The nests are a place of shelter for the birds<. Birds lay their eggs in nests

Text 2

There are many different types of birds. Most of them fly, but some birds like penguins swim and cannot fly. Birds that can fly build nests. These nests are made of branches. Broken branches are used by large birds to make big nests, while smaller birds use littler branches called twigs to make their nests. Birds use nests as places of shelter where birds can lay their eggs.

Post – Literacy Activity

- Cloze filling
- Identification of author's language choices (Participants)
- Sharing of procedures using the Smart Board

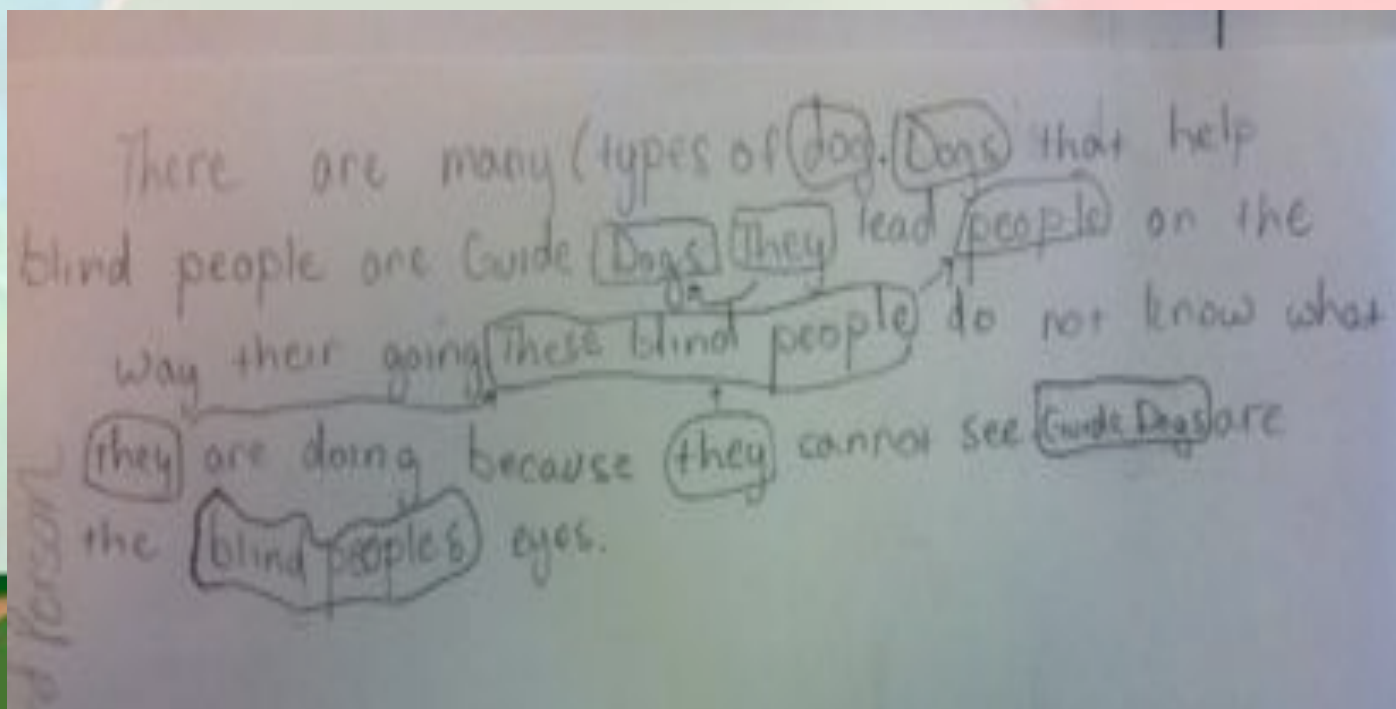
Birds / branches / nest

There are many different types of birds. _____ fly, but some birds like penguins swim and _____ fly. _____ build nests. _____ are made of branches. _____ are used by large birds to make big nests while _____ use littler branches called twigs to make their nests. Birds use nests as places of shelter where birds _____

BIRDS THAT CAN FLY - SMALLER BIRDS - CAN LAY THEIR EGGS - THESE NESTS - CANNOT - MOST OF THEM - BROKEN BRANCHES

TOPIC SHIFT

- Writing workshop in groups
- Identification of author's language choices (Participants)



The image shows a photograph of a piece of paper with handwritten text. The text is written in cursive and has several words and phrases circled or boxed in pencil. The text reads: "There are many (types of) (dog). (Dogs) that help blind people are Guide (Dogs). (They) lead (people) on the way their going. (These blind people) do not know what (they) are doing because (they) cannot see (Guide Dogs) are the (blind people's) eyes." The annotations highlight specific words and phrases, likely for a language analysis exercise. The background of the slide features a colorful, abstract pattern of overlapping shapes in shades of orange, red, green, and blue.

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Reflections

- Time constrains and interruptions.
- Different reading abilities:

Reflections and feedback by students (questionnaire)

1. What did you learn today?
I learn about Bee/Pollen/and Flower
2. Did the topic interest you?
Bee/Pollen/Flower
3. Were the activities interesting?
4. Were the instructions of the activities clear and easy to follow?
5. Which part did you like the best?
little Flower
6. What part did you not like?
Bee
7. Is there anything else you would like to tell us about our lesson?
The Flower grow up

Reflections and feedback by students (questionnaire)

1. What did you learn today? I learn ^{about} ~~that~~ symbiotic relationship
2. Did the topic interest you? when we were doing the sentence
3. Were the activities interesting? wish we sing and dance
4. Were the instructions of the activities clear and easy to follow?
5. Which part did you like the best? were we did Sheep/wool/winter clothing
6. What part did you not like? there wasn't no part i did not like
7. Is there anything else you would like to tell us about our lesson? it was good
I liked and want you to come back another Back