6-1-1994

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Educators Collaborate to Integrate Language Arts Instruction for Preservice Teachers and Elementary Students

Janet Dynak
Nancy Gagliano

University Faculty Member - Janet
I was new to Western Michigan University. I was asked to teach the capstone course for the Integrated Language Arts Minor in the Department of Education and Professional Development. Previously established goals stated that the course was designed to provide preservice teachers practice in restructuring curriculum objectives, classroom organization, and teaching strategies in order to achieve the maximum integration of the language arts processes in the elementary schools. During the course, students were to demonstrate the ability to integrate curriculum through a guided field experience that modeled an integrated approach to learning. My first decision in planning the course was to find an elementary classroom teacher with whom I could work. A colleague suggested I contact Nancy, a teacher who taught at a nearby school.

Elementary Classroom Teacher - Nancy
As a classroom teacher in the Kalamazoo Public Schools, I had worked on curriculum integration for quite a few years.
Several of my colleagues in the district and I had developed thematic units to integrate various content areas. These were published for use throughout the district. In my classroom, I was committed to the power of classroom collaboration to enhance academic performance, social status, and personal aspirations. As I attempted to shift my second and third grade students from being listeners to problem-solvers, I welcomed Janet's contact to help in my endeavors.

Conceptualization

As the two of us met to link the university course to the elementary classroom, we found our thoughts about how students learn were based on similar theoretical perspectives. We viewed learning as an interactive, dynamic, constructive process rather than a set of discrete, hierarchical skills to be mastered (Piaget, 1969; Vygotsky, 1962). This cognitive perspective suggests that a language arts curriculum should focus on a learner's existing knowledge and promote a set of strategies to use metacognitively to comprehend information through reading, writing, speaking and listening (Dole, Duffy, Roehler, & Pearson, 1991). We decided both the preservice teachers and the second and third graders with whom they would work needed to have experiences that would promote this cognitive view of learning.

Research indicates that as preservice teachers process information about the knowledge base for teaching and learning, they need to be encouraged to resolve differences among their prior beliefs, the paradigms and models being covered in education classes, and the curriculum and instruction being delivered in the schools where they participate (Feiman-Nemser and Buchmann, 1989). As Lanier and Little (1986) point out, field experiences that are not programmatically linked to coursework often encourage preservice teachers to concentrate on the rules and procedures that are associated
with classroom management. Knowledge about learners and curriculum are often not considered when the technical aspects of teaching are observed and practiced in early field experiences. As a result, large numbers of students in teacher education do not connect concepts from their coursework to their field experiences, nor to consequent first year teaching experiences (Barnes, 1978; Lemlech, & Kaplan, 1990; Odell, 1991). The literature supports the need for teacher education students to examine a variety of teaching methods and instructional techniques in a context where they can be provoked to continually reflect upon their past experiences that relate to the knowledge base for teaching (Kennedy, 1991; Zeichner, 1987).

Based on the need to connect methods coursework to classroom settings, we attempted to link the preservice teachers' coursework and field experience very closely. We added a course goal which asked the teacher education students to demonstrate the ability to integrate curriculum through a guided field experience that modeled an integrated approach to learning.

Integrating the elementary curriculum through thematic units can provide students with experiences that promote constructive learning and metacognitive awareness (Hart, 1983; Pappas, Kiefer, & Levstik, 1990). Activities within a thematic unit that lead to exploration and discovery of content rather than a "talking about" approach can promote student choice about what they learn. Since Nancy was already using thematic units, we decided this approach would offer opportunities for the university students and the elementary students to negotiate their teaching and learning roles.

This article will explain the developmental process that we went through during our first semester of working
together. Using the work of Kovalik (1986) and Jacobs (1989), we will describe our experiences helping the preservice teachers design and facilitate a timeline, unit theme, key concepts, pre-assessment, outcomes, activities, and evaluation. Our purpose is twofold. First, ideas about how classroom teachers and university faculty can elicit support from each other to develop, implement, and evaluate specific content area units will be examined. Second, using our context-specific examples, generic guidelines to prepare content units which promote content literacy will be identified.

Development

Timeline. The university course ran for 16 weeks. The course schedule was designed so that all of the 15 preservice teachers went out to the school to meet the elementary students and complete a unit pre-assessment during the first 10 weeks of the semester. The formal activities of the unit were implemented during weeks 11 through 13. During this time, each student was scheduled to be at the school at least 20 hours. Except for the "Kick-off" day when all preservice teachers were there to set up the activities, preservice teacher participation during this three week period was done on a staggered basis so that the elementary students had contact with the university students during most of their day. Evaluations were completed by the preservice teachers, elementary students, Nancy, and Janet during the 14th and 15th weeks of the semester.

In addition to the time that the preservice teachers spent at the school, they met on campus as a class for approximately three hours each week. Students worked on various components of the unit in small groups, discussed their teaching and learning experiences in relation to their prior experiences and
course readings, and met with Nancy who came in to discuss some of her classroom practices.

### Figure 1

**Plants And People As Partners**

**AESTHETICS**
- Georgia O'Keeffe
- Nature Artists/Art Forms
- Landscaping
- Ethnic Connections

<table>
<thead>
<tr>
<th>PLANT PRESERVATION</th>
<th>HABITATS</th>
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<td>Terrain</td>
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<td>Landfill</td>
<td>Seasons</td>
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<td>Gardening</td>
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<td>Sprouting</td>
<td>Parts of Life Cycle</td>
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<td>Insecticide</td>
<td>respiration</td>
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<td>How to Grow</td>
<td>photosynthesis</td>
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<td>Gatherer</td>
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<th>RESOURCES</th>
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<tr>
<td>Dyes, Makeup</td>
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<td>Fragrance, Florist</td>
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<td>Nutrition, Food</td>
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<td>Medicine</td>
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<td>Wood</td>
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<td>Paper</td>
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<td>Shelter</td>
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<td>Clothing</td>
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**Choosing a Theme.** Nancy chose the theme based on her plan for the year. The broad theme of "interdependence" was chosen as a district-wide theme for the second grade.
Nancy used the concept of "Partners" to thread the theme of interdependence throughout the year. The class had done units on *People as Partners* and *Animals and People as Partners*. Nancy decided the theme of *Plants and People as Partners* was the one we would work on together.

**Key Concepts.** During Weeks 1 and 2 in the semester, the university students were asked to discuss the assigned readings on curriculum integration and thematic instruction. During Week 3 the students were introduced to the theme, *Plants and People as Partners*, and they were asked to brainstorm concepts or terms that came to mind when they thought of this theme. Using an instructional strategy that asked the preservice teachers to list possible unit concepts and categorize them with labels, the students and Janet created a concept map from a lengthy brainstorming session. Nancy was then given the concept map of over 100 terms and asked what categories and concepts she thought should be the basis for the unit activities. Nancy thought the university students had come up with some very unique links to the theme, and she chose six of the categories to be studied during the three weeks the university students were going to be in the classroom on a daily basis. Based on the district content outcomes for her grade levels, Nancy added a couple of concepts under the category that dealt with general information about plants (see Figure 1).

**Pre-Assessment.** During Week 4, Nancy gave the preservice teachers some background information about her students, and then each university student was asked to develop a pre-assessment that would give them information about the elementary students' prior knowledge and interests about the categories and concepts chosen for the unit. In addition, the preservice teachers were to consider various learning styles as they developed their pre-assessment instruments. Questions
were written in a variety of ways in order to gain an understanding of the elementary students' abilities.

During Week 5, the individual pre-assessments were peer critiqued and then blended into one assessment that was administered later in the week. Some of the sections of the pre-assessment included the following tasks: 1) the elementary students were asked to draw a picture of what they would look like if they could be a plant; 2) they were asked to write about what people do to help plants grow; 3) a list of activities such as learning about parts of plants, looking at a plant under a microscope, growing plants without soil, making things out of plants, and singing songs about plants was given to the elementary students to circle whether it would be “kind of boring,” “OK,” or “totally awesome” and; 4) when given a series of sentences such as “Some plants are poisonous,” “Plants do not need to breathe,” and “We can make clothing from some types of plants,” the students were asked to circle whether they agreed, disagreed, or were not sure if the statement was correct.

Outcomes. From the results of the pre-assessment, the preservice teachers were asked to think about outcomes and activities that fit the concepts and needs of the students they now had met. At this point in the semester (Week 6), Janet divided the class into small groups to select outcomes and begin the development of related activities. The key concepts of habitats, resources, ethnic connections, lifecycles, seasons, aesthetics, sprouting, landscaping, and climate were chosen. One group's outcome statements and project plans using the concepts of habitats, resources, and ethnic connections will be described. Using countries and continents where students in the class had been born (China, Africa, Poland, & America), the preservice teachers developed three outcomes: 1) the student will construct a relief map of the types of terrain found in the country they choose to study; 2) the student will
illustrate the country's resources and the related jobs people do in the country they chose to study; and 3) the student will create an original story based on a folktale that relates resources to the lives of people that have lived in the country they choose to study.

Figure 2
Comprehension Activity Considerations

• COMMUNICATION PROCESS
  reading
  writing
  speaking
  listening
  movement

• GROUPING PATTERNS
  individual
  small group
  large group

• TEXT
  narrative
  expository
  atypical

• EVALUATION
  self
  peer
  teacher
  parent
  other

• HIGHER LEVEL QUESTIONING
  questions for answers
  statements to confirm or reject
  questions to elicit further questions

• PRE-ASSESSMENT AND OUTCOME ALIGNMENT
  school outcomes
  district outcomes
  state outcomes
  national outcomes

• STUDENT CHOICE BETWEEN OR WITHIN ACTIVITIES

• METACOGNITIVE STRATEGIES

• INSTRUCTIONAL PLAN

• VARIETY OF MATERIALS
Comprehension Activities. Using the comprehension activity considerations in Figure 2, the preservice teachers spent Weeks 7 through 10 designing the activities. Janet made it a course requirement that each of the nine guidelines be addressed in the plans. The group of preservice teachers who were doing their activities centered around the birthplaces of the students in the elementary classroom called their project "Lay of the Lands." The elementary students were asked to choose a country, continent or region and begin a top secret mission where they were detectives researching information from 30 books that the preservice teachers had gathered from eight libraries in the area.

The students were asked to use specific books to locate information about the terrain of their area. These books were sometimes written at a more difficult level than the students' reading ability, but the pages where the students could find the information were marked. When necessary, the preservice teachers taped the information on audio-cassettes for the students to use independently. The students took the information they had recorded on summary detective sheets and went to an art area to make relief maps using sand, gravel, grass, paper, etc. to represent different types of terrain. Once they finished the terrain maps, the students were asked to research the literature again for the resources found in their country's various types of terrain. This information was illustrated through small drawings that were cut out and placed on the various parts of their map. At this point, the students were asked questions about their maps, and checked their responses against an answer key. An example of a self-check for Africa is presented in Figure 3.

During the last part of the activity, the students chose a book that represented a folktale from their country. They listened to a tape of the story and were asked to fill out a story map on the content. Then they created their own story and
story map about the people and resources of their chosen country. These stories were illustrated or acted out with the help of classmates and videotaped. The preservice teachers provided the materials for illustrating the stories, and the video equipment was signed out from the university.

![Figure 3](image)

**Self-Check Questions (AFRICA)**

Name

**Region 1**

This region has mountains on the western coasts. Does your map show mountains there? 

**YES**  **NO**

This region has a large desert in the north. Does your map show a desert there? 

**YES**  **NO**

This region also has jungles, forests, and plains where plants can grow. Does your map show a place like this? 

**YES**  **NO**

A major crop grown in Africa is coffee beans which are used to make coffee. Do you have coffee on your resource map? 

**YES**  **NO**

Corn or maize is another crop grown in Africa. Do you have corn on your resource map? 

**YES**  **NO**

Many other plants grow in Africa that people use as resources. Circle the ones you found.

- palm trees
- palm nuts
- palm nut oil
- cocoa
- sweet potatoes
- sugar cane

**Region 2**

This region also has a large desert. Does your map show a large desert here? 

**YES**  **NO**

*Figure 3 was developed by WMU students Lisa Dubois, Jennifer Field, Amy Donohue, and Heather Lynch*

Nancy acted as a facilitator during Weeks 11 through 13 when the unit was implemented at the school. The elementary students worked on the “Lay of the Lands” project and six other projects. Her class had experiences with the key
concepts of lifecycles (creating compost in a can), seasons (researching how seasons affect people and plants), aesthetics (producing artworks in response to nature), sprouting (growing plants in different ways), landscaping (creating landscapes that serve a purpose to people), and climate (observing how climate affects plant growth). The preservice teachers brought in a wealth of materials to assist the students in their work. Over 100 pieces of text that related to the projects were collected for use. Janet borrowed art supplies and audio-visual equipment from the university to allow more options for the elementary students to express their thoughts as they studied the content. In some cases the university students obtained contributions from local businesses in the area.

Evaluation. During Week 15 the university students developed evaluation forms for all participants. A critique form was written for all preservice teachers to evaluate each other in order to examine how the projects aligned with the comprehension guidelines established earlier in the semester. Janet also used this evaluation form to critique the small groups.

Some evaluation questions were written for Nancy to critique the content and pedagogy used by the preservice teachers during the unit. Nancy was asked to comment on the strengths and weaknesses of the preservice teachers’ involvement and professionalism during the implementation of the unit and on the amount of teacher or preservice teacher guidance that was needed for the elementary students to complete the activities successfully.

Questions were developed for the university students to critique the unit implementation. The preservice teachers asked themselves to self-reflect about their personal interactions with the unit tasks and students. They also were asked
by Janet to describe how the unit and course in general provided experiences that helped them articulate their emerging philosophy about teaching and learning.

The university students also developed a post evaluation for the elementary students. The content was based on the pre-assessment that was given at the beginning of the unit. The elementary students were once again asked to answer questions about their content knowledge and interests related to Plants and People as Partners.

The evaluations were completed and the data was analyzed during the final week of the semester. The following themes emerged. All participants found the experience to be a rewarding one. The strengths that were cited included Janet’s comment that the course content was done for “real students” in the context of a “real classroom,” the university students’ positive feelings about learning by doing, Nancy’s comments that she would never have been able to complete a project of this magnitude alone, and the elementary students’ rating the interactions they had with the university students as one of the most rewarding experiences of the unit. The evaluation data also provided ideas for improvement. The unit needed to be implemented earlier in the semester. All participants felt rushed through the evaluation and reflection period. We also learned that although the university students were informed that there was a field experience connected to the course, they needed to know the specific dates of this intense time well in advance of the semester, so they could make changes in their already busy lives. The evaluation feedback also caused us to reflect about the closure of the unit. It was recorded as too abrupt by many university students and elementary students. We decided a field trip which combined some of the unit concepts would be part of future units. (We did so during the following year.)
Conclusion

The generic guidelines for developing a thematic unit which integrates language arts with other content areas were very useful to us during the semester. These guidelines provided the framework from which we coordinated our efforts to meet the needs of the students. All of the steps of the unit are important, but the order can vary depending on classroom situations. As a result of the university's set schedule, we had to develop a unit time-line before we began the semester. A more student-centered approach would suggest that the time-line might be established after the pre-assessment of the students' prior knowledge and interests. We could not do this with the present design of the university methods coursework. We had to problem solve as we dealt with the structural constraints that the university and public school presented us with.

This collaborative project could be adapted in various ways for other classroom situations. As an example, elementary teachers who are not near a teacher-training institution can still make use of this kind of university support. Even though it might be impossible to have preservice teachers implement the unit at the school, they can still collaborate to develop the unit. Parents and other community volunteers can assist with the unit implementation when the preservice teachers cannot be on site. Technology provides the field of education with another avenue to collaborate via long distances. Preservice teachers could do a great deal of the unit implementation through currently available various forms of telecommunications. In these situations, preservice teachers do have the opportunity to develop "real activities" for "real students," and classroom teachers can obtain plans and resources that would not otherwise be available to them. At the present time, many education methods courses have
students prepare wonderful units which are never used in a classroom.

We wrote this paper using the unit packet that the university students put together for their portfolios and future use as classroom teachers. The students felt a great deal of ownership as they compiled copies of the student assessments, their project plans, references, photographs, videotapes, etc. Some of them have made it a point to let us know that they have used this bound packet for presentations to colleagues in other classes, for review as they interviewed for teaching positions, and for a guide to their own unit planning and implementation as a classroom teacher. The process that the preservice teachers and elementary students went through together was documented in a useful product. In addition to the product of a tangible unit packet, we hope the preservice teachers also will internalize knowledge about the collaborative process that was modeled for them. We hope our actions will encourage the preservice teachers to seek these types of collaborative relationships when they join an elementary school staff.

We continue to collaborate with each other and our colleagues. Nancy has encouraged other classroom teachers to get involved with university faculty members in the Department of Education and Professional Development. Janet has joined a group of university faculty who get together on a regular basis to promote more collaboration with K-12 students and staff. As partners, we can provide more opportunities for university students and K-12 students to learn from each other.

References


*Janet Dynak is a faculty member in the Department of Education and Professional Development at Western Michigan University, in Kalamazoo Michigan. Nancy Gagliano is a classroom teacher at Woodward Elementary School, in Kalamazoo Michigan.*