An Extended Literature Base for an Integrated Unit: Forest Regions of the United States

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Abstract
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An Extended Literature Base for an Integrated Unit:
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A Journal Article
Submitted to the
Department of Curriculum and Instruction
In Partial Fulfillment
of the Requirements for the Degree
Master of Arts in Education
UNIVERSITY OF NORTHERN IOWA

by
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December 1999
This Journal Article by: Barbara R. Wild

Entitled: An Extended Literature Base for an Integrated Unit:

Forest Regions of the United States

has been approved as meeting the research article requirement for the Degree of Master of Arts in Education.

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Abstract

An example of extending literature-based language arts to an integrated social studies and science unit is presented in this paper. Justification for this type of learning environment is given by citing professional literature. Specific benefits to students are explained. The teacher and student roles in this unit are defined. Teacher-directed activities, literature groups, and student-selected center activities all work together to provide a learning environment in which students are engaged in learning, take responsibility for their learning, and find meaningful uses for language tasks--written and spoken.
One trend in developing instructional programs in the elementary grades is to integrate literature-based language arts across the curriculum. This integration of the instructional program involves the incorporation of the language processes and the content and processes of the different curricular areas into a unit rather than presenting them in separate subjects. Integration allows learning to move past focusing on isolated facts and toward developing an understanding of concepts and processes and how they relate to the student's prior knowledge and to the different areas of the curriculum. An integrated thematic unit can invite comparison, encourage synthesis and analysis of information, expand concepts and related vocabulary, and enhance thinking and language abilities. The content areas supply ideas, experiences with the functions of language, and opportunities to engage in language processes. In planning an integrated unit, the major concepts and their relationship to each other and the functions of language inherent in acquiring these knowledges need to be identified (Routman, 1991).

An integrated instructional program that offers a print-rich learning environment is characterized by learning experiences offered through the different genres of literature. Such a literature base provides many dimensions of a theme or concept (Langer, 1995).
Literature experiences are further extended by options for related expressive activity. These expressive activities can be presented through learning centers allowing students to initiate activity. Students who have some degree of choice show more initiative in their work, take more responsibility for completion of work, cooperate better with their peers, are more motivated to stay on task, and are more likely to extend the project beyond the minimum requirements (Lloyd, 1995).

Literature-based centers that support the curriculum can supplement teacher-directed instruction. The role of the teacher during center activity becomes one of a facilitator of children’s learning. The teacher interacts with students as they are engaged in the learning experiences by encouraging, observing, questioning, and showing interest in their work. Interactions with peers and the teacher can be one-on-one or with a small group working together on a project (Routman, 1991).

To facilitate involvement in literature experiences and related expressive activity, or a comprehension-composition connection, a block of time each day needs to be set aside to explore concepts and to engage in processes rather than dealing with the fragmentation of
several unrelated subjects. Such a block allows time to search for information and construct meaning from the findings (Lloyd, 1995).

Students' selections of activities in centers and their responses to them need to be part of the assessment of their progress and instructional needs. This assessment needs to be qualitative because processes have to be described. Several qualitative techniques can be used; for example, student journals, teacher logs, student-teacher conferences, checklists, and portfolios. The use of these techniques can support each other and give much information about student learning (Cambourne, 1988).

An Integrated Unit: Forest Regions in the United States

Based on theoretical formulations of thinking-language development and descriptions of literature-based language arts extended across the curriculum, an instructional development project was engaged in to create an integrated unit of the forest regions in the United States for Grade 4. A search was conducted to extend the literature base through the different genres. This base generated many related expressive activities, both teacher-directed and student-selected. The unit has been presented to the students in my class. Implementation of the unit was extended to include related
activities with the media and art specialist. Three weeks were spent on the unit.

The unit was introduced with a discussion of what the students already knew about forests and forest regions. We started a Forest A B C chart. Students were asked to work together in small groups and see what words they could think of to fill in a class chart. As the unit progressed, new words were added to the chart.

During the unit, several teacher-directed activities were presented. Students also had opportunities to select activities at learning centers.

**Teacher-Directed Activities**

**Read-Aloud Sessions**

- Full-length fantasy

A full length animal fantasy, *Poppy*, by Avi (NY: Orchard, 1995) was used as a read aloud book throughout the unit. The woodland setting in this book provided a springboard for discussion about different habitats—woods, pond, field, and farm—and the animals and plants that live in these habitats. Students were able to relate learning gained from center activities to the discussion of *Poppy* after sections
had been read aloud. For example, one day a student shared that he found out that when a porcupine is born, they do not have sharp quills.

- Picture books

Picture books were also a part of the read-aloud sessions. After reading Joanne Ryder's *Chipmunk Song* (NY: Dutton, 1987), written from the point of view of a child who turns into a chipmunk, the children were led through a discussion imagining life in the forest from the point of view of other forest animals. Students used fiction and nonfiction sources to gather background material for writing their own story from a forest animal’s perspective. Peer-editing and teacher conferences were used while the students worked on their accounts. Students spontaneously shared their progress with each other. Students were given the opportunity to publish their stories in a student-made book.

As an extension to exploring the Pacific Northwest forest region, *Whale in the Sky*, by Ann Siebel (NY: Dutton, 1993), was read to the class. This picture book tells of an Indian chief who commissions the building of a totem pole to tell a tribal legend. The back matter of the book gives information on the tools and techniques used to build totem poles. Based on the story, a discussion led to understanding the
elements of this legend: talking animals, an explanation of an event in nature, and extraordinary powers of the hero. The students, working in groups of four, wrote their own totem pole legends and constructed totem poles from large cans saved by the food service for our class. The cans were stacked together ten cans high and secured with tape. Each student covered a can in the columns with a piece of brown paper and decorated it with three-dimensional beaks, wings, and eyes made out of construction paper. The students' legends and totem poles were displayed in the hallway outside the classroom (see Figures 1 and 2).

Figure 1
Students Working on Totem Poles
Literature Groups

Multiple copies of chapter books were available for students. After being introduced to each book, students were asked to select a book for discussion in a small group. Students were put into small groups according to their choices. They read their selection independently. Then, the members of each group met with the teacher to discuss their reactions to the books and make connections to
personal experiences and other books. The books that were the basis of small group discussions are annotated below.


Franklin, Kristine L. *Lone Wolf*. Cambridge, MA: Candlewick Press, 1997. Set in the north woods of Minnesota, the story is about living through grief. Perry and his dad need time, understanding and help from unexpected relationships to learn to cry and laugh again.

George, Jean C. *The Case of the Missing Cutthroats: An Ecological Mystery*. NY: HarperCollins, 1975. Spinner and her cousin set off to solve the mystery of why cutthroat trout are in the Snake River. The characters use applied science and detective skills against the background of the forest and mountains.

George, Jean C. *On the Far Side of the Mountain*. NY: Dutton, 1990. In the sequel to *My Side of the Mountain*, Sam braves the
challenges of life in the wilderness to save his sister and find his falcon only to set the falcon free.


**Coordinated Activities with Specialists**

- **Art Specialist**
  
  With the art specialist, students were shown examples of Native American art from the Pacific Northwest. Design elements and the difference between symbolic and realistic art were discussed. Using colored chalk on paper, students created pictures in the style of the Pacific Northwest Native Americans.

- **Media Specialist**

  The media specialist instructed the students in reference techniques. Then, each student used information books, encyclopedias, and Internet sources to research a forest animal. The information was organized by habitat, predator/prey, description, and interesting facts, and then shared with each other (see Figure 3).
Figure 3

Forest Animal Research

Video


Student-Selected Activities

In addition to teacher-directed activities, several options for student-directed activities were made available to students in learning centers. These centers offered many literature experiences and related expressive activities to explore the theme of Forest Regions of the United States. Two types of centers were available to provide a
print-rich environment. The sustaining centers were maintained throughout the year to offer a secure, predictable learning environment and a smooth transition from one theme to the next. Their content reflected the current study (Harms & Lettow, 1998). Other centers were specifically related to each unit of study.

Students kept a daily journal of their center time, reflecting at the end of each day on their learning experiences and then reporting information about their school day. At the end of each center time, students recorded their plans for the next center period. The center journals were used in student-teacher conferences when discussing the student’s learning during the unit. These conferences were also a time to ask questions and explore possibilities for new projects.

Sustaining Centers

The sustaining centers available throughout the year were listening/reading, poetry, author/illustrator, computer, bookmaking, and reference.

- Listening/Reading Center

Books representative of all genres were available to students at this center. Picture books with accompanying teacher-made cassette
tapes, full-length books, and student-made books furthered students’ understanding of the Forest Regions of the United States.

A. Nonfiction Books

Students had opportunities to explore specific areas of facts about forest plants and animals through nonfiction books. Books were available for a wide range of reading levels (see Figure 4).

Literature Experience:

1. Arnosky, Jim. Crinkleroot’s Guide to Knowing the Birds. NY: Bradbury, 1992. Information is included on how to look for and identify birds on the ground and in flight, how fast baby birds grow, nest identification, and ways to attract birds.

2. Birds of North America (Science Nature Guides), ed. by Angela Royston. San Diego: Thunder Bay, 1994. This book is categorized for broad-leaved and evergreen forests. One section is about the forest habitat and what makes a good living space for birds.


Expressive Activity: Students recorded information gained from their research in their journals and then used this information to make posters. The posters were displayed in the center for others to read.

Student Response: Students shared the information with each other during teacher-conducted discussions. For example, Tommy was proud of the results of his research activity. He related, "I learned a lot of stuff. It is fun, and I know about the forest now. If I ever go to the forest, I will know a lot of things there."
B. Picture Books

Picture books at the listening/reading center also provided opportunities for literature and expressive activities. Students were invited to read the books independently or with a partner. Expressive activities were completed independently or as a collaborative effort among small groups of students.

surrounds the oak tree, both plant and animal life. A puzzle is included in the book in which students identify plants and animals around the oak tree.

Expressive Activity: Students used the addresses included in the "Find Out More" section of this book to write for further information. While working together to identify the elements of the puzzle, students used the knowledge about the forest gained from the book and other sources included in the unit (see Figure 5).

Student Response: When information was received in reply to the students' letters, students reported the information to the class. Letters and brochures were then displayed on a bulletin board in the classroom for interested students to view.
Literature Experience: Cole, Henry. I Took a Walk. NY: Greenwillow, 1998. The foldout format invites the audience to examine the illustrations of plants and animals in many habitats—woods, meadow, stream, and pond. The key in the back lists the images that can be found in the illustrations.

Expressive Activity: Students were invited to write fiction, nonfiction, and poems about the plants and animals they might see on a walk in the woods (see Figure 6).
Student Response: Students shared ideas with each other while they were writing. Published student work was displayed in the center for others to read.

Figure 6

Writing

- Poetry Center

Several poems with forest images were provided at the poetry center. Posters of poems were displayed at the center as well as books of poetry. Directions for the forms of several types of poetry--diamante; who, what, where, when, why; septalet, limerick, couplet, concrete, haiku, found poetry, and cinquain--were included at the center to assist students in writing their own poetry (see Figure 7). The following poems
were available at the center for the students to read and to use as examples in the writing of their own poetry.


“In the Heavy Spring Breeze”


“The Seven Mateinnu”


“Dead Tree,” “Early Spring in the Blackberry Patch,” “Vacant Lot,” and “Trees Without Leaves”


“Forest Secrets” and “A Tree Place”


“Winter Tree,” “Forest Fire,” “Argument,” and “Bird Talk”


“Every Time I Climb a Tree”

“Evergreen” and “Deciduous”


Author Center

Joanne Ryder was selected as the author for this unit. Biographical information about this poet was provided along with her books. The books were not limited to the forest theme. Books in the center were, Chipmunk Song, When the Woods Hum, Lizard in the
Sun, The Bear on the Moon, My Father's Hands, Jaguar in the Rain Forest, and Sea Elf.

- Computer Center

CD-ROM Simpark, (Windows). Maxis, 1996, was used at the computer center to give the students a simulated forest experience. The objective in this program is for the students to play the part of the park ranger in charge of building and maintaining the forest area. Students choose from a menu of forest plants and animals to fill the park. Students learn about interactions of plants and animals and how people can affect an area.

- Bookmaking Center

Students were eager to publish and share their stories. The bookmaking center provided the materials and instructions for the student authors to construct books for their writing. Students added the title and dedication pages before copying and illustrating their story in the books. The finished books were shared and added to the classroom library of student-made books.

Student Response: Maricella was excited about her book and said, "I like projects because the book I'm working on is a pop-up book. I am making one of my own. I think it's a wonderful idea."
• Reference Center

Encyclopedia sets, dictionaries, rhyming dictionaries, and thesauruses were available in the classroom for the students to use while writing (see Figure 8).

Figure 8

Reference Center

Specific Centers to the Unit

• Folklore Center

Native American folk literature related to the forest accompanied by teacher-made cassettes were available. Students had the option of reading the book independently, with a partner, or listening to the cassette tape while following along in the text.

Expressive Activity: After reading the Iroquois legends, students were directed to consider the stories of their own family, especially those that their grandparents and other older relatives have passed down to them. Students were asked to write a family story in the tradition of a storyteller. Published student stories were displayed in the center for others to read.

Student Response: Students told their family stories to each other. Some students read their story while others told it as a storyteller.

Literature Experience:

1. Lewis, Paul Owen. Frog Girl. Hillsboro, OR: Beyond Words, 1997. The chief's daughter rescues the frog village after a visit to the supernatural world where she meets the frog grandmother. The village is saved from the volcano because of her kind act.

2. Lewis, Paul Owen. Storm Boy. Hillsboro, OR: Beyond Words, 1995. Lost in a storm, the chief's son is transported into the supernatural world of the killer whale people. After a day with the killer
whales (a year in his village), the boy is returned to tell his story to his people.

Expressive Activity: After reading either or both *Frog Girl* and *Storm Boy*, students were asked to compare these folk tales to other folk tales previously read and discussed in class as teacher-directed activities. Students were asked to write their own folk tales using forest animals with supernatural abilities. Published student stories were displayed in the center for others to read.

Student Response: Students discussed the elements of a folk tale. They tried their characters out on each other while they were writing. Students read their completed stories to each other. Spontaneous peer conferences were frequent during the writing process as students helped each other (see Figures 9 and 10).

Expressive Activity: After reading the picture book, *Raven*, students were asked to consider both sides of the story: the view of the people who received the light and the view of the sky king and his daughter from whom the light was taken. Students were asked to take
sides and defend their positions, either the raven is a hero or he is a thief.

Student Response: Students took an active role in deciding whether the raven was a hero or a thief; they definitely had differing opinions.

Figure 10

Writing a Response to Literature

- Forest Succession Center

At this center, students used cross-genre books—fiction and informational—to explore the concept of forest succession.
Literature Experience: Fleming, Denise. *Where Once There Was a Wood*. NY: Holt, 1996. The book follows the change of an area from a woodland area to a housing area. Several woodland animals are identified. Information on establishing a backyard habitat is also included.

Expressive Activity: Using the suggestions from the book, students wrote of ways to attract and protect animals in their own neighborhood.

Student Response: Students worked together to develop a plan for a backyard habitat. After deciding on the best plan, the students wrote up the plan and an accompanying blueprint. The student plan was displayed in the classroom for others to consider (see Figure 11).


Expressive Activity: Students produced a story board of pictures and captions that demonstrated the different stages of a forest as it was
related to fire, including before, during, right after the fire, and the new growth of the forest.

Student Response: Students' discussion demonstrated a new understanding of the importance of fire to the health of the forest. Sara especially enjoyed this book. She wrote in her journal, "I learned how to protect the forest. That is what I liked. I had a great time."

Figure 11
Sharing Information
• Animal Tracking Center

Resources were made available for students to use in the study of animal tracks.

Literature Experience:


Expressive Activities: Students created posters illustrating animal tracks. They recorded information and new insights in their journals (see Figure 12).

Student Response: Students shared information with each other in discussion and recorded information in their journals. Student posters were displayed at the center.
Teacher-directed activities, literature groups, and student-selected center activities all worked together to provide a learning environment in which students were engaged in learning, taking responsibility for their learning, and finding meaningful uses for the tasks of language—written and spoken communication. Students were able to move beyond memorizing facts and toward developing a deeper understanding of forest ecosystems. Through experiences with
different genres of literature, students were encouraged to use the
tasks of comparison and contrast, synthesis and analysis of
information, vocabulary building. Students practiced language tasks
while reading, responding in discussion and writing, and reflecting and
sharing information with classmates. Through the choices offered in the
learning centers, students took responsibility for their learning. Offering
an integrated unit--literature-based language arts extended to the social
studies and science areas--proved to be an effective way for students
to master the intended objectives for the forest unit.
References


