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California State University
San Bernardino

LITERATURE AND WRITING IN KINDERGARTEN:
A THEMATIC APPROACH

A Project Submitted to
The Faculty of the School of Education
In Partial Fulfillment of the Requirements of the
Degree of

Master of Arts

in

Education: Reading Option

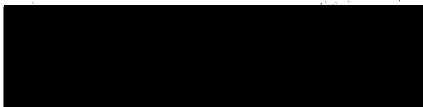
By

Cynthia B. Libby, M.A.

San Bernardino, California

1991

APPROVED BY:



Advisor: Dr. Adria Klein



Second Reader: Dr. Katharine Busch

SUMMARY

All the teachers at my elementary school were mandated to utilize the eight different styles of writing that are found in the California Assessment Program. We are required to spend three weeks on each style until we have completed three weeks on each of the eight styles of writing. We are to hand in to our administrator class writing samples each week of finished products, one per child enrolled.

This project focuses on the kindergarten perspective of literacy and the role of literature and writing in the kindergarten curriculum. It addresses the integration of literature and writing into content areas through thematic units and stresses current developmentally appropriate assessment. Although this project focuses on the kindergarten viewpoint, there are issues that span the elementary grade levels that teachers can adopt/adapt to fit their needs.

Many of my colleagues are frustrated because they feel they spend too much time on writing that they do not get to the other content areas of study. This project is designed to demonstrate the empowering significance of integrating literature and writing into the content areas by way of thematic units.

TABLE OF CONTENTS

Introduction	1
Literature Review	6
Emergent Literacy	6
Reading and Writing for the Young Child	10
Literature	15
Integrating Literature & Writing in Content Areas	16
Thematic Units	20
Assessment	23
Goals and Limitations of the Project	26
Evaluation	28
References	35
Appendix	41
Thematic Unit on Snow	42
Thematic Unit on Seeds	77
Thematic Unit on Economics	107

INTRODUCTION

All the teachers in the public school where I teach have been asked by the administration there to utilize the eight styles of writing that are found on the California Assessment Program (CAP) tests. We are to spend three weeks on each of the writing styles. At the end of each week we are to hand in a class set of writing samples on the specific style for the week. We have also been dictated as to the order of writing style to follow. Many of the teachers are extremely frustrated; they feel that there is not enough time in the day (much less week) to get everything done that is required of them. Many have said that they spend so much time on the writing process that they do not have adequate time to spend on the other content areas. In light of this, the purpose of this project is to show the significance of integrating literature and writing in the content areas. Further, by focusing on thematic units teachers will be able to utilize their time to accomplish their goals. The classroom level focus for this project will be kindergarten.

The eight styles of writing that are linked with the CAP tests reflect a range of writing experiences (CAP Writing Assessment, 1986). The first type of

writing style, the Autobiographical Incident, should communicate a significant occurrence in the writer's life. In the second type, the Story, the writer is to use his imagination or draw on his personal experiences to write a fictional situation utilizing story elements. With Observational Writing, the writer is to convey a "snapshot" in time; something the writer observed. The fourth type of writing is Problem Solution. In this style the writer is to describe and analyze a problem and provide at least one solution for the problem with convincing support. The fifth style, the Report of Information, should communicate a focus concept from the writer's collection of observational data and research. In the Firsthand Biography the writer describes a person she knows well and uses incidences to show how the person has been significant in her life. The seventh writing style, the Evaluation, should communicate the writer's judgment of an item providing supporting evidence and reasons. In the eighth style, Analysis-Speculation About Effects, the writer makes a prediction of a possible result given a situation, trend or event. These are the eight types of writing that the teachers at my school and I are utilizing this year. Additionally, each teacher

had to specifically include these eight styles of writing in her Goals and Objectives for the 1990-91 school year or her Goals and Objectives would not be approved!

Many teachers have difficulty doing a thorough or complete lesson when a precise amount of time is allotted for each content area (McCutcheon, 1978). The reason for this is because the curriculum is cut up into bits and pieces with separate focuses in each content area; the curriculum lacks integration. The solution to this inefficiency of time is to use a thematic approach (Brountas, 1989). Using a thematic approach teachers choose a topic or theme and develop lesson plans for each content area centered around and utilizing the topic/theme. This keeps the curriculum whole and natural allowing the content areas to flow together.

* Communicating meaning is the essence of language arts. Communication conveys reaching out and establishing relationships, giving and taking, sharing, and participating; communication is social. It is at the heart of teaching. Because the language arts touches all curricular areas, "it is the natural meeting ground wherein integrated activities can be

originated and carried out..." (Fortson, 1977, p. 378).

The use of literature is a dynamic way of integrating the content areas. Literature models rich language use, sparks the reader's imagination, introduces descriptive language and story sense, and motivates students intrinsically to read and write. Brozo and Tomlinson (1986) indicate that while children's literature is a powerful motivator in reading, the combination of its use in the content areas is compelling from the perspective of building schema.

It is essential for kindergarteners to write and for us as teachers to get their stories; we can even use the different types of writing styles. The integration of reading and writing contributes much to a student's understanding as well as retention of knowledge (Cunningham and Cunningham, 1987). Writing can be effectively used to assess students understanding of concepts or application of them. Reading and writing flow naturally together and for the young child "develop concurrently and interrelatedly" (Martinez and Teale, 1987, p. 444).

My theoretical position and my project's placement on the theoretical continuum is on the whole language end of the continuum. I believe reading is a process

of using the three cueing systems (graphic, syntactic and semantic) which are interrelated and interdependent. Readers use these three cueing systems for prediction, confirmation and integration of meaning. At the heart of reading then is meaning -- communication. Learning to read is as important as learning to speak. It is social. The whole language approach emphasizes this strong relationship between written and oral language. The process of understanding speech is very closely related to the process of understanding print. Growth in a given expression of language must be seen as a multilingual event; reading, writing, speaking and listening all support growth and development in literacy (Harste, Burke & Woodward, 1981). *Learning to read involves teaching children to anticipate and expect meaning from print, responding to the print and sharing that response. This is where I start with my kindergarteners.

The purpose of this project will show the significance of integrating literature and writing through thematic units in the content areas at the kindergarten level.

LITERATURE REVIEW

In this chapter, I will be addressing some key concepts that are at the heart of my project. While I focus on the kindergarten viewpoint, there are issues that span the grade levels, particularly the primary grades. I will begin this literature review by focusing on emergent literacy and discuss reading and writing for the young child. The role of literature in the kindergarten curriculum is also an important area that will be reviewed. I will also address integrating literature and writing into the content areas showing thematic units as a viable tool to accomplish integration, and review current assessment issues.

Emergent Literacy

Emergent literacy is the process of becoming literate. It is not based on the idea of reading readiness involving the teaching of specific reading skills and acquiring more and more skills until one can read; it is not acquisition of skills. Rather, as Smith (1985) writes "...learning to read is regarded as a continual process of making more and more sense of written language, advancing with every reading experience and beginning with the first insight that print is meaningful..." (p. 145). This is clearly seen

in the article by Laminack (1990) entitled "Possibilities, Daddy, I think it says possibilities", which was taken from a journal that he was keeping on his son's development in literacy. This is also true in my experiences with young children. One experience that sticks out in my mind was when I was babysitting two year old Katy. We were driving home from the store when she pointed to a stop sign and asked about it. I told her that the word on the sign was "stop" and that cars stop at the stop sign (just like we were doing). She was so excited about learning this that the first thing she asked me was "Where's more?". We came to two more stop signs before we got home. She saw each one and enthusiastically said "STOP STOP!". Later as we took a walk to the park she saw another stop sign and ran up to it and said "STOP STOP Cindy Libby STOP STOP!". The acquisition of literacy starts young, is continual and builds upon each reading experience.

My kindergarten students enter school with a great deal of language competence. They have used and are continually using language in all its forms (speaking, listening, reading, and writing) at some level, whether at the exploratory level or beyond. Literacy growth starts when children are young, before they enter

school (Ferreiro and Teberosky, 1982; Goodman, 1986; Harste, Woodward and Burke, 1984; Martinez and Teale, 1987; Sulzby, 1985). It is a developmental process (Weiss and Hagen, 1988). As Goodman (1986) states "literacy begins with what other family members do already: responding to signs, logos, and labels; sharing books; scribbling notes" (p. 44).

Kindergarteners bring these literacy experiences to school with them and this is what they build on.

There are several theoretical principles involved in an emergent literacy curriculum (Strickland and Morrow, 1990). The first principle is that when children read and write, the nature of their constructed meanings and quality of it greatly lies on their background knowledge or schema of the world and on their knowledge of language. We, as teachers, can assist our kindergarteners in developing and broadening their schema and knowledge of language through continual exposure to first-hand experiences with manipulatives as well as literary experiences in reading, writing, listening and speaking. The second principle is that people who are immersed in a literate rich environment begin to read and write naturally. The third principle is that people have a need to read

and write and that this need is best learned when people see it as a necessity and practicality. Many illiterate people become functionally literate as they see the need to fill out job applications in order to work or in order to pass the driver's exam to get licensed. We teachers can help our kindergarteners by providing and using various types of necessary print in the classroom. Examples of practical print for students would include: letter writing to pen pals, writing invitations to parent/s for open house or other exciting event, notations of informational messages, lists (for field trip, party, homework needs and the like), posters/signs for special presentations or sales, journal writing, map making, recipes for cookbooks, menus, newsletters, and the like. The final principle is that children gain an understanding of textual structures by being exposed to the different forms and styles of literature. The textual structures encompass folk tales, fairy tales, fables, nursery rhymes, poems, informational books, realistic fiction, as well as functional print.

Recent emergent literacy research has shown that dramatic play can contribute to the development of children's early reading and writing (Christie, 1990,

Isenberg & Jacob, 1983, Roskos, 1988, Schroeder, 1989). Christie 1990 states that "when children are given an opportunity to engage in dramatizations in 'literate' play settings stocked with reading and writing materials, they readily incorporate literacy into their play episodes" (p. 542). By providing ample time in literate play centers (i.e. housekeeping center, store, bank, doctor's office, restaurant) full of reading and writing materials children can have authentic and meaningful reading and writing experiences.

Emergent literacy is the whole language view of learning to read and write. The term literacy ties reading and writing together. Goodman (1986) states "Literacy development is a matter of getting the processes together: learning, in the context of reading and writing real language, to use just enough print, language structure, and meaning, and to keep it all in the proper personal and cultural perspective" (p. 43).

* Reading and Writing for the Young Child

Just as children learn to walk by watching others then imitating them by taking one step at a time, first hanging on to things that will help them, to finally walking on their own, to eventually running, for needs as well as pleasure, so it is with the reading process.

"Children learn to read by reading" (Smith, 1983, p.23). Children begin to learn to read when they see that there is a meaningful relationship between print and spoken language and that the difference in printed marks are significant (Smith, 1985). Sulzby (1985) writes "young children who are read to before formal schooling are ushered into an understanding of the relationships between oral and written language within a social context..." (p.460). When parents or teachers share storybook experiences with children, the children begin to take their first step by reading parts of the story with the parent or teacher, to reading/reciting language that sounds like reading and the book language of familiar stories, to eventually recognizing individual words, to reading conventionally.

When children first start walking, they hang onto things that will help them. In reading, the books that help children in this way are predictable patterned books both in language and in plot (Bridge, Winograd, Haley, 1983). Recent research shows that "young children approach written language expecting it to make sense and to have predictable structure" (Laminack, 1990, p. 537). That is why predictable books are ideal and easy for young children to read: they have

patterned speech, patterned plot, rhyme, repetition, natural language flow, and meaningful story. Through this natural process children begin to read (or walk so to speak) independently.

Children will also read for need and for pleasure. To enhance children's reading for pleasure, we kindergarten teachers can provide a classroom library with quality literature. Martinez and Teale (1988) note that the best predictor of a child's reading growth is the leisure time that a child spends in reading. They also write that "children in classrooms containing literature collections read up to 50% more books" (p. 569). It is clear that we teachers need to read many literature selections daily and allow students time to read on their own. We also need to encourage our students to respond to the literature selections (Heald-Taylor, 1987). These responses to further interpret literature includes puppetry, role play, movement, dramatization, drawing, modeling with clay, construction, visual arts, music, research, and extended reading.

Another way of encouraging students to respond to literature is through writing. Elkind (1975) states that "reading and writing are reciprocal processes of

meaning construction which mutually reinforce one another" (p. 36). Writing is a developmental process that starts from infancy forward (Sulzby and Teale, 1985).

The developmental writing path of young children can be generalized into stages on a continuum. The earliest forms of writing appear like scribbling. Children leave their marks everywhere: on foggy car windows, paper, walls, in the frosting of a cake, on wet beaches, in mud, in their mashed potatoes! Young children grow by incorporating drawings with their scribble writing or by drawings alone to convey their thoughts or stories like wordless picture books. Children then move to making letter-like forms in their writing, to using strings of letters, to various forms of phonetically based invented spelling, to finally using conventional spellings in their writings (Sulzby and Teale, 1985, Calkins, 1986). Children learn to write by writing. It is important at each stage in the development of writing that children share what they have written; this empowers them to know that their marks convey meaning (Calkins, 1986).

Young children need time and opportunity to explore writing. Scollon and Scollon (1981) note that

in the development of writing, opportunities for children's independent explorations of writing are crucial to early development. When we get children in our kindergarten classrooms that have had minimal opportunities to explore writing, we need to provide them that time. It is especially important for these children (and all children) that our classrooms be literate cultures and that we enfranchise them as readers and writers from the first day of school (Calkins, 1986).

I want to emphasize kindergarteners writing the first day of school because I have experienced this firsthand. When children are requested to write on the first day of school, they seem to accept it as another activity in a day full of new experiences. Writing is established as a daily event of life in the classroom. However, when writing is not established the first day of kindergarten, children are reluctant to begin writing. This is evident in new enrollees throughout the school year; if new students transfer into your classroom who have not experienced writing at the start of their kindergarten year, they will most likely be reluctant to start. This is especially true if the new student comes from a class product, not process

writing. Therefore, writing must be established on the first day of school.

Literature

Literature based reading instruction prospers all students; basalized reading instruction prospers some students. Goodman, Shannon, Freeman, and Murphy (1988) advocate literature based reading supporting the move away from basal reading materials. They note that basals teach sounds, letters, and words in isolation from the language systems and that basals show little attention to the language systems and their relation in natural texts. They stress that basals frequently produce distorted abstractions, losses in contextual meanings, and losses in grammatical functions as a result of the graphaphonic relationships having been taught in isolation or having used words out of context. Basals also control vocabulary and syntax causing loss of style and making language read less naturally and less predictably. Goodman (1988) examined two popular basal reading series and noted that of the texts therein approximately 20% were authentic renderings.

Students flourish with literature based reading instruction. Many studies show that literature based

reading instruction is successful with all types of students (Tunnell and Jacobs, 1989). The students of these various studies include all first graders in New Zealand, beginning readers in Ohio, limited English speaking children in New York, older students who had "failed", reading disabled Chapter 1 students, and resource students. In every study the researchers emphatically stressed utilizing children's literature that was written in natural uncontrolled language.

We kindergarten teachers need to provide students with effective literary sources of natural human expression. Children's literature models rich language, sparking reader's imaginations, demonstrating descriptive language and story sense, and motivating children intrinsically to read and write (Heald-Taylor, 1987). The California English-Language Arts Framework (1987) states that "to touch students' lives and to stimulate their minds and hearts we need a literature based English-language arts curriculum that engages students with the vitality of ideas and values" (p. 7).

Integrating Literature and Writing in Content Areas

Literature is powerful in modeling writing for children. Children's use of language in daily writing is influenced greatly by the numerous stories that are

read to them daily. Research confirms that the type of materials read to students have a direct affect on the type of writing they do (Calkins, 1986). Students internalize storylines and reuse it in their writings. They will also experiment with punctuation. Students eventually write stories with chapters, a table of contents, a dedication and author page, complete with illustrations. Daily integrating literature and writing in the language arts area is important to students' developmental growth in literacy.

Literature and writing enhance content learning. Since communication is at the heart of language arts, since language (both oral and written) is the primary vehicle in the creation of new knowledge and the sharing of it (Buckley, 1986), and since language encompasses all curricular areas, literature and writing integrate naturally into all content areas. Many content textbook topics do not touch children's life experiences thus leaving a gap between children's background knowledge and the text topics (Cudd and Roberts 1989). Literature fills the gap. Children can express their new knowledge through writing.

Content textbooks contribute factual information for student learning. Brozo and Tomlinson (1986) state

that "many students receive their first serious look at different cultures, historical eras and events, politics, and the scientific advances of the human race through content area textbooks" (p. 288). The problem with the textbooks, however, is that the narrative element or the stories that encompass human interaction are omitted. This leaves the textbook information like a bowl of shredded wheat: dry, lifeless and tasteless. Anderson et al. (1985) cite that the first difficulties many children experience with reading is the transition to textbooks. Content area textbooks, like basal reading textbooks, use less natural language and less style. Children's interests plummet with content textbooks. I have also experienced this firsthand, as an elementary student and observing students as a teacher. Children's reading comprehension is greater with interesting materials because it keeps student's attention and motivates them (Brozo and Tomlinson, 1986). Literature fills these roles.

Children's literature is a natural springboard for exploring science with young children. They can grow in understanding the difference between reality and fantasy. "Sometimes a storybook which distorts or ignores a scientific law will arouse a child's interest

more easily than a factual book" (Smardo, 1982, p.278) which can lead to student inquiry. Student's questions can serve as a launching pad to further investigation. Children can explore the natural world with stories like *Fish Is Fish* by Leo Lionni or *Squawk to the Moon*, *Little Goose* by Preston and Cooney. Smardo (1982) put together a suggested annotated list of children's stories for integration with science. Topics include: animal changes, insects (changes and identification), light (rainbows and shadows), machines, magnets, tools, the moon, plants and seeds (growing), time and seasons, weather, and water (evaporation, floating, melting).

Literature and writing can enhance mathematics. Baratta-Lorton (1976) writes that we must look through the eyes of children when teaching young children mathematics. "Young children learn concepts and relationships through direct, concrete experiences rather than through the mental manipulation of abstract ideas" (Radebaugh, 1981, p. 902). Many storybooks do not directly deal with topics in mathematics but mathematics concepts can be reinforced through literature. Radebaugh (1981) listed suggested annotated children's literature to reinforce math concepts. This list includes these topics: geometric

shapes, comparison (relative size), ordinal numbers, number concepts, counting, addition, history of our number system, money, attributes, large numbers, multiplication, and fractions. Nursery rhymes as well as fairy tales are also excellent in reinforcing math concepts. Integrating writing along with literature in the area of math also reinforces math concepts. Deidre Edwards (1990) writes math stories with her young students about daily activities, extensions with literature, newly acquired information, excursions, and special events. She states that as children write math stories they "develop an understanding of the need for sequencing and pattern in both their story writing and their mathematical computations" (p. 26).

Literature and writing are natural springboards into math, science, social science, music, movement... all content areas. It allows language and content area learning to grow naturally and imaginatively.

Thematic Units

The concept of thematic units integrating the school day with its interdisciplinary teaching approach is not new. It came from the noted works of Pestalozzi, Froebel, Piaget and Dewey. They all suggest that learning be based on child interest and

that instruction should therefore be active, sense-oriented and manipulative. Further, they believe that for children to learn, children need growth time in exploration, experimentation, and play with interesting manipulative materials. Dewey (1966) stressed that real-life experiences in learning were extremely important and that when children actively engage in their interests, their developmental skills are functionally integrated. Therefore as Strickland and Morrow (1990) write "instead of studying separate lessons on particular skills, children study themes of interest to them and learn skills in the process" (p. 614).

Without the integration of the learning areas, the school day is fragmented. Bits and pieces of skills and lessons are taught in bits and pieces of predetermined time. The skill and lesson segments segregate the learning areas making it difficult for children to integrate the subjects and see how they relate to the other areas. This type of teaching approach is viewed as a cha-cha-cha curriculum due to the segmentation of learning, resulting in teachers spending 40% of a school day on choreography (Graves, 1983). With thematic units to integrate the learning

areas, the curriculum naturally flows together and students see relationships between subjects.

Strickland and Morrow (1990) put it this way "when literacy skills are developed in an integrated fashion, through themed units and literacy activities serving a realistic function, then children see purposes and reasons for becoming literate" (p. 604). The use of thematic units especially supports emergent literacy and content area integration.

This literature review is based on the whole language philosophy of learning and teaching. Whole language is not only a philosophy that encompasses the language arts but every facet and area of learning. Whole language has some fundamental assumptions. Newman and Church (1990) express them well: "Learning is social; requires risk-taking and experimentation; involves constructing meaning and relating new information to prior knowledge; occurs when learners are actively involved, when they have real purposes, when they make choices and share in decision-making; uses language, mathematics, art, music, drama, and other communication systems as vehicles for exploration" (p. 23-24).

Assessment

The issue of assessment in whole language is the target of much controversy. All programs (including kindergarten) must include assessment of literacy development but the approaches vary. At a district kindergarten inservice I recently attended, I received a draft of the revised California Assessment Program Integrated Reading And Writing Performance Assessment (Fran Claggett, 1990), a sample prompt for teacher workshops. The prompt illustrated the "range of the kinds of reading and writing invitations a student might receive in an integrated, 2-period, reading and writing assessment prompt" (p. 1). Both the reading and writing assessments are based on a theme that the students read and respond to in writing. The reading prompts will "inform the scorers of students' initial responses, as well as of their ability to develop and understanding of the poem, reflect on their changing ideas about the text, and step back to take a critical stance" (p. 1). This will involve students writing by personalizing what they have read, using critical thinking, thinking metacognitively and evaluatively. The writing prompt was designed to specifically guide students into writing in one of the eight styles

assessed by the CAP but does not, however, inform the students on which style they are to use. The assessments also state that there is no one "right" answer to any questions on the assessment. A rubric will be used in the scoring of the tests.

The implications of this new type of assessment are many. We teachers need to teach in themes, we need to expand children's background knowledge through many kinds of literature and poems, we need to see ourselves as a facilitator or cheerleader and encourage children in their own learning. For this assessment to be as natural as possible, children need to express themselves, write daily and be familiar with different styles of writing. Teachers need to foster higher order thinking skills in addition to metacognitive thinking. Granted, not all of these will be accomplished at the kindergarten level, nor should they have to all be introduced. My colleagues at school and I, however, have no choice but to make our children explore every style of writing because after all, writing samples have to be turned in every week. Despite the ugliness of the previous sentence, we teachers can positively facilitate children in their developmental quest for learning by providing them a

literate rich environment with plenty of time to explore, play and experiment with many materials. As far as preparation for the CAP test, the key is to integrate literature and writing into all content areas using themes to accomplish that end.

Thus the role of integrating literature and writing in the kindergarten curriculum, as described in this literature review, is crucial to students' development of early literacy skills. The issue of assessment of early literacy development must be continually examined by teachers in order to assess children's literacy in a developmentally appropriate manner.

GOALS AND LIMITATIONS OF THE PROJECT

One goal of this project is to demonstrate the significance of integrating literature and writing into the content areas through the utilization of thematic units. I hope this project will thereby be a contribution to the teaching profession and that my colleagues will utilize the information presented resulting in an improvement in literacy education and curricular accomplishments. The third goal of this project is to demonstrate how the eight styles of writing established by the California Assessment Program can fit into thematic units.

One limitation of this project is that the thematic units provided in the appendix were designed for primary grades. The thematic units can, however, be adapted to the intermediate grade levels. The research portion of this project also focuses on emergent literacy in the primary grades. It would, however, be advantageous for any elementary school teacher to read as intermediate teachers many times have at least one or more beginning reading students. In addition, this project was not specifically designed for bilingual education, although bilingual teachers may benefit from reading the literature review,

evaluation, and the thematic units and incorporate or adapt the information given to fit their curriculum. Finally, the thematic units do not necessarily attempt to emphasize science, mathematics and social studies but to incorporate them into the literacy experiences.

EVALUATION

Assessment is a necessary part of a child's education and is intricately knitted with teaching and is continual. As one teaches, she automatically observes to see whether her students understand what is being taught; she checks to see if they have grasped the concepts. After assessing the level of students' understanding she decides on the needs of the students, whether to concentrate on a certain area or whether to move on.

Students, likewise, naturally evaluate their own learning whether they are aware of it or not. Students try to assimilate concepts/facts taught into their background knowledge. If they understand, the things taught will be like fish added to their schematic fishnet; however if they do not understand what is taught it would be as a hole in their schematic netting.

There are three ways to ascertain whether a student has grasped a concept. First the teacher can watch a student: observe body language, listen to what comes out of his mouth, watch her attitude and level of involvement. Secondly, the teacher can ask a student if she understands and assess what she needs help in.

Thirdly, the teacher can have students evaluate their own learning. Student self-evaluation is extremely important to incorporate at any grade level because it helps students monitor their own learning.

There are many ways to assess student growth. In past years, assessment was limited to traditional multiple-choice testing which does not fully measure student knowledge. This is due to the fact that standardized tests consist of factual questions which are measured with "right" or "wrong" responses; that is, there is only one right answer -- all other answers are incorrect. The response margin is extremely narrow because these tests measure students knowledge. According to Bloom's Taxonomy (Swaby, 1984) knowledge, which refers to factual and detailed recall, is the lowest level of thought. What about measuring higher levels of thought like comprehension, application, analysis, synthesis, and evaluation and allowing students to use their own words in communicating their thoughts? To solely measure students growth with their performance on standardized tests is to measure unjustly. We must look at assessment as a broad spectrum with many ways of evaluation.

One of the rays in the evaluation spectrum is *kid*

watching (Goodman, 1985). This involves systematic observation and notation of students active use and incorporation of language into everyday behavior. This would include observation of students' concepts of functionality and conventionality of literacy.

Teachers may note the degree to which students spend time with (looking at or reading) books, listening to stories, using print in dramatic play, using environmental print, how students respond to new print (signs, posters...) and through observing students reread familiar storybooks (Teale, Hiebert, and Chittenden, 1987).

Teachers may also gather assessment information of students' comprehension abilities by observing them during storybook readings. Teachers can assess student participation, answers to questions, predictions, questions students may have about the story or characters in it, and student response to the story. Another way to assess student comprehension is to ask a student to retell a story (Koskinen, Gambrell, Kapinus, and Heathington, 1987). Students' language and story structure can be assessed through the retelling of a story.

Since reading and writing develop together, asking

students to write a response to a story is another good assessment tool. Students could write a prediction they may have, or they could write a new story ending, they could write a play to go along with the story, make up a song or write a letter to a character in the story. Something that I like to use in assessment is to have students make a schematic web of what they already know about a subject that we will be studying, then at the end of the unit I like to have students make another schematic web of all the things they now know about the subject. Kids are amazed at what they learn. Pappas, Kiefer, and Levstik (1990) used semantic maps (also known as schematic webs) to show the development of schemas. It is a good way for teachers to assess what a child has learned. It is also a good way for students to monitor their own learning.

It is also important to provide students with choices in responding to literature. In addition to what has already been written, students may like to act out a story in drama or with puppets; they may also like to illustrate a certain scene that they liked in the story, or they may want to make a model of something in the story out of clay or playdough, or

they may choose to do a dictation story. Student choice in responding to literature is important because students have input in their learning and they take pride of ownership in what they do (Staab, 1991).

The keeping of journals is another way of responding to literature. Students can write down what they liked or learned about the story. They can write how the story reminded them of a real life situation. They can use their journals to make a personal connection with what they have read or listened to.

Another effective way to assess student growth in literacy is to keep a portfolio on each student (Au, Scheu, Kawakami, and Herman, 1990). A portfolio houses student's work (written, audio and visual) thus showing student accomplishments as both reader and writer. Two to three writing samples per student should be gathered each week. Audio cassettes with students reading their own work or a favorite storybook or retelling a story at least once a week could also be kept in the portfolio. Any wordless picture books that the students make or any illustrations for a story can also be included in the portfolio. Portfolios are excellent to keep on each student because it shows the growth students have made over the year. The student samples

will show the different stages of work; samples collected should include work from the draft mode to the finished product. Teachers should also keep anecdotal records of students and their progress throughout the year. Students' process and products should be evaluated (Staab, 1991). Teachers will be able see student's concepts and developments of literacy grow. Student's writing samples can span the curriculum; they do not have to be purely language arts. Student portfolios will also remind students of what they learned throughout the year.

Assessment is a part of teaching. It is important to examine children's literacy in a developmentally appropriate manner. This is why I have provided alternatives to standardized testing. At the district in which I teach, kindergarten students are required to take one standardized test during the first few weeks of school, solely for purpose of determining Chapter I students. Students who enroll after the testing (usually after August) are not required to take the test. The district used to retest the kindergarten students at the end of the year but they stopped that about three years ago because they determined that the test was developmentally inappropriate. The district

is moving toward portfolios as a way of showing student growth and will implement the use of portfolios next year. It is exciting to see developmentally appropriate alternatives in assessment of emergent literacy.

All of the assessment measures mentioned are authentic measures of assessing student growth. Used in conjunction, they provide a developmentally appropriate and accurate manner of measuring student growth throughout the thematic units presented and for teachers to use throughout the school year.

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APPENDIX

THEMATIC UNIT ON SNOW

Rationale

The following two week unit on snow is designed for a kindergarten class. In this area where snow falls in the mountains and seldom in the valley, this unit will broaden students understanding of snow, proper attire, snow sports and activities, how snow is helpful and how it can be hazardous, how it alters lifestyles and that snow and the winter season can be celebrated.

* Note - In this unit I have shown how the eight styles of writing according to the CAP could be used depending upon which style is due for the week. They are suggestions that teachers may adapt/adopt into their curriculum.

Concepts

This unit is built around the following concepts:

1. Snow is associated with the winter season.
2. Snow is frozen water vapor that falls from the atmosphere during it's role in the water cycle.
3. Each snowflake has six sides to it but no two snowflakes are exactly alike.
4. Snow alters the way people dress.
5. Snow allows for special seasonal sports and events.
6. Snow and the winter season alters animals' lifestyles.
7. Tracks in the snow tell stories that you can read.
8. There are places where snow remains year-round, places where snow falls seasonally, and places where snow never falls.
9. Snow can be hazardous.
10. Snow and the winter season can be celebrated.

LESSON PLANS

Day One

Related concept: Snow is associated with the winter season.

INTO: Show students photographs of snowy scenes from calendars, picture books and informational books. Have students pair up and brainstorm everything they know about snow or that is related to snow by making a schematic picture web. When students have had ample time, they share their information with the whole class while the teacher makes one giant schematic picture web on chalkboard or big sheet of paper of total pupil response.

THROUGH: Teacher reads *Winter Is Here!* and *The Snowy Day* to the class. A discussion would be lead on the themes of the books and whether the stories could take place in a warm climate setting. Students feelings of the stories and the pictures in the stories would also be addressed. In addition to questions concerning *The Snowy Day*, teacher should ask students how and why Peter's firmly packed snowball disappeared from his pocket from the time he had gone inside his house until bedtime. The related poem *A Lost Snowflake* could then be read. The songs *Winter* and *Wonderful World of*

Winter would then be taught. *The Seasons* video could be watched and discussed.

BEYOND: Students would make a crayon resist painting of a snowy winter scene or draw or sketch a picture of a snowy scene. Students could also write an autobiographical incident about snow if they have had one. Kindergarteners who have had an autobiographical incident always want to share them! These students can then share their stories to the rest of the class from the author/illustrator chair. The story *Has Winter Come?* (which deals with the smells associated with winter) could then be read and discussed. The class could go walking together around the school in search of winter or snow. (Once when I did this, we came upon snow in our parking lot which lead to a wonderful analysis-speculation of how the snow got there. We could see snow on the mountains but this was the only patch of snow in the valley. They had some great ideas which turned into terrific stories. One boy thought that maybe the wind blew some of the snow from the mountain down to our parking lot.) Students could then write observational stories of signs and smells of winter, contrast stories of winter smells versus summer smells, or surprise analysis-speculation stories.

Day Two

Related concept: Snow is frozen water vapor that falls from the atmosphere during it's role in the water cycle.

INTO: The video *Water's Way* would be watched and discussion of the water cycle and the snow's role in the cycle would follow. Chapter two of *The Snow Book* would then be read to the students and discussed. A model of the water cycle could then be made by filling a Pyrex pot with water and heating it on a hot plate until the water is boiling. Then a frying pan with some ice cubes would be held four inches above the pot. A miniature water cycle will be produced as the water vapor from the boiling water is cooled by the cold bottom of the frying pan, causing droplets of water to condense on the bottom of the pan and then fall into the pot below.

THROUGH: Teacher would lead the whole class in pretending each person in the class to be water vapors. Class would act out the water cycle with the teacher as the she narrates the steps of the water cycle. Teacher would then lead the class in a discussion on the various types of precipitation (rain, snow, sleet, hail, mist).

BEYOND: Students could choose to write a story or make a picture book of the water cycle. They could choose to write a story of the different kinds of precipitation. Others could choose to do a dictation story of the water cycle or how it might feel to be a water vapor going through each part of the cycle. Students could write a report of information on the water cycle or precipitation.

Day Three

Related concept: Each snowflake has six sides to it but no two snowflakes are exactly alike.

INTO: Display various pictures of all sorts of people (young, old, tall, short, plump, skinny, male, female, black, white, yellow, brown, disabled) and have half of the students brainstorm as to how the people are alike while the other half of students brainstorm as to how the people are different. Both groups would then share what they came up with. The book *Snow Is Falling* could then be read and discussed.

THROUGH: The poem *The Snowflake* would be read to students. Students would be divided into small groups to make frost and snow. A tall can is to be filled with alternate layers of cracked ice and table salt, with each ice layer twice as thick as the salt layer and packed down firmly. Then some drops of water should be placed on a piece of wax paper and covered with the can. Dew may form on the sides of the can and then freeze, but frost will also form as the temperature of the air beside the can falls to below freezing. After the sides of the can are well covered with frost the can will be removed from the wax paper to display the ice/snow crystals. During the

experiment a thermometer could be held next to the can as well as holding a thermometer in the room, away from the can. A comparison of the temperatures could then be made. The story *Simon and the snowflakes* could then be read and the songs *Snow Time* and *Snowflake In My Hair* could be taught. The students could then make and eat snow cones. The whole class would then be taken outside to play the game "Jack Frost and Jane Freeze" (a boy and girl are chosen to be Jack Frost and Jane Freeze and together they tag-freeze their classmates until all are frozen; tagged students may not melt until the spring -- the end of the game; play in a large but limited area).

BEYOND: Students could make their own paper snowflakes and compare them to the other students' snowflakes. Students could choose from white duplicating paper to various colors of tissue paper to make their snowflakes. (For your information: snow looks white because of the reflection of light on the snow crystals, however, in Greenland microscopic plants sometimes make the snow look red or green.) Students could make an observational writing of what they observed during the experiment. Students could make noodle snowflakes by taking various kinds of noodles

and arranging them in a snowflake design on waxed paper and gluing them together. Leave the creation on the waxed paper for about two hours, then you will be able to peel the waxed paper away. The noodle snowflake can be hung from a string and used as a winter decoration. Students could also write their own version of *Simon and the snowflake* using their own names and ideas.

Day Four

Related concept: Snow alters the way people dress.

INTO: Students are divided up into small groups with each group having a large piece of drawing paper. Each member draws a picture of something that one should or could wear in cold or snowy weather. Each group shares with the whole class what they came up with. At this point the teacher could make a graph with the class as to how the students dressed to go outside to school. Compare how many wore sweaters, coats, caps, scarves, mittens, gloves, pants, shorts, shoes, sandals. (Do a follow up in the spring and compare graphs.) Students could do an observational writing on how people dressed for the cold weather or on results of the graph. Read the poem *Joe's Snow Clothes* and discuss how Joe dressed as compared to people in class (Joe had everything covered but his nose -- he lived where it was extremely cold and snowy).

THROUGH: Read *The Crack-of-Dawn Walkers* to the class and discuss. Students in their small groups determine if there was anything else one could wear in snowy weather that they wanted to add to their paper. *A Walk On A Snowy Night* would then be read and discussed. Class would make comparisons of the similarities and

differences between the two stories. The songs *Zippers* and *The Mitten Song* would then be taught to the students. Discuss the difference between mittens and gloves. Make a graph of the students mittens and gloves.

BEYOND: The poems *The More It Snows* and *Snow Woman* (a patterned poem) would be read and discussed with students. Students could then choose to write their own story about a walk in the snow, or they could choose to make up a poem, song or skit about winter or winter clothing. Students could also choose to make a mini-picture book of winter clothing or write their own version of *Snow Woman*.

Day Five

Related concept: Snow allows for special seasonal sports and events.

INTO: The books *The Christmas Sled*, *The Snowman Book*, and *Snow Time* would be read to the students. A discussion of the snow sports and activities presented in the books would follow. Class would brainstorm other snow sports or activities not mentioned in the books.

THROUGH: Teach students the songs *Roll Up The Snow* and *Making A Snowman*. Act out the songs while singing. Read the poem *Lying On Things* and *Snow* (poems about having fun in the snow). Make, bake and eat snowball cookies (another name for balled butter cookies rolled in confectioner's sugar). Take a poll of favorite snow activities of students in the classroom and list the top three activities (some students may do it of the teachers at the school and compare those results with that of the classroom). Play charades of snow activities.

BEYOND: Students choose one of the following: 1. Students read through the wordless picture book *First Snow* and create a storyline to go with the pictures. 2. Students create a picture of a snow activity scene

(may write a story to go with it if student so decides). 3. Students make a model out of clay, dough, or other thing of something used in a snow activity or made during a snow activity. 4. Students make a skit of fun outdoor snowy activity.

Day Six

Related concept: Snow and the winter season alters animals' lifestyles.

INTO: Teacher reads *Red Riding Hood Goes Sledding* and *The Bear Who Couldn't Sleep*. Students get into groups of two and act out one of the stories. Then students compare and contrast the stories.

THROUGH: *Animals In Winter* and *Winter Sleepers* would be read to students. Discuss how some animals migrate before winter, some hibernate and the rest stay where they are. Discuss how the hibernators prepare for winter. Read and discuss *Winter Harvest* and *Winter Magic*, stories about animals that stay and do not hibernate and how people help feed them in the winter season. Also read related poem *Joe* on feeding animals in the winter.

BEYOND: Students each pick a different animal to research and write a report of information of what that animal does in the snowy wintry season. Students may illustrate their stories. Students can then make bird feeders to hang outside for birds. To make the bird feeders, spread peanut butter on a pine cone, roll in bird seed and hang with a string.

Day Seven

Related concept: Tracks in the snow tell stories that you can read.

INTO: Students brainstorm about the various tracks that they have seen. Students may draw a picture of the tracks on the chalkboard as they share. *Snow Tracks* would be read to students. Allow students to guess what made the various tracks on the cover before reading. Then read to find out what made the tracks. Discuss the elements and contents of the story.

THROUGH: Provide a xerox copy of different track pictures from the book *Track Watching*. Have students sit in small groups and hand out a different track picture to each small group. Students brainstorm as to what made the track in their picture. Each group would then write an evaluation paper of what they think their track was made from or they could write a story about the track picture and share with the class.

BEYOND: Take students outside and see if they can find any tracks. Then have students create their own story about snow tracks and illustrate. These stories may then be shared with the others in class. Students may also draw as many different tracks as they know of.

Day Eight

Related concept: There are places where snow remains year-round, places where snow falls seasonally, and places where snow never falls.

INTO: Students think about the region in which they live and determine where Fontana fits in with the related concept and then where Mt. Baldy or Big Bear fits in. Then students brainstorm as to what places have some snow all year.

THROUGH: *Snow*, chapter eight of *The Illustrated World of Wild Animals*, and *Take A Trip To Antarctica* would be read to students. A globe would be brought out and locations of the books pointed out. A comparison and contrast of the life and characteristics of the Arctic and the Antarctic would be made.

BEYOND: Students would pick a Pole (north or south) and find out more about it. The students who picked the Arctic would go to the library to find information about the Arctic. They would then read or have their information read to them. In addition, their subject would be read to them from the encyclopedia. The book *Let's Find Out About Eskimos* would also be read to them. Then they would write and illustrate the information they gained about the Arctic. After they

share their information with the rest of the class, the video *Eskimo Family* would be watched by the entire class. Each student could be given an Eskimo pie and students may estimate how many bites it would take to eat their pie. Students who picked the Antarctic would also go to the library to find information about the Antarctic and have their information read to them. Their subject would also be read to them from the encyclopedia. The books *Bessie*, *The Messy Penguin* and *What Spot?* would be read to them. Students would write and illustrate the information they gained about the Antarctic which would enable them to share their information with the rest of the class.

Day Nine

Related concept: Snow can be hazardous.

INTO: Students would brainstorm how snow might be hazardous. *Brave Irene* would be read and discussed. *Snow Is Falling* would also be read and a discussion of blizzards and flooding (in springtime) would follow and the affect of these on people, animals and plants would be addressed. *Geraldine's Big Snow* would also be read and a discussion of what people could do to prepare for a big snow storm would follow.

THROUGH: *Katy And The Big Snow* would be read to students. A discussion of the story would follow. Students could point out the different community helpers that Katy helped out. Students could make a map of their own with the different community helper stations for Katy to plow. A guest speaker could share personal experience of a blizzard and show pictures (there are many people and teachers from the north, Midwest and east coast that now live in southern California that have experienced a blizzard). I have personally experienced blizzards and would share with my class. The blizzard of '78 stick out in my mind; t-shirts were sold with the slogan "I survived the blizzard of '78". Everything was stopped and

transportation was altered -- only snowmobiles were allowed out. I know a woman who was going into labor who had to be taken by snowmobile to the hospital. Some people ran out of food until roads were safe for travel for they had not prepared for a blizzard. Others that had emergencies had to wait and like Katy, all people that had snowmobiles were called on to help. Students would then brainstorm different emergencies as in Katy's story. I would also tell about the flood that my town experienced in the spring as a result of the blizzard and continual snow. Too much of anything can be harmful. The class could compare how blizzards and floods are alike and how they are different.

BEYOND: Students could choose to get a firsthand biography from someone who went through such an experience. Students could also choose to write a problem solution story. They could also write and illustrate a story about a blizzard or flood or about what we in California need to be prepared for -- earthquakes. Some students may want to find out more about snowmobiles and could be read the book *Snowmobiles*. These students could compare/contrast snowmobiles with desert bikes and buggies. Students may draw or paint their own impressions of the hazards

of too much snow. Students would share their work from
the author/illustrator chair.

Day Ten

Related concept: Snow and the winter season can be celebrated.

INTO: *The Snow Parade* and *Owl Moon* would be read to see how some people enjoy or celebrate the snow or winter season. A discussion of the story's elements and themes would follow.

THROUGH: A field trip to a nearby mountain with snow, such as Mt. Baldy could be taken. The students could make snowmen, snow angels, snowballs, a snow fort, have a snow parade and experience snow first hand. If there is no snow in the mountains, the class could still have a snow parade where the entire class could sing *Let It Snow* and *Snow Time* and play instruments. Marshmallow snow creations could be made with large and miniature marshmallows, vanilla frosting (to act as glue), raisins, chocolate chips, skinny licorice strips and any other edible foods to design with.

BEYOND: All students individually would make a picture web of all the things they now know about snow. Then small groups of students could dramatize what they learned about snow. A song or poem could also be an option for students to express what they learned throughout the snow unit. Some students may write and

publish books about what they have learned. To finish this unit students would write an evaluation of whether they would want to live in an area where it snowed throughout the winter or not, giving reasons for their opinions.

Evaluation

The kindergarten students would be evaluated on participation in class, effort put into projects, and demonstration of knowledge learned, whether the knowledge is demonstrated through artwork, drama, music, poetry, stories, picture books or publications. Short individual conferences with students on what they are working on would take place on a daily basis as well as kidwatching. Students work would be collected and put into their portfolios and students would do a self-evaluation.

Literary Materials

Informational Books

Animals in Winter by Ronald Fisher - Describes how animals prepare for winter by hibernating, migrating, storing food, or changing colors to blend with the winter landscape. It contains beautiful photographs.

The Illustrated World of Wild Animals by Mark Carwardine - A variety of usual and unusual animals are presented from their particular regions of the world. Beautiful illustrations, maps, and animal facts are presented.

Let's Find Out About Eskimos by Eleanor and Ted Wiesenthal - Describes the Arctic region, Eskimo lifestyle including hunting expeditions, mobility, food, clothing, housing, trade, games and education.

The Snow Book by Eva Evans - Covers all aspects of snow from winter to spring and its affect on communities, activities, mobility, Eskimos, and animals.

Snow Is Falling by Franklyn Branley - Describes the characteristics of snow, its usefulness to plants and animals and the hazards snow can cause.

Snowmobiles by Ed Radlauer - Addresses various aspects of snowmobiles including description, uses and

safety.

Take A Trip To Antarctica by Keith Lye - Describes all aspects of the Antarctica (it's characteristics, weather, early expeditions, research stations, life of scientists there and animal life. Contains outstanding color photographs of region, animals, and scientists, a map, and painting of the first exploration team.

Track Watching by David Webster - Contains black and white photographs and information on tracking.

Winter Sleepers by Phyllis Sarasy - Compilation of all the animals that hibernate.

Picture Books

A Walk On A Snowy Night by Judy Delton - A father and daughter take a walk on a snowy night visiting various places in their town and listening to the different sounds they hear outside.

Bessie, The Messy Penguin by Joyce Holland - Story of a messy little penguin that struggles with her self-esteem because of her messiness and goes in search of informal clothes and finally comes to realize that she is just right the way she is.

Brave Irene by William Steig - A delightful story of how Irene treks bravely through a snow storm to deliver a gown that her mom had made for the duchess.

First Snow by Emily McCully - The story of a timid little mouse discovering the thrill of sledding in the first winter snow. Excellent illustrations in this wordless picture book.

Geraldine's Big Snow by Holly Keller - Story of Geraldine waiting for the big snow and what she and others do in preparation for the snow and what they do when it comes.

Has Winter Come? by Wendy Watson - The story of a woodchuck family preparing for long snowy nights and how the little woodchucks learn to recognize the smells of winter in the air.

Katy And The Big Snow by Virginia Burton - Depicts how Katy, the big snow plow, saves the city of Geopolis from blizzard affects by plowing the snow out of the city streets.

Owl Moon by Jane Yolen - A girl and her father go for a walk one wintry night in search of the Great Horned Owl. Contains beautiful illustrations.

Red Ridinghood Goes Sledding by Charlotte Steiner - Red Ridinghood goes sledding and runs into a bears hibernating quarters awaking the bear and now must help him go to sleep again.

Simon and the snowflakes by Gilles Tibo - Simon

tries to count the snowflakes falling many different ways but concludes that it is an impossible task. The expressive airbrush paintings/illustrations are beautiful.

Snow by Virginia Parsons - Describes snow, places of so snow, animals in snow, and snow activities.

Snow Time by Miriam Schlein - Describes snow activities.

Snow Tracks by Jean George - Show the tracks that different animals make in the snow and tells a story about why the tracks were made.

The Bear Who Couldn't Sleep by Charlotte Pomerantz - The story and adventures of a bear who was not ready for winter hibernation.

The Christmas Sled by Carol North - Describes a little girl's use of her Christmas sled and other outdoor wintry activities.

The Crack-of-Dawn Walkers by Amy Hest - Story of how Sadie and her grandfather go for their special early morning walk every other Sunday.

The Snow Parade by Barbara Brenner - Andrew starts his own snow parade. Soon a dog joins in, then a duck, a rabbit, a pigeon, a policeman and his horse...until all the townspeople join in. Snowflakes in margin

represent the growing number of those joining the parade. Good counting book.

The Snowman Book by Joe Kaufman - Addresses winter clothing and activities in the snow ending with a snowman.

The Snowy Day by Ezra Keats - Describes Peter's experiences with snow one day and presents the mystery of where the snowball in Peter's pocket disappeared to as he reached for it before bedtime.

What Spot? by Crosby Bonsall - A story of Antarctic animals and a little red wagon.

Winter Harvest by Jane Aragon - Describes a child's experiences of feeding a deer family in the winter. Beautiful water color illustrations.

Winter Is Here! by Jane Moncure - Depicts a girl's celebration of winter.

Winter Magic by Eveline Hasler - Story of how a boy is taken out into the snow covered world and shown the secrets of winter (underground activity, the quietness of winter, ice and icicles, hibernation, and the depth of snow).

Poetry

Poems taken from *Snowy Day: Stories and Poems* edited by Caroline Bauer are as follows:

A Lost Snowflake by Charlotte B. DeForest -
Snowflakes melt quickly when you catch them.

Joe by David McCord - Poem of feeding animals in the
winter time.

Joe's Snow Clothes by Karla Kuskin - Describes how
Joe is clothed for winter -- only his nose shows.

Lying On Things by Dennis Lee - Poem about lying in
the snow (making snow angels and other things).

Snow by Karla Kuskin - Describes many things to do
in the snow.

Snow Woman by Nancy Watson - A patterned poem about
a snow woman.

Poems taken from *The Random House Book Of Poetry*
selected by Jack Prelutsky are as follows:

First Snow by Marie Louise Allen - After the first
snow regular outdoor places look like somewhere else.

The More It Snows by A. A. Milne - The more it
snows, the colder one's nose gets outside.

The Snowflake by Walter de la Mare - Depicts the
beauty and frailty of a snowflake.

Stopping By Woods On A Snowy Evening by Robert Frost
- A rider and his horse stop in the woods to watch the
beauty of the snowfall.

When All The World Is Full Of Snow by N. M. Bodecker

- An observer enjoys the atmosphere of watching snow fall and the changing environment.

Nonliterary Materials

Photographs

Four of the informational books contain photographs. They are *Animals In Winter*, *Take A Trip To Antarctica*, *Track Watching*, and *Snowmobiles*. Another source of photographs for this unit may come from calendars with photographed landscape.

Videos and Film

The videos and film listed below are available from the San Bernardino County of Schools Library and can be ordered from the Fontana Media Center. Two weeks should be allowed for orders.

Eskimo Family - Follows Anakudluk and his family on their annual trek from winter camp to spring hunting grounds. Depicts the day-to-day life of an Eskimo family including eating, working, hunting, and visiting relatives. 1960 film. 17 minutes.

The Seasons - Records the cycle of the seasons on a dairy farm in the Pennsylvania Dutch country. 1971 video. 17 minutes.

Water's Way - Introduces the properties and purposes of water guided by an animated raindrop who falls in a boy's hand as a snowflake. 1983 video. 7 minutes.

Music

Frosty The Snowman by Steve Nelson and Jack Rollins.

Let It Snow by D. Garrow.

Making A Snowman by G. Whitman.

The Mitten Song by M. L. Allen.

Roll Up The Snow by Helen Horn.

Snow Time by Mildred B. Hamilton.

Snowflakes In My Hair by J. Warren.

Snowman by L. B. Smith and L. F. Wilson.

Winter by Jane Moncure.

Wonderful World Of Winter by Helen Horn.

Zippers by C. C. Birchard.

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THEMATIC UNIT ON SEEDS

Rationale

The following five day unit on seeds is designed for a kindergarten class. Young children have had many experiences with seeds whether they realize it or not. They have removed seeds from fruits, found seeds on the ground, eaten fruits and vegetables containing seeds, picked seeds off that have stuck to their clothing, and some have planted or helped plant seeds. Many children recognize common seeds (watermelon, apple, corn and beans) yet are unaware that some foods are seeds (such as rice, peanuts, peas, and pecans) and that some foods eaten contain seeds (like bananas, strawberries, tomatoes, blackberries, and squash). This unit will help students expand their awareness of seeds and growing things.

* Note - In this unit I have shown how the eight styles of writing according to the CAP could be used depending upon which style is due for the week. They are suggestions that teachers may adapt/adopt into their curriculum.

Concepts

1. Seeds come from the fruits of plants.
2. Some seeds are eaten with their fruit; some seeds are not to be eaten.
3. Seeds differ in shape, size, color and texture.
4. Every seed contains a baby plant and food for the baby plant.
5. Seeds need water, warmth, food and air to sprout and grow.
6. Plants change in size as they grow; leaves grow bigger, stems grow taller, roots grow longer.
7. People use seeds for different purposes.
8. The scattering, planting and growth of seeds in nature is seasonal.
9. Seeds may be used with art media in picture making.
10. Some seeds need their shell removed before being eaten, some seeds can be eaten without being cooked, and some seeds taste better cooked.

LESSON PLANS

Day One

Related Concepts: Seeds come from the fruits of plants. Some seeds are eaten with their fruit; some seeds are not to be eaten. Seeds differ in shape, size, color and texture. Every seed contains a baby plant and food for the baby plant.

INTO: Put up a big sheet of butcher paper. Ask students to brainstorm everything they know about seeds and share with class. Make a class schematic picture web about seeds on the butcher paper (keep this paper up for the duration of this unit so that students can add new information to it at the end of each day).. Ask students where seeds come from and allow for answers. Then read the story *Cherries and Cherry Pits*. Give each student a cherry to taste and save the pits. Make a graph on if students liked or disliked cherries and read graph. Then read *Pumpkin Pumpkin, Flowers, Fruits, Seeds*, and *The Carrot Seed*. A fruit is defined as the part of a plant containing the seed or seeds. At this time the teacher can show students different fruits (watermelon, pumpkin, cantaloupe, gourd, okra, tomato, cucumber, squash, corn in the husk, peas or beans in the pod, kiwi, peach or nectarine, plum,

kumquat, loquat, orange, lemon or lime for example).

Since a watermelon, pumpkin, cantaloupe and gourd need a sharp metal knife to open, use them to demonstrate to students what they will be doing in small groups when you are done. Show students a watermelon and ask students what they think is inside of it, how many seeds they think are in it, and what the color, shape and size of the seeds will be. Then open the watermelon and show students the seeds. [At recess time the watermelon can be cut into slices to give to each child to eat and save the seeds -- one seed per child could be used for a seed spitting contest which is especially popular in the Midwest.] Model the same questions for a pumpkin, cantaloupe and gourd. Then have students get into small groups. Give each small group several fruits, a plastic knife, and paper towels to predict and examine the seeds of each fruit. Have each group save the seeds. The teacher could give each group the same fruits or she could give each group different fruits and then have the groups share their seed findings when they are done. When each group is done opening their fruits and observing their seeds have students set their seeds out to dry. The raw fruit that is edible can be eaten now.

THROUGH: Read *Look At Seeds and Weeds*. Mix the seeds from the earlier activity with new additional seeds. Provide as wide a variety of seeds as possible; the local grocery store has a variety of inexpensive dried seeds. Have students get into small groups again and give each group a portion of the mixed seeds. Invite students to explore the seeds and put alike seeds together. There are many ways to classify seeds. They can be classified according to color, shape, size, texture or hardness to name a few ways. These ways need not be mentioned for students will discover them as they work in their groups. Go to each group and when the group has classified all their seeds encourage students to see if they can group the seeds in other ways. When groups have had ample time, bring all the students together and ask them what is inside a seed. Give each student a dry lima bean and encourage them to try to open the seed. It will be difficult. Then give each student a lima bean that has been soaked in water overnight and encourage them to open the seed. Soaked lima beans are larger than dry ones and much easier to open. When a lima bean is open students can see a baby plant and the food for the baby plant. Show the short video *What Do Seeds Do?* and discuss.

BEYOND: Refer to the seed schematic web made by the class earlier and ask students what they now know about seeds that they would like to add to it. Add the new information to the web and review it. Then invite the students write a report of information about seeds on whatever information they would like to share about seeds. Encourage students to illustrate their story. When finished, have each student plant radish seeds (they grow quickly) in milk containers filled with dirt. Students can chart the growth of their radish seeds the first thing every morning. Also students can help set up a class project to watch growth of seeds not planted in dirt by either putting alpha seeds on top of wet cotton with a dish underneath and a glass jar on top or by putting a paper towel into a clear plastic cup (or glass jar) with cotton in the middle (to hold the paper towel to the side of the cup or jar) and putting lima beans between the paper towel and the side of the cup and wetting the cotton. It would be beneficial to do both. Students can also look at these projects first thing in the morning to check for any changes. If there is time read *The Little Red Hen*, then divide the students into three groups (one group for the cat's response, one group for the dog's

response, and one group for the mouse's response) and do a choral reading of the story with the teacher being the little red hen.

Day Two

Related Concepts: Every seed contains a baby plant and food for the baby plant. Seeds need water, warmth, food and air to sprout and grow. Plants change in size as they grow; leaves grow bigger, stems grow taller, roots grow longer.

INTO: First thing in the morning have the students check their radish seeds that they planted and check for any change. Have students record their findings in their own personal journals. Then have students look at the two class projects and keep a class record of the changes. Students can compare the growth of the radish seeds to the alpha sprouts and to the lima beans throughout the week. Then get the students together and ask them what plants need for growth. After they have responded read the stories *A Flower Grows* and *The Carrot Seed* and discuss. Then show the short film *What Plants Need for Growth* and ask students if there is any other things beyond what they said earlier that seeds need for growth. Share the poem *The Little Plant*. Have the class pantomime a child planting and watering a seed and then the seed growing. Then read the story *Seeds and More Seeds* and discuss. After the story take a nature walk in the school yard (or a walking field

trip to a nearby park) looking for and collecting seeds. Make sure students collect seeds only from public places. Put the seeds found on the walk with the other mixture of seeds from day one and save for a special project on day five.

THROUGH: Show the short video *Growing, Growing* and discuss. Then inform students that there are some fantastic stories about seeds and that you are going to share some with them. First show students the short wordless picture book *The Apple Bird*. Then read *The Enormous Turnip*, *The Biggest Pumpkin Ever* and *Jack and the Beanstalk*. Then have students think of what it would be like to be a little person in a world of giant people and giant vegetables or what they think would happen if they received magic seeds or what would happen if someone ate from a giant vegetable.

BEYOND: Give students the following choices and allow students to choose what they want to do. Students could write and illustrate a fantastic story, make a picture book of a fantastic story, do a dramatic presentation of one of the stories read or one that they make up, write a story line for *The Apple Bird*, or make a picture of any of the above using pencil, colored pencils, crayons, water colors, tempera paint,

ripped paper art or a combination of these. Students are to share their work from the author/illustrator chair after they have completed their work. At the end of the day make sure to ask students if there is anything more they want to add to the schematic seed web that is not already there, add new information to the web and review.

Day Three

Related Concepts: People use seeds for different purposes. The scattering, planting and growth of seeds in nature is seasonal.

INTO: First thing in the morning have the students check their radish seeds that they planted to check for change. Have students record their findings in their journals. Then have students observe the two class projects and record any changes. Ask students if there is any comparison between the different seeds. Then read the chapter "The Garden" from the book *Frog and Toad Together* and *Leo the Late Bloomer* and discuss how each seed has its own sprouting or blooming time (people too!). Show the short video *Wonders of Growing Things* and discuss. Then have students get into small groups and brainstorm all the things that people grow in gardens. Have groups write down their ideas. When all groups have had ample time, have groups share. Tell students that you are going to share some poems and stories of what people grow in their gardens. Read the poems *May Time Magic* and *Mistress Mary* which relate to flower gardens. Then read *The Rosey Fat Magenta Radish*, *Anna's Garden Songs* and *A Garden For Miss Mouse*. Then have a raw vegetable garden party with

each group responsible for preparing certain vegetables (like cucumbers, tomatoes, peas or beans, celery, Italian squash, green bell pepper, broccoli, cabbage, cauliflower or carrots). Make sure students have clean hands, water to wash the vegetables, paper towels, plastic knives and paper plates. When the party is over, the class can graph the most liked vegetable and the least liked vegetable.

THROUGH: Read *This Year's Garden*, *Farm ABC*, and *Family Farm*. Discuss what purposes the people had in mind for their seeds. Discuss the difference between a garden and a farm. Then have the students picture themselves as crop farmers. Ask them to think about what they would grow. When each student has thought of something to grow have every student color a big picture of what they thought of. When the pictures are done have each student share their picture and group students according to crops. Then sing *Old MacDonald* (changing the first part of the verse to "Old MacDonald had a farm he had rows of seeds") and in place of the animals put in each type of crop and have the students hold up their pictures at the appropriate times.

BEYOND: Read *The Little Red Hen* and discuss. Then give students a choice of how they want to extend their

learning. Suggest that they could write a story or an autobiographical incident about seeds, gardens or farms. They could also get into a small group and make stick or finger puppets of the characters in *The Little Red Hen* and put on a puppet show. Students could also collaborate to make a seed-flower-fruit ABC book (or the whole class might decide they each want to take a letter and do the ABC book). Students might also come up with an idea of their own. When students are finished with what they decided to do have them share what they have done. At the end of the day make sure to ask students if there is anything more they want to add to the schematic seed web that is not already there, add new information to the web and review.

Day Four

Related Concept: The scattering, planting and growth of seeds in nature is seasonal.

INTO: First thing in the morning have the students check their radish seeds that they planted to check for change. Have students record their findings in their journals. Then have the students observe the two class projects and record any changes. Ask students if there is any comparison between the different seeds. Then have students gather for story time and read the story *Autumn Harvest*, the poem *Thanksgiving Time* and discuss. Then read the story *Chipmunk Song* which also takes place in the fall and share the poem *The Squirrel*. Help students discover that people are not the only ones who eat seeds and ask students what seeds the chipmunk and the squirrel ate and collected. Then have a nut hunt out on the kindergarten playground (like an Easter egg hunt). Have nuts (walnuts or peanuts) in the shell hid on the playground and have students pretend that they are chipmunks searching for food to store up for winter. Make sure they are careful for hawks.

THROUGH: After the nut hunt show the short video *Seeds and Seasons* and read the story *The Tiny Seed*. Have

students get into small groups and do a story map on a big piece of butcher paper for *The Tiny Seed*. When groups are done have them hang and share their story maps. Then read the story *Seeds*, share the poem *Baby Seeds* and show the short video *Seeds on the Move* and discuss the dispersal of seeds.

BEYOND: Ask students to name the seasons and to share the different characteristics or things that are done or seen in the different seasons. Record student responses on the chalkboard. Then read *Summer Is...*, *The Song* and *A Circle of Seasons* and discuss each of the books' seasonal characteristics. Share the poems *Where Do All the Daisies Go?* and *The Months*. Invite students to make a seasonal picture book and illustrate it or make a wordless seasonal picture book. When students are done, divide students into small groups to share their books. At the end of the day ask students if there is anything more they want to add to the schematic seed web that is not already there and add new information to the web.

Day Five

Related Concepts: People use seeds for different purposes. Seeds may be used with art media in picture making. Some seeds need their shell removed before being eaten, some seeds can be eaten without being cooked, and some seeds taste better cooked.

INTO: First thing in the morning have the students check their radish seeds that they planted to check for change. Have students record their findings in their journals. Then have the students observe the two class projects and record any changes. Ask students to compare the growth of the different seeds. Invite students to write the comparison in their journals. Then gather students together for story time. Read *Gardener George Goes to Town*, *Miss Rumphius*, *Johnny Appleseed* and *Johnny Castleseed*. Discuss the purpose for which the characters in these stories used their seeds. Discuss ways that people make their world more beautiful. Then ask students how authors and illustrators make their world more beautiful. Ask students to write about how they could make their world more beautiful (analysis-speculation story) or to use the seeds collected throughout the week along with art media to make pictures. Let students decide what they

want to do and get working on it. When they are done invite them to share their work from the author/illustrator chair.

THROUGH: Review the different purposes for which people use seeds. If it has not been mentioned, remind students that one purpose for seeds is to eat them. Tell students that the class will now focus on a seed that people use for eating at many places -- popcorn. Discuss all the places where people eat popcorn. Ask students what they think about popcorn being a weight-lifter. To show them, fill a small glass jar to the top with raw popcorn kernels and then water. Then place a plastic plate on top of the jar and check it in an hour. After an hour the swollen kernels will have lifted the plate off of the jar. Then read *The Popcorn Book* and discuss. Share the poems *Popcorn*, *Hot Buttered Popcorn* and *Popcorn Song*. Then pop some popcorn and invite students to listen to the song the popcorn makes. Then show students a seed in a shell (peanut, walnut, pecan or sunflower seed) and show how the shell has to be removed before eating. Have students taste a raw seed. Then saute the rest of the seeds along with some pumpkin seeds and have a seed tasting party. Ask students what seeds they liked the

best and if they liked some seeds better cooked or raw. Then refer students to the schematic seed web and ask students if there is anything more they want to add to the schematic seed web that is not already there. Add new information to the web and review the growth of the web.

BEYOND: Ask students to write an evaluation story on what they learned about seeds that they did not know before the unit. They may include illustrations.

Evaluation

The kindergarteners would be evaluated on their participation in class, effort put into projects and demonstration of knowledge learned (whether their knowledge is demonstrated through stories, picture books, artwork, drama, poetry or publications). Short individual conferences with students on what they are working on would take place on a daily basis as well as kidwatching. Students' work would be collected and put into their portfolios and students would do a self-evaluation.

Literary Materials

Informational Books

A Flower Grows by Ken Robbins - Illustrates the life cycle of an amaryllis. Beautiful illustrations that were created from original black-and-white photographs, printed on ilfospeed black-and-white paper and hand colored by the author using water-based dyes.

Flowers, Fruits, Seeds by Jerome Wexler - Beautiful colored photographs of various plants and trees show characteristics of different leaves, seeds, and flowers and depict the cycle from flower to fruit to seed to flower.

Look At Seeds and Weeds by Rena K. Kirkpatrick - Text and illustrations describe various kinds of seeds and weeds, experiments one can do with seeds, and seed dispersal.

Seeds by Terry Jennings - Text and illustrations describe what seeds need in order to grow, what is inside a seed, and seed dispersal.

Seeds and More Seeds by Millicent E. Selsam - An informational story about a boy who finds out all about seeds.

The Popcorn Book by Tomie de Paola - A wonderful book that has two story lines going, an interaction

between brothers making popcorn and an informational story line where one of the brothers is reading facts about popcorn from an encyclopedia.

The Tiny Seed by Eric Carle - An excellent story about a flowering plant's life cycle through the seasons in terms of a tiny seed's adventures. Dazzlingly colorful collage illustrations.

Picture Books

Autumn Harvest by Alvin Tresselt - Autumn brings the first frost, migrating geese, burning leaves, and a bountiful harvest.

Cherries and Cherry Pits by Vera B. Williams - The story of Bedemmi, who loves to draw and tell stories about cherries and cherry pits. Beautiful water color illustrations.

Chipmunk Song by Joanne Ryder - An imaginative story that draws the reader into living the life of a chipmunk in the fall season. Perfectly illustrated enhancing and embracing the story line.

Family Farm by Thomas Locker - A touching story of how a farm family nearly loses their home until they hit on the idea of growing and selling pumpkins and flowers to supplement their corn and milk sales.

Gorgeous oil painting illustrations.

Frog and Toad Together by Arnold Lobel - The book has five chapters, the second one being "The Garden" which is a humorous story of Toad growing a garden.

Gardener George Goes to Town by Susan Moxley - Gardener George, who had a magical touch so that all he sowed grew to be as brilliant as a rainbow, leaves the country that he has beautified and goes to the city to leave his mark on the city.

Jack and the Beanstalk by Matt Faulkner - The story of a boy who climbs up a giant beanstalk and outwits a giant to make his fortune for his mother and himself.

Johnny Castleseed by Edward Ormondroyd - As Evan's father shows him how to make a wonderful sandcastle, they see the idea spread and grow in the minds of others on the beach, as if from scattering seeds.

Leo the Late Bloomer by Robert Kraus - The story of how Leo began doing things in his own timing, just as every type of seed has its own blooming time.

Miss Rumphius by Barbara Cooney - The story about how Miss Rumphius, who vowed to do three things when she was little (to live by the sea, visit faraway places, and to make the world a more beautiful place), goes about accomplishing her goals.

Pumpkin Pumpkin by Jeanne Titherington - Jamie plants a pumpkin seed and, after watching it grow, carves it, and saves some seeds to plant in the spring. Beautiful colored pencil illustrations.

The Apple Bird by Brian Wildsmith - A wordless water color picture book about a bird that eats a multicolored apple that falls from a tree and turns into the shape and color of the apple that was eaten.

The Biggest Pumpkin Ever by Steven Kroll - Two mice, each without the other's knowledge, help a pumpkin grow into the biggest pumpkin ever -- but for different purposes. Wonderful water color and pen illustrations.

The Carrot Seed by Ruth Krauss - A little boy plants a carrot seed, daily waters it and pulls weeds around it and patiently waits for the carrot to grow and finally gets his harvest.

The Enormous Turnip by Kathy Parkinson - One of Grandfather's turnips grows to such an enormous size that it takes the whole family including the family pets to pull it up.

The Little Red Hen by Paul Galdone - The little red hen does all the work in and around the house, from planting the wheat to baking the cake, while her three friends (the cat, the dog and the mouse) sleep the day

away not lifting a finger to help thus reaping what they have sown by going hungry.

The Rosy Fat Magenta Radish by Janet Wolf - Relates a child's excitement and rewards of her first gardening experience.

The Song by Charlotte Zolotow - Susan hears a little bird singing inside her, throughout the year, singing of the changing seasons, but no one else can hear it.

This Year's Garden by Cynthia Rylant - Story follows the seasons of the year as reflected in the growth, life, and death of a large rural family's garden.

Poetry

A Circle of Seasons by Myra Cohn Livingston - A thirteen-stanza poem following the cycle of the seasons. Gorgeous oil paintings reflecting the different moods of each season.

A Garden For Miss Mouse by Michaela Muntean - A fantastic story about how Miss Mouse plants a garden which soon takes over her house and how she solves her problem by inviting her town and having a garden party.

Anna's Garden Songs by Mary Q. Steele - Anna relates her garden experiences through poems, each entitled with a vegetable name and relating a story for each one. The water color illustrations wonderfully enhance

the poem/story line.

Treasure Chest of Poetry by Bill Martin Jr. with John Archambault and Peggy Brogan - A collection of 200 poetry cards (one for each day of the school year plus twenty for summer school). Poems used from this collection include: *Baby Seeds, Hot Buttered Popcorn, May Time Magic, Mistress Mary, Pop Corn, Pop Corn Song, Thanksgiving Time, The Little Plant, The Months, The Squirrel, and Where Do All the Daisies Go?*.

Farm ABC by Patricia Lynn - There is a four lined rhyme for each letter of the alphabet that relates a family's life experiences on their farm.

Johnny Appleseed by Reeve Lindbergh - Rhymed text and brilliant oil painting illustrations relate the life of John Chapman, whose distribution of apple seeds and trees across the Midwest made him a legend and left a legacy still enjoyed today.

Summer Is... by Charlotte Zolotow - Written in free verse, this book captures some of the joys and beauties of each season. Wonderfully illustrated in water colors.

Nonliterary Materials

Videos and Films

The videos and films listed below are available from the San Bernardino County of Schools Library and can be ordered from the Fontana Media Center. Two weeks should be allowed for orders.

Growing, Growing - Illustrates the process of plant growth by applying observation, singing, writing, painting, mathematics, and experimentation. 1987 video. 11 minutes.

Seeds and Seasons - Uses a sunflower to illustrate a plant's reproductive cycle. Utilizes stop-motion photography to record the dropping of seeds as winter approaches; growth with warm weather; function of roots, stems, leaves and flowers; fertilization and growth of new seeds. 1987 video. 10 minutes.

Seeds on the Move - Uses time-lapse and high speed photography to illustrate the amazing methods of seed dispersal. Includes seeds that travel on the wind, in water, by adhesion and even one that "walks" on the ground. 1985 video. 15 minutes.

What Do Seeds Do? - Explains the parts, variety, and function of seeds, how they are transported, stages of their development, and their place in the ecology of

plant and animal life. 1985 video. 12 minutes.

What Plants Need for Growth (2nd Edition) - Uses time-lapse photography, laboratory investigation and observation of plants in controlled environments to demonstrate the dependence of growing things on water, air, light, food and warmth. Examines agricultural practices illustrating ways in which food supply is enhanced by controlling water and plant nutrition.

Wonders of Growing Plants - Uses time-lapse photography to present plant reproduction, showing that plants grow not only from seeds but also from stems, roots and leaves. 1976 video. 11 minutes.

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THEMATIC UNIT ON ECONOMICS

Rationale

The following two week unit on economics is designed for a kindergarten class. Students will study about needs and wants, income, goods and services, banks, the value of coins, that money is trading, and that there are many things that a boy or girl could do with money. This unit relates principals of economics to familiar experiences of young children.

* Note - In this unit I have shown how the eight styles of writing according to the CAP could be used depending upon which style is due for the week. They are suggestions that teachers may adapt/adopt into their curriculum.

Concepts

1. All people have needs.
2. All people have wants.
3. Distinguishing needs from wants helps people make better decisions economically.
4. Families need income to meet their needs and wants => income is usually earned by work that family members do => workers receive income by producing goods or services.
5. Money is used to pay for goods and services.
6. Before money, people used to barter => Money makes trading easy.
7. Banks help people take care of their money.
8. Each coin and currency have a specific value.
9. There are ways that boys and girls can earn money.
10. There are many things that a boy or girl can do with their money.

LESSON PLANS

Day One

Related Concept: All people have needs.

INTO: Divide the class into four groups. Have one group brainstorm everything that pet birds need, have the second group brainstorm everything that wild birds need, have the third group brainstorm everything that fish need, and the fourth group brainstorm everything that a pet dog needs. During brainstorming have student groups write or draw on butcher paper what their animal needs. After students have had ample time, have groups one and two share their information with the class. Then teacher, with student input, makes a Venn diagram of the needs of pet birds and wild birds and discuss. Then have groups three and four share their information with the whole class. Teacher then with student input makes a venn diagram of the needs of fish and the needs of pet dogs and discuss. Read the book *Fish Is Fish* and discuss. Lead students to discover that while animals have unique needs, they also have the same basic needs.

THROUGH: Teacher informs class that people have needs too and through literature they will discover what those needs are. Read *The Soup Stone* and *Three Billy*

Goats Gruff and ask what the students discovered was needed (food). Teacher then storytells or reads *Three Little Pigs* and asks what was needed in the story. The class would then make a graph of student's dwelling places (apartments and houses) and read graph. Students would then have a choice of making a story map for the *Three Little Pigs*, doing a dramatic presentation or stick puppet presentation of any of the books read in the THROUGH portion, or to illustrate a picture related to one of the stories read. Students will share their work with the class before the day is through.

Day Two

Related concept: All people have needs (continued).

THROUGH (continued): Review from previous day that all people have need of food and shelter. Inform students that they will continue to discover through literature what else people need. Read *A New Coat For Anna* and discuss. Here I would relate to students the story of how my retired team teacher needed a new pair of shoes when she was little (during the depression of the 1930's) because she had worn a hole through the sole of each of her shoes, and to help the shoes last until her family had enough money to get a new pair, her mother put cardboard inside her shoes to protect her feet. People have clothing needs. Then read *A Chair For My Mother* for students to discover a family's need after a fire has ravaged their apartment building. Discuss. Then read *Mr. Nick's Knitting* for students to discover that we all need friendship and care. Students then have a choice on what to write: Autobiographical incident on something that they or their family needed, an autobiographical incident on friendship and care that a relative or friend showed or that the student showed to a relative or friend, story or book on the student's needs. Students share their writings with

the class from the author/illustrator chair.

BEYOND: Teacher reads *The Shop* and *The Baby's Catalog* to discover that individual family members have needs. Discuss the different needs of family members. Divide the class into five groups with magazines, scissors, glue, pencils, and crayons. Have five big sheets of butcher paper with one entitled "Babies", the second entitled "Mothers", the third entitled "Fathers", the fourth entitled "Boys" and the fifth entitled "Girls"; give one to each group. Have the students go through the magazines (or old catalogs) and make a collage of their respective person's needs. If they can't find something they are looking for, the students can draw it. When students are done, have each student group bring up their collage and share their work. Post or hang group work up.

Day Three

Related concept: All people have wants.

INTO: Teacher asks students if people make wishes.

Teacher inquires as to when people make wishes.

Students brainstorm while teacher writes student input on chalkboard. Invite students to remember back to their last birthday and ask if they made a wish before they blew the candles out on their birthday cake. Ask students what they do when they get the wish-bone off of the chicken or turkey or what they do when they find a four leaf clover. Remind students (or teach them) about the poem *Star Light, Star Bright*. Then read *The Three Wishes: An Old Story* and discuss. Play the pantomime game (like charades) on things that children wish for such as a bike, paints, bubble maker, ball, hoola-hoop, jump rope and the like. Teach the poem *If Wishes Were Horses*. Make a bulletin board with the students, where students would make a picture of what they wish for and put it on a bulletin board that has a horse on it with the caption "If wishes were horses, we'd all take a ride".

THROUGH: Wishes are wants. Tell students that they are going to listen to a story about a man who wanted something. Read *The Emperor's New Clothes* and discuss.

Then do a media study by showing the video *The Emperor's New Clothes*, having students watch for any differences they see in the video than in the book. Discuss students findings; compare and contrast the book and the video. (Students could do a report of information on the media study).

BEYOND: Read *Something Special for Me* and discuss. Invite students to share about something special that they are saving for or that they would like to have. After everyone has had a chance to share, invite students to write a "Something Special for Me" story or book about themselves and illustrate it. Students will share their stories from the author/illustrator chair.

Day Four

Related concept: Distinguishing needs from wants helps people make better decisions economically.

INTO: Have the students review what people's basic needs are. Read *Jack and the Beanstalk*. Discuss Jack and his mother's needs and wants throughout the story. Divide the students into two groups with magazines, scissors, glue, pencils, crayons, and equal amounts of 5 x 8 unlined cards or construction paper. Have one group go through the magazines looking for pictures of people needs to cut out and glue to the cards and the other group looking for pictures of things people want or wish for. When students are finished, compile and shuffle the cards of needs and wants. Then play the thumbs-up, thumbs-out game where the teacher holds up the first card and students put thumbs-up if the card is a need or thumbs-out if the card is a want. The class does this until all the cards have been shown.

THROUGH: Read *Alexander, Who Used to Be Rich Last Sunday*. Discuss Alexander's spending of his money and his dilemma at the end of the story. Divide the students up into small groups with butcher paper and markers and have the student groups map out the way he spent his money throughout the story. Have student

groups share their maps with the class when done. Then show the Disney video *Economics By Choice* which emphasizes the skill of making choices. Discuss video.

BEYOND: Students would write an analysis speculation on "What would happen if my grandparent gave me a dollar?" or "What would happen if I spent my lunch money to buy candy at the corner store on the way to school?" or "What would happen if I spent my money on a want (student choice) instead of on a need?" or "What would happen if I saved my money?". Students may illustrate their story using whatever media they want. Students may share their stories from the author/illustrator chair if they wish. Also assign special homework: Interview a parent, relative or neighbor about his/her job and what he/she does.

Day Five

Related Concept: Families need income to meet their needs and wants => income is usually earned by work that family members do => workers receive income by producing goods or services.

INTO: Read *Little Red Hen* and discuss. Teach the *Little Red Hen* song. Sing several times and have students act out parts in the song. Make bread (bread with yeast or quick bread) with the students and bake it. Then read *Family Farm* and show the short film *Truck Farm to Store*. Discuss the farm families needs, what they do for work, and how they earn their income. Read *A Chair For My Mother* and discuss what the mother's job was and what she did. Invite students to share their special homework on what their parent, relative or neighbor's job is and what he/she does. After each student has had a chance to share, have students write their firsthand biography and illustrate their story. When students are finished, show the film *Families - Earning and Spending* and help students discover that families all over the world work for a living and have expenses. Then review the story of *Little Red Hen*, sing the song and share the baked bread that was made. Have the play center stocked with

reading and writing materials and telephones and set up like a restaurant or pizza place with a store next door and construction taking place across the street so that students may engage in dramatic play.

Day Six

Related concept: Families need income to meet their needs and wants => income is usually earned by work that family members do => workers receive income by producing goods or services (continued).

THROUGH: Review *Family Farm* book and ask students what farmers provide for people. Read *Tacky the Penguin*, discuss story and ask what the hunters were hunting. Ask students what modern day hunters hunt for on land and in the ocean (deer, pheasants, fish, lobster, crab, oysters, clams, shrimp). Lead students to discover that hunters produce goods. Read the title of the next book *Ruth's Bake Shop* and have students predict what the story will be about and what will be in Ruth's shop, then read the story and compare predictions with actual story. Read *We Keep A Store* and discuss what they provide. Then ask the class to tell you the names of stores they know of and write the names on the chalkboard (this could include grocery stores, book stores, department stores, clothing stores, shoe stores, and restaurants). Have students pair up and brainstorm all the things they can think of that can be bought at the different stores and write or draw pictures of their ideas on paper. After students have

had ample time, have each student share with the class one or two things that they thought of and have a place for the pairs of students to display their paper. Then inform students that stores not only provide goods but that they also have workers that do a service. Show the video *Supermarket* and discuss what types of service the workers performed. Ask students to remember the person they interviewed and make a class graph of the workers as to whether they provide goods or services. Read *Fix-it* and *The Erie Canal* (short stories), *The Wild Washerwomen* and *How My Library Grew*, by Dinah. Discuss the services provided in the stories and, for the middle two books, ask students what the modern day equivalent is for the services provided. At this point, the teacher could reread *The Wild Washerwomen* and have the whole class (since there are so many characters) act it out during the reading.

BEYOND: Read *Jam: A True Story* and discuss the jobs of the parents and brainstorm a solution for all that jam. Then read *Someday Rider* and have the students think about what they work they want to do when they grow up. Wait until all the students have thought of something and then have them share. Then invite the students to write and illustrate an analysis speculation story on

what job they want to work when they grow up. Invite students to share their stories with the class when done.

Day Seven

Related concepts: Money is used to pay for goods and services. Before money, people used to barter => Money makes trading easy.

INTO: Read *Teddy Bear Farmer* and *Teddy Bear Baker*.

Discuss what the bears did in their businesses, what people did to receive their goods and what the bears did at the end of each day. Teach the poem *Simple Simon* and ask students if Simple Simon was able to eat any of the vender's pies (explaining why or why not). Teach the poem/song *Hot Cross Buns* and ask what the poem is about. Teach the poem *To Market* and read the poem *Old Mother Hubbard*. Discuss all the things bought and where they were bought. Lead students to discover that money is used to pay for goods and services. To illustrate this, tell students that authors are paid for their service of writing and that book authors also get a percentage of money for each of their books that are sold. Also tell students that artists get paid for their service of illustrating books or paid for their paintings or sculptures (products). Inform students that today you will be their employer, that you would like each student to do a service of either writing a story or doing an illustration about something that has

to do with money (stories might include answered money story problems). Tell students that you will pay them two pennies each for their service rendered (use the penny collection that most of us have accumulated at home). Also inform students that while they are working their service that you will be working on a product (hot cross buns) that will be on sale for a penny each. To make the hot cross buns, purchase before time any brand of refrigerated biscuits, using a knife cut a cross into each biscuit, bake as directed, and top with butter (you could add cinnamon sugar). You might have a parent helper or team teacher assist you. When students are finished pay them their due and help them see that what they do with their money is their choice -- they could spend it all, they could save it all or they could spend half and save half. The class could also graph what students did with their money.

THROUGH: Read *A New Coat For Anna* and discuss the ways Anna's mother found to make Anna her badly needed coat. Explain that exchanging or trading goods is another name for bartering. Discuss the pros and cons of bartering. Read *Odd Jobs*, discuss story and see if students have any more input to add to the pros and

cons of bartering.

BEYOND: Show the short video *Why We Use Money - The Fisherman Who Needed A Knife*. Discuss the video.

Review what was learned today. Have the play center stocked with reading and writing materials and set up like it was on day five for students to have dramatic play if students want to. Allow students to make their own play center or dramatize any of the stories read.

Day Eight

Related concepts: Banks help people take care of their money. Each coin and currency have a specific value.

INTO: Read *In Search of the Saveopotomus* and discuss.

Then read *Banks: Where the Money Is* and show the video *Money Business*. Discuss the usefulness and value of banks. Ask students if there are any other kinds of banks that people might have at home (piggy banks).

Ask students what piggy banks look like. Ask students how they think piggy banks got their name. Teach the song *Piggy Bank*. Have each student make a piggy bank.

This can be done by using empty tubs of frosting with the label peeled off (or any container that has a flat surface and a lid), cutting a rectangular hole in the lid, and providing students an appropriate piece of paper that will cover the circumference of the tub for students to decorate and glue to their tubs. (Students could write an observational story on what they saw in the video).

THROUGH: Read *Money* and discuss the history of money.

Read *The Money Book* and discuss the values of different coins. Sing the *Piggy Bank* song which talks about the combination of pennies that equal a nickel, a dime, a quarter, a half dollar and a dollar. Go through the 99

cents portion of the wordless picture book *26 Letters and 99 Cents* with the class. Read *Dollars and Cents for Harriet* and watch the short film *Making Change*. Discuss the story and the film. Then show the students how to do money rubbings. You can show the students how to make a cent-i-pede by making several rubbings of a penny, cutting the rubbings out and gluing them into a centipede form. Then draw the face, feet and a background. Students could make a cent-i-pede or use this idea to make their own creation. Students could make a money tree or they could trace the different coins to make a picture (wagon wheels, balloons, clocks, anything with a circular form). Encourage students to be creative during this art time.

BEYOND: Watch the film *The Dime*. Let the students reflect on the film. Give each student a penny and have them think about where it has been or where it will go. Invite students to write and illustrate a story or book about the penny they have. When students are done they may share their stories from the author/illustrator chair.

Day Nine

Related concepts: There are many ways that boys and girls can earn money. There are many things that boys and girls can do with money earned.

INTO: Provide a jar filled with pennies for students to estimate amount. Read *Music, Music For Everyone* and discuss the way Rosa earned money. Ask students if they know of any other ways that boys and girls can earn money. Then explain that some boys and girls earn money at home by doing chores. Read *Daddy's Little Helper, To Hilda For Helping, and What to do when your mom or dad says... "Earn Your Allowance!"*. Ask students about different ways that boys and girls can help around the house. Show the short film *Economics - Newspaper Boy* and read the short book *How to Turn Lemons into Money*. Discuss ways that the class might earn money. Suggest to students that they could make something that others will want to buy. Guide students to suggest a cookie sale. [Before this activity, request permission to hold the cookie sale and see if other teachers will be willing to let their students purchase the no-bake cookies. Do the latter to determine how many cookies will be needed in order to purchase enough ingredients.] Help students brainstorm

what jobs will be needed (shopper for ingredients, cookie makers, cookie wrappers, poster makers, word-of-mouth advertisers, and cashiers). Make sure everyone has a job. There are many no-bake cookies recipes; choose any one. The teacher makes a good shopper for ingredients. Purchase the needed ingredients before hand and have them at school. List the ingredients and their cost or enlarge the checkout receipt. Show students the list, explaining that the cost must be paid back before the class has extra money or their profit. Determine the price for each cookie. Help students start their jobs. It would be advantageous to enlist a parent volunteer before hand to help in the preparation on this day and a parent volunteer to help the cashier with the sales on day ten. Here is a suggested no-bake cookie recipe:

Honey Balls

1 1/2 cups powdered milk 1 cup honey
1 cup peanut butter 1 can shredded coconut
1 cup crushed wheat flake cereal

Mix the powdered milk, honey, and peanut butter. Stir until thoroughly mixed. If possible, chill mixture one hour. Mix the coconut and the cereal and spread out on waxed paper. Roll the peanut

butter mixture into small balls and roll each ball in the coconut mixture to coat. Wrap in plastic wrap or waxed paper. Makes approximately 48 balls.

Today, day nine, do all the preparations. When students are finished with their jobs they have free choice of dramatic play, writing, drawing or class library. When everyone has finished their jobs and have had ample free time, call all the students over and tell them that there are still many more ways for a boy or girl to make money on their own. Go through the book *Making Cents: Every Kid's Guide to Money* and show students other ideas. You can also do a book talk on *How to Grow a Hundred dollars* and have it available for students to read and look at. Then ask students to think of all the ways they have learned that a boy or girl could make money and have them evaluate the way they think would be the best or most fun. When all students have thought of a way, then have the students share. After students have shared, ask students to write and illustrate their evaluation story on what they think would be the best or most fun way to earn money. You could give students the option to just illustrate or just write a story of their evaluation. Invite students to share their work from the author/

illustrator chair.

Day Ten

Related concepts: There are ways that boys and girls can earn money. There are many things that boys and girls can do with money earned (continued).

THROUGH: Have students set up everything for the cookie sale (which in my class would take place during brunch/recess) so that the sale will be ready to start on time. Then have students sit for story time. Tell students that there are many things that a boy or girl can do with money earned and that through literature they are going to see what some children did with money they received. Read *Happy Birthday, Grampie* and *Something Special for Me* and discuss what the children did with their money. Show the video *Alexander, Who Used to Be Rich Last Sunday*. Then read the short book *The Woman with the Eggs* and discuss the woman's plans of what she was going to do with the profits she made from selling her eggs. Divide students into small groups with butcher paper and have students make a story map of the woman's plans. When they are done, have each group share their work. Then take students outside and play "Eggs to Market" relay where students are divided into two groups with half of each group facing the other half. Then students take turns

relaying an egg (it can be hard boiled) on a spoon to the other side of their group. Easy does it.

BEYOND: Read *Three Days on a River in a Red Canoe* and discuss how the two boys pooled their money with their parents to purchase a canoe to take a trip. [The bake sale should have taken place by now.] Show and count with students the money that was made on the cookie sale and subtract the cost for the ingredients to determine the profit. Ask students to suggest what can be done with the profit to benefit the whole class. Make a graph of the suggestions and have students graph what they think should be done with the profit. Then have students do an evaluation on what they have learned throughout this unit on economics. Students could start by doing a schematic picture web of what they now know about money/economics and compare it to the first one that was done and then write what they have learned. I would end this unit by making a cake that looked like a coin, bill or piggy bank beforehand and sharing it with the students in celebration of what the class learned about money and economics.

Evaluation

Kindergarten students would be evaluated on their participation in class, effort put into projects, and demonstration of knowledge learned, whether the knowledge is demonstrated through artwork, drama, music, poetry, stories, picture books or publications. Short individual conferences with students on what they are working on would take place on a daily basis as well as kidwatching. Students' work would be collected and put into their portfolios and students would do a self-evaluation.

Literary Materials

Informational Books

Banks: Where the Money Is by David A. Adler -

Explains how a bank works with its functions of saving, lending, use of checks, and other banking aspects.

Dollars and Cents for Harriet by Betsy Maestro - As Harriet attempts to earn five dollars for a new kite, the reader learns about coins that add up to a dollar.

How to Grow a Hundred Dollars by Elizabeth James and Carol Barkin - Amy is introduced to basic economic principles as she starts her own terrarium business. The book covers costs and inflation, profit and loss, interest and loans, advertising, and eventual liquidation at a profit. A challenging book for kindergarten students.

How to Turn Lemons into Money by Louise Armstrong - Basic economic terminology is introduced by using a lemonade stand as an example. Excellent primary informational book with excellent cartoon illustrations that makes an effective use of color.

Money by Benjamin Elkin - Discusses the history of money, the kinds of money, and suggests what to do with money not being spent right away. An excellent informational book that makes use of photos throughout

the book.

Making Cents: Every Kid's Guide to Money by Elizabeth Wilkinson - Discusses the concept of money and illustrates many ways to earn money. Excellent resource book on practical and creative ways for kids to earn money.

The Money Book by Joan W. German - Describes two types of money (bills and coins), the value attached to each, and the combinations of coins that equal other coins and the dollar bill and what children do with money.

What to do when your mom or dad says... "Earn Your Allowance!" by Joy Wilt Berry - A valuable tool in helping children realize how they can work around the house to receive an allowance, how to determine the amount of allowance, responsibility in handling the money earned, and aids development and implementation of a work and payment schedule. An excellent handbook for parents and children. There is an additional cartoon storyline that accompanies the information.

Picture Books

A Chair For My Mother by Vera Williams - A story about how a young girl, her waitress mother, and her grandmother save all their coins to purchase a big

comfortable armchair for their apartment after their house burned down with everything in it. Outstanding water color illustrations.

A New Coat for Anna by Harriet Ziefert - Even though there is no money, Anna's mother finds a way to make Anna a badly needed winter coat. Wonderfully illustrated in watercolor by Anita Lobel.

Alexander, Who Used to Be Rich Last Sunday by Judith Viorst - When Alexander received a dollar he thought about everything he wanted to do with the money including saving for a walkie-talkie but by the end of the week he had spent all his money on different things and only had bus tokens.

Daddy's Little Helper by Frank Endersby - A wordless picture book of how a little boy helps his dad clean the entire house.

Family Farm by Thomas Locker - A touching story of how a farm family nearly loses their home until they hit on the idea of growing and selling pumpkins and flowers to supplement their corn and milk sales. Gorgeous oil painting illustrations and a must read modern day realistic story. Note: A portion of the proceeds of this book is donated to Farm Aid.

Fish Is Fish by Leo Lionni - When his friend, the

tadpole, becomes a frog and leaves the pond to explore the world, the little fish decides that maybe he doesn't have to remain in the pond either.

Fix-it by David McPhail - The fix-it man is called to repair the television (after mom and dad have tried) for Emma, but when it is fixed Emma is no longer interested in watching television but in reading books. Watercolor illustrations.

Happy Birthday, Grampie by Susan Pearson - A granddaughter's love breaks through barriers of language, age, and blindness when she makes a special birthday card and buys a special gift for her grandpa.

How My Library Grew by Dinah by Martha Alexander - Dinah watches the construction of a new library being built across the street from her house and decides to make a book for the library; when it opens she presents her book to the library and gets her first library card.

In Search of the Saveopotomas by Stephen Cosgrove - A story of how a dinosaur who has hoarded possessions all his life discovers a new feeling of happiness when he gives away all but what he needs and the rest he gives to the saveopotomus to save for him (at Saveopotomus First National). A serendipity book.

Jack and the Beanstalk by Susan Pearson - A boy climbs to the top of a giant beanstalk where he uses his quick wits to outsmart a giant and make his and his mother's fortune.

Jam: A True Story by Margaret Mahy - When Mrs. Castle finds a job as an atomic scientist, Mr. Castle stays home to care for the children and house. One day he uses all the plums off the plum tree to make jam which they use on everything. When the last jam jar is used the plums are ripe again.

Little Red Hen by Lyn Calder - A busy hen's lazy friends though unwilling to help plant, harvest, or grind her wheat into flour, are eager to help eat the bread she makes from it.

Mr. Nick's Knitting by Margaret Wild - Feeling lonely when his seven o'clock commuter train knitting partner Mrs. Jolly is in the hospital, Mr. Nick knits a very special gift to cheer up his friend. Beautiful watercolor illustrations.

Music, Music For Everyone by Vera Williams - Rosa plays her accordion with her friends in the Oak Street Band and earns money to help her mother with expenses while her grandmother is sick. Beautiful watercolor illustrations.

Odd Jobs by Tony Johnson - A humorous story involving three episodes in which Odd Jobs does all sorts of jobs; His motto being "The odder the better".

Ruth's Bake Shop by Kate Spohn - The story of Ruth, an octopus who loves to bake, that spends so much time baking that she opens up her own bake shop. Story describes and illustrations show the many different different kinds of cookies, pies, breads, pastries, and cakes.

Someday Rider by Ann Herbert Scott - Kenny lives on a ranch with his family. He wants to be a cowboy just like his father. One day his mother teaches him to ride a horse and later he gets to ride with his dad. Beautiful watercolor pictures.

Something Special for Me by Vera Williams - A story about how Rosa has trouble choosing what to buy for her birthday with the money that mother, grandmother and she have saved, until she hears a man playing beautiful music on an accordion. Beautiful watercolor illustrations.

Tacky the Penguin by Helen Lester - When hunters come to the penguin colony to capture penguins, sell them and get rich off of the sales, Tacky's odd behavior runs them off.

Teddy Bear Baker by Phoebe and Selby Worthington -
The story of a day in the life of Teddy Bear, a baker,
and how he runs his bakery and counts his money at the
end of the day.

Teddy Bear Farmer by Phoebe and Selby Worthington -
The story of a day in the life of Teddy Bear, a farmer,
and how he runs his farm, including chores and sales.

The Baby's Catalogue by Janet and Allan Ahlberg - A
wordless picture book about a day in the life of an
infant set up as a catalogue. Supplies many pictures
of baby needs and experiences from moms and dads to
highchairs, diapers, meals, toys, games, accidents,
brothers and sisters, baths, and bedtimes.

The Emperor's New Clothes by Janet Stevens - Two
rascals sell a vain emperor an invisible suit of
clothes.

The Erie Canal by Peter Spier - A retelling of
Thomas S. Allen's *Fifteen Years on the Erie Canal* about
how a man and his mule hauled barges from Albany to
Buffalo. Excellent illustrations and information at
the end of the book about that time period in early
America (includes a map and the song at the end with
the historical information).

The Shop by Carol Watson and Colin King - The story

of a family shopping at a grocery store and all the things they get. Pictures in the store are labeled.

The Soup Stone by Iris Van Rynbach - When a family claims it has no food to feed him, a hungry soldier proceeds to make soup with a stone and water.

The Three Wishes: An Old Story by Margot Zemach - A very poor woodscutter is granted three wishes by a tree fairy, urged to wish for riches by his wife, and gets nothing but trouble until he and his wife remembers what matters most.

The Wild Washerwomen by John Yeoman and Quentin Blake - Seven washerwomen, who are sick of their work and employer, go on a rampage until they meet seven very dirty woodcutters. Describes the old fashioned way to clean clothes. Humorous story wonderfully illustrated in watercolor.

The Woman with the Eggs by Jan Wahl - A retelling of the original story by Hans Christian Anderson. A story of a woman who while going to market to sell eggs began dreaming about how rich she would become after she sold the eggs and invested in more chickens but before she got to the market the eggs broke. A classic.

Three Billy Goats Gruff by Tom H. Roberts - Three

clever billy goats outwit a big, ugly troll that lives under the bridge they must cross on their way to the other side of the mountain where food is plentiful.

Three Days on a River in a Red Canoe by Vera Williams - Mom, aunt Rosie, cousin Sam and mom's boy (who narrates the story in first person) put their money together and buy a red canoe. The story describes the three day camping trip they took in the red canoe. Excellent story that makes use of maps, recipes, directions for making knots and washing dishes, and wonderfully describes the camping experience.

Three Little Pigs by Aurelius Battaglia - The adventures of three little pigs who leave their mother to make their homes and seek their fortunes and how they deal with the big bad wolf.

To Hilda for Helping by Margot Zemach - The story of Hilda who always helps out around the house without complaining and is rewarded by her father which makes her sister jealous.

26 letters and 99 cents by Tana Hoban - A concept book showing the denomination, value and relationship of coins to 99 cents (also shows capital and small letters in order with a picture that starts with each

respective letter).

We Keep a Store by Anne Shelby - Told in first person, a little girl describes the many pleasures that accompany her family's running of a country store.

Poetry

All poems which are widely know were taken from *A Treasury of Mother Goose* illustrated by Hilda Offen are as follows: *Hot Cross Buns, If Wishes Were Horses, Old*

Nonliterary Materials

Videos and Films

The videos and films listed below are available from the San Bernardino County of Schools Library and can be ordered from the Fontana Media Center. Two weeks should be allowed for orders.

Alexander, Who Used to Be Rich Last Sunday - Teaches the value of saving and spending carefully. Follows Alexander as he wastes away the money his grandparents gave him on a visit. 1989 video. 14 minutes.

Economics By Choice - Teaches basic economic principles through classroom activities and real-life applications such as buying a bike. Illustrated the concepts of unlimited wants, scarcity, choice and opportunity costs. Emphasizes skills of making choices. 1986 Disney video. 18 minutes.

Economics - Newspaper Boy - Portrays a newspaper boy as a businessman who sells a product, provides a service and makes a profit. Identifies basic economic concepts. 1971 film. 11 minutes.

Families - Earning and Spending - Depicts basic aspects of family life as seen in a Japanese family, an American family, and a Mayan Indian family in Mexico.

Shows how one family raises coffee, one father works on water pollution problems and in another family the father and mother work at separate jobs. Show some of the ways the money is spent in the various families. 1976 film. 15 minutes.

Making Change - Teaches the names, values and relationships of coins, how to make change and money notation. 1977 film. 9 minutes.

Money Business - Combines puppets and live actors with song and dance to teach basic concepts about money and economics, including denominations of money, history of money, working and saving, banking, and making choices. 1985 video. 22 minutes.

Supermarket (2nd Ed) - Takes a behind-the-scenes look at the running of a supermarket. Features the store manager, who explains what kind of skills and how much work is involved. Shows delivery men, butchers, produce people, stockmen and bookkeepers. 1984 video. 14 minutes.

The Dime - Follows the circulation of a dime from the mint through many changes of hands until it finally ends up in a sewer. 1976 film. 13 minutes.

Truck Farm to Store - Introduces the operational procedures and economic values of modern truck farms.

Shows the planting, harvesting and marketing of carrots. 1965 film. 11 minutes.

Why We Use Money - The Fisherman Who Needed a Knife
- Discusses the trading a fisherman must go through in order to get a new knife. Explains how, due to the inconvenience of trading, the idea of money is born. 1970 video. 8 minutes.

The single video listed below is a 1987 video recording by Platypus Productions Inc. (Livonia, MI: Playhouse Video). It is a video cassette release of the 1984 cable television production, executive producer Shelley Duvall. Faerie Tale Theatre.

The Emperor's New Clothes - Shows how a vain emperor's unlimited wants get the best of him when two rascals sell him an invisible suit of clothes.

Music

Piggy Bank by Greg Scelsa. Song is on the record We All Live Together Volume 3, 1979. Los Angeles: Youngheart Records.

Red Hen's Song by Ravosa. Song is on the Silver Burdett Music Centennial Edition Kindergarten Record 3, 1985.

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