

DOCUMENT RESUME

ED 385 406

RC 020 150

TITLE Aspirations: The Ganado Primary School Curriculum.
 INSTITUTION Ganado Public Schools, Ariz.
 PUB DATE Jun 92
 NOTE 126p.; For a related document, see RC 020 151.
 PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC06 Plus Postage.
 DESCRIPTORS American Indian Culture; *American Indian Education;
 *Culturally Relevant Education; Educational Objectives;
 *Educational Principles; *Elementary School Curriculum;
 Holistic Approach; *Learning Strategies; *Navajo (Nation);
 Primary Education; Program Descriptions; Reading Instruction;
 Writing Instruction

IDENTIFIERS *Ganado Primary School AZ

ABSTRACT

This document describes an elementary school curriculum implemented at the Ganado Primary School in Arizona. The curriculum is based on traditional Navajo teachings associated with the four cardinal directions. The goal is to help students live harmonious lives by developing a sound belief and value system, learning ways to make a living, learning social competence, and having respect and reverence for earth and all living things. The reading and writing program consists of three components: a mini-lesson, an activity period, and a sharing period. During the mini-lesson, the teacher explains and models a specific aspect or strategy of the reading or writing process that enhances skill development. During the activity period, students work individually or in groups experimenting with and practicing the strategy demonstrated during the mini-lesson, or they work on self-selected activities. During the sharing period, teachers discuss students' reading and writing skills with students individually or with small groups. The document also describes other curricular areas and school programs including videocy (intelligent viewing of television and films), English as a second language, thematic studies, natural sciences, social sciences, mathematics, fine arts, the Navajo Enrichment Acceleration Program, physical education, library, multiage programming, the Success Program, computer programs, the instructional resource center, and counseling programs. The last section of the document outlines a framework for curriculum planning that includes principles of learning, characteristics of the learner, general resources, and curricular approaches. (LP)

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Aspirations

The Ganado Primary School Curriculum

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The entire staff and faculty would like to extend their gratitude by acknowledging those individuals whose concern and dedication to the education of the young children of Ganado Primary made these

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Ganado Primary School Curriculum
Revised: June, 1992

**GANADO PRIMARY SCHOOL
MISSION STATEMENT**

The Ganado Primary School's mission is to provide opportunities for children to make sense of their world, to respect themselves and others, to respect their environment, and to appreciate and understand their cultural and linguistic heritage. Children, teachers and administrators and bring varying points of view, resources, expectations of and assumptions about the world, and ways of dealing with their daily circumstances. Our mission is to help everyone negotiate these experiences with the content of the classroom, instructional style, and the social, emotional, physical and professional interactions of school life. We believe that a relaxed atmosphere where surprise, challenge, hard work, celebration, humor, satisfaction and collegiality is the natural order of the day for all.

Care must be taken to insure that sound philosophical, developmental and cultural understandings of children are at the heart of decision making in the classroom and the school. The question, "What is it like to be a child?" underlies staff development, matters of curriculum, parent involvement and instructional approaches. "What is it like to be a teacher?" is an equally valid question. What is true about our mission to children is true for teachers and staff as well. We, therefore, offer the following assumptions and their natural outcomes about children, teachers, and staff and learning as the foundation and logic of our mission.

ASSUMPTIONS

Children, staff, and teachers:

- Want to be good
- Like to play
- Like to be active
- Like to express their feelings
- Want to be challenged
- Want to be noticed

OUTCOMES

An Environment which accepts that:

- Trust and understanding guide management and curriculum decisions
- Inventive ideas and activities are welcome and acted upon.
- Movement, manipulatives and hands-on exploration are part of daily life
- Laughter, sadness, joy, and anger are part of school life.
- High expectations, serious involvement, individual interests, stimulating discussions and human resources are valued
- Appropriate praise, celebration and award are used to recognize

LANGUAGE ARTS PROGRAM

The language arts program is based on the premises that:

- children should be immersed in a literature-rich environment
- reading, writing, and vocabulary learning are integrated processes
- conventions or basic skills need to be taught not through isolated practice, but while children are actively engaged in reading, writing, and vocabulary learning
- fostering higher-order thinking and reasoning skills should be a natural part of teaching reading, writing, and vocabulary learning

READING AND LITERATURE

The literature and reading program focuses on the need for children to create meaning as they read. Rather than being a step-by-step series of stages which must be mastered, reading is an ongoing interaction of predicting the outcome, evaluating the sense of the words, and integrating the information in the text in relation to the child's own experiences. Reading does not begin when children start school. It begins with the rhymes, rhythms, songs, stories, and environmental print that children have naturally responded to since early childhood. Children have been developing their own strategies for understanding language since they began to make sense of the spoken word. The way the child learned to talk parallels the way the child will learn to read. They make sense of language and the world through trial and error, approximations, imagination and attention to meaning. Learning to read becomes an extension of those early experiences.

The instructional practices herein focus upon helping children figure out how reading works, what it can do for them, and how literature can impact them and others. Strategies and generalizations about reading such as phonics and grammar construction are taught and reinforced as they are needed to insure meaning and fluency.

Before describing the Reading Workshop, it must be pointed out that an unstructured period when the teacher reads to students, reads with students, reads one's own books, permits choice and movement, and otherwise encourages reading for pleasure, should comprise a daily aspect of each classroom's reading experience. Additionally, an "at home reading" program, which allows students to take home books from the classroom library, can not only improve reading ability, but, by involving parents and siblings in the reading experience, reinforce the notion that reading for pleasure is one of the reading's primary functions.

FOUNDATIONS OF LEARNING

The Ganado Primary School supports the Navajo traditional teachings associated with the four cardinal directions upon which the Navajo Foundations of Learning are based. In traditional Navajo teachings, the goal of education is to help the child live a harmonious life (hozogoo naashaa dooleel) by developing a sound belief and value system (East), learning to make a living (South), learning social competence (West) and having respect and reverence for earth, universe and all living things (North). The various areas of the curriculum naturally falls within each of these cardinal directions (See diagram for examples).

By developing our curriculum around the cardinal directions, teachers and learners are able to see the interrelatedness of all elements of the curriculum. As they study family relationships (the West), for example, they understand that this area is related to our getting along with people which is also related to many other aspects in all the other directions thus providing a connection to all the parts of our curriculum, the final outcome (the center) being the well balanced individual. Within the Navajo Foundations of Learning, the subject matter of each direction must be in balance with all the other directions in order to keep the system in harmony and balance. Too much time spent on the pursuit of the South (learning to make a living) and too little time spent on the North (respect for nature), East (sound belief and value system) and West (social competence), has produced many of the serious social problems we in the world today.

Ganado Primary School strives for this holistic balance in all four areas of the curriculum. We strive to avoid the isolating of parts from the whole by teaching the whole. To use a metaphor, we show the child a picture of life based upon Navajo traditional teachings and allow the child many opportunities to understand this picture and to find their place within this picture, rather than giving the child puzzle pieces a few at a time and expecting them to put the picture together.

To use another metaphor, we create and teach our curriculum as a Navajo weaver creates a rug. Like a weaver, we show the children our latest creation and ask them to help us weave another even more beautiful one. In this process, teacher and learner are both fully engaged in the creation process as they apply all the skills necessary to produce the latest vision of life, repeating this process each year until the learners become the teachers, passing knowledge from generation to generation, creating new visions based upon the creations of the past.

In our view, the teaching of reading, writing, and mathematics are skills that one needs to create a harmonious life just as carding, spinning and weaving are the skills one needs to weave a Navajo rug. Our method, as in weaving, is to teach the skills within the process of creating a HARMONIOUS SELF AND COMMUNITY.

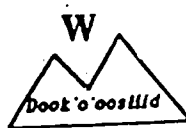
Our focus, therefore, is on the creation process and not on the individual skills. We know that as the learner engages in the creation process, the learner will learn the skills as naturally as the weaver learns the skills necessary to weaving. We also know that if the learner lacks the vision of creation, learning the

skills will never produce a harmonious and beautiful life.

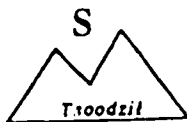
In our teaching of reading and writing, for example, we allow the learner to experience wonderful literary creations and show them how to unlock these treasures before them and then how to produce their own creations. The skills necessary to read and to write are learned in relationship to the creation process, not separated from the creation process. Our focus is on teaching the creation process and not on skill development that is removed from the act of creating. We teach the skills necessary to read and write during the actual process of experiencing a complete reading and writing activity.

We believe that the process of creation is complex, that each person creates in unique way and that a creation is more than the sum total of the skills used in the creating process. We also believe that each individual easily masters the skills used in creation when they are fully engaged in the creating process and that learning skills outside the creating process retards the creating process itself, as evidenced by the thousands who can read and write but seldom read or write a literary work. Our goal is not to produce individuals who can read and write but learners who are readers and writers engaged in the process of creation. Our curriculum is an extension of the natural learning process that the learner has experienced prior to entering our school and we make every effort to continue this natural process and not interfere with it by introducing the unnatural system that has failed learners in the past.

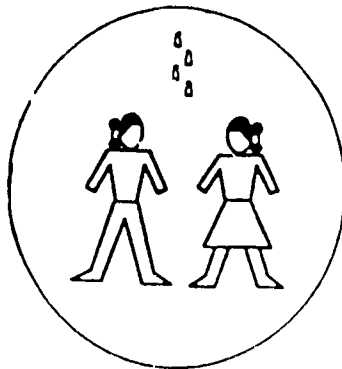
FOUNDATIONS OF LEARNING



Family relationships
Social relationships
Interpersonal relationships
Spiritual Values
Creative Play



Reading
Writing
Drama
Careers



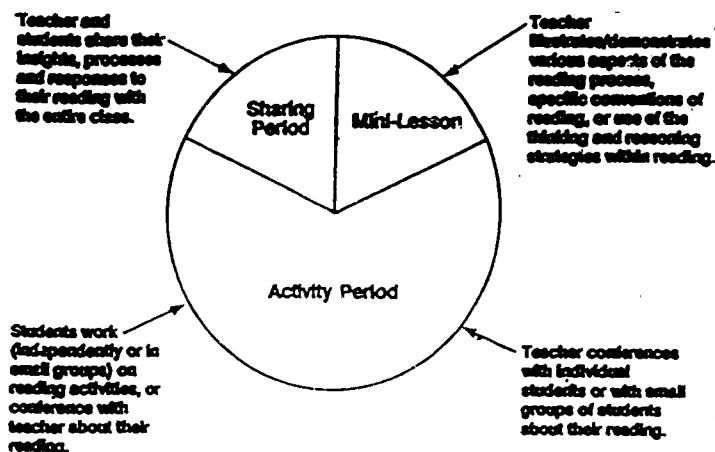
Medicinal plants
Herbs
Geometry
Patterns
Music
Art
Natural Science



Philosophy
Creative Thinking
Decision Making
Goal Setting
Values

CONDUCTING THE READING WORKSHOP

The reading workshop has three main components: a mini-lesson, an activity period, and a sharing period. These are depicted in the figure below.



MINI-LESSON

During the mini-lesson, the teacher explains and models (1) a specific aspect of the reading process or a strategy that enhances the reading; reasoning skills utilized in reading. In addition, the teacher explains or demonstrates the importance of that aspect of reading and discusses how the strategy, convention or skill can be used by students.

ACTIVITY PERIOD

During the activity, students work individually or in groups experimenting with and practicing the strategy, convention, or skill exemplified in the mini-lesson, or they work on less structure, self-selected activities such as reading a book or some other type of literature they have selected, discussing a piece of literature they have read, looking for a new piece of literature to read, or responding in writing (or in some other way, like drawing) to literature they have read. When students are working on less structured projects, the activity period is referred to as undirected. However, undirected activity periods can be accompanied by a highly focused mini-lesson. That is, while the teacher might leave the activity period open for students to work on self-selected tasks, she might introduce that activity period with a highly focused mini-lesson demonstrating some strategy, convention, or skill.

At times the teacher might decide that the strategy, skill, or convention modeled in the mini-lesson is important enough or difficult enough to warrant that students practice it immediately during the activity period. In such cases the activity period is referred to as directed - focused on practicing a specific strategy, skill, or convention.

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While students are working during the activity, the teacher is (1) adding individual students or groups in their work or (2) conferencing with students. When adding individuals or groups, the teacher might circulate about the classroom offering guidance to students as needed and requested.

Conferencing is one of the most important aspects of the workshop. During the reading conference, the following will commonly occur:

ESTABLISHING RAPPORT: Make the student feel at ease by beginning with some welcoming comment.

SHARING: Listen as the student shares something about his entries in the response journal or reading folder. Discuss any related activity in which the child is engaged. Teacher comments might include the following:

- Tell me about what you have been reading.
- What did you like the best?
- What else have you read or heard about this topic?
- Where could you get more information?
- What are you planning to read next?
- What have been your reactions to you reading?
- Why do you think you reacted the way you did?
- What reactions do you think the author was trying to elicit?
- How did you resolve them?
- What surprised you about what you read?
- Why did it surprise you?
- How does this compare with other pieces you have read.

COMMENTING: In the student's presence, go through his response journal and reading folder, commenting on particular pieces or asking for clarification on particular entries.

ORAL READING: Listen to the student read orally from a passage he has selected. During this oral reading you can note any problems the student might be having in his reading.

ENCOURAGING AND GUIDING: Provide the student with some evaluation of his progress in reading, making sure to comment positively on some aspect of his work either in the response journal or in the reading folder. Also, discuss future activities which the students might wish to engage in.

SHARING PERIOD

Group sharing is the last component of the reading workshop. Here students share their reactions to what they have done during the activity period or important insights they have gained as a result of the activity period. The purpose of the sharing period is to provide students and teachers with an opportunity to openly discuss their work in an effort to inform or be informed by others.

STUDENTS MAY HAVE OPPORTUNITIES TO:

- Select their own books and read everyday.
- Hear children's literature read to them daily.
- Share their reading with others through individual, small, or large group settings.
- Conference about their reading with their teacher.
- Explain reasons for selection of reading material.
- Demonstrate prior knowledge of reading content.
- Respond to literature by using their personal experiences.
- Read communications in the form of letters, invitations, messages, instructions...
- Use cloze techniques to gain fluency and meaning.
- Find their own strategies for making sense of difficult or unfamiliar words or passages. (decoding, re-reading, asking for help, "holding" to read further, substituting similar words, context clues...)
- Read their own writing to teacher and peers.
- Read and retell a story, poem, or non-fiction selection.
- Predict and inquire about plot, mood, and character development.
- Identify and solve problems through reading.
- Evaluate and make critical judgements of reading selections.
- Creatively adapt the literature to other art forms.
- Practice phonics and reading development skills as needed.

ESSENTIAL SKILLS

The following are the essential skills that are to be mastered, as appropriate, at each grade level. However, we recognize that mastery is an ambiguous term and can often lower expectations and diminish the intent of the essential skills.

Furthermore, it is developmentally inappropriate to assign mastery of a skill which is by definition not masterable. For example, can anyone ever truly master "revising of a sentence" at any given point in time or at any given grade level, and how would you determine this? Although the skills are appropriate, we disagree with the sequential and fragmented nature of this list and find it inconsistent with our basic premises for language arts education.

While we recognize the need for accountability, we feel there are other more practical and realistic methods for assessment. Please see the assessment/evaluation section of the document.

	K	1	2
JR-1 READS AND COMPREHENDS A PERSONAL EXPERIENCE NARRATIVE			
1. Recalls events in order in a narrative			
2. Tells how two characters or events in the narrative are alike or different			
3. Makes an inference or predicts a future event to own experience			
4. Relates an event or character in the narrative to own experience			
5. Tells whether the events in the narrative are real or fantasy			
6. Gives personal reaction to the narrative			
7. States what is already known about content			
8. Predicts content			
9. Identifies main idea			
JR-2 READS AND COMPREHENDS A STORY			
1. Names the main character			
2. Recalls events in order in a story			
3. Tells the setting			
4. Relates an event or character in the story to own experience			
5. Tells whether the events in the story are real or fantasy			
6. Gives a personal reaction to the story			
7. States what is already known about content			
8. Predicts content			
9. Identifies main idea			
JR-3 READS AND COMPREHENDS AN INFORMATIONAL REPORT			
1. Names what the report is about			
2. Tells critical details from the report			
3. Compares one element in the report to another element in the report			
4. Makes an inference or a prediction related to the main idea in the report			

	K	1	2
5. Relates the subject of the report to own experiences			
6. Plans strategy for reading			
7. Summarizes, clarifies, questions, and predicts while reading			
8. Monitors own comprehension and self-corrects			
9. Recognizes difference between fact and opinion			
JR-4 READS AND COMPREHENDS A COMMUNICATION (LETTER, INVITATION, THANK-YOU NOTE, MESSAGE, NOTICE, ANNOUNCEMENT, INSTRUCTION...)			
1. Describes the content of the communication in own words			
2. Recalls the steps or parts of the communication			
3. Tells the critical details of the content			
4. Identifies the purpose of the communication			
5. Tells what should be done on the basis of the communication			
6. States what is already known about content			
7. States purpose for reading			
8. Locates words or sentences to answer questions			
JR-5 READS AND COMPREHENDS A POEM			
1. Recalls the events in the report			
2. Recalls the sequence of events in the report			
3. Describes the significance or importance of the event			
4. Describes the speaker's attitude towards the event			
LISTENS AND DEMONSTRATES COMPREHENSION OF DIRECTIONS			
1. Recalls the steps in the directions			
one step			
two step			
three step			
2. Recalls the sequence of steps in the directions			
one step			
two step			
three step			

	K	1	2
3. Performs the task according to the directions			
one step			
two step			
three step			
LISTENS AND DEMONSTRATES COMPREHENSION OF A STORY			
1. Accurately recalls events in their order in the narrative			
first, middle, last			
four events			
multiple events			
2. Describes the setting of the story			
3. Describes a character in the story			
4. Tells how two characters or events in the story are alike or different			
5. Makes an inference or predicts a further event in the story			
6. Relates an event or character in the story to own experience			
7. Gives a personal reaction to the story			
JR-1 WRITES A PERSONAL EXPERIENCE NARRATIVE			
1. Narrates a complete experience, that has a beginning, middle, and end, and feels whole			
2. Has ideas that are connected in a sequence that make sense			
3. Contains connecting words and phrases to develop ideas			
4. Contains descriptive words and phrases to develop ideas			
5. Shows evidence of editing and proofreading final draft so that errors in spelling, punctuation, capitalization, and usage do not impede comprehension			
6. Participates in a prewriting activity			
7. Decides on method of development			
8. Monitors own writing			
9. Writes next draft			
10. Revises for sentence structure			
11. Edits for capitalization, punctuation, and usage			

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	K	1	2
12. Rewrites paper			
13. Proofreads final draft			
3W-2 WRITES AN IMAGINATIVE STORY			
1. Centers around a character who is described enough to be distinct from other characters			
2. Has a definite beginning, middle, and end for plot structure			
3. Has main idea and details that advance the plot or sequence of events in the story			
4. Has a definite setting			
5. Shows evidence of editing and proofreading final draft so that errors in spelling, punctuation, and capitalization, and usage do not impede comprehension			
6. Participates in a prewriting activity			
7. Free writes to get first draft			
8. Monitors own writing			
9. Revises for ideas			
10. Revises for word choice			
11. Edits for capitalization, punctuation, and spelling			
12. Rewrites paper			
13. Proofreads final draft			
3W-3 WRITES A REPORT BASED ON PERSONAL OBSERVATION	K	1	2
1. Reports an event accurately and clearly			
2. Reports parts of the event in the order in which they happened			
3. Contains details and descriptions that illuminate the event			
4. Contains an introductory sentence			
5. Shows evidence of editing and proofreading final draft so that errors in spelling, punctuation, capitalization, and usage do not impede comprehension			
6. Participates in a prewriting activity			
7. Identifies purpose for writing			

8. Identifies audience			
9. Decides on methods of development			
10. Free writes to get first draft			
11. Monitors own writing			
12. Revises for ideas			
13. Revises for sentence structure			
14. Revises for word choice			
15. Revises for capitalization, punctuation, and spelling			
16. Rewrites paper			
3W-4 WRITES A COMMUNICATION	K	1	2
1. Has an audience and purpose that can be clearly identified			
2. Meets the needs of the audience for that purpose			
3. Is organized in a meaningful sequence for audience and purpose			
4. Has conjunctions and transitions words to tie ideas together			
5. Shows evidence of editing and proofreading final draft so that errors in spelling, punctuation, capitalization, and usage do not impede comprehension			
6. Participates in a prewriting activity			
7. Identifies purpose for writing			
8. Identifies audience			
9. Free writes to get a first draft			
SPANS IN A PLANNED SITUATION BY REPORTING AND GENERALIZING ABOUT EVENTS AND INCIDENTS			
1. Speaks in a planned situation			
SPANS IN A PLANNED SITUATION BY GIVING INSTRUCTIONS THAT ARE UNDERSTOOD			
1. Speaks loudly enough to be heard			
2. Modifies instructions according to the listener's response so that the listener is successful at completing the task			

3. Includes all major parts of the task to be accomplished			
4. Presents the steps of the task in order			
SPANS IN A PLANNED SITUATION BY TELLING A PERSONAL EXPERIENCE OR FICTIONAL STORY			
1. Narrates a complete experience, one that has a beginning, middle, and end, and feels whole			
2. Identifies and characterizes the main character in story so that the main character is distinct from all other characters			
3. Includes descriptive details that advance the plot			
4. Establishes the setting			

WRITING

The writing program emphasizes that writing is a process of making meaning where the student is guided by the teacher in discovering their own ideas and their own language. Rather than mastering individual steps, writing occurs when there is a continuous interaction between writing, imagining, and thinking. Reading, drawing, talking, content areas and personal experiences simultaneously interact to stimulate and maintain momentum in writing. As a result each child's writing is unique because each writing piece is an attempt by the student to find his own voice and his own strategies. The program is based on the thesis that all students can write fluently and clearly. However, in addition to helping all students become more self-assured writers, the program is also creating more sensitive and critical audiences for writers. To facilitate the process of legitimate writing, students must write for authentic audiences. This means that student writing must be read by individuals other than the teacher. As students learn to write better they learn to listen and read better.

"Teachers need to be aware of modeling as a learning method....behaviors" P. Sloan & R. Latham. In the modeled writing, the teacher or peer is composing, articulating the process he/she goes through, explaining the reason for doing the composing. Children practice the modeled process of composing through trial error, feedback and improvement. Some of the things that can be modeled:

- How to write in a variety of genres
- Keys to get started
- Keys to end
- Strategies for tightening the piece (editing)
- Adding details
- Spelling strategies
- Punctuation conventions
- Grammatical conventions
- Editing devices
- Keys to publish

The advantages of modeled writing are:

- 1) Children have the opportunity to observe a more competent writer go through the writing process.
- 2) Children see the conventions used in the context of actual writing.
- 3) It helps extend their repertoire of writing forms and skills.

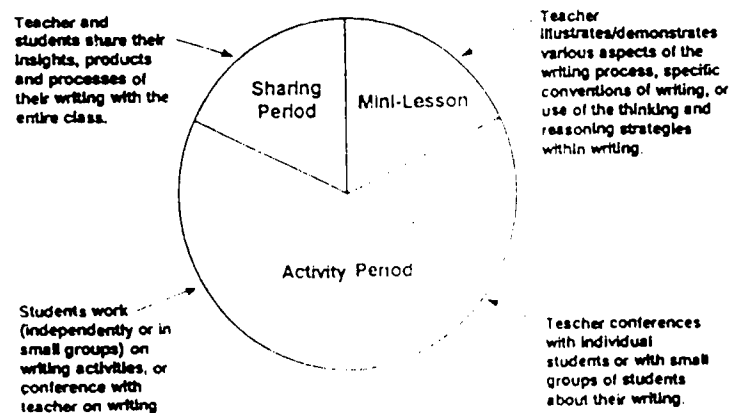
The writing instruction often in the form of a writing workshop is designed to help the students make their own decisions about the topic, audience, form and correctness of their text. Students are not expected to cope with organization, content, style, punctuation and spelling all at once; they are put in control of what they can

handle. The writing workshop takes students from where they are and guides them through the stages of rehearsing, rough drafts, refining, editing and publishing, while recognizing the importance of feedback and sharing at several points along the way. Re-writing becomes not a punishment, but an opportunity to make their message clearer.

Concern for spelling, punctuation, and neat handwriting should not interfere with the flow of ideas and the need to convey meaning in the first draft. These vital components of writing need to be introduced in the mini-lessons in order to lay the foundation for future awareness and competency. Using invented spelling and invented punctuation facilitates the initial phases of writing with the published product an example of the student's best efforts at editing, revising, and thinking.

CONDUCTING THE WRITING WORKSHOP

The writing workshop has three main components: a mini-lesson, an activity period, and a sharing period. These are depicted in the figure below.



THE MINI-LESSON - During this short period, generally at the beginning of the workshop, the teacher demonstrates a specific aspect of writing that relates to the needs of the students and the curriculum.

ACTIVITY PERIOD - This period may be a time for working on a directed writing strategy as demonstrated in the mini-lesson or

may be a time for developing their self-selected, on-going writing

of stories, essays, poems, reports or letters. Each child has a writing folder where they keep their work in progress.

Conferencing is one of the most important aspects of the writing workshop. During the writing conference, the following will commonly occur:

ESTABLISHING RAPPORT: Make the student feel at ease by beginning the conference with a welcoming comment.

SHARING: Listen as the student shares something about his current writing. You can elicit responses from the student by using the following probes:

- Tell me about your piece of writing?
- Why did you choose this subject?
- What surprised you in your writing?
- What problems did you have in your writing?
- What problems did you have while writing?
- What will you do next?
- What is the best part of the piece?
- Let me see if I understand you. You said that....
- I don't understand how that happened. Could you tell me more?
- What kind of feelings were in your story?
- Did anything or anybody change?
- What do you think you need to do to be a better writer?
- Do you want to publish this piece?
- I liked this part about your writing

COMMENTING: In the presence of the student, comment on specific entries in the writing folder or cumulative folder, noting specific aspects of the student's writing. Emphasize the positive, especially in the beginning of the school year.

ANALYZING: Review the student's current writing with an eye toward specific aspects of the writing process and the use of thinking and reasoning strategies.

EVALUATING AND GUIDING: Provide the student with an evaluation of his progress making sure to comment positively on specific aspects of the student's writing. Also discuss future writing projects.

SHARING PERIOD

During this period usually at the end of the workshop, students have the opportunity to share work in progress. This may occur as a large group, small group or as partners. All students should be encouraged to participate in the sharing, asking questions and making comments similar to that modeled by the teacher in conferences during the activity period. The audience may offer

ideas, insights, criticism or general praise for the piece.

The teacher of writing serves as the supportive, nurturing voice which eventually becomes the supporting structure for the child's future confidence in writing. Consequently the teacher's intervention must be timed to the child's growing understanding of writing. In addition the teacher plays a significant role in modeling the surprises, mistakes and rewards of their own writing.

STUDENTS MAY HAVE THE OPPORTUNITIES TO:

Participate in some aspects of the writing workshop daily.

Observe their teacher engaging in writing, modeling all aspects of the writing process. (topic selection, spelling, punctuation, revising, publishing...)

Experience writing in a group setting. (chart stories, daily news, parent letter)

Choose their own topic for writing.

Write for a specific purpose or topic.

Choose from a variety of forms for writing (personal, imaginative, script writing, report, persuasive, poetry, letter, imitation...)

Consider a variety of audiences for writing.

Keep a notebook of observations for finding patterns in their experiences that could lead to other writing possibilities.

Write in a variety of journal styles and entries (personal, science, dream...)

Dialogue in writing with others.

Conference with peers.

Conference with the teacher in an individual setting.

Share stories in progress with peers, teachers and other classes.

Evaluate their own writing as well as others.

Revise their writing for clarity, development of ideas, sentence construction and word choice.

Edit their writing for punctuation, spelling, grammar and neatness.

Use imagery and visualization techniques to enhance their writing.

Integrate their writing in all subject areas.

Respond in writing to video materials. (Documentaries, comedy series, serious drama....)

Publish their writing.

Enter writing in contests.

Submit writing for district, school or class anthology.

VIDEOCY

Videocy is the term coined to define and describe those concepts and skills pertaining to the intelligent use of television, VCR, and film. While TV and VCR viewing are regarded by many as a passive event requiring little of the viewer, we would suggest that the medium is often rich with the very features which make literature, drama and song conveyances of meaningful communication, transmission of values and entertainment. In this view it's not improbable to compare TV with the earliest plays and other pre-literate representations of real-life joys, sorrows, ideas, failures and successes which sustained entire cultures. It is also not unreasonable to assume that the audiences of those times were sophisticated viewers, critically attending to the details of message, plot and characterization. In our own century the radio became a fixture in homes across the country, not displacing newspapers as feared but augmenting them in all manner of communication. We are, of course, a literate society, and regard reading and writing as a highly efficient means of recording and retrieving information. We are also correct in our concerns about the universality of literacy. Nonetheless, we err in thinking of electronic media being a threat to literacy. Television is simply one more means of making sense of our world. And where we know that reading is a great deal more than simple decoding of print, so should we consider that viewing television comprises much, much more than passively watching colorful images flitting across the screen.

We propose here that students and adults can learn how to more critically view television and films and make important decisions about what they are seeing. To that end students may have opportunities to:

- Share viewing with others in small or large groups
- Perform on and respond to their own performance on television
- Predict and evaluate matters of message, plot, character and mood
- Identify and resolve problems through viewing character dilemmas
- Respond critically to drama, comedy, mystery and other genres of television shows and films
- Respond critically to commercial content and format
- Retell, summarize or act out television shows
- Bring into play prior knowledge regarding television content, format and structure
- Compare and contrast films and television shows with antecedent literature
- Consider the impact of news and weather reporting on their own lives
- Consider the impact of factual documentaries on their own awareness of the world

ENGLISH AS A SECOND LANGUAGE

The Ganado Primary School provides an English as a Second Language Program for the limited English proficient students. Our primary school does have a Transitional Bilingual Grant funded through Title VII and the school's staff does incorporate transitional bilingual techniques and methods within our ESL program when appropriate.

The aim of the ESL Program at the Ganado Primary School is to promote the development of the English language in a natural setting. Each teacher needs to ensure that the ESL program is designed to address 1) English language acquisition in the areas of listening, speaking, reading, and writing. 2) content area success including work in math, social studies, science, and thematic units and 3) instruction pertaining to the culture of the United States and the primary language group. The basic curriculum of the regular classroom as well as much of the support programs incorporate the essential tenets of an ESL program which include the following areas.

- ESL students' learning should build on the educational and personal experiences they bring to school. When students are introduced to new books or units of study, the teacher solicits the experiences and knowledge that the students already have about the topic. The Navajo Enrichment Program insures that the students' Navajo legacy is highlighted.
- Learning a language means, among other things, learning to socialize, to learn to query, to make believe, to wonder, and to visualize. Play drama, conferencing with peers and teacher language instruction and thematic teaching contributes effectively to this area of ESL instruction.
- If ESL students are to "keep up" or "catch up" with their native English speaking peers, their cognitive and academic growth should continue while the second language is developing. Challenging and interesting questions and subject matter is directed to the ESL learner as well as to the native English speaker.
- In addition to verbal language the non-verbal modes of communicating contribute extensively to language development. The Fine Arts program at the school specifically recognizes this area of language development with extended aspects of this approach occurring in the regular classroom.
- Parental participation is critical to a student's growth. Through home reading programs, parent workshops and other invitations to parents the ESL program clearly involves the parents.
- It takes two to three years to become fluent in a second language, but it takes five to seven years to become proficient in

the academic and abstract aspects of the language. Therefore, it is critical that the curriculum views language learning as a continuous interactive process and not a set of skills to be mastered in isolation at any particular time.

In addition to individual classrooms incorporating this pedagogical aim in their classrooms, the School-within-a-School approach and the Multi-age groupings are designed and implemented with this developmental understanding of language acquisition.

Attached in the research section of this document are statements regarding early childhood education which supports our curriculum and in turn supports the informed practices as listed above for an ESL Program.

In addition all teachers are encouraged to implement this program in their classroom and in order to meet the intent of the law, all teachers are encouraged to obtain an ESL or Bilingual Endorsement.

THEMATIC STUDIES

Teaching thematic units is a composing and learning process where teachers and students explore, create and generally grow more knowledgeable about a particular subject. Thematic instruction validates interests and the pursuit of interests, instilling the idea in the students that schools are places to learn interesting things. Topics of study may originate from more general theme concepts such as change, movement, discovery, fantasy, or respect, and be taught through more specific thematic unit topics such as dinosaurs, weather, bears, plants, or ecology. The concepts or topics may begin with the teacher or the students, depending on the needs of the particular classroom situation. Students may also become originators and developers of their own themes or topics.

These integrated units allow for thorough exploration through all subject areas as the students are totally immersed in the content. Skills are developed or learned within context and the connections between school and the real world merge, revealing connections within the entire curriculum.

Since a thematic unit integrates many areas of the curriculum, it is important that the teacher be knowledgeable about the expectations and methodologies of all subject areas. Formal lesson plans outlining objectives and activities play only a small part in the implementation of a thematic unit. In reality, planning requires continuous evaluation of the teaching, on-going observations of the students progress and interest levels, the receptiveness of the teacher to interpret the student needs and the ability to plan accordingly.

Thematic units foster an environment which allows for creativity, spontaneity, and ownership of the teaching and learning. "Teachable moments" are encouraged and validated, along with involving students in brainstorming, organizing, and evaluating a unit.

The process of organizing a thematic unit may include the following procedures:

- * Selecting an area of study
- * Researching the topic
- * Finding teaching resources (published, human and developed)
- * Integrating the courses of study (mathematics, science, social studies, fine arts and language)
- * Relating themes to other themes
- * Building on the student and teacher experiences
- * Developing goals and outcomes
- * Involving parents in the planning, teaching and celebrating of the subject
- * Developing concepts to build generalizations
- * Selecting teaching styles and techniques
- * Evaluating the unit
- * Celebrating the topic

NATURAL SCIENCES

A successful science program helps students learn scientific methods and concepts and promote children's intuitions, imagination, language and critical thinking. Science is interconnected to all areas of learning and may be the starting point for exploring the language arts, math, fine arts, and social studies.

Studies in science help students relate science concepts to their own experiences and develop strategies for exploring new information. Hands-on kinds of experiences, with emphasis on the process as well as the product, should be the goal of instructional practice. The direction for the science program emerges not only from the curriculum, but from the teacher and student, as well as current events.

STUDENTS WILL HAVE THE OPPORTUNITIES TO...

Observe and identify things, noting similarities and differences.

Classify, categorize, group and order things.

Communicate their findings through graphing, drawing, writing, or recording.

Communicate their understanding of science concepts through drama, art, and journal entries.

Make associations of science concepts with stories and legends.

Measure, count, weigh, estimate, and quantify with standard and non-standard units of measurement.

Predict, guess or hypothesize about possible outcomes.

Become aware of significant and appropriate scientific discoveries.

Become aware of appropriate significant scientists.

Become aware of the connections between scientific breakthroughs and their consequences.

Following are some suggested natural science related themes:

Senses	Earth	Seeds and plants
Growing and changing	Environment	Animals
Body and health	Ecology	Water
Sound and light	Astronomy/space	
Energy	Weather	
Machines	Geology	

SOCIAL SCIENCES

Studies in the social sciences allow for the child to be an inquirer of their social environment, while promoting awareness of interdependence and interrelatedness of individual societies and cultures. Sensitivity to the specific linguistic and cultural backgrounds of the students may be a factor as the topics are chosen and expanded. Teachers freely develop their own methods and activities, finding their own associations for integrating the social science concepts with other areas of learning. They may take on the role of co-learner with the students, guide, lecturer, resource person, or model.

STUDENTS WILL HAVE THE OPPORTUNITIES TO ...

Use charts, maps, graphs, and other graphic or pictorial materials.

Make individual and group maps of immediate surroundings or the larger world.

Locate and gather information.

Give directions to places.

Conduct an inquiry on a social problem of interest.

Investigate the local resources for information.

Become familiar with appropriate cultural roles, kinship affiliations (clans) and values.

Compare cultures.

Experience using money and evaluating the role of trade in their own lives as well as in their community and society.

Discuss the role of the individual in society including citizenship, laws, and education.

Discuss and evaluate significant historical events.

Discuss and evaluate significant people in the social development of the world.

Following are some suggested social science related themes:

Current events	Feelings
Family	Relationships
Career	Holidays
Community	Values - rules and laws
Cultures	Social conventions

	K	1	2
ORGANIZATION -Recognizes and demonstrates that ideas and descriptions about natural phenomena can be organized in different ways			
1. Identifies the order of planting a seed sprouting, adult plant, flower and fruit			
2. Sorts object(s.g., objects that sink, objects that float)			
3. Identifies groups of objects that have been designed by humans			
CAUSE AND EFFECT -Recognized that cause and effect relationships exist in the natural world			
1. Describes the differences of appearance in animals with the seasons			
2. Describes the motions of the sun, earth and moon and causes of day and night			
3. Observes the effects of heating or cooling water			
SYSTEMS -Gives examples of the parts and interactions of natural systems			
1. Identifies components in a habitat			
MODELS -Creates or utilizes concrete models to understand/explain natural phenomena			
1. Identifies models that are bigger than, smaller than or the same size as the real object			
CHANGES -Recognizes that change occurs in the natural world			
1. Recognizes sequence of growth states from baby to adult and seed to plant			
2. Identifies the seasons and describes them			
STRUCTURE AND FUNCTION -Recognizes that there is a relationship between an organism's structure and it's function			
1. Collects information about animals by studying bones, teeth, body covering and other parts			
2. Relates plant parts to the job they do			
DIVERSITY -Gives examples of similarities and differences evident in natural phenomena and organisms			
1. Describes and illustrates day and night			

	K	1	2
DIVERSITY -(con'd)			
2. Classifies objects as living/nonliving, hard/soft, light/heavy or strong/weak			
3. Observes and describes differences of students in class			
4. Identifies differences in pets			
5. Lists objects and organisms on the school grounds			
INTERACTIONS -Recognizes there are interactions among the components of systems			
1. Recognizes that plants and animals are different in different environments			
2. Investigates prehistoric animals and their habitats			
RATIONAL THINKING SKILLS			
1. Describes and groups objects based on their color, shape, texture, size and as living or nonliving			
2. Identifies sense and describes how people use them			
3. Gathers data and keeps simple records			
CREATIVE THINKING SKILLS			
1. Invents animals			
CRITICAL THINKING SKILLS			
1. Recognizes evidence that change has occurred			
2. Describes relationships among objects and events			
3. Utilizes measurement			
4. Answers questions by investigating			
5. Asks questions and tests them			
6. Sequences the stages of events according to their order of occurrence			
PERSONAL DECISION-MAKING			
1. Lists ways science and technology can help people care for themselves			

	K	1	2
SOCIETAL IMPACT OF SCIENCE AND TECHNOLOGY			
1. Describes how the light bulb has changed the way people live and work			
2. Relates air pollution to automobiles and industry			
HANDS-ON-LEARNING			
1. Observes and classifies attributes of rocks using a hand lens, balance and water			
2. Observes, collects and characterizes plant life in area of school, using paper towel and cardboard plant press			
3. Stores materials in appropriate places			

	K	1	2
DIVERSITY -(con'd)			
2. Classifies objects as living/nonliving, hard/soft, light/heavy or strong/weak			
3. Observes and describes differences of students in class			
4. Identifies differences in pets			
5. Lists objects and organisms on the school grounds			
INTERACTIONS -Recognizes there are interactions among the components of systems			
1. Recognizes that plants and animals are different in different environments			
2. Investigates prehistoric animals and their habitats			
RATIONAL THINKING SKILLS			
1. Describes and groups objects based on their color, shape, texture, size and as living or nonliving			
2. Identifies sense and describes how people use them			
3. Gathers data and keeps simple records			
CREATIVE THINKING SKILLS			
1. Invents animals			
CRITICAL THINKING SKILLS			
1. Recognizes evidence that change has occurred			
2. Describes relationships among objects and events			
3. Utilizes measurement			
4. Answers questions by investigating			
5. Asks questions and tests them			
6. Sequences the stages of events according to their order of occurrence			
PERSONAL DECISION-MAKING			
1. Lists ways science and technology can help people care for themselves			

MATHEMATICS

The Mathematics program is designed to help students create, understand and manipulate patterns, concepts and numbers. Although sequential development of certain concepts is incorporated in the program, students are allowed to explore and play with concrete materials and concepts at their own developmental level. Much of the program attempts to use the written numerals after the concept has been grasped or during the concrete manipulation of materials. The playful exploration of numbers parallels the playing with sounds and words that naturally occurs in the acquisition of language. Just as children approximate standard speech and writing in their need to make sense of and acquire language, children in their attempt to gain meaning with numbers must have experiences in approximating the abstract symbols. For example, a three year old will try to imitate the older children counting to ten when playing hide and seek. Although he may not be correct he might at least know that the number ten comes last. Eventually, he will get it right through practice and the need for correctness. Of course not all math concepts can wait to be discovered, but all math concepts can be manipulated and explored to some degree as a discovery process. In other words the initial emphasis is on making concepts meaningful through concrete objects moving on to symbolization of numbers and to interpreting rather than simply manipulating the abstract symbols.

Although we have an adopted math program we use a variety of methods to teach math, including: games, videos, manipulatives, teacher created materials, and math workshop. Like the writing and reading workshop, the math workshop consists of a short mini lesson, activity and share session. The mini lesson focuses on a math concept. The concepts are developed through assessment of student needs. The activity relates to the concept covered in the mini lesson allowing for practicing, extending, creating, and exploring with various media. The share session gives opportunities for students to express the concept learned through oral interpretation, projects or demonstrations.

In addition, thematic units, literature and the arts can all be used to enrich and integrate math understanding as part of the large, small or individual projects. Sports units in particular with their score keeping, record keeping, statistics, win - loss records, player information and predictions are ideal ways to extend and integrate math into the experiences of many students. Of course, calculations and measurements in science experiments involve the use of math. And discovering properties of music through the use of manipulatives naturally overlaps with math concepts.

The role of the teacher is to provide the freedom to explore new materials visually, auditorial, and physically as to well as interact with students at several points along the way. The teacher should build on and stimulate the natural interests of

students creating an atmosphere for investigative learning. The teacher should reveal their own thought processes and questions about math concepts, thus, serving as a model for making connections with math and other content areas.

STUDENTS MAY HAVE OPPORTUNITIES TO:

Explore math concepts through workshop format where the base of learning originates with the student

Use manipulatives and explore geometric shapes in free explorations and guided activities

Read, write, and count numbers to the students' maximum potential

Use computations appropriate to the students' maximum potential

Practice computations as needed for fluency and accuracy

Use standard and non-standard measuring devices

Be actively involved in using the calendar figuring out future and past dates

Learn to tell time

Be exposed to other ways of telling time (sundial, shadows...)

Use thermometers to read and interpret temperatures

Create, interpret concrete, pictorial and symbolic graphs originating from students or other sources.

To explore and manipulate ordered pairs of numbers on a grid

Use terminology of geometric shapes

Estimate number, lengths, space

Carry out simple activities involving probability and prediction

To work with fractions seeing relation of parts to the whole

Recognize and create patterns, manipulative, numbers, and extend patterns using numbers, manipulative and words. Do experiments which enable them to organize data, see patterns and make predictions.

Choose the appropriate operation in a given situation

Write original word problems.

Use calculators for discoveries about math and computations

Have cooking experiences for the purpose of teaching and understanding the need for math

Role play story problems

Learn math concept/skills through playing games

Learn math concept/skills through videocy

Explore numbers through mental math

ESSENTIAL SKILLS

The following are the essential skills that are to be mastered, as appropriate, at each grade level. However, we recognize that mastery is an ambiguous term and can often lower expectations and diminish the intent of the essential skills.

Numberation			
1	Counts by ones tens tens		
2	Uses ordinal 1-5 cardinals 1-10 ordinals 1-10 cardinals 1-100		
B	Uses cardinal and ordinal numbers to compare and order quantities		
3	Reads and writes numbers of objects by ones by hundreds		
4	Uses concrete materials to explore place value ones, tens, and hundreds		
C	Computation		
1	Interprets word problems by using role playing pictures and models		
2	Adds and subtracts one digit numbers two digit numbers with renaming three digit numbers		
3	Uses informally the properties of commutativity, associativity, and identity		
4	Chooses the appropriate operation with addition & subtraction with multiplication		
5	Estimates answers to computational problems		
6	Explores the concept of multiplication and division with concrete materials		

7. Basic multiplication facts to 3			
Fractions			
1.	Uses concrete materials to recognize and compare halves and fourths		
2.	Recognizes fractional equivalents for halves, fourths, and tenths		
Word Problems			
1.	Writes mathematical sentence		
2.	Chooses an appropriate unit of measure in a given situation		
B. Measurement and Money			
1.	Uses a variety of measurement instruments		
2.	Tells time to hour to half hour to quarter hour		
3.	Recognizes and counts pennies, nickels, dimes separately pennies, nickels, dimes assorted coins to \$1.00		
4.	Uses nonstandard, metric, and English units of measure to estimate and measure length, volume, weight, and temperature		
5.	Uses money to represent and compare decimal values		
C. Geometry			
1.	Uses terminology appropriate to grade level geometric shapes		
2.	Uses several geometric shapes to make other manipulative		
3.	Explores the filling of space using manipulative		
4.	Decides if figures are congruent and if they are similar		
5.	Identifies basic two dimensional shapes basic geometric solids		
6.	Uses manipulative materials to develop the concepts of point and line segments		

D. Patterns and Relationships			
1.	Uses a concrete model to create a pattern and represent that pattern symbolically		
2.	Identifies, describes, and extends a pattern in a sequence of objects		
3.	Describes the relationship given in a table of numbers derived from a sequence of objects		
4.	Determines a location by using ordered pairs of numbers on a rectangular grid		
E. Data Analysis and Probability			
1.	Creates and interprets concrete, pictorial and symbolic graphs		
2.	Collects, organizes, represents, and interprets data derived from surveys and experiments conducted by the students		
3.	Performs simple activities involving probability		
4.	Explores the concepts of multiplication and division with concrete, pictorial, and symbolic graphs		
F. Analytical Reasoning			
1.	Classifies and sorts by single attribute State relationship/make generalizations by multiple attributes state generalizations of multiple attributes		
2.	Makes reasonable of logical conjectures and conclusions about situation with concrete materials, using such words as "and", "or", "if...then", "all", "some", "none", "most", and "out of"		

FINE ARTS

(Drama, Visual Arts, Music, & Dance)

"Creativity is an attitude, a way of looking at something, a way of questioning, perhaps a way of life- it may well be found on paths we have not yet traveled." Viola Spolin- 1983

The Arts, as an integral component of our total curriculum, compliments all subject areas. Incorporating fine arts into theme concepts stimulates excitement, encourages vitality for learning and allows for endless freedom of expression. Through the arts students discover the relationship between academics and creativity. To learn by doing, be it through water color painting, experimenting with rhythm, exploring space through creative dance, or personifying poetry, requires combining the comprehensive and synthetic faculties of the right brain and the critical and analytical features of the left brain, therefore thought and action become meaningful and the complete child emerges. In the fine arts class students will have opportunities to develop an appreciation of the arts and to practice manual, observational and critiquing skills, that will be valuable in their regular classroom endeavors. Within the entire school Children will be continually and positively reinforced and encouraged to participate in plays, art showings, recitals, readings, and all activities supporting the arts. Although limitless, below are a sample of activities and opportunities available to students in their perspective art forms.

Drama

Cooperate & listen to the ideas of others.

Positively interact with peers in dramatic activities, such as mime, puppetry & plays.

Respect other's feelings by critiquing positively.

Create, write and act out a dramatic story or poem.

Be able to identify the beginning, middle, and end of a dramatic situation.

Create characters using mind, body, and tone of voice to convey meaning and emotion in order to make the characters believable.

Use appropriate dialogue.

Distinguish between imaginary characters and reality.

Identify the mood, time, & place of a dramatic situation.

Learn stage direction and technique for moving.

Participate in set and costume design.

Demonstrate appropriate audience etiquette.

Students will have the opportunity to view classic dramatic productions (movies, films) when available.

VISUAL ART

Identify realistic and abstract art work.

Discriminate between techniques of art; sculpture, painting, drawing, etc.

Observe guest artists.

Participate in discussions involving observations and impressions (artistic mood) of works of art.

Identify primary, cool, and warm colors.

Identify size, shape, line, texture, space and form.

Draw, paint, cut, tear, shape, print, construct, sculpt, and design projects, pictures, etc.

Investigate and demonstrate artistic use of photography and video.

Use a variety of materials to create works of art.

Show art work in student gallery.

Self critique.

Children will also become familiar with significant artists and illustrators.

Children will have the opportunity to view various works of art from different cultures.

DANCE

Move to count or beat.

Recognize locomotor and non-locomotor movement.

Recognize and perform bounce, shake, bend, stretch, twist, push, pull, turn, run, leap, walk, hop, jump, skip & slide.

Lead movements to be imitated.

Sequence and memorize through improvisation.

Demonstrate movement and clap to time and rhythm.

Improvise with props.

Execute traveling movement.

Differentiate between tension and relaxation and the ability to vary the intensity of dynamics.

Move in response to tangible (real) and intangible (imagery or natural) ideas.

Create a dance composition for others.

Participate in singing, movement games (Hokey Pokey, Skip to my Lou).

Students will be familiar with styles of dance- classic, ballet, jazz, waltz etc.

Students will be given the opportunity to use dance as a means of conveying messages- through stories and songs.

MUSIC

Use voice to sustain vocal sounds.

Performs melodic phrases.

Sings rhythmic and tonal patterns

Maintains beat/produces high and low sounds.

Sings with expression.

Plays classroom instruments to include body percussion and rhythm instruments.

Moves to music.

Makes simple instruments.

Listens to a variety of music.

Can distinguish between different instrument sounds.

Can name instruments.

Students will have the opportunity to become familiar with various musicals and composers representing vast styles and pervious of music.

Students will become familiar with music from different cultures and ethnic areas of our own country.

Students will be given opportunities to develop an inner appreciation of music as it relates to their daily lives.

NAVAJO ENRICHMENT ACCELERATION PROGRAM

The NEAP program provides opportunities for student to learn the Navajo language within the framework of the Navajo Foundations of Learning and in keeping with the goals of the Ganado Primary school of making language learning meaningful.

The NEAP program acts as the catalyst for the learning of the Navajo language in the regular classroom and in the students home. In the NEAP program, the students are introduced to the language learning activities and projects which they are to complete with the assistance of the regular classroom teacher and parents. Parents will be encouraged to participate in the NEAP projects through a Navajo Home Enrichment program. Students will be encouraged to use the Navajo language in their daily lives at school and at home through a Navajo Language Awards Program.

The following are some example of NEAP projects:

- *Produce a dramatic skit in Navajo
- *research and learn one's clan relationships
- *do a weaving learning the appropriate Navajo names and colors
- *sculpture a clay family learning the appropriate Navajo names
- *write a story in Navajo
- *tell a story in Navajo
- *interview an elder on various subjects
- *cook a traditional meal and learn the terms
- *make a cradleboard and learn the terms
- *Create a Navajo puppet show
- *Learn a Navajo song
- *Tell a joke in Navajo
- *play a traditional Navajo game
- *learn why Navajos do certain things a certain way
- *learn basic plants and their uses
- *build a model of a hogan and learn the names
- *create a personal Navajo dictionary

The NEAP program will use the Navajo Nation Beauty Way curriculum as a guide. The Beauty Way curriculum is based upon the Navajo Foundations of Learning and has been adopted by the Ganado School District.

PHYSICAL EDUCATION

The Physical Education program is designed to help students grow socially and physically, to become competent in a variety of basic movements and sport activities, and to have a basic knowledge of safety and competitive game rules. The program lets the children work independently and in groups with use of manipulative. Hands on experiences are provided to the students as much as possible with encouragement given to create ne ways to use materials and accomplish tasks. during the class, physical fitness is discussed and is measured by the AAU Physical Fitness Program.

Underlying the program is a continual concern to nurture the child's growing self-concept which in turn helps to promote a positive lifelong attitude toward physical fitness. Consequently P.E. class should be an enjoyable learning experience with emphasis placed on non-competitive activities whenever appropriate.

Physical Education integrates math, language, health and science to correspond whenever appropriate and practical to the abilities of the students. For example, scoring for most games involves some math computation, listing to rules for activities and making written banners for games involves language arts, and discussions about nutrition, fitness and diseases integrates the health and science into the curriculum.

LIBRARY

Ganado Primary School Library provides services, books and related educational media such as non-print material which helps each child to feel that the library has something to offer. The library is an exciting place which holds answers to many questions that can assist in solving the problems of life as well as promoting its joys. The library helps develop a lifelong independent learning attitude.

Independent learning is encouraged through scheduling unstructured time in the library during which the student may browse, explore, and choose books. Structured time is used to teach behavior, read books to the student body, and to promote a love for books and reading.

The librarian, with the help of the library committee, writes policy, approves and disapproves recommendations, and orders a percentage of books and materials based on the request of students, teachers, and staff, as well as those recommended by professionals in the field of children's literature.

High priority is placed on coordination of library and classroom materials by assisting the teachers in collecting materials for subject study and expanding classroom libraries.

In addition, service to both teachers and staff include:

- A. creating and distributing list of bibliographies and other materials as requested.
- B. obtaining materials through the inter-library loan.
- C. keeping and maintaining the Professional Library.
- D. ordering materials requested by teachers.
- E. giving book talks as requested by teachers.
- F. classroom visitations as requested by teachers.
- G. providing in-service for teachers and staff on the use of the Library.
- H. assisting small groups with research projects.
- I. acquaint students with the many types of media found in the library.

MULTI-AGE PROGRAM

Multi-age classrooms were developed to accommodate various levels of learning which appear in children without the stigma of grade-induced expectations. They enable the teacher/facilitator to concentrate on where children are in learning development, not where they should be in reference to grade-level norms. Children in a multi-age classroom can have as a focus their individual strengths and become periodic role models for other students. Additionally, multi-age classrooms provide a familiar frame of reference to support and maintain an on-going community of learners. This community is established and maintained with the expectation that it will operate cohesively for at least three years. This time-span allows for greater teacher/student/parent relationships and interactions. Initially, students were placed in the multi-age classrooms by teacher and parent recommendations. Efforts were made to select children who provide a spectrum of social and academic abilities and who come from long-term residential families. The multi-age instructional program is based primarily on using multi-sensory approaches which are thematically generated from teacher and/or student interests. Both teachers and students use evaluation techniques to revise and extend their processes of learning. Appropriate levels are created by higher-order, open-ended activities which provide challenging opportunities for individuals, as well as cooperative groups. Negative aspects of competition that are normally found in a singular grade level are eliminated as students recognize that there is a wide range of differences in their ages and abilities.

MAJOR RESOURCES The Non-Graded Elementary School. Goodlad and Anderson. 1987. Two Grades Are Better Than One. Mitchell. Teacher Magazine, April 1991. Cutting The Cloth To Fit The Child. Vogel. Breaking Down Grade Barriers. ASCD Update. March 1991. The Case for Mixed-Age Grouping in Early Education. Katz, Evangelou, and Hartman. NAEYC.

SUCCESS PROGRAM

The Success Program combines the special education program with the regular classroom in a cooperative teaching setting. The success classrooms at grades K, 1st and 2nd are composed of two teachers, one a regular certified teacher and the other a certified special education teacher. Students identified as special education students are placed in the success classroom at grade level. The rest of the students in the success room are comparable in their academic and social abilities to that of a regular classroom. In other words students of exceptionally high ability may be placed in the success room.

The speech therapist who is part of the special education team continues to have a pull-out program where students receive intensive individual and small group therapy in speech and language. However, the success classrooms as well as other settings can provide the speech therapist with opportunities to observe students in more natural settings.

THE SUCCESS PROGRAM WILL PROVIDE OPPORTUNITIES TO;

The integration of the special education student into the regular school curriculum and classrooms, and the promotion of the "least restrictive environment" for each student.

The reduction of negative connotations and stereotypes of special needs children. the enhancement of positive self-esteem for all students

To expand the availability of special education techniques that benefit all students.

To increase the cooperative and beneficial aspects of interactions between students of differing developmental abilities.

To increase individualization between the special education and regular programs.

To develop a student competency, rather than deficit-ability, program.

To increase the articulation between the special education and regular program.

SCHOOL WITHIN A SCHOOL

The school-within-a-school (SWAS) is a phenomenon rarely associated with primary schools. We believe that the SWAS structure promotes the empowerment of teachers, provides a strong support network within the school, and leads to an improved educational environment for children and teachers. Our contention is that our efforts to create this SWAS supports our already successful and recognized establishment of a sound child-centered literacy program and is more useful than tightening up entrance requirements or realigning curriculum documents.

Higher student achievement within this SWAS is indicated by statistically significant differences on the reading, the language arts, and the mathematics sub- tests of the Iowa Test of Basic Skills, on reading achievement as measured by the Gates-MacGinitie Reading Test, on the district-wide writing assessment, on assessments of attitudes toward reading, and in parent participation in school programming as compared to the non-participating portion of the student body.

The SWAS was officially launched in the 1989-90 school year with three kindergarten, three first grade classrooms and two second grade classrooms participating. As of the 1991-92 school year there are currently three school-within-a-schools operating within the primary school.

COMPUTER PROGRAM

The computer is a versatile tool which can be used in many fields for learning, working, and playing. The best computer programs allow you to explore new concepts and produce useful products in a format that is enjoyable and easy to use. It is important to remember that the computer is an additional tool -- it seldom completely replaces the tools we already have.

At the primary level, computer literacy should not be taught as a separate subject. Rather, children should become familiar with the parts of the computer and learn to use the keyboard as they work with software which supplements what is taught in the regular classroom. Giving all children access to computers will promote the integration of computers into all subject areas. In addition, all Kindergarten classrooms have computers and first and second grade classrooms have two or more computers in the classroom. Teachers also have access to these computers in the classrooms as well as the computers in the labs.

WRITING: Using a word processor for writing is one of the most valuable functions of the computer. At first, children should simply write. As they become more fluent and more comfortable with the computer as a writing instrument, editing and revising can be introduced.

READING: Students can read what they have written or share their writing with other students to develop reading skills. Reading and following directions on screen or in a manual is very important in various computer programs.

SPELLING: There are many computer spelling drills and practice programs available in game format. The teacher can easily add or change word lists in these programs to focus on words, a particular class or child needs to work with.

MATH: There are many computer math programs available. In the primary grades, most are drill and practice. Some of the concepts practiced are: counting, shapes, matching, same or different, number recognition, more than, less than, equal, addition, subtraction, regrouping, story problems, estimation.

PLAY

With the increasing pressure to start academic studies at earlier ages, it is important to remember that play - particularly pretend play - is one way that children learn. The primary school views play as a desirable part of education. Play is conscious activity characterized by ease, fun and lightness during which learning takes place. Often children are under their own direction and feel free to act on their innate curiosity, interest, and spontaneity as they interact with classroom materials, other children, and adults. In a sense, play is "work" that is taken seriously by both the child and the teacher. Research clearly supports the appropriateness of play in the primary curriculum. In fact, symbolic play directly relates to the development of early literacy, as well as socially and emotionally healthy children. "The greatest importance of play is in the child's immediate enjoyment of it, which extends into an enjoyment of life." Bettelheim - 1987 "Symbolic play forms the basis of many of the intellectual concepts ." Young Children - September 1991 "Play may contribute to this ability by allowing children to play through their ideas, much the way adults talk through alternatives to problems they face." Young Children - September 1991 "Only when parents (or teachers) give play not just respect and tolerance but also their personal interest will the child's play experience provide a solid basis upon which he can develop his relation to them and further to the world." Bettelheim -1987

COUNSELING PROGRAM

The Counseling program at Ganado Primary School is based upon the Navajo traditional teachings associated with the four cardinal directions in which the goal of life is to live in a state of harmony and balance between the mental, spiritual, emotional and physical aspects of human existence.

In order to assure that each child is given an opportunity to achieve this holistic state of being, the counseling program offers a number of services and programs to the students, parents/guardians, school staff and other significant people involve in the student's life.

THERAPY PROGRAMS

The school counselor offers direct service therapy to students, parents and staff members. The following types of therapy are offered:

Play Therapy

Play Therapy is used as a diagnostic and treatment modality for children. The counseling office maintains a fully equipped play therapy room. Classroom teachers also make use of Creative Play within the classroom and often work directly with the school counselor in observation of children's play and in developing play activities for classroom use.

Cognitive Behavior Modification

Cognitive Behavior Modification is used as a treatment modality. The school counselor works directly with the classroom teacher and parents in developing a specialized program for each student with maladaptive behaviors.

Family and Marriage Counseling

The school counselor works directly with the parents/guardians and extended family members whenever possible. Parents are encouraged to take advantage of this service.

Imagery for a Culturally Meaningful Psychotherapy Program

This is a specialized program of mental and emotional health treatment which empowers indigenous Native Americans to discern and discover their own solutions to personal problems and issues of conflicts and disorder. Through this program, the client is able to find sufficient strength to renew basic confidence in oneself, to relearn trust, and to have hope again. This program assists the client in altering negative perceptions of oneself into a positive feeling for oneself and one's family. The client achieves a positive posture in the process and dynamic of self discovery in imagery. This program is offered to parents/guardians and staff.

Dispute Resolution

The counselor assists students, staff and parents who are in conflict to reach a resolution using mediation techniques.

TALKING CIRCLES

Talking Circles are a traditional Native American method of allowing a group of people express themselves within an emotionally safe environment. Talking Circles are conducted for students, parents and staff.

SELF-HELP GROUPS

The counseling program helps in the establishment of community self-help groups within the school and community such as Al-Anon, Co-dependency and after-care recovery groups.

WORKSHOPS

The counseling program conducts workshops for parents and staff throughout the school year. These workshops cover various topics such as parenting issues, stress management, communication skills, group process, child abuse, attention disorders, co-dependency and many other topics of interest to staff and parents.

CONSULTATION

The counseling program provides consultation services to students, staff and parents on a wide variety of subjects which are impacted by mental health concerns.

COMMITTEES

The school counselor is a member of several school committees such as the Ganado Substance Abuse Prevention Committee, the Counseling Committee, and the Special Education Screening/Placement committees.

PREVENTION PROGRAM

The counseling program is responsible for the school wide substance abuse prevention program. At the present time, each classroom teacher uses the Skills for Growing curriculum and participates in Red Ribbon Week activities. The Beauty Way and BABES programs are being used in the Navajo Enrichment program.

REFERRAL SERVICES

The counseling program refers clients to various agencies such as Child Protective Services, Navajo Nation Behavioral Health Services, and to traditional Navajo healers.

ASSESSMENT

The counseling program is responsible for the assessment of the student population in order to determine those who are in need of counseling services or assistance from outside agencies such as social services.

STUDENT COUNCIL

The counseling program conducts a student council program in which two children from each first and second grade classroom are selected to be represented on the Ganado Primary Student Council. The Student Council members are trained as Peer Leaders.

CURRICULUM MATERIALS/PROFESSIONAL LIBRARY

The counseling program maintains curriculum materials for classroom use and a professional library for the staff.

PARENT CENTER

The counseling program maintains a Parent Center through which parents are offered consultations, workshops, and materials. Future plans include developing a Role Modeling Program in which parents become directly involve with children as role models through student activities such as pow-wow, rodeo, camping, games, and traditional ceremonies.

INSTRUCTIONAL RESOURCE CENTER

The Instructional Resource Room is designed to extend the professional and personal development of the staff. Because we believe that the teacher must be a model for learning and an informed decision maker in their teaching and planning, it is essential that adequate resources are made available to them. The Instructional Resource Center facilitates this opportunity through the services of an Instructional Resource Teacher, a Publication Assistant and a variety of materials and resources for professional development.

The role of the Instructional Resource Teacher with the assistance of the Publication Teacher Assistant consists of:

- a) formalizing the curriculum.
- b) maintaining the Resource Center.
- c) organizing a parent group.
- d) coordinating the professional classes for certified and non-certified staff.
- e) working with teachers and teach assistants to implement the curriculum.
- f) helping with publicity for the school.
- g) keeping current on research, educational practices and sharing information with the staff.
- h) writing and sharing information about educational practices in the school through articles, workshops, and other outlets.
- i) encouraging and providing opportunities for class, student or teacher publications.
- j) ordering materials for teachers.
- k) arranging schedules and committees for the school.

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**A FRAMEWORK FOR CURRICULUM PLANNING
GANADO PRIMARY SCHOOL**

DECISION SCREENS

PRINCIPLES OF LEARNING

CHARACTERISTICS OF THE LEARNER

GENERAL RESOURCES

CURRICULAR APPROACHES

SUBJECT

BROAD FIELD

SOCIAL PROBLEMS

EMERGING NEEDS

ORGANIZED KNOWLEDGE

FOUNDATIONS

PHILOSOPHY (the good life)

SOCIOLOGY (characteristics of contemporary and future society)

PSYCHOLOGY (basic human needs)

GOALS

GENERAL OBJECTIVES

Principles of Learning

The Hallmarks of a Good Education*

*SOURCE: The State of America's Children 1991, Children's Defense Fund, Washington, D.C. (1991) pp. 75.

Thanks to education research, the reform efforts of the 1980's, and creative experimentation in scattered schools and districts, the nation already knows a great deal about what helps children perform at high levels. We know that children achieve in lively classroom where:

- * The curriculum is rich, complex, and related to students' real experience.

- * Lessons require the students' active thinking and encourage students to help each other and learn together in small groups.

- * Evaluation and grading are private, focus on the specific learning the child has or has not accomplished, de-emphasize comparison with other students, and encourage art work.

In addition, we know that in high-performing school:

- * Every effort is based on the conviction that all students can achieve at high levels given the right kinds of help.

- * Teachers and administrators accept individual and collective responsibility for their students' achievement.

- * The school, community, and parents together establish clear goals for the school and develop concrete action plans to achieve them.

- * Students' progress is monitored regularly, and when problems arise intervention is immediate and responsive.

- * Teacher and staff performance is evaluated and teachers receive the assistance or additional training they need to be effective in meeting their students' needs.

- * Teachers and administrators involve parents in the school and in their children's education in significant ways.

Principles of Learning

RECOMMENDED STANDARDS*

* SOURCE: National Association of Elementary School Principals, Early Childhood Education and the Elementary School Principal: Standards for Quality Programs for Young Children, 1990.

The following recommendations are based on the understanding that children in the three-to-eight year range acquire knowledge in ways that are significantly different from the ways older children learn. The standards identify expectations of the principal, the staff, and parents.

. Schools should be ready for the child and not expect the child to be ready for the school; early childhood programs must be based on the ways children learn, not on how adults prefer to teach.

. Since young children learn best through direct sensory encounters and not through a formal academic process, learning should be the outcome of hands-on experience, especially play.

. Children are assigned to a class according to research-based recommended class size : ratios of 2:20 for three- to five-year-olds, and 1:15 for six-to eight-year olds.

. Children should be assessed and measured by observation, not tested for success or failure. No letter grades should be used.

Principles of Learning

The National Education Goals*

*SOURCE: "Implementing the National Education Goals," Principal . November, 1990, pp. 30

Goal 1. Readiness

By the year 2000, all children in America will start school ready to learn.

- * All disadvantaged and disabled children will have access to high quality and developmentally appropriate preschool programs.
- * Every parent will be a child's first teacher and devote time each day helping his or her preschool child learn.
- * Children will receive the nutrition and health care needed to arrive at school with healthy minds and bodies.

Goal 2. School Completion

By the 2000, the high school graduation rate will increase to at least 90 percent.

- * Seventy-five percent of those who drop out will successfully complete a high school degree or its equivalent.
- * The gap in graduation rates between students from minority background and their non minority counterparts will be eliminated.

Goal 3. Achievement and Citizenship

By the 2000, students will leave grades 4,8, and 12 having demonstrated competency over challenging subject matter, including English, mathematics, science, history, and geography, and every school will ensure that all students learn to use their minds well, so they will be prepared for responsible citizenship, further learning, and productive employment in our modern economy.

- * The academic performance of elementary and secondary students will increase significantly in every quartile.
- * The percentage of students who demonstrate ability to reason, solve problems, apply knowledge, and write and communicate effectively will increase substantially.
- * All students will be involved in activities that promote and demonstrate good citizenship, community service, and personal responsibility.
- * The percentage of students competent in more than one language will substantially increase.
- * All students will be knowledgeable about the diverse cultural

Principles of Learning

heritage of this nation and about the world community.

Goal 4. Mathematics and Science

By the 2000, U. S. students will be first in the world in mathematics and science achievement.

- * Math and science education will be strengthened throughout the system, especially in the early grades.
- * The number of teachers with substantive backgrounds in math and science will increase by 50 percent.
- * The number of college students, especially women and minorities, who complete degrees in mathematics, science, and engineering, will increase significantly.

Goal 5. Literacy and Lifelong Learning

By the year 2000, every adult American will be literate and will possess the knowledge and skills necessary to compete in global economy and exercise the rights and responsibilities of citizenship.

- * Every major business will be involved in strengthening the connection between education and work.
- * All workers will have the opportunity to acquire the knowledge and skills needed to adapt to emerging new technologies, work methods, and markets.
- * The number of quality programs designed to serve the needs of part-time and mid-career students will increase substantially.
- * The proportion of students who enter college, complete at least two years, and complete degree programs will increase substantially.
- * The proportion of college graduates who demonstrate advanced ability to think critically, communicate effectively, and solve problems will increase substantially.

*** Goal 6. Safe, Disciplined, and Drug-Free School**

By the year 2000, every school in America will be free of drugs and violence and will offer a disciplined environment conducive to learning.

- * Every school will implement a firm and fair policy on use, possession, and distribution of drugs and alcohol.
- * Parents, business, and community organizations will work together to ensure that schools a safe haven for children.

Principles of Learning

- * Every school district will develop a comprehensive K-12 drug and alcohol prevention education program.

Principles of Learning

THE LEARNER'S MANIFESTO*

*SOURCE: Insult to Intelligence: The Bureaucratic Invasion of Our Classrooms, Frank Smith, Heinemann: Portsmouth, NH, 1986.

(1) **The brain is always learning.** We learn exactly what is demonstrated by people around us. Schools must stop trying to teach through pointless drills, activities, and tests.

(2) **Learning does not require coercion or irrelevant reward.** We fail to learn only if we are bored, or confused, or if we have persuaded that learning will be difficult. Schools must be places where learning can take place naturally.

(3) **Learning must be meaningful.** If we understand, then we learn. Schools must change themselves, not try to change themselves, not try to change us, to ensure we understand what we are expected to learn.

(4) **Learning is incidental.** We learn while doing things that we find useful and interesting. Schools must stop creating environments where we cannot engage in sensible activities.

(5) **Learning is collaborative.** We learn by apprenticing ourselves to people who practice what they teach. Schools must stop trying to deliver instruction mechanically. If teachers cannot teach, there must be better teachers, not more tests and programmatic instruction.

(6) **The consequences of worthwhile learning are obvious.** We demonstrate the worthwhile things we learn by engaging in those activities. Schools, teachers, and parents should not have to rely on marks, scores, or tests to discover if we have learned.

(7) **Learning always involves feelings.** We remember how we feel when we learn and when we fail to learn. Schools must not treat learners like battery hens or like machines.

(8) **Learning must be free of risk.** If we are threatened by learning, then the learning will always threaten. Schools must recognize that continual testing is intellectual harassment.

Principles of Learning

DEVELOPMENTALLY APPROPRIATE PRACTICES*

SOURCE: "NAEYC Position Statement on Developmentally Appropriate Practice in the Primary Grades, Serving 5- Through 8-years-olds," *Young Children* . January 1988, pp. 64-85.

The curriculum in early childhood programs is typically a balance of child-centered and content-centered curriculum.

Development and learning in primary-age children

Integrated development and learning

1. One of the most important premises of human development is that all domains of development-physical, social, emotional, and cognitive-are integrated. Development in one dimension influences and is influenced by development in other dimensions. **The relevant principle of instruction is that teachers of young children must always be cognizant of " the whole child."**

2. **Throughout the primary grades the curriculum should be integrated (Katz & Chard)**

Physical Development

1. Primary-aged children are far from mature physically and need to be active. Physical activity is vital for children's cognitive growth as well. When presented with an abstract concept, children need physical actions to help them grasp the concept in much the same way that adults need vivid examples and illustrations to grasp unfamiliar concepts. But unlike adults, primary-age children are almost totally dependent on first-hand experience. **An important principle of practice for primary-age children is that they should be engaged in active, rather than passive, activities (Katz & Chard).**

Cognitive Development

The curriculum should provide many developmentally appropriate materials for children to explore and think about and opportunities for interaction and communication with other children and adults. Similarly, the content of the curriculum must be relevant, engaging, and meaningful to the children themselves (Katz & Chard, in press).

Primary-age children be provided opportunities to work in small groups on projects that " provide rich content for conversation" and that teachers facilitate discussion among children by making comments and soliciting children's opinions and ideas (Katz & Chard, in press).

Social-emotional and moral Development

Ganado Primary/Boloz

8

Principles of Learning

Recent research provides powerful evidence that children who fail to develop minimal social competence and are rejected or neglected by their peers are at significant risk to drop out of school, to become delinquent, and to experience mental health problems in adulthood (Asher, Hymel, & Renshaw, 1984; Asher, Renshaw, & Hymel, 1982; Cowen, Pederson, Babigian, Izzo, & Trost, 1973; Gronlund & Holmlund, 1985; Parker & Asher, 1986). Research also demonstrates that adult intervention and coaching can help children develop better peer relationships (Asher & Williams, 1987; Burton, 1987). **The relevant principle of practice is that teachers recognize the importance of developing positive peer group relationships and provide opportunities and support for cooperative small group projects that not only develop cognitive ability but promote peer interaction.**

In appropriate classrooms, teachers use positive guidance techniques, such as modeling and logical consequences, to help children learn appropriate behavior, rather than punishing, criticizing, or comparing children.

Despite their increased independence and developing consciences, 5-, 6-, 7-, and even 8-year-old children still need supervision and the support of trusted adults. As a result, children in this age group should not be expected to supervise themselves in school or after school for extended periods of time. Teachers and parents provide opportunities for children to develop independence and assume responsibility but should not expect primary-age children to display adult levels of self-control.

Individual differences and appropriate practices

Although universal and predictable sequences of human development appear to exist, a major premise of developmentally appropriate practice is that each child is unique and has an individual pattern and timing of growth, as well as individual personality, learning style, and family background.

During the early years, children are not only learning knowledge and skills, they are acquiring dispositions toward learning and school that could last a lifetime (Elkind, 1987; Gottfried, 1983; Katz & Chard, in press)

Longitudinal research indicated that curriculum and teaching methods should be designed so that children not only acquire knowledge and skills, but they also acquire the disposition or inclination to use them. Compelling evidence exists asserting that overemphasis on mastery of narrowly defined reading and arithmetic skills and excessive drill and practice of skills that have been mastered threaten children's disposition to use the skills they have acquired (Dweck, 1986; Katz & Chard, in press; Schweinhart, Weikart, & Larner, 1986; Walberg.

Principles of Learning

GUIDELINES FOR APPROPRIATE CURRICULUM CONTENT THEORETICAL FRAMEWORK*

* SOURCE: "Guidelines for Appropriate Curriculum and Assessment in Programs Serving Children Ages 3 Through 8," A position statement of the National Association for the Education of Young Children and the National Association of Early Childhood Specialists in State Departments of Education, adopted November 1990 (Young Children, March 1991)

What does it mean to approach children developmentally? It means that we recognize the child's changing capacities and that we recognize that a child has the capacity for change." (Garbarino, 1989 p. 30)

Following is a summary to the basic assumptions about learning and teaching as an interactive process that inform this document:

. Children learn best when their physical needs are met and they feel psychologically safe and secure.

Appropriate curriculum does not violate, but rather respects children's biological needs. For example, in appropriate programs children are not required to sit and attend to paperwork or listen to adult lectures for extended periods of time because such activity is at odds with children's biological needs. Likewise, the curriculum provides for active physical play and periods of more restful, quiet activity since this pattern is compatible with children's physical needs.

Additionally, the degree to which children perceive continuity between their school and home experiences, a connectedness between the culture of the school and the culture of their family, influences the degree to which children feel psychologically safe in out-of-home environments. When parents are meaningfully involved in the program, the program is more likely to provide an effective learning environment for all children.

. Children construct knowledge.

From infancy, children are mentally and physically active, struggling to make sense of the world. Children are continually acting on and organizing experiences mentally, whether they are social experiences with adults and other children or physical experiences with objects. Knowledge is constructed as a result of dynamic interactions between the individual and the physical and social environments.

Central to experimentation is making "constructive errors" that are necessary to mental development. These "errors" or "incorrect" ideas from the adult's viewpoint, reflect children's developing attempts to understand relationships and form concepts based on their own experiences.

Principles of Learning

Children need to form their own hypotheses and keep trying them out through mental actions and physical manipulations--observing what happens, comparing their findings, asking questions, and discovering answers.

Children's understanding of concepts is facilitated by providing repeated experiences and real problems to solve so they can see contradictions between their thinking and the reality of the world.

- . Children learn through social interaction with adults and other children.

The principle of learning is that children can do things first in a supportive context and then later independently and in a variety of contexts. The support of adults and more competent peers provides the necessary assistance or "scaffold" that enables the child to move to the next level of independent functioning. The teacher's role is one of supporting, guiding, and facilitating development and learning, as opposed to traditional view of teaching as transmission of knowledge.

- . Children's learning reflects a recurring cycle that begins in awareness, and moves to exploration, to inquiry, and finally, to utilization.

Children must have direct, hands-on experience with the content in order to make it personally meaningful. Active manipulation of the environment is essential for children to construct knowledge.

- . Children learn through play.
- . Children's interests and "need to know" motivate learning.

Teachers need to "identify content that intrigues children and arouses in them a need and desire to figure something out" (DeVries, 1987, p. 25).

- . Human development and learning are characterized by individual variation.

Every generalization about development and learning carries a caveat: a wide range of individual variation is normal and to be expected. Recognition that individual variation is not only normal but also valuable requires that decisions about curriculum and assessment be as individualized as possible.

WHAT SHOULD CHILDREN LEARN: CURRICULUM THEORY

NAEYC clearly acknowledges that the principles of practice it

Principles of Learning

espouses have their roots in John Dewey's vision of school and society (Bredenkamp, 1987, p. 66). Similarly, these guidelines for curriculum and assessment reflect the theoretical perspective that the proper role of the schools is to prepare citizens for democracy and that such a goal dictates that schools endure democratic communities.

The long-term goal of American education is not only to help children develop personal integrity and fulfillment but also to enable them to think, reason, and make decisions necessary to participate fully as citizens of a democracy (Dewey, 1916).

Guidelines for Curriculum Content

The following statements are guidelines to use in making decisions about developing and/or selecting curriculum content for young children (what children are expected to know and be able to do).

1. The curriculum has an articulated description of its theoretical base that is consistent with prevailing professional opinion and research on how children learn.
2. Curriculum content is designed to achieve long-range goals for children in all domains--social, emotional, cognitive, and physical--and to prepare children to function as fully contributing members of a democratic society.
3. Curriculum addresses the development of knowledge and understanding, processes and skills, dispositions and attitudes.

The acquisition of knowledge and the mastery of skills is accomplished so as to ensure that children will be disposed to apply the knowledge for skill and so that children associate positive feelings with the learning (Katz, 1989).

4. Curriculum addresses a broad range of content that is relevant, engaging, and meaningful to children.

The human mind is a pattern detector; the child naturally attempts to make meaning out of every experience. As a result, what is meaningful is always more easily learned, understood, and remembered. The younger the child, the more important it is to provide curriculum content that is close to the child's experience and therefore more likely to be meaningful.

5. Curriculum goals are realistic and attainable for most children in the designated age range for which they were designed.

Principles of Learning

Curriculum expectations of young children are flexible and dynamic, rather than deterministic and lock-step, since there is no universal sequence of skills development. The curriculum allows for children to work at different levels on different activities and does not require all the children to do the same thing at the same time. Decisions about when knowledge and skills are introduced and/or expected to be accomplished are based on knowledge of the prior experiences of individual children in a group, knowledge of prerequisite intellectual structures, and knowledge about typical patterns of development and learning.

6. Curriculum content reflects and is generated by the needs and interests of individual children within the group.

Curriculum incorporates a wide variety of learning experiences, materials and equipment, and instructional strategies, to accommodate a broad range of children's individual differences in prior experience, maturation rates, styles of learning, needs, and interests.

7. Curriculum respects and supports individual, cultural, and linguistic diversity. Curriculum supports and encourages positive relationships with children's families.

8. Curriculum builds upon what children already know and are able to do (activating prior knowledge) to consolidate their learning and to foster their acquisition of new concepts and skills.

Curriculum for young children should not be based on a rigid score and sequence but should help children connect new learning to what they already know and are able to do.

9. The curriculum provides conceptual frameworks for children so that their mental constructions based on prior knowledge and experience become more complex over time.

Conceptual organizers such as themes, units, or projects give children something meaningful and substantive to engage their minds. It is difficult for children to make sense of abstract concepts such as colors, mathematical symbols, or letter sounds when they are presented at random or devoid of any meaningful context.

10. Curriculum allows for focus on a particular topic or content, while allowing for integration across traditional subject-matter divisions by planning around themes and/or learning experiences that provide opportunities for rich conceptual development.

Principles of Learning

The purpose of integrating curriculum is to reflect the natural way children learn and also to help children make connections between what they learn at home and in the program, between what they learn in school and the real world, and between different disciplines or subject matter areas (British Columbia Ministry of Education, 1990). The curriculum provides for long blocks of time to bring naturally related subjects together and does not require minimal time allotments for instruction in discrete subject matter.

11. The curriculum content has intellectual integrity; content meets the recognized standards of the relevant subject-matter disciplines.

12. The content of the curriculum is worth knowing; curriculum respects children's intelligence and does not waste their time.

Content should be included in curriculum for specific age groups because it is important for children to learn to function capably in their world. Content goals should include what children can learn efficiently and effectively at this time. Children and teachers should not have to waste time trying to address content that is meaningless, or could be learned much more easily when the child is older.

13. Curriculum engages children actively, and passively, in the learning process. Children have opportunities to make meaningful choices.

14. Curriculum values children's constructive errors and does not prematurely limit exploration and experimentation for the sake of ensuring "right" answers.

15. Curriculum emphasizes the development of children's thinking, reasoning, decision-making, and problem-solving abilities.

Skills are taught in the context of activities that are meaningful to the child, rather than teaching skills in isolation (Lloyd-Jones & Lunsford, 1989).

16. Curriculum emphasizes the value of social interaction to learning in all domains and provides opportunities to learn from peers.

17. Curriculum is supportive of children's physiological needs for activity, sensory stimulation, fresh air, rest, hygiene, and nourishment elimination.

Principles of Learning

Children should not be required to sit still for long periods without a break.

18. Curriculum protects children's psychological safety, that is, children feel happy, relaxed, and comfortable rather than disengaged, frightened, worried, or stressed.

19. The curriculum strengthens children's sense of competence and enjoyment of learning by providing experiences for children to succeed from their point of view.

Enjoying the curriculum is an important but insufficient criterion for curriculum selection. Worthwhile curriculum does not have to entertain children. Instead, children's enjoyment can derive from positive feelings about self and meaningful learning, as they realize their competence.

20. The curriculum is flexible so teachers can adapt to individual children or groups.

Principles of Learning

TEACHER BELIEFS AND LEARNING*

*SOURCE: "CHILDREN'S SUCCESS AS READER'S AND WRITERS: IT'S THE TEACHER'S BELIEFS THAT MAKE THE DIFFERENCE," Heidi Mills and Jean Anne Clyde," (*Young Children* . January 1991), pp. 54-59.

Teachers' classroom decisions are by no means random or accidental. Rather, whether or not a teacher is conscious of it, her "practice" is firmly rooted in her beliefs about learning, and reflects a personal theory of what she believes effective teaching is all about.

Stephens and Clyde (1985) concluded that teachers' choices of materials, the nature of assignments they made, and their educational focus were consistent with their views of how children learn to read. The researchers concluded that belief systems played a significant role in shaping curricular experiences. Whether explicit or implicit, teachers' beliefs become actualized as practice. These studies help to explain why two teachers can use the same materials and textbooks but produce programs that look quite different. It also explains why two teachers can look at the same child and have very different impressions of him.

Even though the lessons that come from teachers' beliefs reflect teachers' best intentions, not all belief systems are of equal benefit to learners (Harste, Woodward, & Burke, 1984). This is why teachers should carefully examine their own assumptions. What a teacher believes about teaching, learning, and the nature of children will expand or limit the opportunities for her children to achieve their potential (Watson, Burke, & Harste, 1989).

We believe that teachers, like all professionals, have the right and, indeed, a responsibility to act on our current best learn, that is, to exercise professional judgement.

Characteristics of the Learners

The Lives and Times of Children*

*SOURCE: "How Kids Learn," by Barbara Kantrowitz and Pat Wingert, *Newsweek* . April 17, 1989, pp. 4-10.

Each youngster proceeds at his own pace, but the learning curve of a child is fairly predictable. pushing a child too hard, too soon.

*** Infants and Toddlers:** They're born to learn. the first important lesson is trust, and they learn that from their relationship with their parents or other caring adults. Later, babies will begin to explore the world around them and experiment with independence. As they mature, infants slowly develop gross motor (sitting, crawling, walking) and fine motor (picking up tiny objects) skills. Generally, they remain egocentric and are unable to share or wait their turn. New skills are perfected through repetition, such as the babbling that leads to speaking.

*** 18 months to 3 years:** Usually toilet training becomes the prime learning activity. Children tend to concentrate on language development and large-muscle control through activities like climbing on jungle gyms. Attention spans lengthen enough to listen to uncomplicated stories and carry on conversations. Vocabulary expands to about 200 words. They enjoy playing with one other child, or small groups, for short periods, and learn that others have feelings too. They continue to look to parents for encouragement and protection, while beginning to accept limits on their behavior.

*** 3-year-olds:** Generally, they're interested in doing things for themselves and trying to keep up with older children. Their ability to quietly listen to stories and music remains limited. They begin telling stories and jokes. Physical growth slows, but large-muscle development continues as children run, jump and ride tricycles. They begin to deal with cause and effect; it's time to plant seeds and watch them grow.

*** 4-year-olds :** They develop better small motor skills, such as cutting with scissors, painting, working with puzzles and building things. They can master colors, sizes, and shapes. They should be read to and should be encouraged to watch others write; let them scribble on paper but try to keep them away from walls.

Characteristics of The Learners

* **5-year-olds:** They begin to understand counting as a one-to-one correlation. Improved memories make it easier for them to recognize meaningful words, and with sharper fine motor skills, some children will be able to write their own names.

* **Both 4s and 5s:** Both groups learn best by interacting with people and concrete objects and by trying to solve real problems. They can learn from stories and books, but only in ways that relate to their own experience. Socially, these children are increasingly interested in activities outside their family. They can play in groups for longer periods, learning lessons in cooperation and negotiation. Physically, large-muscle development continues, and skills such as balancing emerge.

* **6-year-olds:** Interest in their peers continues to increase, and they become acutely aware of comparisons between themselves and others. It's a taste of adolescence: does the group accept them? Speech is usually well developed, and children are able to joke and tease. They have a strong sense of true and false and are eager for clear rules and definitions. However, they have a difficult time differentiating between minor and major infractions. Generally, children this age are more mature mentally than physically and unable to sit still for a long period. They learn better by firsthand experiences. Learning by doing also encourages learning by doing also encourages children's "disposition" to use the knowledge and skills they're acquiring.

* **7-to 8-year-olds:** During this period, children begin developing the ability to think about and solve problems in their heads, but some will continue to rely on fingers and toes to help them find the right answer. Not until they're 11 are most kids capable of thinking purely symbolically; they still use real objects to give the symbols—such as numbers—meaning. At this stage they listen better and engage in give and take. Generally, physical growth continues to slow, while athletic abilities improve—children are able to hit a softball, skip rope or balance on a beam. Sitting for long periods is still more tiring than running and jumping.

Characteristics of The Learners

BILINGUAL STUDENTS AND LEARNING*

SOURCE: Strategies for Teaching Limited English Proficient Students, Arizona Department of Education, Bilingual Unit, June 1990, pp. 23.

SOME FACTS THEY SHOULD KNOW

- FACT #1:** It takes 2-3 years to become fluent in a second language but it takes 5-7 years to become proficient in the academic and abstract aspects of the language.
- FACT # 2:** Students may sound quite fluent when communicating face to face with their peers but still not comprehend the abstract language of reading.
- FACT # 3:** Sounding out words is not reading. Comprehension occurs only when students understand the meaning of what they are reading.
- FACT #4:** The thousands of idiomatic expressions and multiple meanings commonly used in English often create huge stumbling blocks in comprehension for second language (L2) students.
- FACT #5:** The authors of basal readers are limited to the number of new words they can add to a story. Therefore, they will often use the same words in several totally different contexts. The word "play" was used in a primer five different ways in one story.
- FACT #6:** L 2 students usually learn the most common meaning of a word. If it is not consciously pointed out to them that there are other meanings for this same word, they will continue to use that one definition every time they encounter that word. Obviously, comprehension suffers tremendously.

Characteristics of The Learners

BILINGUAL/BICULTURAL CHILDREN*

*SOURCE: "Understanding Bilingual/Bicultural Young Children," Lourdes Diaz Soto, (Young Children . January 1991), pp. 30-36.

Misconception about young learners

A variety of misconceptions about second language acquisition and young learners exists (McLaughlin, 1984). **One misconception is that young children acquire language more easily than adults.** This idea was borne of the assumption that children are biologically programmed to acquire languages.

Although we know that early, simultaneous bilingualism will not harm young children's language development, and that they are capable of acquiring a second language without explicit instructions, it is a myth to think that children find the process "painless" (Hakuta, 1986).

A second, related misconception states that the younger the child, the more quickly a second language is acquired. There is no evidence of a critical period for second language learning with the possible exception of accent (Hakuta, 1986). Studies reported by Krashen, Long, and Scarcella (1979), which examine rate of second language acquisition, favor adults. In addition, adolescent learners acquire a second language faster than younger learners. Young children who receive natural exposure to a second language, however, are likely to eventually achieve higher levels of second language proficiency than adults.

A third misconception is that there is a single path to acquiring a second language in childhood. Wong Fillmore (1985) suggests that three interconnected processes, including the social, linguistic, and cognitive domains, are responsible for variability in language learning. Learner characteristics contribute substantially to differential second language learning in children, but the relationship between learner characteristics and outcomes is not simple. No one characteristic can determine language learning (e.g., gregariousness) because variables such as situations, input, and interactions are also important (Wong Fillmore, 1986).

The second language learning process cannot be isolated from the young child's cultural learning. Ethnographic studies examining linguistically and culturally diverse children have found that classroom patterns also need to be culturally responsive, since differing approaches may work with diverse children.

Young children progress at their own rate and persist until the skill is mastered. An accepting attitude is necessary during the trial and error phases of language acquisition. Rigid instructional practices emphasizing grammar construction are not appropriate because they can confuse and interfere with the natural

Characteristics of The Learners

developmental progression of second language acquisition.

Practical applications for teachers of young children

Based upon the recent research, and what we know about young children, we can:

1. Accept individual differences with regard to language-learning time frames. It's a myth to think that young children can learn a language quickly and easily. Avoid pressures to "rush" and "push out" children to join the mainstream classrooms. Young children need time to acquire, explore, and experience second language learning.

2. Accept children's attempts to communicate, because trial and error are a part of the second language learning process. Negotiating meaning, and collaboration in conversations, is important. Children should be given opportunities to practice both native and newly established language skills. Adults should not dominate the conversations; rather, children should be listened to. Plan and incorporate opportunities for conversation.

3. Maintain an additive philosophy by recognizing that children need to acquire new language skills instead of replacing existing linguistic skills. Afford young children an opportunity to retain their native language and culture. Allow young learners ample social opportunities.

4. Provide a stimulating, active, diverse linguistic environment with many opportunities for language use in meaningful social interactions. Avoid rigid or didactic grammatical approaches with young children.

5. Incorporate culturally responsive experiences for all children. Valuing each child's home culture and incorporating meaningful/active participation will enhance interpersonal skills, and contribute to academic and social success.

6. Use informal observations to guide the planning of activities, interactions, and conversations for speakers of other languages.

Characteristics of The Learners

BELIEFS ABOUT LANGUAGE LEARNING*

*SOURCE: "I'm Really Worried about Joseph: Reducing the Risks of Literacy Learning," JoBeth Allen, Barbara Michalove, Betty Shockley, and Martha West. (The Reading Teacher, vol.44, no. 7, March 1991) pp: 458-468.

The following assumptions, based both on reading the research literature and on professional experiences, serve as our working definition of whole language:

1. **Whole texts.** During the critical period of emergent literacy, most children learn best by going from whole to part. Children have extensive verbal and experimental interactions, but many have not participated in such literacy events as bedtime stories, repeated storybook readings, or interactive writing times.

2. **Adult models.** Children who observe literate others develop a desire to be members of this "literacy club" (Smith 1988), just as children who observe language users want to learn to talk. Children who have had limited supported associations with literacy need to be around who "model joyous literacy" (Holdaway, 1979).

3. **Real reasons.** All real learning must make sense and must be purposeful. The literacy activities at the core of our curriculum must be designed to engage students in real reasons for reading and writing.

4. **Time.** The gift of time should be given every day, not with an extra year in school. Every child should have time to read, to write, to interact with peers, to extend a learning activity to its natural, rather than a preordained, conclusion.

5. **Responsibility.** Developing responsibility for one's own learning is especially important for children who view themselves as failures (Hansen, 1989). Emphasize real choices- what books will you read, how will you figure out unfamiliar words, what will you write about today, who will help you, which words might be spelled incorrectly, which story will you publish, what will you do when you get frustrated?

6. **Supported risk taking.** Children who "fail" in school have often been failed by the school. Create literature environments where children can take risks without risking failure. In such classrooms, all children would be equal, not in what they already knew, but in what they could learn.

7. **Belonging.** Students who do not view as a positive, successful experience often do not feel they really "belong" in a particular class or even in the school as a whole. Everyone should have know s/he has something important to contribute: everyone would be both a teacher and a learner.

Characteristics of The Learners

SECOND LANGUAGE LEARNERS*

*SOURCE: "Enabling First and Second Language Learners in the Classroom," Margaret Early, *Language Arts*, vol. 67, October 1990, pp. 567-575.

Recent research and accumulated experience make it clear that the acquisition of a second language in all its dimensions takes many years (Cummins, 1981; Wong-Fillmore, 1983; Collier, 1987).

Principles of Effective Language Learning

1. ESL students' learning should build on the educational and personal experiences they bring to school (Early, et al., 1986; Ashworth, Cummins and Handscombe, 1989).

In language learning, students should be encouraged to use their previous experiences with oral and written language to develop their second language and to promote their growth to literacy. (Au and Jordan, 1981; Hudelson, 1986; Edelsky, 1986; Cummins and Swain, 1986; Enright and McCloskey, 1988). In all leanings, cultural identities should be honored by instructional practices that recognize the knowledge and experiences students bring to school rather than attempt to replace them (Cummins, 1986; Jordan, 1985; Heath, 1983; Moll and Diaz, 1987).

2. Learning a language means, among other things, "learning to use a language to socialize, to learn, to query, to make believe and to wonder" (Rigg and Allen, 1989).

This takes many years to learn; expecting quick and full-fledged competence is unrealistic (Cummins, 1981; Wong-Fillmore, 1983; Collier, 1987). Moreover, ESL children show considerable individual variation in their rates of development of oral proficiency (Strong, 1983; Wong-Fillmore, 1983). and writing (Edelsky, 1986). Thus, all teachers not just the ESL specialist, need to address the learning needs of ESL students and be prepared to adjust (this does not mean "water down") their instruction to accommodate the different levels of English proficiency and different learning rates and styles of the their students (Ashworth, Cummins and Handscombe, 1988; Rigg and Allen, 1989).

3. If ESL students are to "keep up" or "catch up" with their native-English speaking peers, their cognitive and academic growth should continue while the second language is developing (Mohan, 1986; Early et al., 1986; Ashworth, Cummins and Handscombe, 1988).

Integrating language teaching with teaching of academic content in thematic units appears to be a particularly promising way to develop simultaneously students' language, subject area knowledge and thinking skills (Early and Hooper, 1991; Enright and McCloskey, 1988). This integration, however, requires careful, systematic planning (Swain, 1988).

Characteristics of The Learners

4. Activities or tasks (as opposed to exercises in grammatical structures that fragment language at the word or sentence level and neglect the discourse level) hold promise as a unit of analysis for designing second language instruction (Crookes, 1990).

From this perspective, the thematic unit becomes an ecology of tasks. Each task is considered for its potential to involve the students in particular type of real language use. Each constellation of tasks is considered for the opportunities afforded the students to use language interactively across a variety of situations, modes, and text types.

5. Although verbal language may be the major mode of meaning-making, it is not the only mode. Young children's texts are frequently multiple media: drawing, writing, and talk (Harste, Woodward and Burke, 1984; Dyson, 1986).

The interrelationships between graphic and linguistic realizations of meaning (as well as the interrelations between linguistic modes) can be exploited to make communication clearer and lower the language barrier for students who are learning subject matter knowledge in a second language (Mohan, 1986; Early, 1989).

6. ESL students' school achievement and social growth are significantly increased when schools actively encourage parental participation (Comer, 1986; Heath, 1983; Tizard, Schofield and Hewison, 1982).

To achieve excellence as well as equity for our students, parents and teachers must become partners, not strangers, in the learning enterprise.

Characteristics of The Learners

NATIVE LANGUAGE INSTRUCTION*

* SOURCE: "THE ROLE OF NATIVE LANGUAGE INSTRUCTION IN BILINGUAL EDUCATION PROGRAMS." Angela Carrasquillo, (MABE NEWS . May 1, 1991), pp 1, 20-21.

The United States government defines bilingual education as instruction using the native language and culture as a basis for learning subjects until English skills have been sufficiently developed.

The importance of native language instruction in the linguistic, cognitive and academic development of limited English proficient students has been emphasized by authorities such as Anderson (1977); Carrasquillo & Segan (1984); Cummins (1981, 1984); Goodman, Goodman and Flores (1979); Krashen (1981); United States General Accounting Office (1987); Secretary of Education Cavazos (1989); and Vygotsky (1962). All these authorities agree that since language is a means for representing thought as well as the vehicle for complex thinking, there is a need to use and develop the language students know best. Within these principles, there are several areas in which native language instruction impacts the most.

Second Language Acquisition

One of the main objectives of bilingual education is the acquisition of English skills. When concepts are introduced and reinforced in the students' primary language, linguistic ability in general is enhanced. Acquisition of a second language depends not only on exposure to the target language, but also on proficiency in the native language. Cummins (1984) has stated that: "The interdependence or common underlying proficiency principle implies that experience with either language can promote development of the proficiency underlying both languages, given adequate motivation and exposure to both, either in school or in school or in the wider environment (p. 1943)." A high level of language proficiency evidenced in both -- the native language and the second language -- leads to accelerated cognitive growth and therefore positive academic outcomes.

It has been found that children who have a good command of their native language (especially in vocabulary and grammatical structure) demonstrate facility in the acquisition of the second language and students may quickly develop surface language skills (in vocabulary, grammar and pronunciation) in English. Through the native language students have already mastered general concepts through cognitive and meaningful tasks (Krashen, 1981). Students use these conceptual and cognitive skills effectively in the second language environment if the second language is presented in meaningful and communicative-based settings. Competence in the second language, therefore, is a function of competence that has

Characteristics of The Learners

been developed in the native language.

Content Area Knowledge

According to Cummins (1984), it takes five to seven years to reach an age-appropriate level of context-reduced proficiency (academic communicative proficiency) necessary in the development of content knowledge. Students learning content areas such as science, mathematics and social studies need to study them with the least possible language difficulty. Science, mathematics or social studies achievement can be enhanced by instruction provided in the students' native language. This should continue for several years until students have mastered English language skills and are more adept at processing abstract cognitive skills through the second language.

Characteristics of The Learners

SCHOOLING FOR CHILDREN OF POVERTY*

*SOURCE: Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom, Volume I: Summary, U.S. Department of Education . Office of Planning, Budget and Evaluation, Washington, D.C. January 1990.

HIGHLIGHTS

This report synthesizes current research-based thinking about effective academic instruction for elementary schools serving high proportions of students from impoverished families. For years, the challenges of teaching reading, writing, and mathematics in such settings have prompted both researchers and practitioners to search for better curricula and instructional approaches.

Until recently, a "conventional wisdom" about effective practice in such settings has emphasized the remediation of learners' deficits skills, teacher-directed instruction, a uniform approach to classroom management, and the grouping of students by ability. In the hands of skilled teachers, the conventional wisdom can work well, especially when the goal is improving student performance on relatively simple academic tasks. It has important limits, though, which are the subject of this report.

The theme running through our critique is this: Although it represents an improvement over much of the instruction offered in schools serving poor children, conventional wisdom may place an unintended ceiling on student learning. Appropriately applied, the alternatives discussed in this report show promise of improving on conventional practice.

Conventional Wisdom, a Critique, and Alternatives

The research evidence reviewed in this report leads to an overall conclusion that much recent thinking about the education of disadvantaged students has been flawed. This thinking, which we call conventional wisdom, itself represents an advance beyond an earlier stage of educational practice that tended simply to ignore the plight of disadvantaged students. The conventional wisdom has some strengths as a basis for curriculum and instruction. Nevertheless, the most recent scholarly analysis suggests that further modifications in thinking and practice are needed.

What is the conventional wisdom? Stated oversimply, it focuses on disadvantaged learners' deficits and sets forth solutions in the form of principles of curriculum organization, instructional approach, classroom management, and instructional grouping.

We do not suggest that this way of thinking must be discarded, although some researchers advocate doing so.

Characteristics of The Learners

Our review of the research base indicates that there is this to be said for the conventional wisdom: applied skillfully, it tends to result in good student performance on current standardized tests, especially the tests administered in the elementary grades which emphasize basic skills. This is not a trivial outcome; it is more desirable than the performance now seen in many high-poverty schools. Many classrooms now fall far short of effectively implementing the conventional wisdom, and they might benefit from doing so.

THE CONCEPTION OF THE "DISADVANTAGE" LEARNER

CONVENTIONAL WISDOM: A great deal of research and practice has been predicated on the assumption that "disadvantaged" students are deficient in ways that influence their performance in school. A corollary assumption is that disadvantaged students' families have given them a bad start in life. These assumptions, in effect, locate the problem in the learner and his or her background.

AN ALTERNATIVE VIEW: While recognizing that there may be gaps in the disadvantaged student's experience (e.g., limited exposure to print, if not more serious gaps in family support for schooling), the educator builds on the child's experience base and at the same time challenges children to expand their repertoire of experiences and skills. Evidence suggests that disadvantaged students will be better able to meet the academic challenge of school if the following principles are followed:

- * Teacher know and respect the students' cultural/linguistic background and communicate this respect in personal way to the students.
- * The academic program allows and encourages students to draw and build on the experiences they have, at the same time that it exposes them to unfamiliar experiences and ways of thinking.
- * The assumptions, expectations, and ways of doing things in school - in short, its culture - are made explicit to these students by teachers as they explain and model these dimensions of academic learning.

SEQUENCING AND CHALLENGE IN THE CURRICULUM

CONVENTIONAL WISDOM. Conventional approaches to fashioning curricula for disadvantaged students- and indeed for "slow" learners of any kind- follow from the conception of the student as an individual with critical skill and knowledge deficits. Such curricula are characterized by two basic traits. First, these curricula tend to break up reading, writing, and mathematics into fixed sequences of discrete skills, ordered from the simplest (the "basics") to the more complex ("higher-order skills"). Second, intrusion typically emphasizes developing mastery of these skills by linear progression through the curricula.

Characteristics of The Learners

From one point of view, this way of building curricula makes good sense. It helps to isolate basic skills that are assumed to be the critical deficiency in the disadvantage student's repertoire; it provides a clear structure for learning; it facilitates the charting of students' progress; and it provides regular and supplemental instructional programs a common vocabulary for diagnosing what low-achieving students need.

A CRITIQUE. Despite these advantages, there is broad agreement across experts in all three content/skill areas reviewed in this report that these curricular assumptions are critically limited in several respects. They tend to (1) underestimate what students are capable of; (2) postpone more challenging and interesting work for too long, and in some cases forever; (3) fail to provide a context for learning or for meaningfully employing the skills that are taught; and (4) even reinforce academic failure over the long term. The students are literally charged with putting the pieces together into an integrated and useful base of knowledge, and, more often than not, they don't. In the view of many experts, this approach to curriculum lacks both coherence and intellectual challenge for students who experience it.

AN ALTERNATIVE. Assuming that the academic program for disadvantaged students should convey more than discrete basic skills, the available evidence suggests the following principles. More effective curricula should :

- * Balance routine skill learning with appropriate novel and complex tasks from the earliest stages of learning.
- * Provide a context for skills learning that establishes clear reasons for needing to learn the skills, affords opportunities to apply the skills, and helps the student relate one skill to another.
- * Focus on meaning and understanding from the beginning- for example, by orienting instruction toward comprehending reading passages, communicating important ideas in written text, or understanding the concepts underlying numbers facts.
- * Influence attitudes and beliefs about the academic content areas, as well as skills and knowledge.
- * Eliminate unnecessary redundancy in the curriculum (e.g., repeated instruction in the same mathematics computation skills year after year).

THE ROLE OF THE TEACHER IS INSTRUCTION

CONVENTIONAL WISDOM. Since the mid 1970s, efforts to define appropriate models for instructing disadvantages students have been dominated by a class of teaching approaches that we refer to as "direct instruction." Although there are variations among them, these approaches typically feature (1) teacher-controlled instruction, with considerable time spent presenting lesson

Characteristics of The Learners

material and directly supervising students' work; (2) extensive opportunities for practice and frequent corrective feedback; (3) a careful structuring of academic tasks so that content can be introduced in small, manageable steps, (4) rapid pacing; and (5) whole-group or homogeneous-group formats. For various reasons, this class of approaches lends itself particularly well to the teaching of the linear, discrete skills-oriented curricula.

The research evidence supporting various elements of direct instruction indicates that, for disadvantaged populations, it enhances some kinds of academic learning, in particular, those involving discrete basic skills.

A CRITIQUE. There is growing dissatisfaction about the ability of this category of approaches to convey more integrated and challenging curricula to students. First, students do not need much thinking for themselves when the teacher breaks the learning task into small manageable steps and explains how to accomplish each step. Second, some important academic learning goals don't lend themselves to small, manageable steps. Third, students can easily become dependent on the teacher to monitor, motivate, and structure all aspects of the work they do.

AN ALTERNATIVE. In this area, current research does not support abandoning the conventional wisdom but instead suggests balancing it with different approaches. Work on the teaching of learning strategies and other aspects of classroom practice gives reason to believe that a balance of teacher-directed instruction and learner-directed instruction has more to offer the education of disadvantaged students, especially if the goal is to engage students in curricula that are more intellectually challenging.

Evidence suggests that the following principles aim at an appropriate balance between teacher-directed and learner-directed instruction. Teachers should:

- .Teach explicitly the underlying thinking processes along with skills.
- .Within sequences or units of instruction, and across the school year, gradually turn over responsibility for the learning process to the students as they become more capable of constructing knowledge and applying modeled strategies on their own.
- .Encourage students to use each other as learning resources and structure their interaction accordingly, as in many cooperative or team learning arrangements.

THE RELATIONSHIP OF CLASSROOM MANAGEMENT TO ACADEMIC WORK

CONVENTIONAL WISDOM . Conventional wisdom holds that a uniform structure provides students with clear expectations and guidance regarding interactions with teachers and other students. To an extent, well-established principles of "good" classroom management

Characteristics of The Learners

have been developed that implement this view. These principles combine good prevention, chiefly through tone-setting and the development of routines early in the year, with appropriate remediation as disruptive behavior occurs.

AN ALTERNATIVE. A better perspective on classroom management retains two elements of the conventional wisdom: (1) establishing general ground rules at the beginning of the school year, and (2) maintaining order over time through vigilant monitoring and ongoing problem-solving on the part of the teacher, as he or she anticipates challenges to, or distractions from, the primary program of action in the classroom. But this perspective encourages teachers to find a new basis for order in the classroom that emanates as much as possible from academics rather than generic rules, incentives, and consequences for misbehavior. Specific ways of doing this will vary across grades.

In general, then, classroom management should be intimately linked to the nature of the academic work being done. From this perspective, teachers can most effectively manage instruction if they:

- . Set expectations for classroom order that are appropriate to the academic work at hand, within broad boundaries established for overall behavior in the room.
- . Anticipate resistance to novel and unfamiliar work that is necessarily a part of a more challenging curriculum.
- . Plan a strong "program of action," rooted in interesting and engaging academic activities.

ACCOMMODATING DIFFERENCES IN STUDENT PROFICIENCY

CONVENTIONAL WISDOM. Several common arrangements for instructing diverse groups place low-achieving children together and separate them from those who do better. Three are especially pervasive: (1) ability-based reading groups in the primary grades; (2) formal or informal tracking in literacy or mathematics instruction in the upper elementary grades; and (3) group-based supplemental services (eg., Chapter I pullout instruction) in both literacy and mathematics.

AN ALTERNATIVE. Research evidence does not warrant doing away with ability-based differentiation altogether. Under some conditions, its effects are positive. However, schools and teachers should at least consider adopting the following principles:

- . Use (1) heterogeneous grouping, such as cooperative and team learning, and (2) more flexible and temporary ability-grouped arrangements.
- . Integrate supplementary assistance, such as Chapter I instruction, as much as possible into the mainstream classroom activities and/or provide supplementary instruction at times

Characteristics of The Learners

that do not require students to be away from activity in their main classrooms.

. Maximize individual help to low-achieving students on an ad hoc rather than in long-term group-based arrangements.

General Resources

GUIDELINES FOR APPROPRIATE CURRICULUM ASSESSMENT THEORETICAL FRAMEWORK*

* SOURCE: "Guidelines for Appropriate Curriculum and Assessment in Programs Serving Children Ages 3 Through 8," A position statement of the National Association for the Education of Young Children and the National Association of Early Childhood Specialists in State Departments of Education, adopted November 1990 (Young Children, March 1991)

1. Curriculum and assessment are integrated throughout the program; assessment is congruent with and relevant to the goals, objectives, and content of the program.

2. Assessment results in benefits to the child such as needed adjustments in the curriculum or more individualized instruction and improvements in the program.

3. Children's development and learning in all the domains-physical, social, emotional, and cognitive-and their dispositions and feelings are informally and routinely assessed by teachers' observing children's activities and interactions, listening to them as they talk, and using children's constructive errors to understand their learning.

4. Assessment provides teachers with useful information to successfully fulfill their responsibilities: to support children's learning and development, to plan for individuals and groups, and to communicate with parents.

5. Assessment involves regular and periodic observation of the child in a wide variety of circumstances that are representative of the child's behavior in the program over time.

6. Assessment relies primarily on procedures that reflect the ongoing life of the classroom and typical activities of the children. Assessment avoids approaches that place children in artificial situation, impede the usual learning and developmental experiences in the classroom, or divert children from their natural learning processes.

7. Assessment relies on demonstrated performance, during real, not contrived activities, for example, real reading and writing activities rather than only skills testing (Engel, 1990; Teale, 1988).

8. Assessment utilizes an array of tools and a variety of processes including but not limited to collections of representative work by children (art work, stories they write, tape recordings of their reading), records of systematic observations by teachers, records of conversations and interviews with children, teachers' summaries of children's progress as individuals and as groups (Chittenden & Courtney, 1989; Goodman, Goodman, & Hood, 1989).

9. Assessment recognizes individual diversity of learners and allows for differences in styles and rates of learning; Assessment takes into consideration children's ability in English, their stage of language acquisition, and whether they have been given the time and opportunity to develop proficiency in their native language as

Organized Knowledge

well as in English.

10. Assessment supports children's development and learning; it does not threaten children's psychological safety or feelings of self-esteem.

11. Assessment supports parents' relationships with their children and does not undermine parents' confidence in their children's or their own ability, nor does it devalue the language and culture of the family.

12. Assessment demonstrates children's overall strength and progress, what children can do, not just their wrong answers or what they cannot do or do not know.

13. Assessment is an essential component of the teacher's role. Since teachers can make maximal use of assessment results, the teacher is the primary assessor.

14. Assessment is a collaborative process involving children and teachers, teachers and parents, school and community. Information from parents about each child's experiences at home is used in planning instruction and evaluating children's learning. Information obtained from assessment is shared with parents in language they can understand.

15. Assessment encourages children to participate in self-evaluation.

16. Assessment addresses what children can do independently and what they can demonstrate with assistance, since the latter shows the direction of their growth.

17. Information about each child's growth, development, and learning is systematically collected and recorded at regular intervals. Information such as samples of children's work, descriptions of their performance, and anecdotal records is used for planning instruction and communicating with parents.

18. A regular process exists for periodic information sharing between teachers and parents about children's growth and development and performance. The method of reporting to parents does not rely on letter or numerical grades, but rather provides more meaningful, descriptive information in narrative form.

Organized Knowledge

CHARACTERISTICS OF HOME-BASED LITERACY EVENTS*

* **SOURCE:** "Preschoolers and Academics: Some Thoughts," Judith A. Schickedanz, Soyoung Chay, Paula Gopin, Lan Sheng, Soo-Mi Song, Nancy Wild, *Young Children*, November 1990, pp. 4-13.

Psychological Characteristics of Preschoolers' Home-Based Literacy Events

The literacy events in high socioeconomic home environments have several psychological characteristics. They are high in meaningful, child initiation, and child direction; and there is partnership quality to the adult-child relationship.

Home-based literacy events are meaningful because they are functional - they get something done- and because they occur in the course of everyday events. It was rare among the children we studied for parents of preschoolers to contrive literacy episodes for the purpose of teaching children about literacy. Instead, literacy events typically emerged in the service of accomplishing larger goals.

Home-based literacy events are meaningful in another way - tutoring about specific details of written language is not separated from broader language contexts. Children ask questions and adults provide clues and information in context. Rarely is there any focus on information for information's sake, or on practice out of context. When there is practice without an immediate functional purpose, it's often the child who sets up the situation.

At home, many literacy events are child-initiated (Bissex, 1980; Durkin, 1966; Schickedanz and Sullivan, 1984).

Home-based literacy events are often child-directed. The major exceptions to this general feature of home-based literacy events occur when a child asks to participate in some real-world task.

There's often a partnership quality to the adult-child relationship in preschoolers' home-based literacy events. This quality is sometimes achieved by a parent's willingness to let a child in on her thinking.

Organized Knowledge

Affective Characteristics of School-Based Literacy Events

Children's school-based literacy encounters often differ sharply from home-based encounters with respect to affective characteristics.

At school, literacy episodes rarely are functional, that is, serve a larger purpose. Instead, they are contrived for the purpose of teaching children about literacy. Given the difference in the contexts in which literacy events emerge in two settings, it is not surprising that school-based literacy events are rarely child-initiated or directed.

A partnership quality is rarely apparent in the adult-child relationship surrounding literacy events at school. In the home situation, the partnership quality often emerges when children initiate tasks that aren't within their own independent reach. But instead of doing the task for a passive child, skillful parents scaffold the situation to give the child maximum support and maximum involvement. At school, on the other hand, where tasks are contrived and assigned to children - typically an entire group of children - adults tend to design tasks that are within fairly easy reach of most children's independent action. Teachers then make every effort to get children to accomplish the tasks independently.

At school, the boundaries of acceptable performance also seem to be more limited than at home. Discrepancies between the child's current performance and the accepted, adult standard are often made explicit to the child. This explicitness is perhaps what differs most about home-based events involving preschoolers versus school-based events involving kindergarten and first grade children. There's probably a gradual increase in explicitness with respect to deficiencies in performance with an increase in age, whether the child is at home or at school, but the difference we've noted probably stems, too, from different pressures felt by teachers versus parents. In any event, this difference is probably one of the most important on the psychological dimension when preschoolers are at stake.

Organized Knowledge

STAFF DEVELOPMENT*

*SOURCE: "Shouting from the Tops of Buildings: Teachers as Learners and Change in Schools" Julie E. Wollman-Borjilla, *Language Arts*, vol.68, February 1991, pp. 114-120.

Whole language principles for learning (Goodman, 1986), usually discussed in terms of students' learning, underline teachers' learning as well. Purpose, ownership, risk-taking, social interaction, and empowerment are interdependent and are all central to successful professional development.

1) Learning Grows Out of Learner's Purposes: Before teachers can integrate a new approach into their classroom practice, they must have a personal sense of its purpose. When teachers try something new just to please an administrator or staff developer, they may "go through the motions" but are unlikely to alter fundamentally their theories of learning or approaches to teaching.

2) Learning Entails Developing Ownership of New Ideas and Activities: Teachers develop ownership of new ideas when they connect these ideas to what they know, placing them within the context of their own experiences. Further, when teachers are in control of how and when changes are implemented in their classrooms, they develop ownership of the change process itself. Such ownership must exist if changes are to be lasting (Boomer, 1988).

3) Learning Involves Taking Risks: Trying out new ideas and approaches is essential to learning (Jaggar, 1989). In order to discover what works and what does not, teachers must become comfortable with feelings of uncertainty and loss-of-control which experimentation can engender.

4) Learning is Fostered by Social Interaction: Articulating and examining beliefs, sharing and exploring ideas with others, and talking through plans and problems are all important to learning (Boomer, 1988; Jaggar, 1989)

5) Learning Requires Empowerment: Empowerment can be thought of as the core of the four principles just discussed. Empowerment both grows out of and engenders risk-taking, development of ownership, definition of personal purposes, and engagement in professional dialogue.

Empowerment suggests that teachers are free to experiment, to make mistakes, and to learn from them. It suggests that the principal trusts teachers to make decisions about curriculum and materials, and the teacher has the opportunity to dialogue with colleagues and staff developers about his or her work. As a result, it is hoped that the teacher will think about language and literacy in new ways, and change his or her teaching fundamentally.

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Organized Knowledge

The teacher's development then, it is hoped, will be mirrored by her students' growth as learners.

Organized Knowledge

NURTURING the EXEMPLARY TEACHER*

*SOURCE: Nurturing the Exemplary Teacher," Paul C. Beisenherz, Principal, November, 1990, pp. 36.

What are the characteristics of an exemplary teacher? Many schools have teachers who possess qualities that make them stand out from their colleagues. They have a vision of what successful teaching should accomplish, and the confidence and motivation to achieve their objectives. They also possess, or are able to develop, certain distinctive attitudes and behaviors:

They take risks. Exemplary teachers are willing to try any new ideas, topics, and techniques that will enable them to teach better and to motivate their students.

They are aware of successful programs and approaches. They incorporate successful programs into their curriculum and use modern techniques that have been associated with effective teaching.

They scourge activities. Exemplary teachers realize that children need a wide variety of experiences in order to master certain concepts. These teachers collect appropriate activities from many sources appropriate and incorporate them in to their teaching.

They scrounge materials. Exemplary teachers actively seek any materials and equipment that can help them.

They perceive teaching as a creative process.

They demonstrate enthusiasm in their teaching, aware that they are modeling a behavior they want to see in their students.

They develop feelings of success and self-esteem. Exemplary teachers work hard to build these qualities in their students, knowing that they are related to high motivation and achievement.

They demonstrate leadership and commitment by activities like these:

- * Active participation in professional organizations.
- * Offering workshops and presentations.
- * Working with student teachers.

They beat their own drums. Exemplary teachers realize that to obtain the necessary support for their unique, high quality programs, they must "sell" their "product."

Organized Knowledge

CLASS SIZE*

SOURCE: "How Changing Class Size Affects Classrooms and Students," Douglas E. Mitchell and Sara Ann Beach, Far West Laboratory, Policy Briefs, Number Twelve, 1990, pp 1-4.

Systematic interpretation of the growing body of class size research took a giant leap forward in 1978 with the development of meta-analysis. Glass and Smith identified 77 studies containing 725 different comparisons of pupil achievement in classes of at least two different sizes. Using "Effect Size" (the difference between small and large class achievement scores divided by the standard deviation of the large class), Glass and Smith found that achievement dropped off sharply when additional students were added to very small classes, but the marginal effects of each additional student decreased as classes got larger.

How much, and how reliably, do class size reductions lead to increase student achievement?

If student learning gains are slight or so unreliable that other factors completely overpower them, the only justification for investing in this expensive policy is a desire to make life easier for teachers and students. If, on the other hand, the effects are substantial and not easily produced by other means, failure to control class size would be a major stumbling block to overall school performance. The answer is complicated.

Reduction in class size from 20 students per teacher produces about a six percentile point increase on a typical achievement test. This small gain becomes substantial if class reductions are maintained over a child's entire 13 year career in the public school. The sum, achievement gains are reliable and cumulatively substantial.

Exactly how does changing the student/teacher ratio influence student learning?

Simply changing the number of students in a classroom cannot, by itself, be expected to change learning outcomes. Evidence indicates that other changes in classroom operations are necessary to produce the achievement gains that accompany class size reductions.

The most likely explanation for the achievement gains found in small classes, then, is that teachers must divide their attention among the students they face, and they must adjust instructional strategies to fit the needs of all students in the class.

Changes in Classroom Processes

Organized Knowledge

Class size reductions improve attitudes and encourage the use of effective teaching techniques. Observational studies comparing the cognitive, affective, and management differences between large and small classes found that teachers interact more frequently with individual students and make substantive changes in classroom layout, student evaluation, and classroom management. In Tennessee, teachers in small classes report less noise and misbehavior, more use of learning centers, more enrichment activities, more cooperation among students, and a better ability to evaluate student work effectively.

The evidence indicates that small class achievement gains are produced through specific changes in the behavior of both teachers and students. Where changed teaching and learning behaviors do not accompany reduced class size, achievement gains do not result.

Within reasonable resource constraints, at least three distinct strategies can be found for reducing class size: 1) redeploying critical staff members, 2) redistributing students, and 3) incorporating small class instructional strategies into existing classrooms. Little is known about the relative costs of these alternatives.

Redeploying staff. Large reductions in effective class size can be generated for various parts of the school day if existing staff resources are creatively managed. One elementary school, for example, divides the school day to devote a three-hour block of uninterrupted time exclusively to instruction in the core academic subjects. During this period, all certificated staff take a class of about 15 students. Instruction is protected from all interruptions.

Redistributing Students. Some of the benefits of class size reduction can be produced by better use of appropriate student grouping strategies. Enhanced teacher handling of the three factors which control the effectiveness of instructional grouping: the method of student assignment, the tasks set for group members, and the access of students to needed resources.

Incorporating small class instructional strategies. Especially effective teaching practices found most often in small classes include better utilization of space, more individual interactions, and enhanced teacher "with-it-ness." Also found in small classes are lower noise levels, fewer discipline problems, more one-on-one instructional time, and more response by teachers to diverse student interests and abilities.

Conclusion

Although class size research has had an unfortunate history, careful syntheses of available research, supported by a meta-analysis of achievement data, shows that class size has a substantial and cumulative effect on student learning.

Organized Knowledge

Theoretically, the view that teachers represent a Fixed Instructional Resource with their time and attention divided among the total number of students in the classroom best fits the research data.

Organized Knowledge

CLASSROOM ENVIRONMENTS*

*SOURCE: What Matters?: A Primer for Teaching Reading. Edited by Liane Stephens. Heinemann: Portsmouth, NH. 1990.

In making changes in the physical aspects of the classroom, the ultimate aim is to create an environment that supports, facilitates, and invites literacy - an environment filled with messages received, messages sent, messages shared, and invitations to send messages. There are, however, no formulas or rules to follow in structuring the physical dimensions of literate environments. They have been developed in almost every kind of condition, from the natural "classrooms" of outdoor education, to carpeted, well-equipped, modern schoolrooms. Decisions need to be made about choice and arrangement of furniture, use of space, selection of materials, and provisions for their use. We offer the following guidelines:

1. **Each aspect of the physical environment should invite and facilitate literate activities.** For example, chairs for reading or browsing should be comfortable, not forbidding; and print materials and writing paraphernalia should not just be in the classroom, they should be invitingly displayed.

2. **Places for undisturbed reading and writing should be available, as well as places for conversation and sharing ideas.**

3. **The environment should reflect and provide evidence of literate activities.** Teachers should create space for displays of authentic messages of all kinds: individual mailboxes for personal messages, a message board for public announcements and invitations, posters advertising important events or a book that a child has read, displays of stories and poems and published books by student authors.

4. **Students should be encouraged to share ownership of the classroom environment and the literacy materials and messages it contains.** They should be allowed to make decisions about the environment and rules and procedures for its use. And they should do as much work, and assume as much responsibility, as they are capable of doing.

5. **Teachers should be concerned with the symbolism of the environment, as well as with its functional aspects.** A teacher desk at the front of the room, chalkboards and bulletin boards reserved only for the teacher's use, or constraints on access to books and materials, tell students that they are really laying a game for which someone else has written the rules. Books should be invitingly displayed, signs and seating identifying conference

Organized Knowledge

areas, and notices inviting written responses all signify that children are expected and welcome to send and receive messages about subjects over which they have some choice.

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PARENTAL INVOLVEMENT*

*SOURCE: "Increasing Parental Involvement in Elementary School: The Nitty-Gritty of One Successful Program" by Harlene Galen, (Young Children . January 1991), pp. 18-19.

What research says about parental involvement

A quarter of a century ago, research evidence confirming the benefits of parental involvement in children's education began to appear (e.g., Bloom, 1964; Coleman, 1966). The cause-effect relationship between student achievement and parental participation has consistently been strengthened by subsequent research findings (Greengerg, 1989). The 1981 annotated bibliography, **The Evidence Grows** (Henderson, 1981), reports 35 studies showing that various types of parental inclusion had positive results, including measurable gains in pupils' performance. A 1987 update, **The Evidence Continues to Grow: Parental Involvement Improves Student Achievement** (Henderson, 1987), summarizes 18 additional studies with similar findings.

A recent research-based policy statement, **Right from the Start** (1988), from the National Association of State Boards of Education, concluded that parental involvement was essential. It recommended that primary programs should.

- * Promote an environment in which parents are valued as primary influences in their children's lives and are essential partners in the education of their should.
- * Recognize that the self-esteem of parents is integral to the development of the child and should be enhanced by the parents' positive interaction with the school.
- * Include parents in decision making about their own child and on the overall early childhood program.
- * Ensure opportunities and access for parents to observe and volunteer in classrooms.
- * Promote exchange of information and ideas between parents and teachers which will benefit the child.

Organized Knowledge

RECESS*

*SOURCE: "Outdoor Recess: Is it Really Necessary?" A.D. Pellegrini. (Principal . May 1991) pp. 40-41.

The limited data that does exist suggests that recess is good for children because it is positively related to educational outcomes.

The Recess Theory

The appropriateness of using outdoor recess periods for diversion rather than other forms, such as talking to peers between activities, is an important consideration. For example, some children may find outdoor recess more novel than others. Indeed, we know that preschool boys prefer outdoor play, while preschool girls prefer indoor play (Harper and Sanders 1975).

We also know that significant gender differences in motor activity levels exist among preschoolers, with boys being more active than girls, and that these differences become greater as children move into elementary school (Eaton and Enns 1986).

As a result, outdoor recess periods may be more necessary for boys than for girls.

A Time for Peer Interaction

From our studies of children's playground behavior, we know that their level of peer interaction is a good indicator of their social and educational competence (Pellegrini and Glickman 1990). But the gender issue is relevant here, too. It seems that boys' more vigorous outdoor recess behavior is closely related to their social development (Pellegrini, forthcoming), while girls appear to find other social interaction contexts more amenable.

Although more research is needed on gender differences, there is adequate data now to suggest that recess, whether indoors or out, is good for elementary school children.

Organized Knowledge

RETENTION*

*SOURCE: "Why Student Retention Doesn't Work," Margaret Dawson and Mary Ann Rafoth, Streamlined Seminar, National Association of Elementary School Principals, Vol. 9, No. 3, January 1991.

Many of the students have already repeated one year in school; most are boys from lower socioeconomic classes who have been placed in lower tracks since early elementary school.

The reform movement within education, with its emphasis on accountability and enforcing higher standards, has led many educators to view retention as preferable to "social promotion." One study found that retention was supported by 74 percent of school administrators and 65 percent of teachers. Even a majority of parents interviewed (59 percent) supported retention for students who did not meet grade level requirements.

What Does the Research Show?

A survey of the literature shows that retention is, for the most part, of questionable educational benefit and is likely to have deleterious effects on achievement, self-concept, attitudes toward school, and school drop-out rates. There is no convincing evidence anywhere that students who are retained...benefit, either educationally or emotionally, from repeating a grade. In fact, the research suggests just the opposite.

When students of comparable achievement levels are compared, the drop-out rate among students who have been retained is significantly greater than the rate for students who have not repeated a grade.

Retention and Academic Achievement

Effects of retention on academic achievement has been and remains one of the most extensively investigated areas of educational research. A recent computer search of the literature yielded 850 citations. Paring these down to studies which contained sufficient data to enable a statistical analysis of the results still yielded 63 studies investigating the effects of retention on academic achievement and personal adjustment in kindergarten, elementary, and junior high students.

Systematic reviews of research on retention provide a clear answer: **Retained students do worse, academically, than comparable students who are promoted.**

When academic achievement is broken down by specific domains (reading, math, science, social studies, etc.) results still indicate that promoted students fare better in all academic subjects than retained students. And when the data are analyzed by grade level in which the retention took place, results still favor promoted students over retained students.

Longitudinal studies also challenge the belief that early retention produces achievement gains while later retention does

Organized Knowledge

not. These studies suggest that any gains made initially due to retention are washed out over time.

Most studies do not provide support for retention. Those few that do provide such support also have several characteristics in common. The target populations tended to be more able students and retention was combined with intensive remediation. Furthermore, none of these studies followed up their student-subjects after more than one year to look at the long-term effects of retention.

Retention and Personal Adjustment

Studies of student attitudes toward retention reveal universally negative feelings. Invariably, students who are retained recognize the change as failure and feel ashamed. When asked to rate stressful experiences, one group of students **rated only blindness and parental death as more stressful than staying back in school.**

Clinical interviews with retained students indicate that they perceive their retention as punishment for "flunking." In one study of children who had been retained, a surprising 43 percent of the girls and 18 percent of the boys **did not include themselves when asked to name students in their class who had stayed back.** In the same study, 84 percent of the students who were retained described feeling "sad," "bad," or "upset" about staying back. Forty-seven percent reported being punished by their parents.

Retention and School Dropouts

Convincing research suggests that the act of retention by itself increases the likelihood that students will subsequently drop out of school. In fact, being held back once increases a student's likelihood of dropping out of school by 30 percent; being held back twice makes dropping out virtual certainty.

Does Retention Benefit Any Child?

Many factors, such as visual-motor skills, physical size, and standardized or informal tests of readiness, are considered by parents, teachers, and administrators when they make their retention decisions at the kindergarten and first grade level. But the research shows that these characteristics are not good predictors of positive outcomes. In particular, the use of standardized tests in kindergarten or first grade to determine school entry or promotion is often inappropriate, since these tests are designed to be used typically as screening tests. Also, such testing practices disproportionately and adversely affect minority and low-income children.

Although some small percentage of those retained may be helped, the evidence indicates that educators are simply unable to predict accurately which individuals these will be.

Cost

The National Education Association estimates that last year

Organized Knowledge

(1989-1990) U.S. public schools spent an average of \$4,890 per K-12 pupil. If a school district retained 30 students last year - and spent the average dollar amount on each of them - such a district would have incurred an additional \$146,000 for 1989-1990. Quality teacher training in effective instructional technology cost much less.

Curricular: Subjects

SPELLING*

* SOURCE: "Reading-Spelling Links," Kathleen Stumpf Jongsma, *The Reading Teacher*, April 1990, pp. 608-610.

Good readers and spellers must integrate at least three kinds of information if they are to develop control over the spelling system: (a) how a word sounds, (b) how it looks, and (c) what it means. However, a concern for surface structure irregularities combined with an isolated skills approach has led to materials and activities that require the rote memorization of spelling words and much drill and practice with isolated phonics and spelling "rules."

Recent spelling research by Edmund Henderson suggests that control of the system requires on-going development and refinement of tacit ideas about how words work. Learning about words is more than memorization; it is a form of concept development. Children use print experiences to formulate ideas about words and to develop strategies for processing and producing them.

Darrel Morris's research suggests that there are strong positive correlations between the ability of kindergarten and first-grade children to: (a) systematically represent individual phonemes in words with letters, (b) keep their place in print while reading known story, and (c) acquire a stable sight vocabulary.

What are the implications for instruction? First, children need wide experience with print so that they can build an adequate knowledge base for exploration and concept development. Second, literacy instruction should include a formal word study component that is based on our current knowledge about the nature of English spelling and our understanding of the stages of development of word knowledge. Third, reading and spelling instruction should be coordinated. Children should not be expected to correctly spell words they cannot read or words they rarely hear or use.

- Jerry Zutell (*The Reading Teacher*, April 1990)

While it is true that children who write and use invented spelling make great strides in developing spelling competency and generate spellings that over time approximate conventional spelling, it is not true that writing alone, and incidental learning, produce expert spellers.

Here are a few safe spelling strategies that are supported by considerable research:

1. **Do teach spelling.** Remember that a spelling program must be based on current research and that research overwhelmingly rejects the notion that spelling is learned incidentally (Fitzsimmons and Loomer, 1977; Peters, 1985).

2. **Understand developmental aspects of learning to spell and**

Curricular: Subjects

how spelling should be integrated with the total language arts program (Gentry, 1987).

3. Encourage young children to invent spelling for words they may not have learned to spell, allowing them to think about spelling and demonstrate their acquired skills (Gentry, 1987).

4. De-emphasize correctness, memorization, and mechanics in first drafts or in pieces of very young spellers. Adjust expectations to fit the children's level of development (Gentry, 1987).

5. Teach the words that children use in their writing (Smith and Ingersoll, 1984).

6. Use a test-study-test format (Horn, 1947; Yee, 1969).

7. Use the self-corrected pretest technique (Horn, 1947; Christine and Hollingsworth, 1966).

8. Use strategies that help children develop perception of word form (Peters, 1985).

9. Teach spelling consciousness. Respond to children's writing in ways to help them discover more about spelling (Gentry, 1987).

10. Teach children to proofread for spelling (Gentry, 1989).

- (J. Richard Gentry (The Reading Teacher . April 1990)

DRAMATIC PLAY*

* SOURCE: "Dramatic Play: A Context for Meaningful Engagements," James F. Christie, *The Reading Teacher*, April 1990, pp. 542-545.

Recent research on emergent literacy has revealed dramatic play can also make important contributions to children's early reading and writing development.

A growing body of research indicates 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 (Hall, May, Moores, Shearer and Williams, 1987; Schrader, 1989). While enacting domestic themes in the housekeeping center, children have been observed to engage in a variety of home literacy routines. Other dramatic play themes have been found to elicit additional real-life uses of literacy.

When print becomes an integral part of children's dramatic play, literacy development is promoted in a number of ways. First, children have a chance to consolidate and demonstrate what they have learned about the everyday uses of written language. Second, children can experiment with scribble writing, invented spelling and emergent reading in rich, contextual situations. Third, engaging in dramatic play can help develop children's knowledge of story structure by giving them an opportunity to invent and act out their own narrative scripts. Finally, they have opportunities to see literacy vocabulary, including terms such as read, write, pencil, paper, and book in meaningful contexts. Use of such metalinguistic terms during play has been found to be positively related to measures of emergent literacy development (Pellegrini and Galda, 1991).

The literacy routines that children incorporate into play reflect their growing conceptions about the everyday functions of written language, and the written by-products of play can reveal much about the developmental level of their emergent writing.

Simply giving children an opportunity to engage in free play will not guarantee that rich, sustained dramatic play will occur or that literacy activities will become integrated into children's dramatizations. Research has shown that some children, particularly those from low-income families, seldom engage in dramatic play in classroom settings unless special intervention programs are implemented (Dansky, 1980; Saltz, Dixon and Johnson, 1977; Smilansky, 1968). Even with children who engage in frequent dramatic play, literacy behaviors are often absent unless classroom play areas are properly equipped (Hall, et al., 1987).

In order to take full advantage of dramatic play's potential as a medium for literacy development, attention must be given to

Curricular: Subjects

three factors: (a) the settings in which play occurs, (b) the amount of time allocated for play activities, and (c) the type of teacher involvement in play episodes.

1) Children are much more likely to incorporate reading and writing into their dramatizations if these types of materials are available in the housekeeping corners: pens, pencils, note pads, diaries, cookbooks, telephone books, picture books, magazines, catalogs, and newspapers.

The range of children's play themes and related literacy activities can be greatly expanded by the addition of a them center to the classroom. These centers have props and furniture that suggest specific settings that are familiar to children such as a doctor's office, restaurant, bank, post office, or grocery store.

2) Research has shown that preschoolers are more likely to engage in rich, sustained dramatic play during 30 minute play periods than during 15 minute sessions (Christie, Johnson, and Peckover, 1988).

3) Classroom play can be greatly enriched through teacher participation. Teacher involvement has been found to assist "nonplayers" to begin engaging in dramatic play, to help more proficient players enrich and extend their dramatizations, and to encourage children to incorporate literacy into their play episodes (Christie, 1983; Morrow and Rand, 1991; Smilansky, 1968). By watching children as they play, teachers demonstrate that they are interested in the children's play and that play is a valuable worthwhile activity.

In addition, outside and inside interventions can be used sparingly to make comments and suggestions to children while they are playing, or to take roles with the dramatic play to help facilitate and expand play roles and direction.

- James F. Christie (The Reading Teacher . April 1990)

Curricular: Subjects

PHONICS*

*SOURCE: "Beginning to Read: A Critique by Literacy Professionals and a Response by Marilyn Jager Adams," (The Reading Teacher, vol. 44, No. 6, February 1991) pp. 370-395.

Beginning to Read: Thinking and Learning about Print, Marilyn Jager Adams's review of beginning reading instruction, including the role of phonics, has promoted considerable dialogue and debate in literacy education community. In this feature, literacy professionals of varying perspectives comment on Adam's work, and Adams herself then responds to their comments.

Adams will be undoubtedly be acclaimed, or vilified as a proponent of phonics. This will occur even though she notes the disarray found in the current phonics programs, suggests that no one knows what to teach when or how to teach phonics best (p.245), even though she suggests that learning to sound out words is not the primary positive effect of phonics instruction (p.54), even though she notes that teaching phonics rules is a waste of time (p. 212), even though she argues that many disabled readers have learned the basic letter-sound correspondences but still cannot read (p. 208), and even though she writes in wonderfully clear language about the powerful potential in the use of big books, shared reading, invented spelling, early writing activities, and the use of rich, inviting texts as the basis for initiating literacy lessons.

...Adams contextualizes the phonics debate firmly in the midst of real reading and writing activity. Her constant reminders that phonics skills and knowledge are best fostered and only useful in real reading and writing are the central message of this book and are differentiates it from its historical predecessors.

... her criticisms of the materials, methods, and mindlessness of much of what has been offered as phonics instruction should make her view of the materials debate clear to all but the thickest of readers. She makes it clear that teachers need to teach effective strategies for dealing with print and that to accomplish this they need to know their children and their children's literacy development.

... she raises the issue of what to do with children who arrive at school ill-prepared for the curriculum demands we have set for them. Here she describes the impact on school learning of the differences in experiences with print and texts that children have before they enter our schools. Adams asks the hard questions about the discrepancy between those children with 200-300 hours of print and text interactions and those with 2,000-3,000 hours. How can teachers make up the differences given only 200 or so hours per year devoted to literacy instruction in the early grades? The latter group is usually successful regardless of how badly we organize our initial instruction; the former group rarely recovers from the disadvantage they arrive with.

Curricular: Subjects

Adams tells us clearly that what we have offered as phonics instruction was more often worthless than useful...Richard Allington.

Adams calls invented spelling "essentially a process of phonics" and concludes that it "simultaneously develops phonemic awareness and promotes understanding of alphabetic principle" (p.38). Donald J. Richels

MY PURPOSE IN WRITING

Beginning to Read: Thinking and Learning about Print

The purpose of this book was not to produce "an endorsement for phonics instruction." As Allington points out, I seriously question the value of much of the methodology and materials that are offered under that rubric along with the very notion of teaching phonics first. ... I do not believe that "any universal best method for teaching reading... can be defined in outline. The effectiveness of a method depends too much on the details of its realizations - its materials, its teachers, its students, and the compatibility of each with the other" (p.423).

Toward cautioning policy makers against issuing simplistic compliance regulations, I tried to underscore the complexity of the issues and to vivify the dependence of effective instruction on sensitive awareness of both its goal and individual students with whom one is working.

Across the literature, measures that have proven to be poor predictors of reading success include mental age, IQ, parental education, affluence, handedness, learning styles, perceptual-motor skills, and oral language characteristics. In contrast, two powerful sets of predictors are preschoolers' familiarity with letters of the alphabet and their awareness of phonemes (the speech sounds that correspond roughly to individual letters). Of these, preschoolers' awareness of phonemes holds impressive predictive power, statistically accounting for as much as 50% of the variance in their reading proficiency at the end of first grade.

But there is an important twist in this plot. While a preschoolers' phonemic awareness may be the best single predictor of how much that child will learn about reading in school, the best predictor of a preschoolers' phonemic awareness is found to be how much she or he has already learned about reading- normatively speaking, the same must also be true of children's familiarity with letters. Both of these strong predictors, in other words, are tied directly to children's experiences with print.

...the essential message of the literature on phonemic awareness is that productive knowledge of letter-sound correspondences comes not through drill but understanding. Indeed, only as a child understands the system can she or he gain anything worthwhile from whatever practice, rules, or direct instruction we

Curricular: Subjects

might present. Moreover, if children understand the system, they will extend and refine it on their own as they read and write.

I do not advocate complete knowledge of the nature and identities of isolated phonemes- that is an appropriate challenge only for phoneticians. What I advocate is more careful pedagogical attention to whether or not each child has developed conscious awareness of the existence of phonemes- of the idea that the sounds of syllables can be broken apart. This insight is essential for making sense and use of letter-sound correspondence.

...I do argue strongly that children's familiarity with the visual shapes of letters should be well in place at the outset of formal reading instruction. However, I also argue that knowledge of letters is of little value unless the child knows and is interested in their value. Letter play is only productive to the extent that children are also engaged regularly and interactively in the enjoyment of print. I do suggest that teaching children the names of letters... I do not, on the other hand, advocate drilling the letters to perfection before reading and writing instruction is begun. ...but the best way to give one's students the interest and experience for refining such skills is through meaningful and motivated engagements with print.

"Ponderous drills" on "isolated skills" are no more a way of developing reading than they are representative of what reading is about.

- Marilyn Jager Adams

Curricular: Subjects

PHONICS*

SOURCE: "Dear Readers," William Teale, *Language Arts* vol. 68, no. 3, March 1991, pp. 184-187.

Nothing in language arts education at the elementary school level gets as much of a visceral response as the topic of phonics. It has come to pass that phonics is largely viewed as either the great savior or the great evil, the key to good reading or the chief characteristic of poor reading instruction. As a result, much of what one hears about the issue of decoding in reading is couched in either-or terms. Either you use a comprehension approach in teaching reading, or you use a decoding approach.

Such a situation is unfortunate because what gets obscured is debate about where the true differences in theory and in practice are when it comes to decoding and reading. Let's face it; a dichotomy between decoding and comprehension is a silly way to think about the reading process and the teaching of reading. There is virtually unanimous agreement in the field that both decoding and comprehension are indispensable parts of reading and learning to read.

So where does the either-or come from? Part of it, I think, comes from a conflation of decoding with phonics. Phonics is all about instruction; it's an approach to helping children learn about sound-symbol relations in written language. In other words, phonics is a way of teaching children about decoding and how to decode. Furthermore, the typical image of phonics instruction is that of skill-and drill lessons, worksheets, and largely out-of-context practice that get children to learn about letters and sounds but don't necessarily get them to apply their knowledge in classrooms. Phonics people cry "Foul" at this, saying that that is not what good phonics teaching is. However, the fact remains that it is what happens in the name of phonics in beginning reading programs around the United States.

But note that decoding itself is not inherently linked with any particular way of teaching. Nor is the issue of direct versus indirect instruction, if by direct instruction we mean that the teacher purposely devises activities designed to help children to learn about letters and sounds and how they relate to each other. It is clear that good whole language teachers, consciously and with forethought, devise activities that focus children on learning the code. Teachers who go into each day of school merely willing to react to any problems children just happen to have with decoding in the context of that day's activities are not as helpful as teachers who, based on what they know about students' skill and needs in decoding, deliberately plan lessons to help children learn more about the code so that they become better readers.

So, I suspect that much of the time when educators say that they don't like programs that teach decoding, what they really mean is that they don't like particular ways of dealing with decoding in beginning reading. One can easily be in favor of teaching decoding

Curricular: Subjects

but not be in favor of phonics.

What we in the field really need to make clear is what we're supporting and what we're objecting to when it comes to decoding and beginning reading so that we can get beyond the either-or issue. Otherwise, thousands and thousands of teachers and many teacher educators will continue to think of it as phonics or comprehension, literature or teaching skills, learning or teaching. Think of what such conceptions mean for classroom practice.

Given that, some have called for an end to the debate, saying that we need to find a way of bringing together the phonics-first people and the whole language people. Take the best of each because some of each is involved in reading and teaching reading, they say. But surely that is nonsense, to. It misses the point completely. On the surface everyone wants instruction in both decoding and comprehension for beginning readers. Where the important differences come in is with the intentions and mindset that guide instruction. There are differences; there is a need for discussion. The solution is not in eclecticism.

The first step is for educators to understand the articulated positions. This means that we must make clear just what is involved with different approaches to beginning reading (i.e., what is involved theoretically, politically, and socially, as well as what effects they have on children [their knowledge, strategies, and affect], and what materials and methods are used.) Some may argue that the positions have already been clearly articulated; but I'll bet that if we were to pick out 200 random kindergarten and first-grade teachers, 50 school principals, and an equal number of teachers of language arts methods courses, we would find that there is a great deal of fuzziness and even misinformation out there.

As far as I am concerned, intensive phonics is the wrong way to go about teaching beginning reading. But I also feel that whole language without decoding equates to disaster for beginning to reading. (In fact, any thinking whole language advocate would say that there is no such thing as whole language without decoding.)

Maybe we need a new label; maybe we don't need any label. One thing seems clear, however: We need beginning reading programs that, first and foremost, take functional, meaningful, purposeful approaches to reading, that keep comprehension at the center of reading, and that build in the learning and teaching of decoding at every step.

Curricular: Subjects

MATHEMATICS*

*SOURCE: Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom, Volume 1: Summary, U.S. Department of Education . Office of Planning, Budget and Evaluation, Washington, D.C. January 1990.

Regarding mathematics curriculum and instruction, the following are widely held to be important ingredients for effective elementary curriculum in schools serving disadvantaged students:

- . An emphasis on the understanding of mathematical concepts that are part of computation, symbols, mathematical problem-solving, etc.
- . Reduce emphasis on computational skills in the upper elementary grades, especially when it is taught out of context.
- . A broader range of other mathematical topics, including at least geometry, estimation, probability, and statistics, which are covered in greater depth for mastery, rather than touched on for "exposure."
- . Opportunities to apply mathematical ideas and skills to novel problems and real-life situations.
- . Less redundancy in curricula across grades.

In implementing curricula of this sort, there is widespread agreement that good mathematics instruction for this and other student populations involves:

- . Explicit teaching of mathematical problem-solving strategies.
- . Teacher-student and student-student discourse about mathematical ideas or skills and their applications to life experience.
- . Multiple representations of mathematical ideas and operations, including graphical displays and manipulative.
- . Experiences with educational technologies as mathematical problem solving tools (computers, calculators, etc.).
- . Some opportunities for project-based learning of mathematics.

Curricular: Subjects

READING *

*SOURCE: Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom, Volume I: Summary, U.S. Department of Education . Office of Planning, Budget and Evaluation, Washington, D.C. January 1990.

Good reading curriculum for disadvantaged elementary school students, as viewed by many contemporary reading scholars, is characterized by:

- . **Emphasis on meaning**, that is, on comprehending what is read, employing the full range of cues (phonemic, contextual, knowledge-based) as aids to "constructing" meaning.
- . **Less emphasis on the teaching of discrete coding skills in isolation from their use**, as children move up through the grades.
- . **Exposure to a wide range of appropriate text**, including children's literature.
- . **Reading material that reflects and respects the life experiences and backgrounds of the students.**

While a variety of teaching approaches have value in conveying this kind of curriculum to students, it is widely believed by experts that reading instruction for disadvantaged students should include:

- . **Opportunities to engage in extended silent reading of appropriate texts from the earliest stages in learning how to read**, rather than after the "basics" have been mastered.
- . **Teacher-student and student-student discourse about meaning and interpretation of material that has been read**, as well as its relevance to students' life experiences.
- . **Explicit teaching of comprehension strategies through means such as cognitive modeling.**
- . **The chance to relate reading to other uses of language**, in particular, written and oral expression.

Curricular: Subjects

WRITING*

*SOURCE: Better Schooling for the Children of Poverty: Alternatives to Conventional Wisdom, Volume I: Summary, U.S. Department of Education . Office of Planning, Budget and Evaluation, Washington, D.C. January 1990.

An emerging conception of a good writing curriculum for this student population parallels that for reading in many respects. Such a curriculum:

- . **Emphasizes meaningful written communication.**
- . **Deemphasizes the learning of written language mechanics (spelling, punctuation, grammar, etc.) in isolation from the act of communicating in writing.**
- . **Draws on students' experiences and knowledge, as well as on other realms of experience less familiar to students.**

Introduces students to process of writing and skills appropriate to each stage in the writing process.

To impact this kind of curriculum to disadvantaged students, language arts instruction should:

- . **Provide frequent opportunities to write text from the earliest stages, rather than after the "basics" have been mastered.**
- . **Engage in discourse with and among students about the meaning of what they have written.**
- . **Expose students to various genres, such as narrative, descriptive, and persuasive writing.**
- . **Create the conditions that encourage the use of written language for meaningful communication.**

Curricular: Subjects

SOCIAL STUDIES*

SOURCE: *Renewing the Social Studies Curriculum*. Walter C. Parker, Alexandria: Association for Supervision and Curriculum Development, 1991.

THE GOAL OF THE SOCIAL STUDIES EDUCATOR IS TO HELP STUDENTS DEVELOP a deep, rich network of understandings related to a limited number of essential topics. Which topics are essential? Answering this question is the renewal committee's most important work.

Five Essential Learnings

The five most essential learnings of the K-12 social studies curriculum: the democratic ideal, cultural diversity, economic development, global perspective, and participatory citizenship.

Of course, there are disagreements as to what these big questions are. But such disagreement is not a problem, it is very sort of debate that is needed. It is the most important conversation curriculum planners will have.

Understandings that were developed under challenging circumstances are likely to be richer, deeper, and to have been cross-examined. Hence, they are more likely to be helpful (Resnick and Klopfer 1989).

I will elaborate later the elements of challenging circumstances, but, for now, I mean circumstances where (a) topics are studied in depth and (b) gathering and recalling facts are necessary but not sufficient for grappling with the problem or task at hand. These are circumstances in which the learner is required by the unit plan to gather and remember information and to go even further by analyzing, interpreting, and manipulating it.

Suffice it so say at this point that critically important understandings are at the heart of the social studies curriculum. To renew the social studies curriculum is to deliberate with others about which understandings are most important and then to create, systematically and artfully, a 13-year-long opportunity for students to build, refine, and apply those understandings.

Pervading Commitments

Three commitments pervade this book: First, the social studies curriculum can and must be genuinely thought-provoking for virtually all students. Second, the social studies curriculum should concentrate the intellectual resources of the student and the instructional resources of the school on a limited number of essential learnings that are treated in depth. The third commitment running through the book is democratic education. By this I generally mean education about democratic ideals and practices. More specifically, I mean the education of what

Curricular: Subjects

interchangeably can be called "democratic" and "deliberative" character. At the heart of democratic character is the wherewithal to deliberate, which we will define as "careful consideration with a view to decision" (Gutmann 1987). Deliberation is democracy's primary virtue.

To educate children for democratic character is thus to educate them to share in ruling, in deliberation; to educate them to rule without discrimination or repression; to rule in such a way that daily life is moved closer to the democratic ideal, especially for those disadvantaged by present arrangements; and to accomplish this movement in an orderly enough way that democracy itself is not sacrificed to it.

Two critical elements are brought to bear:

1. In-depth study: the sustained examination of a limited number of important topics. Superficial exposure to a vast array of topics undermines the habits of thoughtfulness we need to cultivate in social studies education.
2. Higher-order challenge: the design of curriculum and instruction that requires students to gather and use information in non routine applications. Future civic crises will be crises in part because of their novelty if we have nothing in our repertoire of experiences that tells us in quite enough detail what to do.

A National Pattern

In spite of the ample opportunities for controversy within school districts, and the large number of school districts (about 16,000) making their own social studies curriculums, there is, in effect, a national social studies scope and sequence, (Morrissett 1982).

- K - Self, School, Community, Home
- 1 - Families
- 2 - Neighborhoods
- 3 - Communities
- 4 - State History/Geographic Regions
- 5 - U. S. History
- 6 - World Cultures, Western Hemisphere

The name often given to the K-6 portion of this dominant scope-and-sequence pattern is expanding environments or expanding horizons.

Alternatives

Perhaps the most provocative is one put forward by the Bradley Commission on History in the Schools (1988).

Curricular: Subjects

Social Studies as History

- K - Children's Adventures: Long Ago and Far Away**
- 1 - People Who Made America**
- 2 - Traditions, Monuments, and Celebrations**
- 3 - Inventors, Innovators, and Immigrants**
- 4 - Heroes, Folk Tales, and Legends of the World**
- 5 - American History: Biographies and Documents**
- 6 - World History: Biographies and Documents**

Six themes, some too broad to be helpful as content selection guides, elaborate somewhat the content at each grade level:

- 1. Civilization, cultural diffusion, and innovation**
- 2. Human interaction with the environment**
- 3. Values, beliefs, political ideas, and institutions**
- 4. Conflict and cooperation**
- 5. Comparative history of major developments**
- 6. Patterns of social and political interaction**

We might compare this history-dominated framework to the global education alternative. Its author leaves the planning of sequence to the local curriculum committee but proposes four "essential elements" and five "themes," which are to be spiraled through the K-12 sequence. The essential elements, define global education; the themes focus attention, make connections across the curriculum, and encourage transfer of knowledge from the classroom to everyday life.

Social Studies as Global Education
(kniep 1989)

Essential Elements

- 1. The Study of Systems**
- 2. The Study of Human Values**
- 3. The Study of Persistent Issues and Problems**
- 4. The Study of Global History**

Themes

- 1. Interdependence**
- 2. Change**
- 3. Culture**
- 4. Scarcity**
- 5. Conflict**

Goals

In addition to a national scope-and-sequence pattern, there is something of a national goals statement for social studies. The central goal of social studies is commonly given as education for

Curricular: Subjects

democratic citizenship. School districts typically divide this goal into four parts: knowledge, skills, values, and participatory citizenship. The last of these, the most recent addition, is sometimes grouped with skills.

Knowledge

The knowledge goal is often specified as the subject areas of history and the social sciences-geography, economic, political science or civics, anthropology, sociology, and psychology. Actually, these are not knowledge goals, but sources of knowledge goals.

Let us look at two variations. The first of the three scope-and-sequence alternatives recommended by the National Council for the Social Studies (NCSS), the one that follows the expanding environments pattern, emphasized that "knowledge is derived from encounters students have with the subject matter of the social studies...." The "essential sources" of that subject matter "from which knowledge goals for social studies should be selected" are given as follows:

- * **History-** of the United States and the world; understanding change and learning to deal with it
- * **Geography-** physical, political, cultural, economic; worldwide relationships
- * **Government-** theories, systems, structure, processes
- * **Law-** civil, criminal, constitutional, international
- * **Economics-** theories, systems, structures processes
- * **Anthropology and Sociology-** cultures, social institutions, the individual, the group, the community, the society
- * **Psychology-** the individual in intergroup and interpersonal relationships
- * **Humanities-** the literature, art, music, dance, and drama of cultures
- * **Science-** the effects of natural and physical science on human relationships

(Task Force on Scope and Sequence 1989)

Values

The new California framework boils this down to two categories:

* **Understand what is required of citizens in a democracy** (e.g., taking individual responsibility for one's own ethical behavior, controlling inclinations against aggression, and attaining a certain level of civility)

* **Understand individual responsibility for the democratic system** (e.g., students need to ponder the fragile nature of the democratic system and the processes through which democracies perish)

Curricular: Subjects

To one degree or another, this approach to values education involves all five means listed earlier:

* **Inculcation** -In issues-oriented discussions, students are exhorted to be inquisitive listeners as well as skilled talkers, and to be well-informed on the issues.

* **Analysis**- Students are taught to bring logical thinking to the examination of public issues-to detect bias and determine the credibility of sources, to draw historical parallels, and to spend considerable time stating and clarifying issues.

* **Clarification**- Students are helped to become aware of their own values and to express them openly and honestly in discussions.

* **Action Learning**- Disciplined discussion of public issues with peers is action. Open, free, public talk is the most basic form of action in a democratic society.

* **Moral Development**- Students are encouraged to grow in their ability to reason in a principled way about public issues by giving reasons for their opinions and listening carefully to different lines of reasoning on the same problem.

21st Century Goals

Social studies content is concerned with developing reflective, democratic citizenship within a global context and includes the disciplines typically classified as belonging to the social and behavioral sciences as well as history, geography, and content selected from law, philosophy, humanities, and mathematics. It also includes those topics and issues that focus on social problems, issues, and controversies. The social studies can be oriented to one discipline or multiple disciplines, depending upon the topic selected for study. Social studies programs address four educational goals:

* The development of enlightened democratic citizenship for effective participation in local, state, national, and international affairs

* The appreciation and understanding of our cultural heritage, including diversity and its role in contemporary society

* The acquisition of academic knowledge and abilities related to the study of the motives, actions, and consequences of human beings as they live individually as well as in groups and societies in a variety of place and time settings; and the joy of learning about self, others, and human history

* Learning "how to learn"-how to use prior knowledge to understand complex ideas and how to create new ideas

All these goals are of equal importance, for they reinforce each other. Thus the goal of citizenship is supported by the goals of discipline, academic study, and ongoing learning.

Curricular: Subjects

Program Scope: Major Curriculum Themes

The particular curriculum design suggested here is based upon ten themes that extend logically from the previously identified goals. These themes are included at each grade level with increasing sophistication and constitute, in large measure, the program scope. The themes help define the program's scope to the extent that they present perspectives that provide students the temporal, spatial, and cultural criteria necessary for comprehension and rational action. To some degree, any delineation of major themes is arbitrary. Whereas different themes may be emphasized at various grade levels, they should be included at every grade and may be presented in any coherent order based on the maturity level and ability of the students.

With the above in mind,

Grade Levels

K 1 2 3 4 5 6 7 8 9 10 11 12
<-----Cultural Heritage----->
Global Perspective
Political/Economic
Traditional and Change
Social History
Spatial Relationships
Social Contracts
Technology
Peace/Interdependence
<-----Citizenship----->

Conceptual Themes for the Social Studies

1. Interdependence

We live in a world of systems in which the actors and components interact to make up a unified, functioning whole.

Related concepts: causation, community, exchange, government, groups, interaction systems.

2. Change

The process of movement from one state of being to another is a universal aspect of the planet and is an inevitable part of life and living.

Related concepts: adaption, cause and effect, development, evolution, growth, revolution, time

3. Culture

People create social environments and systems comprised of unique beliefs, values, traditions, language, customs, technology, and institutions as a way of meeting basic human needs; shaped by their

Curricular: Subjects

own physical environments and contact with other cultures.

4. Scarcity

An imbalance exists between relatively unlimited wants and limited available resources necessitating the creation of systems for deciding how resources are to be distributed.

Related concepts: adaption conflict, exploration, migration, opportunity cost, policy, resources, specialization.

5. Conflict

People and nations often have differing values and opposing goals resulting in disagreement, tensions, and sometimes violence necessitating skill in coexistence, negotiation, living with ambiguity and conflict resolution.

Related concepts: authority collaboration, competition, interests/positions, justice, power, rights.

Curricular: Broad Field

MYTHS OF WHOLE LANGUAGE*

* SOURCE: "Myths of Whole Language," Judith M. Newman and M. Church, (The Reading Teacher, vol.44, No.1. September 1990) pp. 20-26

Myth: You don't teach phonics in whole language.

Reality: Whole language teachers do teach phonics but not as something separate from actual reading and writing.

Myth: You don't teach spelling or grammar in a whole language classroom.

Reality: These aspects of language are a means to an end rather than an end in themselves. When it seems appropriate, the teacher might provide information or assistance through short, focused lessons with individuals, groups, or the whole class. When children have real audiences for their writing, they have reasons to pay attention to the conventions of written language.

Myth: Whole language means a literature-based curriculum.

Reality: We don't limit ourselves to activities that fit into a particular theme or even to texts of a particular genre. We try to capitalize on opportunities prompted by our students' interests in the world outside the classroom. We don't worry about forcing everything that goes on in the classroom into a single theme.

Myth: Whole language is a way of teaching language arts; it doesn't apply to other subject areas.

Reality: Whole language philosophy underlies the entire curriculum.

Myth: In a whole language classroom you don't have to teach.

Reality: Teachers working from a whole language perspective are active participants in the learning context. We continually work at structuring an environment in which learners can engage in purposeful activities. We initiate learning activities. We are ever on the alert for opportunities to present learners with challenges that gently push them beyond their current strategies and understanding. We are constantly observing our students, asking questions, and inviting contributions from all members on the class in order to judge when learners can best use particular information.

Myth: A whole language classroom is unstructured.

Reality: A whole language classroom is highly structured. While long-range objectives have been carefully considered, the moment-to-moment decision-making is fluid. Whole language teachers make every effort to merge students' interests with overall instructional goals thereby creating a flexible, yet

Curricular: Broad Field

comprehensive curriculum.

Myth: There's no evaluation in whole language.

Reality: Teachers working from a whole language perspective are always evaluating. We observe and interact with students to discover not only what but how they're learning.

Myth: In whole language classrooms there are no standards; anything goes.

Reality: We encourage learners to impose increasingly demanding expectations for themselves.

Myth: Whole language teachers deal just with process; the product doesn't matter.

Reality: We know the value of distinguishing between work-in-progress and finished products. But not all work needs to be perfected. The important thing is assisting students to discern when conventions matter and when they don't.

Myths: Whole language philosophy applies only to teaching children in the early grades.

Myths: Whole language won't work for kids with special needs.

Reality: Children having difficulty in school for whatever reason are the very ones who benefit most from a learning context that encourages them to take risks and to experiment. Many of these children have stopped believing they can learn.

Myths: There is little research to support whole language.

Reality: The research base for whole language philosophy is broad and multidisciplinary. It includes research in linguistics, psycholinguistic, sociology, anthropology, philosophy, child development, curriculum, composition, literary theory, semeiotics, and other fields of study.

Myth: All you need for whole language is a "whole language" commercial program.

Reality: But they do not, in themselves, create a whole language learning environment. To create a whole language-based classroom, we must learn to observe our students closely and be about our teaching.

Myth: Whole language is a methodology.

Reality: Our methodology is dynamic and continually evolving-guided by our observations of students and our ever-changing understanding of theory.

Myth: Giving teachers a few whole language tips makes them into whole language teachers.

Tips perpetuate unreflective teaching; they misrepresent the

Curricular: Broad Field

complexity of what is involved in creating a learner-centered classroom.

Myth: You need only a few inservice sessions to change teaching practice.

Reality: Traditional, one-shot inservices give teachers a few new ideas, but they leave people without the analytic tools to be able to figure out where to go next or why.

Myth: Whole language simply involves a change in classroom practice; it's business as usual for administrators.

Reality: Everyone involved in implementing whole language philosophy has to become a learner. Administrators need to recognize that changing one's philosophical stance involves the same learning processes that teachers are trying to establish for students in the classroom.

Myth: There is one right way to do whole language.

Reality: But the reality is that there is no one right answer to any question about teaching. Every question can and must be answered by "It Depends." It depends on what has gone on before, on what the students seem to know, on the strategies they have at their disposal at the moment, on how ready they seem to be to forge ahead, on the resources at hand, on how much time is available, on how far we teachers think we can push the conventional expectations and values of the school and the community.

Myth: Whole language is only for super-teacher.

Reality: Anyone willing to take some risks can begin the exploration.

Curricular: Broad Field

History of American Education*

*SOURCE: "A Photo History of American Education," "A Teacher's Tools," *Instructor*, (January 1991) pp. 34-59.

Print Media

Standardized textbooks, subject and age-specific, began to proliferate as schools organized their students and curricula by subject and age. In 1836, William H. McGuffey set the stage for modern basals by publishing the *Eclectic Reader*, graded reading books for elementary school.

The Parade of Teaching Tools

Its early advocates called it "invaluable." Schools across the nation installed it in their classrooms. A few teachers adopted it, winning the praises of education reformers. But it was at first ignored by many teachers. These devices "are not uncommon," noted one educator, "but they are little resorted to by the teachers." (*First Annual Report to the School Commissions of Connecticut* by Henry Barnard, 1839.) In fact, observed another, the teacher "knows almost as little how to use it as his pupils." ("Slate and Black Board Exercises for Common Schools" reprinted in *Connecticut Common School Journal*, vol. 4, nos. 8-11 April 1. 1842-May 15, 1842; page 69.)

Kindergarten

Susan Blow opens the first public kindergarten in the United States in St. Louis, Missouri, in 1873.

Woman Superintendent

Laura Eisenhuth, the first woman in the nation to hold a superintendent's position. Eisenhuth was elected school superintendent of North Dakota in 1893.

Reading, Reciting, and 'Rit. etic

In 1901, recitation was an important part of the elementary school curriculum, and much of a teacher's time was devoted to listening while pupils recited their lessons. In his book, *America's Country Schools* (1984), Andrew Guliford says, "...public speaking was both a terrifying challenge and an exhilarating opportunity to soar above the mundane...Many youthful politicians gave their first impassioned speeches in one-room schools.

Progressive Education

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4

Curricular: Broad Field

In 1916, philosopher and educator John Dewey published his book **Democracy and Education**, which would influence teachers for generations to come. Dewey believed, among other things, that schools should teach a spirit of cooperation and community, that curriculum should be grounded in a child's home life and play, and that teachers should move freely about the classroom, supervising group work. Almost 20 years before his theories gained acceptance from the education establishment, Dewey and his wife founded the Laboratory School in Chicago. The school's main purpose was "to train children in cooperative and mutually useful living."

Middle School

Carelton Wolsey Washburne establishes the middle school in the 1920s.

See Dick and Jane

Perhaps no other factor influenced the teaching of reading in America more profoundly than the publication, in 1930, of the first basal reader textbooks, known as the **Elson Readers**. Based on whole-work methodology, the Elson Readers introduced the nation's schoolchildren to the pristine world of Dick and Jane. Developed by William Scott Gray and William Elson, of Chicago, Illinois.

Science Static

When the Soviet Union launched Sputnik, the world's first artificial satellite, on **October 4, 1957**, it also launched a state of panic over the condition of American education. Our country, it seemed, had fallen behind the Soviets in science, math, and technology-and Americans blamed the schools. In 1958, Congress passed the **National Defense Education Act**, designed, in part, to fund the purchase of new equipment and to strengthen instruction in science, mathematics, and foreign languages.

Open-and Shut-Case

In 1970, Charles Silberman's best-selling book, **Crisis in the Classroom**, introduced the general public to the philosophy of open education, which, since the late 1960's, had stressed child-centered methods, student freedom in choosing learning materials, and non structured teaching. To its advocates, the open classroom seemed capable of transforming education in America. Many classroom teachers readily embraced the concept -though the course of classroom traffic did not always run smooth.

By 1978, enthusiasm for open classrooms had waned, and the pedagogical pendulum swung back toward more traditional forms of teaching and learning. Many schools enclosed their open classrooms with partitions.

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5

Curricular: Broad Field

The Future Is Upon Us*

*SOURCE: "Six Views Of What We Must Do To Renew American Education For All Our Children," (Agenda . Spring 1991) pp.60-65.

A Blueprint For Survival

- Thomas Payzant, Superintendent, San Diego City Schools

We must begin by selling the idea that public education is important to everyone. It is critical to our democratic system that students be educated to be good citizens. It is crucial to our economy that students be prepared to become productive employees in a high-tech work place. America cannot tolerate a two-tier system of haves and have-nots, skilled and unskilled, employed and unemployed, English speakers and non-English speakers. Good schools are our only hope to avoid creating a permanent underclass in America.

An excellent place to begin would be implement a policy of coordinated services for children and families. No longer can America afford to be the only industrialized western nation without a carefully articulated policy covering the first five years of a child's life. The challenge is to persuade people working in the same arena to come together with action plans for interagency services. Scarce resources and demands for cost-effectiveness and accountability require collaboration, not myopic independent action.

Sound The Alarm

- Louis V. Gerstner, Jr. Chairman and Chief Executive Officer, RJR Nabisco, Inc.

We need to make the connection between what goes on in every classroom every day and our economic competitiveness, our quality of life, and the future of democracy. A good education isn't just a social nicety. It's the key to earning a decent living in an information age that demands solid reading, math, and reasoning skills for even the most basic jobs. Without restructuring, the gap between rich and poor will continue to widen until there is little hope of bridging it. America will become a second-tier economic power, losing out to competitors and their smarter labor pool. Without an educated populace to make political choices, our participatory democracy is in jeopardy.

Some of the most promising projects we have seen involve performance-based education, which allows students to progress at their own pace, and makes teaching more challenging.

GETTING DOWN TO BUSINESS

- Marc Tucker, President, National Center on Education and the Economy

Ganado Primary/Boloz

6

Curricular: Broad Field

We are dealing with systemic reform—a vast effort to set clear goals, to create clear measures of progress toward these goals, and to push decisions about how reach those goals down to the service-delivery levels of the organization. In both cases, there is a need to eliminate as many of the rules and as much of the bureaucracy as possible and to hold people on the front line responsible for the results.

But the corporations in the private sector have two enormous advantages over our schools. Largely out of the public eye, they can execute their strategies as they see fit. And because they are threatened with extinction if they fail, everyone has a powerful incentive to adopt new methods—however painful—that promise higher productivity and quality.

School restructuring differs from all previous reforms because it requires changing virtually all elements of the system at once—in effect, replacing the entire system.

NOTHING MORE THAN A QUICK FIX?

- Martha Fricke, President, National School Board Association

The premise of "choice" is to give parents the opportunity to pick the school their children will attend on the basis of educational advantage. I agree with that premise, but I believe choice is overrated as the answer to school reform. I'm concerned that choice is nothing more than a quick fix, a sexy idea that will probably be undertaken by more states, in part because of mounting pressure from the federal government.

What I see is parents picking a school that is convenient, saying, "It's on my way to work; it's close to home; it's close to the day-care provider." These parents are not taking the time to go to a school and check on courses and educational practices.

The problem remains that there will always be the "left behinds"—children whose parents will not choose another school because they will not know how to go about doing so. There will always be children remaining at poorer-performing schools, and they will almost always be the most needy children.

There is also a great fear that choice could revive racial segregation in our schools. Those youngsters who could likely choose suburban schools, precipitating a new round of white flight. I also foresee a great deal of litigation when and if choice begins to include parochial and private schools. This raises a constitutional question, and rightly so.

SOME MAGICAL FINISH LINE

- Sam Ginn, Chairman and Chief Executive Officer, Pacific Telesis Group

Ganado Primary/Boloz

7

Curricular: Broad Field

We can take great strides forward during the next decade. First, we must guard against the expectation that one solution will provide the proverbial silver bullet for education reform. Restructuring must involve every aspect of our public education system. It means decentralizing decisions and responsibility for results to the school site level. It means better measurement tools that consistently test every student at key points in his or her academic life.

Restructuring means parental involvement and choice. And it means, as California Governor Pete Wilson has said, adding a pragmatic fourth "R" to reading, writing, and arithmetic - readiness -to ensure that each and every child comes to school ready and able to learn.

Education reform also means doing a better job of linking school more closely to work for those who do not go on to college. Once a student has mastered a core curriculum, we should be exposing that young person to a vast array of specialized education and apprenticeship opportunities - opportunities that simply don't exist today.

REBUILD THE PARTNERSHIP

- Ernest L. Boyer, President, The Carnegie Foundation For The Advancement Of Teaching

Education has always been a collaborative endeavor; schools have been successful precisely because they had a network of support. In the early days children often served as apprentices to local craftsmen. Neighbors cared for other people's youngsters. In colonial America, preachers were considered teachers of morality, and in most families it was the responsibility of older children to help educate their younger siblings - a practice that persisted for many generations. Above all, it was parents who were the first and most essential teachers.

But slowly the partnership weakened. Families no longer worked together. Apprenticeships were abolished. Older children became less engaged in the education of their siblings. Church influence diminished. Neighbors became strangers to one another. And the school, increasingly, became an isolated, disconnected institution, without the essential network of support. Today, we hear endless talk about how the public schools have failed. And surely education must improve. But I've become convinced that it's not the school that has failed, it's the partnership that has failed.

Increasingly, schools are being asked to teach not only the basics, but also to stop drug abuse, reduce teenage pregnancy, eliminate graffiti, and teach good manners. For many years I talked about making the public school a social service agency - a place to meet all the social, physical,

Curricular: Broad Field

emotional, and intellectual needs of children. I don't say that anymore. Schools can, and should coordinate these essential services. But schools simply cannot do the job alone. The unavoidable truth is that we cannot have an island of excellence in a sea of community indifference; if we want better education, we must put back together the connections we once had.

I'm convinced that the most urgent task our generation confronts is re-creating public education and rebuilding the partnership between the nation's schools and the communities they serve.