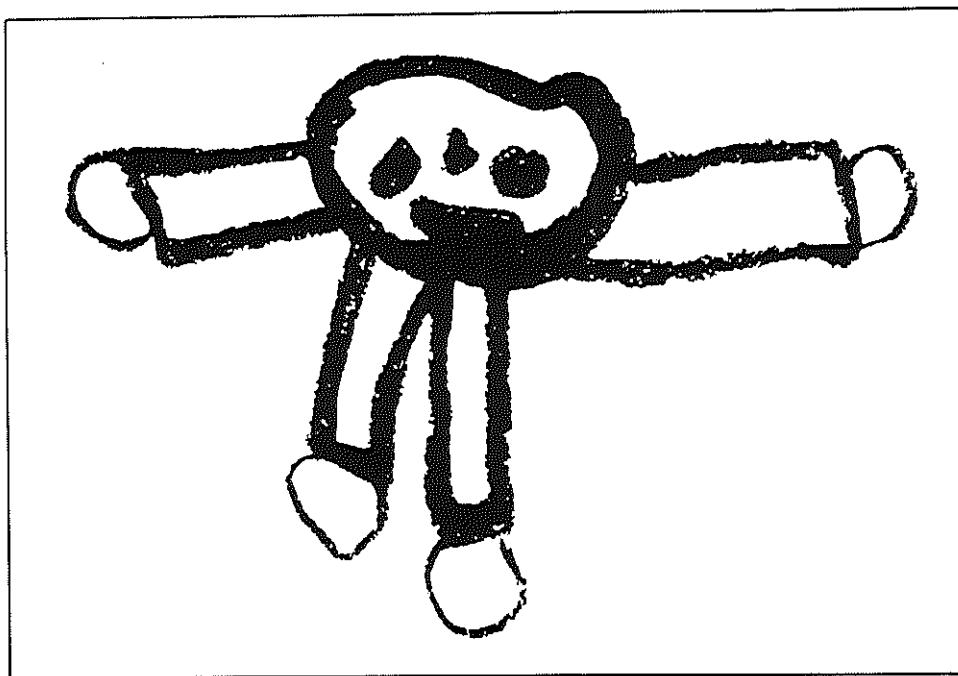


Patricia F. Carini

**THE SCHOOL LIVES OF
SEVEN CHILDREN: A
FIVE YEAR STUDY**



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University of North Dakota
Grand Forks, N.D. 58202
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North Dakota Study Group
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In November 1972, educators from several parts of the United States met at the University of North Dakota to discuss some common concerns about the narrow accountability ethos that had begun to dominate schools and to share what many believed to be more sensible means of both documenting and assessing children's learning. Subsequent meetings, much sharing of evaluation information, and financial and moral support from the Rockefeller Brothers Fund have all contributed to keeping together what is now called the North Dakota Study Group on Evaluation.

A major goal of the Study Group, beyond support for individual participants and programs, is to provide materials for teachers, parents, school administrators and governmental decision-makers (within State Education Agencies and the U.S. Office of Education) that might encourage re-examination of a range of evaluation issues and perspectives about schools and schooling. Towards this end, the Study Group has initiated a continuing series of monographs. In addition to discussions of evaluation, the series includes material on children's thinking, children's language, teacher support systems, inservice training, the school's relationship to the larger community. The intent is that these papers be taken not as final statements but as working papers, written by people who are acting on, not just thinking about, these problems, whose implications need an active and considered response.

Vito Perrone, Dean
Center for Teaching & Learning,
University of North Dakota

This is an account of work done in coordination with the Bureau of Child Development and Parent Education, New York State Education Department, in relation to the Indepth Study phase of the Five Year Evaluation of the New York State Experimental Prekindergarten Program.

Table of Contents

	<u>Page</u>
Foreword	vi
Acknowledgements	vii
Seven Children—Seven Modes of Learning	1
Portrayals: Continuity and Change	15
Mark	
Joel	
Kenny	
Luke	
Terry	
Matthew	
Minerva	
Perspectives: Commonalities and Contrasts	74
Implications: The Shared Needs and Strengths of Children	85
Concluding Thoughts and Recommendations	100
Appendix	107

FOREWORD

THE SCHOOL LIVES OF SEVEN CHILDREN is based on data from a five-year evaluation of the New York State Experimental Prekindergarten. The evaluation design recognized the need for a multifaceted approach to determine how well the program's objectives were being met. The overall longitudinal approach included two major prongs: (1) systematic testing of children attending prekindergarten and continuing through the third grade; data gathering by means of rating scales and routine school records, and (2) an Indepth Study in seven districts which focused on documentation of program quality and continuity of experience through the study of individual children's growth and development, prekindergarten through grade three.

In addition to providing material for this publication, data from the documentation process used in the Indepth Study makes available material for several future publications addressing topics such as a principals' study, study of a school, study of a district and a number of individual child studies.

Acknowledgements

In 1975, when Ruth Flurry asked me and the Prospect Center staff to be consultant to the documentation component of the five-year evaluation of New York State's Experimental Prekindergarten Program, I was more than a little hesitant. The proposed evaluation was large in scope and far flung geographically, involving communities throughout New York State. However, the opportunity to be involved in a long-term study of individual children at a time when longitudinal studies are becoming scarcer and shorter outweighed other concerns, and the commitment was made. It is a decision that has never been regretted. For me, the opportunity to work with Ruth Flurry, whose dedication to children and professional integrity are unsurpassed in my experience, has made work on the five-year study one of the most significant professional experiences I have had. For the Center, the study has provided challenge and new directions for our work in documentation and research.

The members of the staff of the Bureau of Child Development and Parent Education all share Ruth Flurry's high standards and commitment, and each one has contributed enormously to the successful completion of the documentation. Bertha Campbell, Barbara Moffatt, Sue Updike, Katharine Woods and Margaret Casson as Field Coordinator, sustained the five-year effort of on-site work in the schools with the assistance of field consultants, assigned to each of the seven Indepth Districts. This able and sophisticated group of early childhood educators included Charlotte Brody, Ann Caren, Pat Fender-Robinson, Lillie Graham, Ann Halpern, Elizabeth Heaton, Lisa Hirsch, Jean Mandelbaum, Lucy Peck, Mary Ann Porcher and Margaret Yonemura. The regularly scheduled meetings that brought Bureau staff and the consultants together at Prospect Center in order to refine the research design and methods for this study are memorable to me for their vitality and intellectual vigor.

It was also this core group, under Ruth Flurry's leadership, who sustained our original commitment to involve each study child's classroom teachers as the primary data gathers. This acknowledgement of teachers' deep knowledge of the

children they teach and their ability to articulate that knowledge, given a forum and procedures for doing so, is key to the success of the five-year Indepth Study. Many of the teachers became fully engaged in the study, continuing to work with Bureau and Prospect Center staff and the field consultants through to the final analysis of the data. These final data integration meetings, held in the fall of 1979 and the winter of 1980, involved each child's teachers over a span of five years in the description of that child's growth and learning; each session was an exhilarating confirmation of what can happen in schools when the child is the focus of interest. It was a privilege for all of us to work with the teachers and administrators who followed each of the study children in the seven districts of Great Neck, Ithaca, Lawrence, New Rochelle, New York City Community School District #9, Port Washington, and Syracuse.

When the data were analyzed and integrated, Prospect Center staff, Sue Dalziel and Carol Leckey, and I prepared final summaries on each study child as the first step toward the present book. Many good friends including Beth Alberty, Edith Klausner, Anne Martin, and Lillian Weber, and my husband, Louis Carini, have commented to the documentation in its various drafts. Brenda Engel's precise and thoughtful editing of the completed draft is especially appreciated, the more so because of her consistently close attention to the meaning intended.

While this volume does not refer in the text to other longitudinal studies of children, several such studies have contributed significantly to my own understanding of childhood and of methods for studying and portraying a life in progress. I would particularly like to acknowledge the following contributors to the longitudinal literature on children: Lois Barclay Murphy, Elizabeth and John Newson, Clara Claiborne Park, D.W. Winnicott and Frances Wickes. A recently issued book by Michael Armstrong (Closely Observed Children) has been an especially valued reference on documenting children's lives in the school setting. Similarly, Beth Alberty's and Lillian Weber's documentation of school curriculum (Continuity and Connection) has been important both for the insights offered on the meaning of continuity and for its sensitivity to the life of the classroom.

A study that closely parallels the five-year Indepth Study in conceptualization and focus, deserves special attention from readers interested in the ways children learn. The Collaborative Reading Project was conducted almost concurrently with the Indepth Study by the Early Education Group at Educational Testing Service (Anne Bussis, Ted Chittenden, Marianne Amarel, et al). The research design, which is similar in some respects to that of the Indepth Study, involves classroom teachers in the documentation of the child's learning, but with a specific reference to the child's entry into reading.

Finally it is important to acknowledge that besides the Indepth Study, the evaluation of the Prekindergarten Program included a parallel assessment of the program's effectiveness through quantitative measures including tests and rating scales. When an evaluation combines both quantitative and qualitative approaches it is not usually the case that those efforts are mutually supportive. However, in this instance, a truly positive and productive dialogue existed throughout the five years of the study. David Irvine, head of the Prekindergarten Evaluation Unit, took a great interest in the Indepth Study to which he contributed many thoughtful suggestions. His unit's evaluation of the effectiveness of continuity of the learning environment in promoting children's learning proved especially informative and helpful to our efforts. That evaluation is reported in a paper titled, "Continuity of Learning Experiences: A Key to Long-Range Effects of Prekindergarten".

In closing, I would like to say that more important than the several documentations that will report the findings of the Indepth Study is the strong network of educators that now links schools throughout New York State as a result of the leadership offered by Ruth Flurry and the Bureau of Child Development and Parent Education. It is that network that will carry forward the educational practices initiated through the study and ensure a lasting impact on schools.

Patricia F. Carini

Prospect Archive and Center
for Education and Research,
North Bennington, Vermont

September, 1981

Seven Children – Seven Modes of Learning

"How do I do it?"...."I can't learn that"...."I can't learn it that way"...."I can't do it!"...."I did it!"...."that's cinchy!"...."that's easy"...."that's boring"...."I already did that before"...."Oh, I get it"...."Help me"...."let me do it." These are familiar phrases in classrooms and at home, sometimes expressed in tones verging on despair or, at other times, on jubilation. They reflect important relationships between the learner and what is to be learned, between the learner and teacher, between ways of learning and the ways of offering instruction. There are many treatises on learning in general, on learning particular disciplines (e.g. reading), on cognitive development, and on methods of instruction. There are, however, remarkably few descriptions of learners and the personal experience of learning behind the cries of "I can't" or "I did it!" or "show me how!" This documentation is intended to make up, to some extent, for that lack in a way we hope will be helpful to parents and teachers--and particularly, to the young learners who are in their care.

In this chapter short vignettes introduce Mark, Joel, Kenny, Luke, Terry, Matthew, and Minerva, the seven children¹ whose school lives and approaches to learning over a period of five years are the subject of this documentary account. These brief introductions are followed by a description of the kinds of materials that were gathered on the children as a basis for the documentation and the way in which these data were organized to depict each child as a learner. The full portrayals of each child appear in Chapter 2, and provide the detailed description from which the following brief introductions were derived.

¹The original selection of children to be the subjects of this full-scale documentation report represented a more balanced distribution of boys and girls; attrition of the original population over the five year duration of the study depleted the female population. We plan to compile a full record and slide documentation on at least one additional girl for future presentation.

A member of the North Dakota Study Group on Evaluation, Patricia F. Carini is director of The Prospect Archive and Center for Education and Research. (North Bennington, VT. 05257), which includes the Prospect Archive of Children's Work, The Prospect School, and the Prospect Institute for the Study of Meaning. Patricia Carini has written two other monographs for this series. They are: *Observation & Description: An Alternative Method for the Study of Human Phenomena* and *The Art of Seeing and the Visibility of the Person*.

Modes of Learning: Seven Vignettes. The seven children illustrate modes or approaches to learning that can be summarized as follows: a formalist/traditionalist (Mark); a reasoner/problem-solver (Luke); a patterner/adapter (Joel); a mapper/explorer (Kenny); a facilitator (Terry); a speaker/dialogist (Matthew); and a teacher/artist (Minerva). Beginning with Mark, we will describe briefly each child's approach to learning.

Mark, the formalist/traditionalist, knows all the classroom rules and is also quick to see and apply a procedure or rule in mathematics or in a project. He is interested in laws, ritual, rules, ethics, standards, and manners. Because he's so available to pattern and form in all that he does, Mark is easily instructed. He expresses pleasure in patterns that repeat. Once he sees how things work, the pattern lends ease, realism, and familiarity to his transactions with ideas, processes, and people. Sometimes Mark gets caught up in a pattern of form, and needs assistance in focusing on the meaning behind it. In these instances, it is usually the underlying relationships that have to be drawn to his attention.

Joel, the patterner/adapter, also sees the pattern in things, but it is a pattern he needs to construct for himself step-by-step and to repeat in order to create a sequence that he understands and can hang on to. Once he has established the whole sequence, Joel can rearrange the elements and establish variations on the first sequence. Like Mark, he has a strong sense of number, but his particular investment in linear sequence is most visible through his interest in things that connect or interlock, in train tracks, and in maps. The need for repetition is evident also in his strong interest not only in hearing the same story over many times, but in his preference for stories that contain repetitions within them.

Kenny, the mapper/explorer, shares Joel's and Mark's investment in pattern, but not pattern as the overview of procedure or form or as the building of sequences from single units. Rather, Kenny sees large but defined frameworks: a total experience, a whole setting, a complete thought. He is interested in totalities, particularly circumscribed totalities, and he will spontaneously create boundaries that are of assistance to his investigation of a context. For example, he is fascinated with globes which present the whole earth in encompassable frame; and also with books and stories, which preserve the integrity and wholeness of the content. Not surprisingly, Kenny's longest standing interest is in maps. Forming an organic whole that relates the parts of a setting (e.g. a map of how to get to his house) allows Kenny to identify a perspective for viewing the whole—and in his renditions, often more than one. Maps also represent both context and journey; what you map, you can explore. Kenny's investment in motion and multiple points of view is a major dimension of his learning style.

Within a context or framework, Kenny is attentive to relationships among components, and, like Mark and Joel, he has long been interested in numbers and the number system. However, his particular interest is in the part-whole relationship which is evident in his work with blocks, pegs, designs, puzzles, and machine parts.

Luke, a reasoner/problem-solver, assumes that people and the world make sense and it is important to him to figure out how they do. He also assumes that it's up to him to do the figuring, and he looks not for the formula that will work, but for the underlying reason or relationship among things or behind the other person's actions or motives. A figurer and reasoner, he is also an experimenter, an

observer, and an explorer. Luke's approach to the world is consistent across a wide range of disciplines and mediums, including science, games, blocks, clay and paint. Luke's self-reliance and reasoning power are also evident in his concentrated, persistent effort and practice. When, as sometimes happens, he can't figure something out or understand it, he draws back saying he's ill or tired. It is not easy for Luke to apply a rule or procedure in a rote way in order to achieve an answer.

Like Luke, *Terry*, the facilitator, assumes that things and people fit or have a place, but in his case that fit or place is more a spatial or visual phenomenon. As for Joel, puzzles were an early and persisting interest; also sequences and serial orders like numbers. His powers of observation and memory are strong and he has an almost uncanny ability to locate anything lost or hidden from view in the classroom. Terry prefers to maintain a position at the periphery of the classroom or an activity. This vantage point allows him to observe the visual arrangement of the room or the activity, and to use this view of the total context to organize a pattern in which each detail is securely embedded.

Matthew, the speaker/dialogist, is the most expansive of the seven children, most insistent on wholeness in what he learns, and the least patient with fragments or the building up of sequences from single units. He learns by speaking, and speech accompanies everything he does. He converses with his work, addresses himself from the perspective of an observer to the activity at hand, and is the commentator on the classroom. Rehearsing, dramatizing, playing out twice over everything he does, gives Matthew a powerful memory to draw upon and a strong sense of the wholeness of his own activity and thought. His interest is in his own perspective as a person and in the human condition and drama generally. As a learner, he is a weaver of ideas, an ideologist, and a conversationalist always interested in establishing a relationship to feelings and life.

Minerva, the teacher/artist, like Mark, knows all the classroom rules and procedures. However, for Minerva, these procedures are necessities for surviving in school and are without the intrinsic interest that Mark finds in all forms and laws. Minerva's own talent is for likening and contrasting ideas or experiences, with a particular interest in where two or more thoughts or events blend or come together. Minerva moves quickly in body and mind, and the slow or repetitive is boring and distasteful. She loves variety, harmony and beauty. Discordance and ugliness are felt as deeply by Minerva as her pleasure in the beautiful and harmonious. School is seen by Minerva as a path to a wonderful future which she depicts in both drawing and writing. Meanwhile she beautifies, elaborates, and enhances all the daily and, to her, often boring work to which she applies herself so unremittingly.

Each of the seven children is eager to learn and to meet school expectations. All of these children, except Matthew, have an affinity for, or relative ease with, numbers; only Mark and Minerva found it easy to learn to read, although, except for Kenny and Matthew, each of the others had by grade 3 consolidated his reading skills. All seven are deeply invested in books and stories.

Before going on to the full portrayals of these seven children, it is important to give a brief account of the background of the study: its reasons for being, the process of collecting data, a description of the documentation method, and some examples of the kind of materials collected during the five year period.

Background of the Indepth Study. The seven children just introduced are among the 30 children who have been the subject of a five year study comprising one part of the evaluation of the New York State Experimental Prekindergarten Program. Known as the Indepth Study, this pre-kindergarten through grade 3 documentation of the school lives of individual children describes the continuities and discontinuities of each child's educational experience, and his or her modes of learning and thinking. The documentation addresses such fundamental issues in the education of young children as:

- the mesh of school curriculum, structures, and teaching practice with the individual learning and thinking modes of children.
- the continuity of school programs, prekindergarten through grade 3.
- the continuity of contact between school and home, prekindergarten through grade 3.

All of the children in the study were selected by their pre-kindergarten teacher from interest, not because of any "specialness". Since the prekindergarten program serves mainly children from low income families, the children documented in the Indepth Study are from that socio-economic stratum, with the exception of one child representing the allowed 10% of children from higher income levels.

From age four, when each of the children entered a pre-kindergarten program in widely separated regions of New York State, their teacher, other school staff, and consultants from the New York State Bureau of Child Development and Parent Education kept systematic observations and descriptive records of their classroom participation, and also collected their classroom products such as drawings, writing, paintings, etc. Examples of these data are presented in the Appendix and in Plates #1-4.

The records, observations, and children's products were systematically compiled over the five year duration of the study. These materials were catalogued and indexed yearly; they also provided the subjects for discussion in ongoing contact with the children's parents. The study team following each child used these materials for regular periodic reviews of the child and the child's work. The forms used for these reviews are summarized below², along with the purpose of each and an example drawn from the records kept of these meetings.

A. Staff Review of the Child

1. *Format.* The Staff Review of the Child describes the child according to the following headings:

- the child's stance in the world: gesture, posture, inflection, rhythm, energy.
- the child's emotional tenor and disposition: tone, expressiveness, intensity, range, pattern.

²The detailed formats used for the Staff Review of the Child and Descriptions of Child Work appear in the Appendix.

- the child's mode of relationship to other children and to adults: attachments, variation and consistency, quality, range.
- the child's activities and interests: modes of engagement, pattern of involvement, range, intensity.
- the child's involvement in formal learning: modes of approach, interest, patterns of involvement.
- the child's greatest strengths and the areas of greatest vulnerability.

Following the discussion leading from this description, the study team makes recommendations for strengthening the learning environment in order to meet the child's needs more effectively.

2. *Purpose.* The purpose of this comprehensive description is to maintain a whole view of the study child without employing clinical terminology or labelling the child as a "problem" or treating him or her as a "case". The Staff Review also summarizes the accumulated observations and records in a way that makes them immediately available for support of the child's mode of learning.
3. *An Example of the Process.* The focusing question, the chairperson's summary of the teacher's description of the child and the summarized recommendations from a Staff Review of Joel provide examples of parts of the Staff Review process.

Focusing Question for the Review. Joel is now almost six years old. He has been in the Indepth Study for two years; this year he is in A.H.'s (kindergarten) room. There are no critical problems emerging from his participation there....This Staff Review needs to focus on Joel's competence in skill areas. He is going on to first grade next year, and does not, at this time, have the collection of skills expected of most first graders.

(This introduction was followed by a detailed description of Joel according to the headings outlined above.)

Chairperson's Summary of the Teacher's Description (Leading to Group Discussion and Recommendations). [Joel] is a small child. After a slow start, he is perfectly part of the group. At the beginning he stayed close to those he knew, but there has been an expansion to others. His relationships [to other children] are embedded in activity, but his presence is very much felt [by them]. He is coming out of himself; he is seeing things [and] looking at the world as existing apart from himself. He is at once cheerful and serious. His interests are absorbing to him—he is not distracted by people....He is very interested in music; the fact that his responses to it are not involving his whole body may be due to self-consciousness...The first grade skills [identified] in the focusing question are skills he does not have to have in the current classroom context. Still, he is very willing to try to learn them.

He doesn't feel badly that (although he tries) he can't do the academic skills. The teacher is concerned that he will feel badly when he becomes aware that other children have mastered these skills.

Summarized Recommendations. Recommendations were focused on two areas: 1) Joel's great interest in ordering and sorting objects and the relationship of this interest to academic skills and 2) a quality of acquiescence that became visible in the course of the discussion and may contribute to the sparseness and softness of his speech.

--ordering: Capitalize on this interest, varying his opportunities to do it to include letters; collage; variations of numbers, colors, shapes within a series; etc.

--language: Joel's language is soft and not abundant. Recommendations included telling him stories; having him tell stories on tape; puppetry; and movement.

--acquiescence: This is the deeper question. The recommendations are for movement that allows him to make a dramatic statement with equipment and accessories to reduce self-consciousness; to observe his response in conflict situations; and to introduce books that relate to the topic.

B. Descriptions of Child Work

1. *Format.* In this process individual pieces of the child's work in different mediums are selected for description. The work is described with attention to repetitions of motif, imagery, and stylistic and compositional elements. The descriptions are summarized with respect to the work itself and to the characteristic approach to the medium of the child who produced it.
2. *Purpose.* The purpose of this comprehensive description of key products in the child's oeuvre was to gain access to the child's direct and personal statements of meaning. As with the Staff Review, clinical interpretation and psychologizing are avoided. The periodic description of the child's products also serves to summarize the collected work in a way that makes it possible to include it in the compiled written record and to use it for support of the child's ongoing classroom engagement with a range of mediums.
3. *An Example of the Process.* A preview of the portrayal of Minerva through a summary of one of her drawings illustrates the description of child products. The drawing of a girl and mouse is presented in Plate #1.

Control, vividness and boldness are the descriptors the picture immediately brings to mind. There is control which does not diminish spontaneity; vividness of a number of colors applied with varying strokes to emphasize, contrast or repeat; boldness in the

firmness of stroke and centrality of the figure in a quite unstated background.

Motion and tension are also easily identifiable qualities of the picture. There is not only a sense of forward movement in the positioning of feet and arms, but a suggestion of dance conveyed by the outstretched arms, the lightness of the feet (with outlines not filled in) and the appearance of pivoting conveyed by the different levels of the feet. A sense of tension is created by the contrast of the solidity of the figure and the airiness of the blue arching strokes, the almost floating position of the mouse (also not filled in with color) and the tenuous stroke of the connector between the girl and the mouse.

Characteristics of the artist are evident in the varied use of line: to outline, in, up, and down strokes to fill in, or linked spiral strokes diminishing from open outline to solid filling in; clarity of detail i.e. eyelashes, 5 or 6 fingers, earrings, separate bodice--skirt; and layering; i.e. outlining, filling in, covering over, reworking, not in a "picky" way, but to contribute to the design.

Plates of Minerva's Art Work

Plate #1

Girl and Mouse

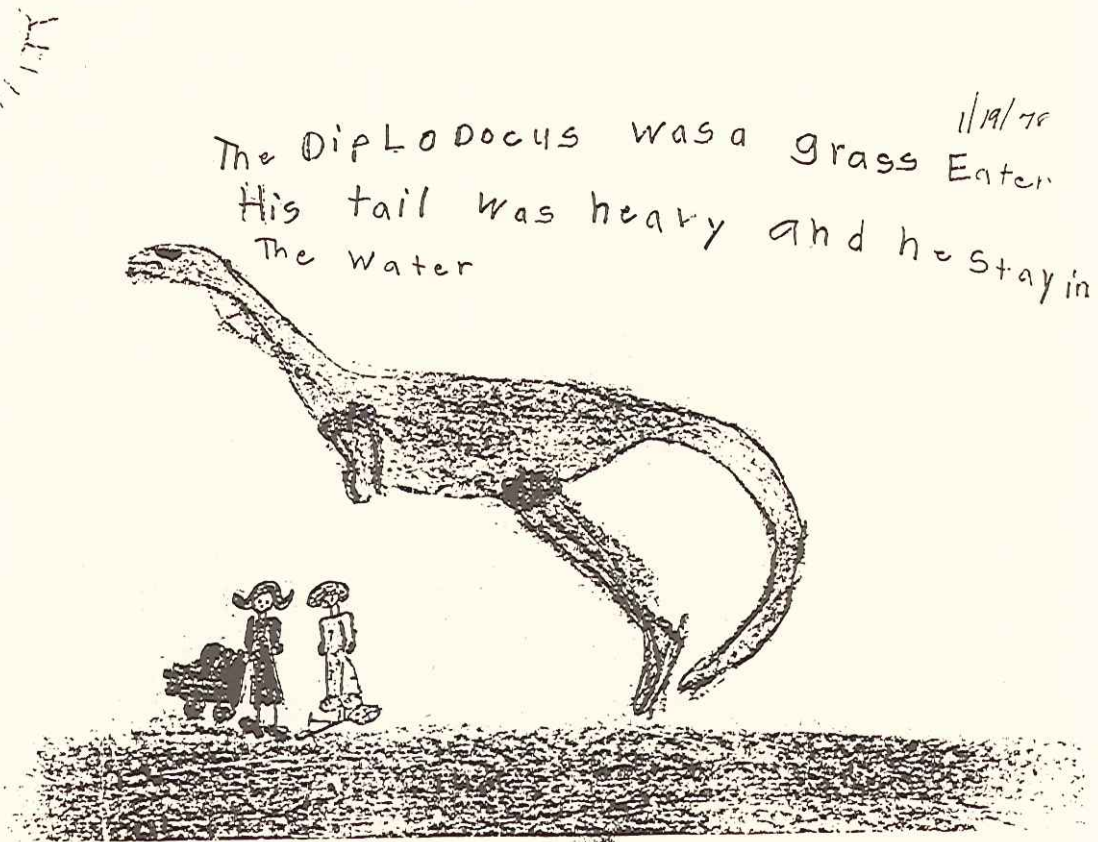
The girl was pulling
the mouse



Plates of Minerva's Art Work

Plate #2

Dinosaur with Family "Logo"



Plates of Minerva's Art Work

Plate #3

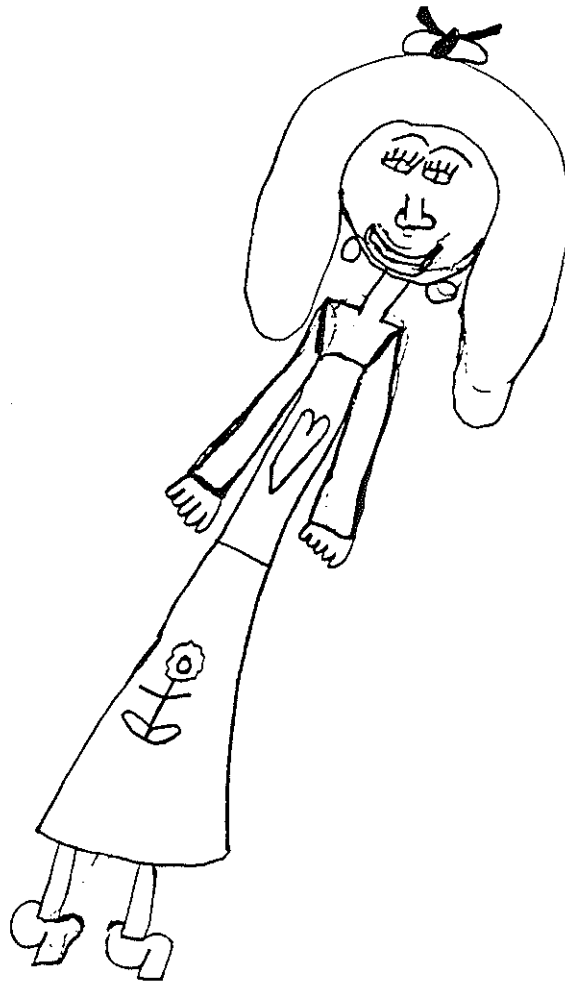
Lady and Husband, December 13, 1977



Plates of Minerva's Art Work

Plate #4

Person, February 15, 1979



The formal documentation of each child drawn from these layers of descriptive data was accomplished through the charting of observations, records and work of the child. To carry out this documentation procedure, data booklets were prepared presenting observations, records, and work on a study child in chronological order. At regular intervals throughout the study, and intensively during the final year of the study, the child's teachers, other school staff and consultants reviewed these books of data to identify recurrent themes which were then employed as headings for charting the data. In a group process, each participant in turn offered a description from the booklet of data that illustrated the heading under study, continuing until each record, observation, or piece of work which had pertinence to the heading had been included under it. Then, as each heading was completed, it was summarized according to the patterns of the data within it. For example, when the data collected on Kenny was charted under "navigator", several patterns were identified, two of which are excerpted below.

(maps) Ken's interest in maps has persisted over time. He began to draw them, apparently spontaneously, even before he entered kindergarten. He accompanied the maps with long....explanations. Other drawings, often in great detail, may include a "map" of a particular scene or even seen from a slightly different perspective...One function of maps is to indicate boundaries between one thing and another. Ken's drawings have clearly defined spaces within them.... Maps are created to chart new territory as it is explored. Once drawn, a map shows the way. A map is an abstract representation of a path which may already be familiar to the user or may lead him down a road not taken before. Ken seems to use drawings and maps to provide another perspective on something with which he is already familiar--for example the way to his house. By the beginning of the 1979-80 school year, he was showing an interest in maps of the world.

(perspective) Not only do Ken's drawings suggest that he sees things from more than one perspective, but there is evidence in the record that he actively positions himself so that he can see from above, around the periphery, in and out. He is an active looker, observer and listener. In order to get an overview, he climbs to the top of the climbing structures on the playground or up on the roof of his house where "you can see a long way." Even with the changes made available by changing his position, he still has become tired of his own backyard. "I done everything at my house so many times." The family's camp on a lake provides a continued source of exploration.

The data on each child was ultimately charted in this group process under multiple headings (see Chart on page 14 for partial listings of headings employed for organizing the data on the seven study children). The process was then continued through the preparation of additional charts by a particular researcher. Since practitioners, consultants, and research personnel had equal involvement in this project, any team member familiar with the child and the data was able to carry the charting process into the more detailed written phase. However, final charts and integrative summaries were prepared and written by Bureau or Prospect Center staff.

From the charting of the data, it was possible to describe each child's perspective and continuing interests, without prematurely and conventionally characterizing the children according to preconceived categories like "concrete" or "verbal" or "leader/follower". Instead, the description of the learning approaches illustrated by the seven children allowed us to distinguish such subtle differences as that between Mark's formula or rule-oriented mode of learning and Luke's reasoning mode. When explored, the distinction between these intimately related modes proved to be a subtlety that is interestingly important for both instructional practice and curriculum.

The descriptions of the children's learning approaches also suggested concerns and purposes held in common, although addressed in varied ways. For example, order, context and expression are strong investments for all seven, but each child's need for context, for order, and for a way of making a personal statement of meaning is particular and unique. Similarly, the ideas and things that are of deep interest to the children are in large measure shared, although again each child brings a particularity of interest that contributes nuance and specificity to the broader interest. For example, while there is shared interest among several of the children in the inside of things, the hidden, and the unknown, that interest for Joel is expressed by water, for Luke by the camouflaged or invisible, for Terry by finding what is lost from view, and for Kenny by searching for secret places. These kinds of nuances and complexities are the subject of the detailed contrasting of the children presented in Chapter 3.

Chart: Headings Employed for Charting Data
(By Child; Partial Listing)

Ken:

Navigator/Explorer
Memory/Conservation/
Preservation
Language
Thinking
Relationship
Presence/Stance/Posture
Awareness

Minerva:

Determination/
Accommodation (acquiescence)
"Like"
Observer/Outsider
Way
Alone
Perfect/Perfection
Carriage

Joel:

Family/House
Friends/Enjoyment/Appreciation
Circle
Container/Containment/Self-
contained
Arrangement/Pattern
Water

Matthew:

Voice/Identity/Speaking
"Ups and Downs"
Language
Orders/Commands
I am/Pride/Possession

Mark:

Limits/Boundaries/Surface
Dramatic/Vivid
Assertiveness
Standards/Rules

Terry:

Helpful/Helping
Number/Order/Connections
Word/Hand
Watching/Looking

Luke:

Intellect/Reasoning/Making Sense
Perseverance/Practice
Tone/Disposition
Exploring/Experimentation

Portrayals: Continuity and Change

For the teachers and observers who followed the daily school lives of each of these children, their particular child became unusual and fascinating—a "wonderful child". This conclusion is the more striking when we consider that these seven children are not remarkable in any way that made them initially stand out from their peers and that they were selected from a program designed to serve children whose economic status might place them at an educational disadvantage. The overwhelming conviction of the professionals who followed the children that each of them, nonetheless, is remarkable carries the strong implication that all children are potentially special and valuable contributors to the quality of life in the family, the school, and the community. This reminder of the value and interest of each and every child, evident when we look closely at that child, is a healthy antidote to the standardization of many current instructional observational practices. These are indeed valuable and interesting children—as are their counterparts in hundreds of other classrooms.

Because each child offers a unique contribution to his or her social milieu, we will place each in succession at center stage before we explore the interplay of perspective and relationship among them. The interplay and contrast of perspectives among the children, the contribution each child's perspective makes to that of each other child and to the classroom, and the educational needs and choices that are shared collectively among the seven children are addressed in chapters three and four.

Let us again begin with Mark.

Mark

"...it was such a different place (Amish country). Their rules are different from ours."

A tall, slender, erect child, Mark at age 8 is keenly available to the outside world, and its demands, and is particularly attuned to the world of rules, standards and forms. The early manifestations of that awareness occurred across a wide range of seemingly incidental classroom occurrences, including pleasure in knowing a rule or routine ("Mark smiles, goes up to get his tag, hangs it on hook, etc.") or in knowing the right way to act in a social situation and enforcing social graces with his peers:

...really scolding a child for poor table manners. It was a genuine problem situation and the offense was corrected immediately. The surprise on the other child's face was hilarious to observe—he had in the past ignored other children's rights. Mark let him know immediately, he would not put up with it. (age 5).

A forceful, determined child, Mark's authority and certainty are not usually attempts to force his personal will on another but, as in the incident above, refer to an outside rule, ethic, or standard which he expects to have respected. On those relatively rare occasions when Mark has responded with personal force, it has been the result of his perception that another child has invaded his person or his territory.

A girl hugs Mark. He pushes her and says to the aide, "She's choking me." (age 4).

(today)--fights--Jake stole his "perfume". Took it out of his pocket... (age 5).

A highly visible child because of his erect posture and clear, vivid speech, Mark is largely self-contained, somewhat reserved, and rather old-seeming for his years. The most obvious indication of Mark's sense of personal boundary is the way he uses his body to express these limits: arms folded, hands folded; body erect, calm and contained; and a composed, pleasant smile. His frequent placement of himself on the edge of groups reinforces the idea of a clear boundary around himself. This placement also enables him to use observation as a technique for checking the limits and form of an activity before joining it.

Always alert to form and order, even the earliest records refer to this quality:

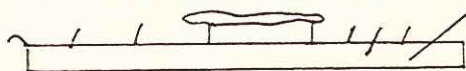
Mark is in the block corner, pick[ing] up blocks with two other boys....Mark puts blocks on the shelf according to like shape and size. (age 5).

Indeed on one early occasion, the attentiveness to form and realism overrode his equal attentiveness to directions and rules.

Making [a] collage picture of animal pets in school. Children had just finished giving some ideas of how to use oval pattern to make a basic animal shape. I had emphasized not to use patterns to paste on but to trace and cut out. Mark did this anyway (used patterns to make the animal). Made a rabbit. Pleased with realistic effect? (age 5).

The interest in the representational and "real" is borne out in an equal investment in naming and labelling the things that he makes:

(art activity). Stables, styrofoam sticks, wooden beads, pipe cleaners, stayed with activity for a long period. When finished, he showed me. Said he had made a boat. "See how I glued sticks together?"....



(Gave me). Later called this a raft.

Thought about his need for realistic-looking product in all his art work. (age 5).

A more preferred activity than art is blocks—a medium combining definite form with flexible power in representation of the real world. Mark constructs buildings that are solid, symmetrical and roofed; from an early age, his houses had floors and were divided into the appropriate rooms. Constructing block cities has been most compelling of all and these are extended to include all sorts of vehicles. All of his building is planned and completed—one block city is recorded to have taken a week to finish. His competence in construction and in planning is recognized by other children who often seek his advice.

An incident recorded in his first grade year captures and makes visible Mark's observational talent, his good memory for fact and information, his interest in the world and in travel, and a vibrancy and dramatic intensity that are the counterpoint within him to containment, form, and rule; it also highlights the closeness of the family ties, and especially the closeness of his relationship to his father.

November 2: Science Museum: Children had just come from one of their specials (science museum). Upon entering the room, Mark and Melvin made a "bee line" to where I was putting up a new bulletin board about New York City. The board displayed beautiful, realistic photographs of the New York skyline, aerial view, subway system, etc.

Mark, bubbling over with enthusiasm, stood on a chair near the bulletin board to see the display fully. Pointing to a building he said, "Here is the Empire State Building!" (Excitedly and in a high-pitched voice). "I see the Twin Towers too!", pointing now to other buildings in haste before Melvin who becomes interested, finds them. Before one could blink an eye, the entire class moved to where Mark and Melvin had created interest and excitement. Mark and Melvin seem to generate enthusiasm and interest in this unit about New York City. Mark, "Miss L, here is the bridge. It is ___ miles long." Teacher, a bit astonished and curious, wondered if his information was correct. Teacher, "How do you know so much about this bridge?" Mark, "My father took me over this bridge and he told me about it!" Teacher, "Mark, do you know

the name of this bridge?" Mark replied, "Yes, it's the George Washington Bridge." (age 6)

The power of Mark's memory, his dramatic language and inflection, and his talent for observing details also are the source of his ability as a storyteller. He is both the journalist and commentator (often about trips to the city with his father and/or other family outings), and the raconteur—knowing instinctively how to hold his audience by foreshadowing the unfolding of the story. Mimicry, the ability to keep a straight face, and contagious energy make his stories immediate and compelling; everything is clear, concentrated, and formulated with the audience in mind.

The dramatic flair of the storyteller characterizes all of Mark's descriptions of events ("yeah, it went BAM! Like...."). These are accompanied by gestures with the help of which he enacts whole situations.

(talking about a plane crash) The airplane started to shake (illustrates this movement, standing erect, arms extended, feet steady on floor, shakes his arms and legs). Man, that was some crash! (age 5).

(Later moving trucks through his block construction of New York City), "Hey, I see trucks. Trucks are in here." He looks in, moves around to back of building. "Oh man, something happened over there. Hey guys, a truck crashed. Hey guys, a crash over here. Hey Jim, a crash over here." Jim approaches. "Here it is." Mark leads the way around the back of building. Jim says, "Where?" Mark responds, "Here, see here!" (age 5).

The rule-giver and enforcer and the storyteller and dramatist are united in Mark through order, sequence, and a quality of detachment of personal perspective that carries authority and power. Mark is not so much liked by other children as he is admired and respected. If the rule-giver sometimes borders on rigidity and self-righteousness ("Mrs. H. said...."), the dramatist—perhaps fortunately—sometimes verges on mild goofiness (mostly when the teacher isn't around).

Mark crawling on the circular rug with a drink in his right hand making a loud screeching sound. His voice was intensifying, highly-pitched. Many of the children ignored him and seemed anxious to tell me that he was misbehaving. When teacher returned to the room, Mark stopped short in his tracks, when he saw the teacher. He looked quite embarrassed, sat up erect on the rug and continued his snack. (age 6).

The energy and liveliness evident in Mark's speech and agile body provide access to his younger and more child-like side, and to two deep interests that rival his predilection for the real and the representational—one is motion itself and the other is turbulent forces in nature such as volcanoes, dinosaurs, and tidal waves.

The energy of childhood evident in his dramatics, is also evident in his visual art work. Colors are generally vivid, and the memories and thoughts revisualized and represented are frequently full of life and vigor. Yellow—the color of newest growth—is often used. Mark uses it to indicate a center of energy in a composition such as the sidewalk to a building, an entryway or window, the clown's face, or to spotlight an aspect of the representation.

The translation of energy into motion is of particular interest to Mark. He adores New York City and relishes trips to the City with his family. His accounts of these and other outings with his family always give as much or more weight to travel and the mode of travel (ferryboat, car, walking) as to the destination and the activity associated with it (restaurant, museum, etc.). Mark's conversation, dramatics, block constructions, and woodworking activity are full of vehicles: trucks, planes, boats, cars, spaceships, and helicopters. He also moves himself with ease and agility; his favorite sports are bike-riding, racing, and kickball. All in all, Mark enjoys those activities that carry him forward: sports, where the body is carried forward in motion; and travel with the emphasis on "moving toward", or "going to".

Movement as forward and propelling toward, without interference and in sequence, characterizes Mark's anticipations and descriptions of family journeys.

My father is taking my mother, sister, and me on a long ride this weekend.... (age 7)

I rode my bike through the nature preserve yesterday and I saw.... (age 7)

Mark came....to tell me about his trip on the ferry and then to New York City. He said that his parents, sister and he went to the Christmas tree and out to dinner by the Empire State Building. He also told me what everyone had for dinner. (age 7)

What movement and travel allow you to see and the new information to be gleaned on these travels have great value for Mark. Attentiveness to small detail, retention of the minutiae of travel, and the living codes and rituals of other persons are all of interest.

Mark showed a banner with Costa Rica printed on it, a card showing the hotel his family stayed at. "There's a firehouse near there", he said, "and there's a banana tree—it's mah gah!" "It's what?" said a few children. Mark repeated the expression, "Mah gah", pointing to the long, thin trunk of the tree. "That means skinny", he said. "In what language?" I asked. No response. "In Spanish?" I asked. "Yes", he responded.

Mark also handed me a small plastic snack tray—"This is for you", he said—with a picture of a woman picking berries and dressed for this, wearing a bandana and basket strapped to her waist. "See some of those berries are not ripe", Mark explained, "she's picking the red ones. They're ripe." (age 5)

(Teacher) Mark brought in picture postcards and asked if he could share them with us. Mark said that his mother said that I should keep them, if I liked.

Mark, sitting and then stands straight, "I went to Pennsylvania. I got these postcards. They show a school, where school is and out on a farm."

Teacher, "Where did you go in Pennsylvania?"

Mark, "I forget which part."

Teacher, "Was it Amish Country?"

Mark, "Yes, they have some special rules in Pennsylvania. In government, he cannot wear beards and they have to dress in black and white dress."

Student to Mark, "Was it like pilgrims?"

Mark, "Yes."

Student, "I'm going to Washington."

Mark, "Great."

Student, "Were you actually where the Amish were?"

Mark, "Yes, it was such a different place. Their rules are different from ours." (age 7)

Direct movement forward, to go some place, to see things, to gain new knowledge, provides for Mark the first hand active engagement with the world that his observant eye needs—and also rich substantive content for his naturally analytic and orderly mind.

The turbulent and deep forces of nature—volcanoes in particular, dinosaurs and tidal waves—are recurrent motifs throughout Mark's work. In their elemental force, these motifs offer unpredictable energy and feelings as counterpoint to the order and sequence of Mark's thought. Mark does not always have direct access to his own feelings, and in his earlier school years, he could be unexpectedly overcome with tears. This usually occurred during a transition or when something novel disrupted the order of things. His response was to want to go home, and specifically to find his mother. With his own increasing capacity to anticipate and control the events around him through observation, memory, a secure grasp of school structure (rules, standards, etc.), incidents of tearfulness no longer appear in the observations. What does burst out occasionally and, as noted earlier, usually when the teacher is away, are instances of mild naughtiness, silliness and loudness. Mark cannot acknowledge these moments easily and to all appearances is embarrassed by them.

The amount of energy at Mark's command is evident in his considerable power of concentration and in his physical well being. However, the fullest and most vital expression of that energy is in his drawings. Part of the summary description of his drawing (age 6) of a tidal wave describes that energy and his sense of his participation in the scene that he is portraying.

The action builds in this drawing. There is a sense that as he drew it and was thinking about the tidal wave, that he got more excited himself, and more caught up in the explosiveness, adding trash and debris. The action goes both left and right: the action of the fish, sail,

hat on figure, all blows to the right, but the boat is headed left and the figure faces left, as in an undertow.

The summary also notes that the human figure in the boat is in control despite the multidirectional chaotic force of the wind.

The person is in control, standing firmly...commanding. He won't let go. His arms extend up and away. He has feet, but no hands. He has a grimaced face, determined.

The overall impression of this crayoned drawing is one of motion. Color, line, directionality, layers, and shading all combine to express enormous energy.

Mark's channeling of energy through form and ritual, his investment in representation and naming, his grasp of expectations and structures, his pleasure in the rewards earned for meeting those expectations, and his proclivity for order make him available to instruction and to learning such skills as decoding and counting that are highly valued in school. Mark's observations and power of memory and his understanding that a pattern or sequence repeats were major supports to his early encounters with this kind of formal learning.

Sat quietly at table, math book in front of him, waiting for teacher's instructions. T, "Turn to page 1 in your math book." Mark continued to sit erect, used right hand to turn page and with left hand held the book. Pupils were learning about left and right, top, bottom, middle; following directions (for example T, "Find the object on the left top of your page, bottom right, etc."). Mark followed each instruction given, first pausing, looking at teacher, down at book as if not sure of what to do. Looked around at his neighbors at table, then began to get the feel of what to do. Later had no trouble finding left, right and middle of page; bottom, left, etc. Pupils were introduced to vocabulary also. (age 6)

Mark's ability and willingness to assume the posture asked for in an academic task is noted repeatedly in the records--often with admonishment to his peers to do likewise.

Penmanship lesson: Mark remembered the rules for good penmanship. He came to his seat, put feet flat on floor, hands in position, right hand holding the pencil, left holding paper in place. He noticed that Charles had his back facing the chalkboard and he said, "Charles, your back is facing the board! Move." (said emphatically). Charles got up slowly, deliberately, and moved to another table facing board. Mark sat in his seat, back bent slightly, to write name as suggested by teacher. He is right-handed and writes with much ease and skill. (Good, fine motor coordination skills). Moving his body slightly, he made each letter formation for MARK, each time with his lips puckered.

Mark follows directions carefully. He is precise and careful. He was asked to write his name from top of paper to bottom (conclusively) leaving room at bottom for number writing, 1-10. (age 6)

By the spring of his first grade year, the teacher notes: "He absorbs himself in his work. If he is unsure of the instructions, he will ask for help. He tries to solve most problems on his own."

By the close of grade 2, Mark was able to read Book #2, My City in the Bank Street series. The teacher notes oral fluency, but the need for some support in comprehension and expression. While he had acquired the skill of reading, he was cautious in interpretation of the story's meaning. However, by grade 3, his teacher observes no weakness in this area:

He grasps ideas quickly. He completes his assignments meticulously, erasing a great deal. He enjoys independent work, competing with himself. He reads slowly and carefully, and his comprehension is good.
(age 8)

She notes also that his love of stories and storytelling continues unabated. By grade 3, Mark also has strong interests and abilities in science and social studies. His pleasure in travel and his observational powers have evolved into an interest in mapping, reports on other parts of the world, and beginning thoughts about comparative culture. His long-standing interest in prehistory, rocks, space and natural disaster are complemented by the observer's eye for cycles and change through time, such as the life cycle of a frog. His observations are noted to be cautious, accurate and meticulous but, in keeping with the turbulent forces that have long fascinated him, it was the simulated rainstorm at the Planetarium that most intrigued him.

In his fifth year in school (age 8), the teacher's comment on Mark's greatest strengths reflects the continuity and the expansion of his interests. It also again shows that his dominant approach to learning is through his capacity for order, his containment, and his concentration.

His greatest strength is his own organization. His desk is extremely neat, as is his person. He saves all dittos and class newspapers in chronological order. He maintains a definite space around himself, not liking anyone to put anything on his desk.

[Mark has a] long attention span, [pays] attention to detail, [does] meticulous work [and carries it] to completion. [He] competes with himself, not for reward.

[Mark has] strong interests in drawing, observing, maps, movement, music and rhythm.

Joel
"Hey, You Guys, Let's make a Circle"

A very small, self-contained child, Joel is cheerful and responsive to school. There is a medical history of spinal meningitis at age 2. Joel has vision problems, extropia of the right eye, and there have been recurrent questions around lags in development, particularly in speech. There has been testing for possible brain dysfunction and consideration of a special education placement. Joel has received speech therapy, but the school's policy of some inter-age groupings which allowed Joel two years with the same teacher, the support of the Indepth Study, and the willingness of his mother and his teachers to give Joel time, have made it possible for him not to be placed in a special education class. At age 8, there has been dramatic consolidation of reading skills that had lagged far behind his classmates; number skills are at a good level; his speech is clearer and much elaborated; and he is highly valued and respected by his peers.

Joel's approach to learning at an early age was basically to wait and see. He would wait quietly and cheerfully until the teacher offered an activity or he would stick close to an old acquaintance, Ramona, and do what she did—usually smiling and usually silent. Many of their activities involved house, either as structure or as dramatic play, and this has remained an absorbing activity for Joel. From the first, Joel was noted to be involved in an activity for long periods of time, and he was always eager to show the teacher his work.

Forty-five minutes at play dough table...several times called me over to see what he was doing (slapping, pounding, poking)....hollow blocks with Ramona—labelled it a "house". Follows Ramona's ideas...Again with Ramona, long time with hollow blocks. With Ramona's "house"; used blocks as symbols. Laughing on the tire swing. Played only with Ramona....following Ramona's lead in house-keeping corner. Repeatedly changes his "story" (one word replies) to agree with hers. (age 5)

Joel's concentration is intense, and once involved he sees many variations of pattern. Early in Joel's kindergarten year, the teacher noted the pervasiveness of arranging and rearranging as an approach to materials.

It occurred to me today, after watching Joel play with the wooden animals and blocks yesterday, the wooden people today, and the arrangements of funnels at the water table—that a consistent theme is the ARRANGEMENT and REARRANGEMENT of materials. He stays intently engrossed with the same material, shifting them in various formations. I will watch for this possible pattern in his future play. (age 5)

Joel, sitting with Jane and Ramona, small wooden pegs. Fills whole board. Takes some out...Then puts them in box. Takes from box, fills in holes, repeats process. (age 5)

In house by himself for most of activity time....arranging and rearranging of furniture....Taking care of three "babies" (dolls), laid them out on blankets. I asked him if he was the Daddy, he said no, he was the Mommy. (age 5)


Watching other children and duplicating, extending, and incorporating their work has also been a consistent learning mode for Joel.

Wooden people—arranging and rearranging. Lego-long time; three "stairs" all around blue base extending beyond it. Sat next to Allen... ("Stairs" had been made by other kids and he had watched them); and was able to reproduce it by himself. (age 5)

...(structure) patterned after Leah's structure....Indicates that he is watching others, observing actively, and able to reproduce. (age 5)

Joel is using the molecular structure set. Initially he was uncertain how to begin. Leo joined him. He showed Joel, using verbal direction, what to do. Joel had some difficulty in getting the pegs and straws to line up. Just off slightly. After three trials, he began. Becomes more and more competent with practice—difficulty disappears. Began with three legos and (using all peg extensions) continued with this pattern. Describes his structure as a Christmas Tree. He works intently and carefully. Very involved. After Leo leaves, Joel incorporates Leo's structure with the "tree". (age 5)

Joel's concentration, his efforts to create and repeat patterns and sequences, and his steady, consistent pace are echoed in an interest in lines, paths, connections, and boundaries. He likes materials that have combinable units such as lego, blocks and tracks and he is also interested in number and sequence.

Cuisenaire rods with Ramona, Monica, and Donald. Much time rearranging colored blocks. Separated colors into separate piles--rearranged into both higher and lower stacks. Shapes into a . Filled center with wooden animals. Added a door. When all blocks were left for his use, he took blue blocks (squares) only and stacked them into equal piles. (age 5)

1:40 (In response to teacher's question regarding a column of six tinker toys) "Can you think of a different way of doing this? Joel put 2-2-2, Joel laughing. (age 5)

Legos--came to me—"Look at my look-out tower". (age 5)

Building with unit blocks, interacting with several kids. (age 5)

Unit blocks with Leo—combined with lego structure. (age 5)

Participated in car going down ramp with many others. Likes multi-rollway. (age 5)

Initiated building with hollow blocks--joined by Jane and Ramona. Touching (aide's) hair. (age 5)

Boundaries and containment are of particular interest and include boundaries for himself as well as a generalized interest in that which contains. Division, sheltering, and holding are all aspects of this interest.

Puts blocks in two lines, drops animals inside two lines. Rearrangement to make a great number of stacks. Makes U-shaped structure... "Animals won't get out"--puts blocks across end for door. (age 5)

Built structure around himself; Unit blocks by himself...structure around himself and 1:1 with cube blocks. (age 5)

In hollow block structure using telephone by himself...Legos. (age 5)

Back to filling containers with measuring cup....holds up long tube--watches water moving through...has red containers carefully lined up (large) ones...puts pail very close to them examining them--puts red top on yellow container. Changes--puts yellow back on yellow...Joel does not look up...too intent. 9:35 Shakes small red container, empties yellow container, looks very carefully inside it to make sure it's empty, shakes large red one--unscrews top--empties it...Empties another red one--puts top back on again... (age 7)

Joel prefers the contained and sheltered parts of the classroom, particularly the house corner, and he also requires and looks for a clear classroom structure; he does not like it when there is a substitute teacher or when there is lack of clarity about who is in charge.

The circle provides an apt metaphor for the deepest level of Joel's investment in containment. The first circle is an invisible boundary around himself that conveys a quality of innocence noted by several observers. While a very friendly and available child to adults and to other children, he is often noted to be content working alone or sitting by himself. When he is absorbed in a project by himself, it is as if the circle of himself has expanded to include the materials he is engaged with. It is mentioned at one point that the object of Joel's concentration speaks directly to him and brings immediate pleasure and satisfaction.

Joel will hold up something he has just finished working on and examine it with exclamations of pleasure and a big, broad smile. (age 5)

Joel's sense of personal boundary is echoed in a smooth and even disposition and in a quality of personal dignity. Tired of a babyhood nickname (Jo-Jo) he told the kindergarten teacher he wanted people to call him Joel--and stuck to it.

Over five years, Joel has slowly expanded his circle of friends from one long time acquaintance to include a wide range of his classmates; within that range, he has a small circle of intimate friends. His conversation with his friends has always had an easy flow, particularly in dramatic play; the example that follows also illustrates Joel's general interest in boundary and containment.

Sand table with Leo--very verbal and much back and forth conversation.

Joel: That's yours. This is mine. Don't take my sand.
Leo: Look, I need a space.
Joel: This is my sand. Your sand over here.
Leo: Can't pass this bridge.
Joel: Uh, uh. line. Can't go past that line.

Joel: OK where's my other thing? (gets container). This is mine.
(Fills container).

Leo: Which fish do you want? I want my favorite color (takes red one).

Joel: I got my favorite color.

Leo: Yellow

Joel: Yea.

Joel: Can I have some ice cream? (Tony put sand in _____.) Thank you.

Leo: A bee ate it all up. Make another ice cream.

Joel pretends to lick ice cream.

Joel: No, I mean. You get this. Now I did that. And I did that. Makes his own "ice cream cone". Smiles.

Joel: See, I did it now. Oh, I can see it right up to here.

Joel: Now I'm going to try and make it. You can have some if I make it.

Leo helps Joel, shows him how to fill small funnel to make the ice cream.

Joel: Uh-oh. The cakes! The cakes must be done.

Leo: Look at this. I'm making some candles. (age 5)

From a willing but unassertive and unassuming participant in a group, Joel has become active in including others in his activities.

"Let's make a circle, let's make a circle. You guys, let's make a circle. Hey, let's make a circle."..."Make a little circle". Everyone makes a circle and then Ted and Maurice leave the group. (age 6)

The counterpoint to containment is spilling over, pouring out, freeing. For Joel this counterpoint is expressed in long term engagement with open-ended materials--water (especially bubbles), sand, and clay. What pours out of Joel himself is musical and bubbly, effervescent laughter that contrasts sharply with his serious, quiet side, usually occurring when he is in the company of other children. He loves to pour water and sand in and out of containers, and bubbles are a recurrent source of fascination.

Joel pours a bottle of water into a small Comet container using right hand. The water goes all over, he picks up the bottle, puts the big funnel in it, holds the bottle with his left hand and pours the water into the funnel. He then picks up a beaker, scoops water with right hand, and pours it into the funnel. (The bottle is now full, but Joel goes right on pouring).

He then stops pouring, feels water come out around the bottle where his hand is holding it. He takes the funnel out, picks up the bottle in his left hand, looks at it and sees the water, and then pours it out. He then starts to fill the bottle again using the same actions as before. Joel picks funnel high in air, puts hand in stream of water, watches it splash, fills up bottle, empties it and starts again. Then he picks up a small funnel and puts it inside the big funnel and begins pouring again.

...all this activity has created a lot of bubbles in the water table as the table has soap in it. "Hey you guys, look what I'm doing. Hey guys, look at those bubbles." ...Joel is now holding the large funnel and pouring water into it. The water is running out but the bubbles are staying in at the top. Paul looks in the end of the funnel, and watches intently as it runs out. (age 7)

The later records contain frequent references to Joel's ever-strengthening membership in the group; he is liked and appreciated, and his presence fosters group solidarity and camaraderie. This relatedness to other children is especially evident in Joel's writing. The stories are action-packed and full of energy and movement. A description of one of these stories (see story below), articulates the camaraderie of a group of companions, who, by working together, offset disaster. It begins with Joel and Keith and these are the most frequently recurring figures in the story. However, it is the action of the story that is most evident.

Joel's Story

Joel and Keith left Jules out in the dust. And then a bat came and picked up Jules. And then Jules jumped off with his hands. Then Joel had to catch Jules. And Jules fell in the quicksand. Then Keith had to jump in and save him. Then they were sinking. And then Joel had to jump in. Then Joel called Michael. And then Mike came to help us out. And then we went to Mike's house. And then we went outside. Then we went over to the playground. Keith jumped off the slide. And then Jules said, "Stop it, Keith, before you kill yourself." And then they slide down the slide and Keith jumped. Keith hurt himself. Keith broke his leg. And then Jules, Mike, and Joel had to come help him. And then we went back over to the quicksand. And then Mike accidentally fell in. And then Mike lost his glasses in the quicksand. And we all jumped in and sunk to the bottom to look for them. And Mike called Tad. And then Tad helped us. And then they found Mike's glasses. And then we had to go to Mike's house and wash them. Then they broke. And Keith went to the store and bought Mike new glasses. And then when Keith was coming back he saw Philip walking on the street. And Keith started running. And then when he got back to Mike's house, he told Joel. And then they went to the park. And then they saw Jordan. Then they all played on the swings. That's all. (age 8)

Summary of Description of Joel's Story

The recurrent verbs in this story describe motion and largely downward motion. These actions are portrayed on three levels: there is surface or ground action; ordinary neighborhood action involving swings, playground, house; and dramatic action involving heights and depths and out-of-the-ordinary things such as quicksand and bats.

The action is described in a series of events that befall a group of children. The central theme linking these events is rescue or help. The sequence of who helps whom is intricate, but the story flows easily.

Jules is the initial victim. He is helped by Keith and Joel, who in turn call Mike to the rescue. Keith is the second victim. He is helped by Jules, Mike and Joel, but is actually rescued by Tad. Mike is the third victim. He is helped by Joel, Keith and Jules...and so on.

Helping is a mutual exchange among peers and the solutions are practical; no superheroes in this drama. Joel casts himself most frequently as a helper, but always co-equally with his comrades.

Structurally, the story is in the tradition of an oral account. One event leads rhythmically to the next, creating a closely linked chain of events, but without ascribing purpose or motive.

Danger provides the dramatic component and is portrayed through quicksand and "the depths".

Stories, and now storytelling, are primary sources for Joel's education. From the time Joel entered school, he was drawn to books and stories. In keeping with his love of order and sequence, he likes to hear the same story over and he particularly appreciates stories that have rhymes or repetitions which he can anticipate and chant. The Bill Martin reading series with its emphasis on sounds, rhymes and poetry is especially appealing to Joel.

Joel has experienced no difficulty with symbolic material as such. Even in early dramatic play, he easily assumed a role or engaged in make-believe.

Housekeeping corner role. Joel was "Spike" the dog. Enjoyed making gruff noises. Crawled on floor and said several times "Where my bowl?" Begins to "raid" cupboards. Leah to Jane (mother on phone), "Spike wants you to pet him." (age 5)

Joel crawls over and lays his head in Jane's lap. She strokes his head. Continues with her phone conversation--he "retires" to sleep on bed.

He shook his head. Sucked noisily on a yellow block that represented a lemon (girl said it was #2 lemons for lunch). Joel picks out an orange cube. Pretends to eat it. Joel sits on block and sucks his thumb. (age 5)

Joel laughed when Ramona returned. Girl playing hugged Joel. He smiled. Joel tried taking 2 objects, eating as grapes. Pretends girl stopped him. (age 5)

However, the recognition of numerals and letters and what they stand for required slow and painstaking work—an effort facilitated by Joel's patient willingness, his interest in repetition, and his power of concentration.

number lotto game—great difficulty doing this, but still interested

(entering first grade)

There is a cluster of first grade expectations that Joel cannot meet. He is interested in writing his name, and has tried to write the letters. But he has no notion that the letters J-O-E-L go together. He does not know color games, but he does sort by color. He matches sizes of play animals. Therefore, he is seeing same and different.

Joel can rote count to 15, but when counting items he does not do so according to 1-to-1 correspondence.

When given the number card, he can recognize 1, 2, 3, but cannot recognize 4. When asked to put the proper number of cubes in front of the card, can count them out but puts them out in a line, not matched to card.

Can recognize 5

Cannot recognize 6

Cannot recognize 7

Cannot recognize 8 (age 5)

By the middle of grade 2, there were still major weaknesses, but also progress. The results of repeated testing (physical and psychological) were inconclusive, but developmental lags were apparent.

General Approach to Work.

Very serious—always concentrates and works very hard. Likes to meet with adults for academic work. Organized and independent but will ask for help when he needs it.

Reading.

At a readiness level, Joel has developed a sight vocabulary of about 15 words from his dictated stories and is working on letter sounds, names and is learning how to write letters, but this work is hard for him. He is interested and tries very hard. He associates some consonant sounds with the beginning of words: s, m, p, c, and knows o.

Joel's involvement with books and the re-telling of stories provides him with a lot of language experiences and development that he needs.

Writing.

Has been tracing over stories in his Daybook but he is just now starting to copy the stories. His hand coordination still needs a lot of

development but I have seen significant progress this year. Has been working on writing individual letters.

Math.

First grade level. Can add easily—knows some facts of sums to 10, but also uses concrete objects. Has worked on figuring out combinations through 10. Can subtract numbers through 10. Is very anxious to contribute at math discussions. Has participated in math discussion on estimating, measuring, graphing, balance and pattern-making.

At this point, his teacher identified personal strengths that she felt would help him in his school work.

I have seen a lot of growth in Joel since last year particularly in his relationships with other children and his way of relating to books. I am still concerned about his academic progress but I feel that he has a lot of strengths as a person that will help him in school. (age 7)

While Joel's skills have continued to strengthen throughout the present school year and he is and will continue to be maintained in the regular classroom, he has been identified by the school on the basis of cumulative testing as a child with "neurological impairment and a severe language impairment." Recommendations from the Sub-Committee reviewing the test data include increased speech therapy, and resource room instruction in the areas of reading, writing, and math. The Sub-Committee also characterized Joel at age 8 as follows:

Joel is aware of the fact that learning is hard for him and of what he can do and can't do.

Mrs. B. has seen a change in Joel as he is more open where he used to shut himself off.

Joel learns by demonstration. When asked questions about reasoning skills, he picks up immediately after a demonstration.

He has to learn memory skills. He enjoys learning.

In his classroom he has a lot of friends. He's outgoing; has a sense of humor; initiates activities and can be a leader. With his group he's not shy and once given a pattern to follow can organize his materials. [Joel has] a flexible personality.

Joel's mother has consistently helped him at home, reading to him, helping him to write his name, and encouraging him to practice other skills. Joel's own attitude remains cheerful, undefeated, and effortful.

Kenny
Mapping it Out

A solid, sturdy, energetic child, Kenny is also capable of absolute stillness and absorbed concentration. Spatial orientations, patterns, relationships and perspective are often the focus of Kenny's attention. Early records note an interest in channels, tunnels, and boundaries.

Moved to block area to help and [to] play with the children building this immense tunnel about 10' long. After helping to build it, Ken began to push trucks through it and then to crawl through. The other children followed suit. (age 4)

He used the small pattern blocks to build a long line in the block area to keep people from walking over it and tripping on the trucks, according to his explanation. He was very careful to have each block touching and lined up perfectly. (age 4)

Block buildings are often complex in design, with attention to the relationships of the moving parts: a building in which everything was "automatic"; a boatyard with canals and gates which opened and closed.

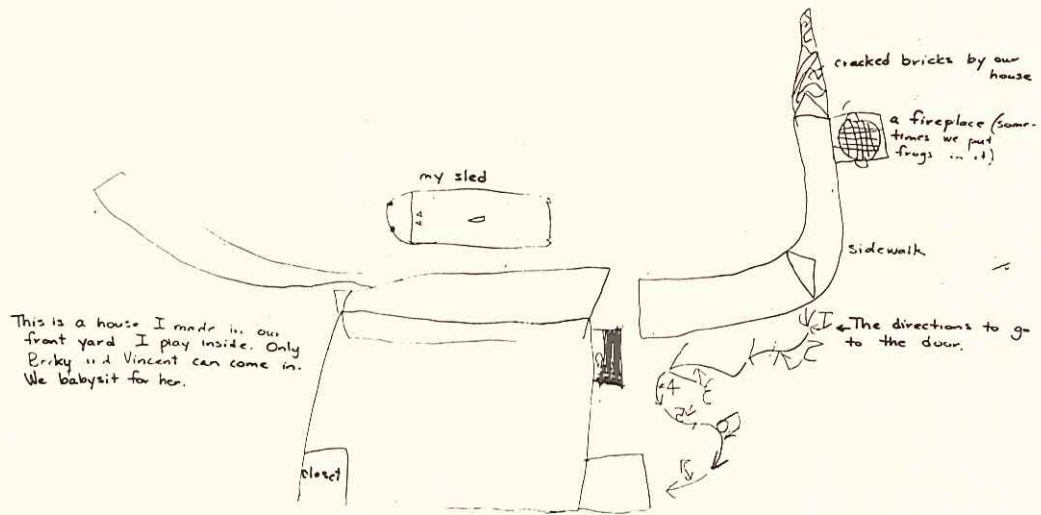
Similarly, his art, an area in which he excels, showed even at age 5, a definite sense of design characterized by balance and symmetry achieved both through the use of color and the use of space. Early drawings—and later ones with increasing elaborateness—employ more than one perspective. A striking example of his complex perspective is a drawing from the kindergarten year in which the figure of his teacher has two sets of eyes, each seeing in different, but particular ways. Other drawings capture an unusual perspective—for example, the Thanksgiving dinner viewed from above. Drawings also invoke the viewer's perspective in subtle ways: many have paths for the eye to travel along or two equally weighted points of focus such as both ground and sky. In a comparison of three drawings (Plates 5, 6, 7: House map, Treasure Map, Tree and Rope) it was noted that all three employ simultaneously a perspective from above, from the inside and from the outside. It was further noted that, while all three create definite boundaries and contained space, they also create paths to follow, suggesting a journey through time; the paths are usually circuitous and lead to a hidden (or mysterious) space or place.

The bounded and the boundless, the contained and the open, the finite and the infinite are interwoven in Kenny's drawings and echoed in other interests: water and the depths (fishing, swimming), ropes and tying, number (sets, but also the mysterious zero). In one drawing of a sunset, earth and sky are not bounded as in the usual child portrayal of these elements, but the sunset is bounded, effectively emphasizing that its transient, fleeting moment has been captured and framed. The interplay of time and space is consistently visualized in Kenny's drawings; motion or journey, and the still moment, provide the access to time, and the observer's relationships to ground and sky provide the access to space.

Plates of Kenny's Art Work

Plate #5

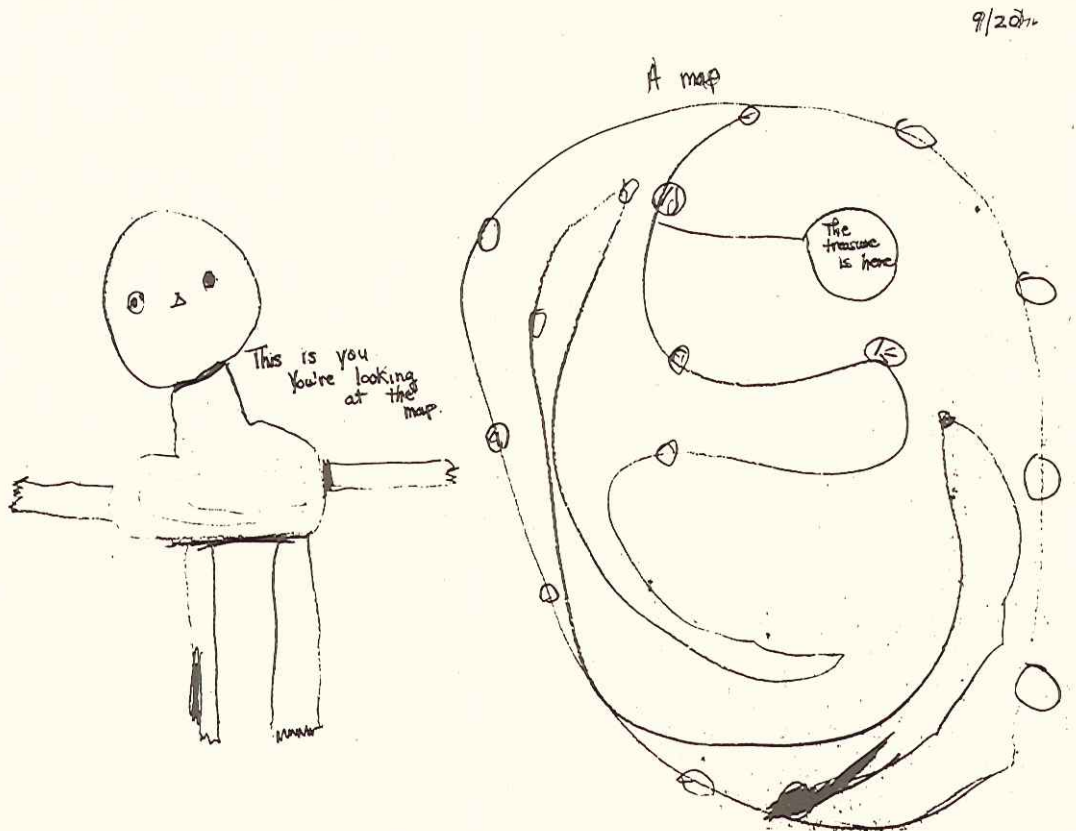
House Map



Plates of Kenny's Art Work

Plate #6

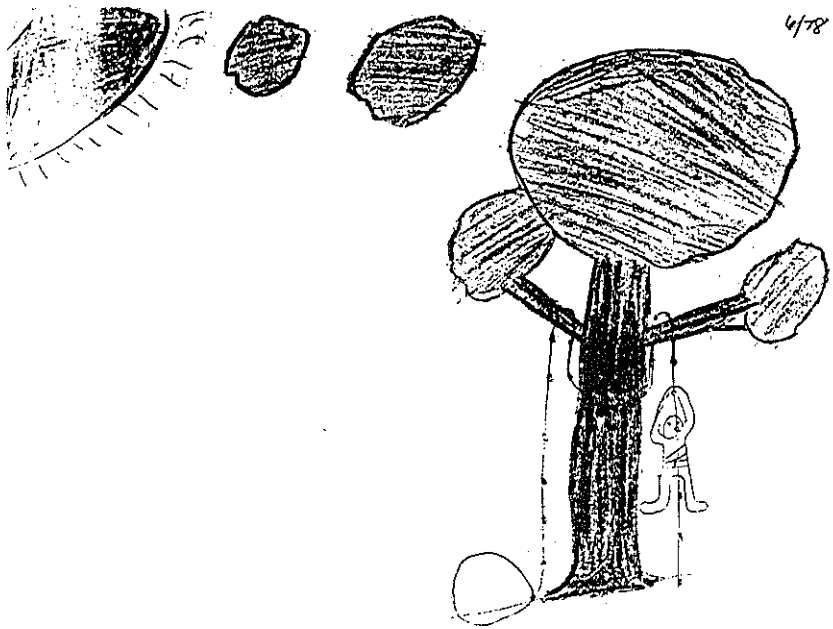
Treasure Map



Plates of Kenny's Art Work

Plate #7

Tree and Rope



Kenny's long term and continuing propensity for maps and mapping is understandable: a map contains—and makes manageable—the boundless; it visualizes in one frame what ordinarily exceeds one's perspective from any given point; it allows a variety of perspectives to be entertained at one time; it permits detachment and control, it both locates and provides the path to the next location; it facilitates and aids memory; it lends boundary, pattern, and particularized relationship to otherwise disjointed, fleeting, isolated, or disjunctive points or events.

By third grade, Kenny's enthusiasm is for world maps and globes. He can draw from memory the lake on which his family's camp is located and place, for an observer with property on the other side of the lake, the appropriate landmarks to guide her from her house to his. Earlier he was able to draw a map to guide the teacher to his house. He can also give directions verbally—either to a place or to explain a process to other children when they turn to him for assistance in "how to....". When describing the visit of relatives, he mapped for the listener where they had each slept in his house, and then observed, "they come from a place way at the top of the map". Describing the setting up of his and his brother's combined train sets and a problem encountered with certain connectors, he stopped and diagrammed where the faulty connectors were.

The crossing point from map to pattern or framework is a subtle one. Kenny creates maps in order to remember and to contain, limit, and visualize both space and his own complex perspectives; he is also drawn to that which is patterned or set in a framework. There are a number of indicators that he can visualize a framework or pattern of relationships for himself and also that he enjoys replicating a set pattern; what holds in both instances is wholeness and the relationship of part to whole. His approach to puzzles illustrates the visualizing capacity.

....when doing puzzles he will put the pieces to the side of the frame and then look back and forth from the piece to the frame. He then picks up the piece and puts it right in, in contrast with most kids who pick up the piece and try it until it fits.... (age 5)

At age 8, he is also reported to take apart his bicycle and put it back together, while many of his earlier interests focused on constructions with interlocking parts (blocks, legos, rig-a-jigs). He reports, "I like to go out in back where old cars are. I open a door, get in and lock the door and go 'va-room' (makes engine sound and pretends to steer). I know how to push that thing down on the floor and shift gears. You know—first, second, third—that stuff. I like to do that." Able to visualize a pattern of relationships and a context, Kenny can also recognize ambiguous objects out of context—e.g. the lens of a camera.

Pleasure in replication is evident in model construction, copying off the board, pattern design, pegs, etc. When school expectations/standards are perceived by Kenny as pressure—not enough time, a strict time limit, immediate recall of new or difficult material—he seeks either a way to structure the task, or time for himself, or a model to replicate. In grade 3, the teacher notes:

He likes to take things home. He likes to finish things at home. He likes to have models to copy. He does well copying from the board and does well copying from books.... (age 8)

A context that was particularly fascinating to Kenny and directly links context back to mapping, journey, and hidden spaces, was a unit on the human body:

Ken was fascinated—he kept wanting to know more about what happens inside himself—veins, heart, stomach. He spent a long time with the magnifying glass looking at his skin. He seemed disappointed that he couldn't see right into his pores. (age 7)

Kenny is prototypically the observer: watchful, thoughtful, reliant on his own senses, with a strong impetus toward order. His particular twist as an observer is the simultaneous availability of several perspectives and the counterpoint he maintains between movement in the service of varied perspective and absolute stillness in the service of memory and thought. Two examples illustrate the seeking of varied perspective:

At lunch—one of first done with lunch...went and looked at waiting line, looked over whole dining room...went out to playground running immediately to wooden climbing house, climbed it three times, sat on edges, jumped...up and down, over and over...Several times climbed up, looked inside frame, climbed up and down again, peeked in through planks. Most of climbing on outside of structure; rested, leaning over top bar looking in; jumped down.

Ran over to pyramidal structure. Clambered all around outside, then in through door, up on inside, out on top, jumped down, then up and over; stopped to look in. In constant motion, on top, legs spread, pretends to shoot machine gun at child climbing up. Except for one episode, doesn't touch another child although now five others are using same frame in random climbing. Does as much jumping off as climbing.

Lies on outside looking into structure on top ledge. High gusts of wind blew dirt around. Didn't interrupt his up and down. When buzzer sounds, leaps from top and tears over to line. (age 8)

The predilection for over and underview, for height and depth, and the relation of ground to sky is confirmed in his drawings and also in his own statements.

Ken said that he would make me a map of his backyard but that he was tired of it...."I done everything out there so many times." He [explained] how he gets up on the roof...."You can see a long way"....and jumps down. (age 8)

Kenny can also be motionlessly absorbed in observation of one thing for a long time—e.g. the pores of his skin. On another occasion, he spent 45 minutes with a solar energy model.

Ken took the solar energy model (some kind of wind mill shape) to the sunny window and sat with it, absolutely focused on it...At one point, he asked for a magnifying glass..."What it needs is a magnifying glass." 43 minutes he stuck with this. (age 8)

The several references to lenses in the record emphasize that looking is the activity most frequently attributed to Kenny. Any new situation such as the first day of school also evokes that response, which is recognized by his teachers as the basis of his thinking and knowledge.

Kenny's strengths lie in his ability to absorb and observe the world around him. Kenny is almost frantically feeling, looking [at] and touching things around him.

Ken learns by observing—he watches, peers, stares, and looks. Even on the first day of school, he seemed to acquire information by carefully listening and watching as the teacher introduced children to the space they would share.

...he has a great sensitivity in the way he looks at things and his dealing with perspective which is different. He looks at things from a lot of different angles.

Observing for him is an important thing. (age 8)

The navigational imagery that observations and records on Kenny evoked—explorer, charter, mapper—is confirmed in his own interests in water, paths, and ropes. Water, lakes, fish and fishing, and swimming are recurrent in his drawings and conversation. Many observations record Kenny's ease in the water and its invigorating effect upon him.

Teacher asks kids to sit on edge of pool. Ken is first one in. "Ken, you ready to get in? Let me see you get in." Teacher asks him to hold breath and dunk under. He does it to five counts and class claps. Ken comes back up on side. Leans back, holds knees. Ken went completely under on last count (something I didn't note at first, but some of the kids only go under as far as their mouths, so it's worth noting). Ken, splashing with hands while sitting on edge (because teacher is working on one child at a time in the water). Ken, splashing rigorously with legs, then rocking on rear end, arms gripping in back, legs straight, outstretched, rocking hard into water, so that legs make rhythmic spashing sound the whole length of the leg. When teacher asks class to clap, Ken claps hands and feet [in water]. (age 5)

Likes swimming. Mother was swimming helper. (age 6)

Swimming—came back wet-headed, bouncy. (age 8)

Ken came up behind me and walking fast, got ahead of me laughing. "This way!" (age 8)

Ken first one out and in line at edge. Got in when told to and swam free style length of pool. Full vigor—one breath—much splashing but real free style... (age 8)

Ken did a capable dive. (age 8)

This time they start from in the water, hand on edge. Billy first, Ken second. (age 8)

....waiting his turn, Ken hits water with rounded edge of kickboard. When he does his turn, he doesn't want to use kickboard. (age 8)

Ken looks forward to and loves his family's visits to their camp, for the lake itself (whose breakers he draws with care), for fishing, and for paths in the woods to his hidden forts.

Ropes are an interesting leit motif in Kenny's conversation and drawings; they serve as connectors of various kinds: paths, moorings, and ladders. In one drawing, the rope into a tree is heavily knotted to prevent slips and to provide resting places; it maps a path into the tree as well as being a ladder and a swing. Kenny has observed about ropes that what he likes to think about "is having them all tied together and then to a boat. Then I would fish way out in the middle of the lake and catch lots of fish." In this comment Kenny unifies the equal pulls on his imagination of the boundless and the contained, the adventurous journey and the safe home port.

Tracks, paths, and sometimes ropes and light form connections and moorings for Kenny, both literally and metaphorically. He describes how he makes flashlights and uses ropes, and employs both as pathfinders. Similarly, he is quick to see the path through a procedure or process, and to find shortcuts. He was thrilled, for example, to have the "magic of nines" pointed out to him.

I asked if he knew his 9's multiplication table. He said he knew 9×9 was 81. I showed him the magic of 9's. He was really excited as the pattern began to emerge at 9×5 and he said " 9×6 must be 54 and so on." When each product added up to 9, he was again excited and called Bobby to look. (age 8)

Numbers are interesting to Kenny both for the secure pattern they provide and also for the expression of the infinite and the mysterious.

Speed multiplication—Ken doesn't volunteer until 100×0 . He's not called on. Next 1000×0 . He raises his hand and says "zero" quietly and low. (age 8)

In his own person, Ken is contained, private, inward, and a severe critic of his own accomplishments. He combines in himself the same proclivities noted in his work: motion and stillness, containment and boundless energy and above all a preference for totalities in which the interrelationship of parts is visible or visualizable. Primarily a thinker with the thoughtful point of view of the observer, Kenny uses humor and conversation about events to establish relationships with adults. While he is quiet, he is an easy conversationalist, able to relate his own viewpoint and feelings (e.g. of a roller coaster ride: "It was so scary I couldn't

believe"). He is interested in where other people live and what they do, and at the same time, remains a bit aloof—at age 8, with children as well as adults. Earlier, Kenny was a child other children turned to for leadership and for advice on how to do things. He speaks often of his family and what they do together, and especially their visits to the camp at the lake.

Pressure, especially lack of time—or what he perceives to be an intrusion into his privacy—makes Kenny withdraw and also inhibits his usually graceful, fluid physical gesture. At those times, he gets red, remains silent, and looks generally angry and suspicious. Kenny has a strong need to control his own time and pace, especially in order to structure or contextualize unfamiliar material. He also values his own privacy and as the psychologist notes resents "probing questions".

At age 8, from his point of view, Kenny has lost a significant degree of control in school because, according to the school standards, he has not learned to read adequately. Kenny is always aware of the expectations of others and tends to elaborate, even exaggerate them. Since his own perspectives on achievement are complex and various, he has come to accept the school's evaluation of his "failure". His mother reports that he thinks he shouldn't have passed first or second grade because he can't read. The multiplicity of perspective, freedom from determined spatial orientation, reliance on total pattern and internal relatedness of parts that lend such originality to his thought and such power to his mathematical understanding, do not provide the same easy access to decoding skills. Ken loves books and stories, has excellent comprehension, dictates stories and has rich, fluent language and a feel for words. However, reading approached as isolated letters and sounds devoid of meaning and context is not accessible. Presented with a test which employs nonsense words to evaluate words attack skills, he did poorly.

On word attack, which is trying to correctly pronounce nonsense... words, he did particularly poorly. The decoding skills, in my perception, are very lacking. He was only able to correctly pronounce one nonsense syllable. On word identification, he got many words wrong. He generally knew initial consonants. On letter identification, there was some inconsistency. The task had asked him to identify 45 letters and there were a few times when he would correctly identify a letter early on in the test and later on would not correctly identify it. I have to qualify that by saying that I think that later on in the test, the script changed from printing to cursive. That may be a problem for him. It was very obvious by way of conclusion that he did not like taking the Woodcock Test at all. Although he didn't say so, it was pretty obvious by his facial expressions that he was being pretty severely stressed. At the end, I felt a need to explain the test to him, so I explained why I had spent some time with him and asked if he had any questions. He didn't have any questions. His only statement was, "I couldn't do it. I don't know the words." Not crying, but very upset. (age 8)

Of the range of instructional methods tried, word patterns and a language experience approach, both of which offer context and pattern, are most available to Kenny. Reading aloud is especially painful and unproductive because it exposes his failure and embarrasses him. He always responds positively, on the other hand, to individual work and teacher support.

Ken's oral reading has gained somewhat. It is very often really good for me to say an unknown word to him immediately when he falters. This seems to avoid any buildup of anxiety of not knowing words. We talk a lot about what's happening in stories; using his art tendencies, we talk about the picture a lot. I feel this helps him get meanings and decode new words through using the context. His oral expression while reading is a lot better. His oral language conversation is super!

Observer's note

The teacher has been working with Ken first thing every morning. They sometimes play "word" concentration with the word cards Ken knows. Often Ken beats him legitimately—at which point he gets very excited and speaks out in glee—also Ken is learning families of words as "...ing" and "...ee...". As long as Ken thinks of the words himself, he can remember them. He doesn't seem to remember the words Mr. G. thinks of. (age 8)

It is important to note that in spite of the struggles with reading, Kenny has maintained an open and conversational rapport with his teachers throughout the third grade year. His ease and fluency and also his impressive capacity for speculation and problem-solving are confirmed in one of the last entries recorded.

I was conferencing with J. in the third grade prep room. Ken wandered in to chat with us—sat down and said, "Hi". It being a rainy day he talked a bit about there being nothing good on Mondays to watch after school "but Bill will walk right in and turn on cartoons and watch them anyway." Then he discussed how the channel numbers for cable T.V. are different than those for regular T.V. Finally we began talking about fishing, broken fishing poles and the one he fixed and the kind of fish to be caught in the park pond. He began to speculate about the mechanics of emptying the pond. When J. remarked that she didn't think they could empty it he said they did but left some puddles in the bottom. He explained about the water pipe leading in and the other one leading out. J. finally remembered that the pond is indeed emptied once a year and as Kenny explained in detail what the pipes look like and where they are she began to remember them. As we said goodbye, Ken said he would bring all his RIF Science books to school to show me on Wednesday. (age 8)

An accident in which Ken broke his right arm and the subsequent events add to the picture of a boy who very much needs to control his own learning and whose pride of accomplishment is particularly great. Having broken his arm, Ken leapt at the offer to use a typewriter and then proceeded to teach himself to write with his left hand "so well that his left-handed writing was better than most kids did with their right hand." The temporary handicap served to lighten the weight of "standards" so he dared take a risk. This fact together with his talent for problem-solving, and the freedom from a dominant right-left orientation turned the accident into a good experience for Kenny and highly productive for his progress in reading.

Ongoing psychological and reading evaluations during the third grade year, prompted by the reading problem and Ken's feelings of failure, resulted in February in a referral to the school's psychologist for weekly sessions. Although invited, Ken's parents did not attend the meeting; they had previously urged that Ken attend Reading Clinic. While assignment to a special class was a consideration for the coming school year, the final decision was to retain Kenny in the third grade, with continued special services.

Luke
"We tried and tried....at last we got it....it
took us a long time" (excerpt from Luke's story).

Small and quick-moving, Luke's physical agility is complemented by a thought process that is deep and thorough. He makes use of reasoning to find the sense or order of events and to figure out causes or explanations. That there is sense to be made is unquestioned by Luke, so he is inclined to accept as reasonable and workable the tasks set for him, and also to set himself to figure out those tasks and do them. This serious attitude and unquestioning acceptance mean that sometimes he feels confronted with too much to do, a feeling that he describes as being "too tired". A task another child might see *seriatim*, to be done one step at a time, Luke perceives in its entirety--and, therefore, as large or long.

Some of the earliest references to Luke's reasoning ability have to do with science activities involving the need to grasp a principle in order to be understood and at the same time dealing with something that is itself not visible--air.

Very interested in a science experiment on how air takes up space. Volunteers to be an assistant. After teacher had each class member experiment at least twice, Luke jumped up from the floor to explain to the class why the paper towel in the glass jar doesn't get wet when placed in a tank filled with water. (age 5)

Wind experiment:

Class went outside to experiment with the wind using bubbles and blowers. Luke blew bubbles but he also used blower in different ways.

1. Having wind blow the bubbles.
2. Turning blower around body.

These were his discoveries. Sister who is in Pre-K was also outside with her class. Came over to Luke. Luke shared his cup with sister and let her experiment with bubbles. Never complained that sister took too long. Wanted to show sister how the wind would blow the bubbles by itself. (age 5)

Luke's reasoning, his understanding of an event, and his observations are always easily, accurately, and completely stated by him in words. This capacity for clear statement of process or of attributes is noted by teachers as lending an adult-like quality or maturity to any discussion or conversation with Luke.

PM science lesson: senses (using our eyes)--all on floor on tummies--looking at cage.) Luke's description, "He has soft, brown, white stuff underneath; his front legs are shorter than the back; he has a long tail (furry); and 2 ears." He was the most accurate of the group and spoke longest. (age 6)

PM discussion of a picture showing a cat up on schoolyard wall. One child asked how it got there. Luke took over conversation. "A dog chased him up there. He can get down. Cats can jump far." This led to discussion about his dogs--he has 2. One lives with his grandma who lives downstairs--he explained, they have a 2-family house. The dog

that lives with his grandma is not as nice as his dog. She barks more and isn't as friendly. His dog is really nice. One day a lady in a car ran over his dog in the street. He is convinced the lady did this on purpose because even though she saw his dog she didn't slow down her car. The dog is all right now. Talked about how his cousin "Kirk Blake" (that's how he referred to him) has a cat who scares dogs. His dog's name is Cinder. (age 6)

The accuracy of the description of the gerbil illustrates Luke's alertness to the world around him, and also an element of objectivity in his view of it. The discussion of the pictured cat is more complicated, but the assumption of cause (dog chased the cat) and motive (inferring purpose because the driver didn't slow down) reveals a mind working within a logical framework, employing a plausible temporal sequence to make sense of an isolated event, and employing observation to establish a basis for an otherwise inexplicable action. At this early age, Luke's logic has flaws but the active mind, seeking for the reason of things is plainly evident.

Yet another "thinking through" illustrated by this example is the placing of one event--the pictured cat--within the context of past experience and knowledge: the cat can get down because Luke knows cats can jump far; and, a reverse situation from his speculation that a dog chased the cat is brought up in the last sentence through his knowledge of a cat who scares dogs. Particularly this last sentence suggests the quality of mulling over or reworking and qualifying a thought on the basis of other remembered observations or knowledge, or on the basis of further observations.

These and other examples suggest an attitude of exploring, reworking, rethinking that makes memory the active force in the acquisition, sifting, and interrelating of new or unfamiliar experiences. In Luke the more speculative, exploratory, inventive side of science is ascendant over that side of science in which the primary concern is verification. The major thrust of Luke's thought is not so much for certainty as for finding, discovering, and uncovering.

The single most frequently recurrent observation on Luke confirms his talent for discovery. He enjoys and is excellent at finding what is hidden, and delights in being called a detective.

...found 25 out of 26 hidden letters. (age 6)

to teacher, "You used to have fish." T: "How do you know that?" "I found a can of fish food in your drawer and figured you must of had fish. Can we have them?" (age 6)

Did an assignment of hidden pictures. He liked to find objects but did not like having to color. (age 7)

The teacher performed some magic tricks and Luke guessed how one was done. He was quite proud of himself. (age 7)

Related to finding and searching, are Luke's fine observational talent and his desire to understand in depth and detail a process or an event.

Chicks hatching, a wild-life trip, or a person's life are all interesting to Luke, and are always recounted or drawn in full detail.

Is excited about science unit on hatching chicks. Is interested in incubator. Spends a great deal of time [during play--work] looking inside incubator. Asked many questions about eggs. (age 5)

(Monday) Chicks hatched. First to ask about incubator when he entered school. "Did the chicks hatch today?" Spent much time watching chicks hatch out during play--work time. Ran over to teacher to tell her that one was about ready to hatch. (age 5)

Very gentle in handling chicks. Tried to show Karen how to hold chick correctly. (age 5)

Asked why some chicks did not hatch. Wanted to know exact reason or cause of their death. Took explanation without much discussion. (age 5)

Brought mother in to see chicks after school. Mother asked some questions about chick development but could not answer her questions. When teacher intervened and questioned Luke, he responded with correct answer. (age 5)

Luke was very knowledgeable about wildlife in the woods. He commented that he thoroughly enjoyed the trip. When asked if he wanted to return in the winter, with snow, he said, "Yes!" emphatically. (age 7)

Luke drew a very good picture of what we saw on the trip. His tree was very detailed, with branches and even twigs. He made one small mistake, his brown crayon dragged along the paper. He tore the picture up and threw it away. (age 7)

(several days later) Luke made the picture[again]. It is beautiful. (age 7)

Luke enjoyed learning in depth about Abraham Lincoln. He enjoyed writing in the classroom with burnt wood. He drew a nice picture of Lincoln chopping wood. (age 7)

Discoveries are firmly engraved in memory through the telling, drawing, and rethinking already noted. A full year after the incubation of the chicks, Luke recounted to an observer his feelings about the new born chicks: "When they're born, it's disgusting. You can see all their food inside their stomachs."

Inference, observation, and a strong sense of order makes all the logical or thinking skills taught in school, and particularly the number system, easily available to Luke.

Was excellent at a classification game using filmstrip projector. Would jump up from floor to answer question on why a certain item or object did not belong with the others. Was able to find the answer to the hardest question involving 3 land masses surrounded by water--islands and one which was not an island. (age 5)

Math—first to recognize cubes were all the same size—(concept larger/largest; small/smallest; same). Happy to announce he knew today was the 8th, during calendar activity. (age 6)

Independent work: did beautifully matched words—recognized color words blue and yellow. Visual discrimination page correct. Math same size, largest/smallest done correctly. (age 6)

That same sense of order and appropriateness extends to feelings and people. When Luke's grandfather died, his concern for his grandmother was expressed by his willingness to take over one of his grandfather's routines, walking Bella, the dog. When other children's circumstances or lives are in disarray, he is concerned to re-establish order and he turns to adults to seek their help in righting the situation.

Came to talk to me about Eduardo (boy I had last year). "Mrs. B., you remember Eduardo?" "Yes, he lives on your street." "Yes, well Sammy is beating him up." I promised I would talk to Eduardo to see if I could help him out. His concern was touching. (age 6)

A student in our class, Jane, came into class, with her hair in total disarray. Luke commented "Miss T., why don't you do something about Jane's hair? It's not combed." The teacher combed Jane's hair, and Luke was quite relieved. (age 7)

Jane's hair was uncombed once more. The teacher combed it and Luke was pleased with Jane's hairstyle. He wanted to know if the teacher was going to comb it every day. (age 7)

Jane got her hair cut. Luke was elated. He said that she looked much better. (age 7)

The willingness to turn to adults in school for assistance is a direct carry over from Luke's secure place within an extended family which includes a grandmother with whom he shares a cup of coffee each day, and several aunts and cousins. His own parents—and particularly his mother—are in close touch with school. Luke is especially proud of the things his parents have taught him (fishing, ball playing) and that he "looks exactly like his father". Home standards and expectations are high, especially for behavior, and except on one or two occasions when Luke has let himself follow the lead of another child into some bit of naughtiness or mischief, Luke accepts these values and standards as his own. He also confidently expects that adults will encourage and support him, and he works in a direct way to establish a good relationship with a new teacher through conversation and helpfulness. Worried that a particular teacher might be harsh, he approached her directly with his worry, and then made occasions to get to know her.

Luke told [me] that a former student of mine talked to him this summer. He was fearful that I was a mean teacher. I told him not to worry. He told me that I wasn't mean. (age 7)

After lunch, Luke asked to work next to the teacher at her desk, in case he needed help. He worked there and finished. (age 7)

Luke hung around after school and helped the teacher. (age 7)

Where order, context and logic are not to be counted upon, Luke is confused and concerned. He has said, "I want to be a good student" and there are a number of indicators of worry when he cannot achieve a high standard of work. The alphabet which has no inherent logic is an illustration of the kind of material that is confusing to Luke. Word patterns--cat-mat-sat--were easier for him than matching isolated sound to letter. Stories themselves were always well-understood and thoroughly enjoyed. In learning to decode, as in other areas, adult assurance and reasoning and recognition of his efforts are sought by Luke and accepted.

"Miss T., why have I always been in the lowest groups in first and second grade? I will probably be in the lowest groups again next year."

Teacher, "Luke, you skipped a reader, which is a big step. You're doing quite well in everything. The important thing is not what group you are in, but whether or not you completely understand the things that you have learned."

Luke, "I see what you mean." (age 7)

Letter and number reversals, some difficulties handling scissors, and other small handwork were a difficulty for Luke in his early school years and these problems prompted teachers to consider a remedial placement for him. In the light of Luke's level of skill performance in third grade and his sensitivity to standards, it is fortunate that this placement did not occur.

Was tested for an O.L.D. placement. Left the room without any problems. Spoke to psychologist after school. She stated that Luke has many little problems that must be looked into. Didn't feel he needed O.L.D.

With each school year, Luke has built from strength to strength, gaining increasing confidence in the effectiveness of his own efforts and an internalized sense of his own talents. After a faltering start with skills in second grade, Luke took hold and worked hard and persistently on reading, sometimes staying after school to complete the work. He achieved gratifying results.

Luke enjoyed the reading group. His comprehension skills were very good. (age 7)

In reading, Luke was impatient with his peers. They were missing words and comprehension questions. He consistently corrected them. (age 7)

Luke did well in his reading group. He attacked words with gusto, and corrected others in their oral reading. (age 7)

Luke was impressed by his reading abilities. His word-attack skills have improved greatly. (age 7)

Luke has been excelling in reading. The teacher has been thinking about advancing him. (age 7)

The teacher and Luke had a conference. Due to his effort, he was to work independently in reading. He was elated! He went around to all of his buddies (all are in higher groups), boasting his achievement. (age 7)

Luke completed 5 reading workbook pages, with minimal error. He stated that the pages were "a cinch." He read well orally, missed no words. (age 7)

End of semester. Teacher talked to reading specialists re: accelerating Luke from a one to two reader to a two to one reader--agreeable. (age 7)

Luke was told about his acceleration, very excited, walked around the room bubbling. (Once again, he announced his news to his friends. He also told others in the class.) (age 7)

Spurred on by success, Luke took on extra book reports and extra reading assignments. Within a month of this success, Luke made the assessment that his math work, always a strength, was improved to a level that would allow him to advance to a higher group.

Luke decided that his math skills were so good that he should be moved up one math group. He asked for a conference with the teacher. The teacher told him that if he was moved up, he would have more work and less instruction, and that he would have to do extra pages to catch up. Luke agreed to the terms. When the higher group met, he was called to it. He was elated!

(next day)

Luke brought in some extra math pages that he finished at home. He was fulfilling his obligation. (age 7)

During second grade, at age 7, all references to small motor problems and reversals disappeared, and new realms of interest emerged: drama, dance, sports, and art.

sports and gym.

Outdoor play. Luke played football with Dick, Benji, Art, Tim and Ray. Luke is a good player. He's fast.

Gymnastics--gym teacher said that Luke is quite agile. He works out enthusiastically on the equipment. He enjoys climbing the rope.

Gym--Luke enjoys athletics. The children were involved in gymnastics. Luke climbed the rope like "Tarzan."

dance.

Luke was chosen to dance in the Brotherhood Program. He made some very nice valentines for his mom and dad.

Luke has memorized his part for the program. He is one of the few that has. His voice is heard over all others in rehearsals. He has always been quite a performer.

Brotherhood Program—Luke was in his glory. He spoke and danced well. He gorged himself with the goodies at the cast party.

Luke asked why he was chosen to dance in the program. None of his buddies were dancing. The teacher told him that he was chosen because he is such a dynamite dancer. He beamed.

music.

Music—Luke enjoys being heard. His voice bellowed.

painting and art.

For the first time this school year, Luke asked if he could paint. He painted a colorful and intricate design, but refused to give it up.

Art class was cancelled. Luke was very disappointed because he had wanted to complete something he was working on for the Art Show. He didn't let anyone know why he was so unhappy.

The teacher told Luke that he was to be the only child from our class to be in the Artworks Assembly. He was very happy, and told all of his friends.

In art, Luke started a spring picture. He didn't want it, so he gave it to the teacher.

drama.

Luke told some very funny jokes for Show and Tell. The children, as well as the teacher, were in hysterics. He said that he got the jokes from his brother.

Luke and another boy, who heard the bell to go in, went through the motions of a scuffle. There were all the movements as seen on T.V., but none of the force. Both boys clutched each other's legs, rushed each other head down, but both held their punches, so that no one would get hurt. The emphasis seemed to be on the ritual rather than on getting the ball which at one point rolled off.

One of the 5th grade monitors selected Luke to be in the Wizard of Oz, as the wicked witch that is killed when the house falls on her. All that will be seen of Luke is a pair of striped socks and shiny shoes. He agreed to take the part. He is such a ham! (age 7)

The burst of energy and movement evident in Luke's ventures into drama and dance, and the elaboration of his art work are accompanied by the continued exploration of depths, inner structures, process, and the hidden; topics include dinosaurs, fish, reptiles, insects, glassblowing and nature study. A drawing done in his third grade year (age 8) is illuminating both of Luke's perspective as a problem-solver and his interest in the hidden.

The drawing is a complicated piece of work (see Plate #8) which at first glance appears to have been the result of playing around with a ruler. Closer examination reveals very deliberate actions of stopping; many lines don't meet and free hand drawing is evident throughout (note ladder in house-like section of the right). Behind the surface geometry (triangles, rectangles, parallelograms, etc.) are layers of intricate sharp angled diagonal lines. The piece did not start as a grid, square or as divided segments which might have been expected from the use of the ruler. The dominance of the diagonal allows greater intricacy, layering, perspective and points of entry. The drawing is ambiguous, full of hidden figures and images. The over-riding imagery is of landscape (fields, roads, mazes), houses and light: in the upper left there are vistas suggesting plowed fields; in the right corner there is a house surrounded by other building-like projections; there are many peaked roofs and windows. For the drawer, the drawing may have been different things at different times, with the possibilities of more hidden figures with each added line. The design is full, requiring persistence to complete and the lines are firm with no suggestion of hesitation. Surface busy-ness hides an intricate order that yields a rich variety of patterns, moods, and images.

The depth of the drawing is in interesting contrast to the surface motion in a piece of writing done by Luke as an assignment (see below). Effort and persistence characterize both the art and writing; "The Australian Desert" is a classic story of the hunt, but with the variation that the focus is not on the kill but on the effort, speed, self-reliance, and plain dogged persistence needed in the chase. That perseverance is its own reward is confirmed in the phrase "...at last we got it" which does not specify how or for what purpose.

Social Studies -- Australian Desert

Complete:

I went out hunting with my father this morning. First of all...

We ate breakfast. Then we got our weapons and got our coats. Then we saw a deer we hid behind trees and stuff. Then he ran we ran after it. Then we threw our spears and missed. But we still had a chance. We kept going I threw my spear and missed. So my father threw the spear and missed. We kept on running. But we had to catch it. But it went on and on and on. But still we kept on running. We tried and tried. But we couldn't catch it.

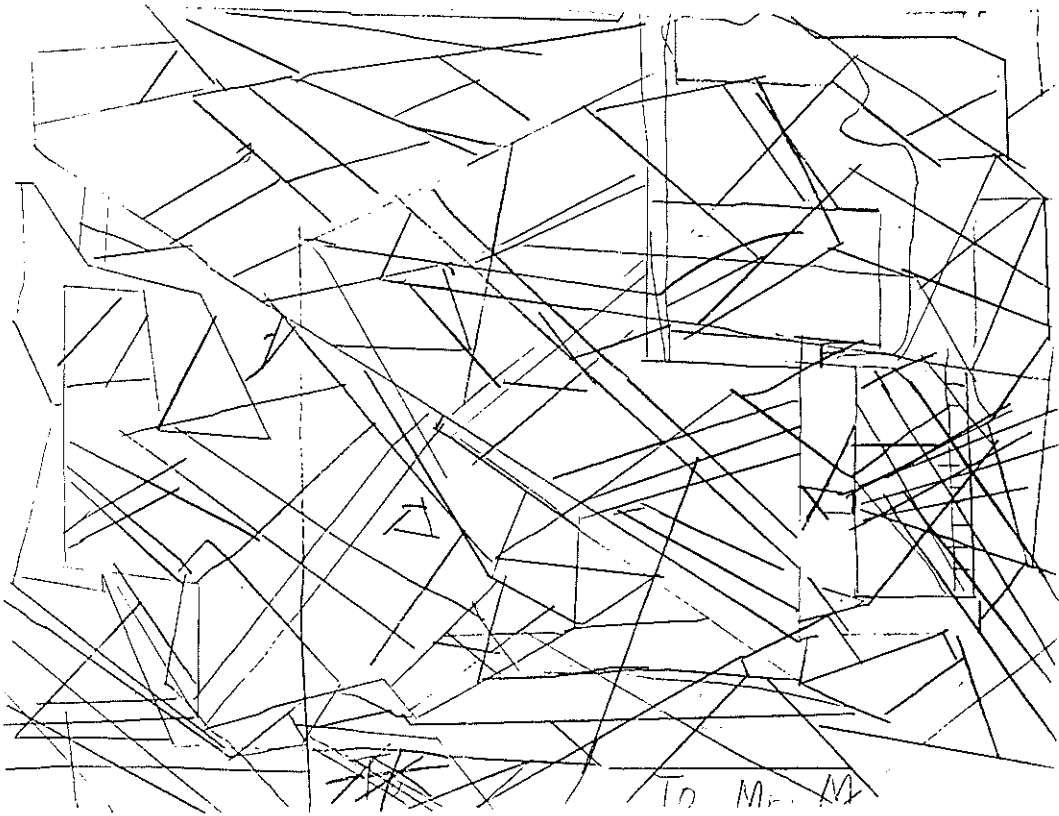
My father almost got it. But still we kept on trying. We ran faster and faster each minute. Finally we caught up to it. But we didn't get it. But still we kept on going. I thought we would never get it. But at last we got it. It took us a long time to get home. But when we did we ate dinner had dessert. And talked for a while and went to sleep and it was a long day.

Overall, the burst of progress and increase in confidence that characterized Luke's second grade year were maintained throughout the third grade year. A final Staff Review notes dramatic talent, strength in mathematics, excellent progress in reading, many interests, and most of all involvement and perseverance.

Luke's Art Work

Plate #8

Line drawing



Terry
Lending a Hand

Tall, attractive, nearly always smiling, Terry at age 8 is a sensitive and sympathetic child. Highly attuned to change and variations, Terry has found transitions particularly difficult. When first brought to school, he refused to come in. Once in, he was resistive, shaking his head "no" to all requests and offers.

Finally sits down with pegs [and] sorts out thicker ones conscientiously. [He] gives them to Mrs. J. and stays with this task. He won't take his coat off and [seems] very worried [and] resistant. (age 4)

The initial transition to school was accomplished over a period of several weeks during which Terry's mother was encouraged to stay with him for all or most of the morning. Those activities in which Terry would participate from the first morning on were sorting or stringing activities involving the kind of repetitive rhythmic hand actions which offer distraction from worry. These helped Terry relax but he continued in his refusal to join the group, to remove his coat, to don a painting smock, and for the most part, to talk. A final outburst of screams and tears on his mother's departure (October 3) marked the beginning of Terry's actual participation in the classroom, and it was noted almost immediately that he was eager to learn, cooperative and productive, but often appeared hurried and lacking in confidence. That same nervousness, although in milder form, was noticeable when Terry entered kindergarten, and a school decision to place him the following year in an inter-age first/second grade, in order to allow him two years with the same teacher, was a response to his need for a consistent setting.

The alertness to setting which makes transition difficult for him also makes Terry unusually attuned to persons, to the things in the classroom, and to classroom routines. He has an unusual and particular ability to locate lost items and to anticipate other children's and adults' needs.

helpful—knows where to find lost items. (age 4)

Names all the children [in the group] clearly. (age 4)

Builds (in blocks) with Andra; [he] is a good friend to have—able to pick up on cues. (age 4)

Terry's awareness of others lends an air of watchfulness and carefulness to his demeanor which sometimes turns to a look of guilt or worry and suggests a high degree of self-awareness. This self-consciousness is evidenced in concerns about his appearance, pride in clothes, and uncertainty about tackling new materials at which he might not succeed. There is a minimum of impulsive behavior and if the context is unfamiliar, there is little spontaneity of expression.

However, Terry, from an early point and with increasing confidence, has employed knowledge and observation to support and locate himself in new situations. Even at a young age when his speech was sometimes quite unclear, Terry knew his address.

The word "watch" is probably the most recurrent descriptor of Terry's activities during the first few years in school.

Terry watched while just two painted. He waited by the easel. When they were finished he continued to watch. I asked if he wanted to paint. He said "Yes"....He worked long at this painting. The paint was carefully applied. He mixed yellow and blue. We had read a book about mixing colors. (age 5)

Terry made a leaf person with no help from me directly. He watched other children. (age 5)

Watching and listening as a source of knowledge also appeared early on and continued as a dependable learning mode for Terry, one giving him entrance to and control of new situations.

There is to be a Friday assembly on Fire Prevention. Terry spoke up, the only one who knew the rule of Smokey the Bear: don't play with matches. He beamed with my praise. (age 5)

Terry remembers (before any class discussion), the two presidents' birthdays in February. [He] raises his hand high and quickly says Lincoln and Washington. He grins from ear to ear with delight. (age 6)

Terry walks in and shows me an article, which he brought from home, about Abraham Lincoln. He says that it says things that we learned yesterday. (age 7)

For Terry, watchfulness and close observation extend to all situations. They provide the content for his strong memory, particularly for detail, which emerges over time as a powerful factor in his approach to learning. As the record suggests, Terry thinks about school when he is at home and remembers to bring in pertinent materials for school projects. He also easily retains cultural information gathered from conversation, television, and other out-of-school sources. He usually stations himself in the classroom at vantage points that increase his power of observation: he watches a project he would like to try, he sits raised on his knees at the edge of a group meeting so he can see everyone, and he moves around the classroom, sometimes gently touching other children, in order to keep tabs on all the ongoing activity. Terry also uses memory to hold the details of the classroom environment in place; he learns and repeats all the children's names; he picks up from the loudspeaker that someone is to be assigned to get the milk and asks for the job; he is fully familiar with all the classroom routines. By the time Terry is in his second year in the inter-age class, he can anticipate and effectively carry out all routine transactions during the school day.

Directions from teacher: "Put your work away." Terry moves quickly away, next seen he has the scissors box—he moves around group to collect scissors. Puts it back on shelf, there was no interaction during this quick event. Terry is at light to give listening signals. He flashes light. Then as it is milk time, he has list of those who get milk which he hands to the teacher who calls out names. Then he hands out milk to those who get it. He has one for himself. He walks quickly to same table where he worked with teacher and leans on his chair and starts to

drink. He leaves table to view the entire room then goes back and drinks milk. (age 7)

The control and ease that Terry gains from his knowledge of the classroom in terms of structures, expectations, and routines is echoed in his self-assigned role as an assistant to the adults. By the end of second grade, Terry was fully familiar with all the adults in the building and had a thoughtful working relationship with each. That rapport in turn wins him their help and approval. His teacher describes those relationships in detail in a team meeting just after his seventh birthday.

Terry's relationship with adults in our school still remains very strong. He seems to respect and understand the authority that adults hold and tries to cooperate with them when he can.

It is very important to Terry that he please his teacher. He feels great importance as a helper--(he gets the attendance cards, picks up supplies, helps serve the snack, gets his group's reading books, and runs the show at clean-up time--just to name a few).

He comes to school relatively early each morning and had become involved in a clean-up crew with our custodian. He was so excited to hear his name announced on the loud speaker. He beams with delight when he is praised for being a great helper or when he has accomplished a well-done task.

Terry is very friendly with the adults in our school. He greets our principal, Mr. P., when he visits our room. He enjoys working with our class grandma. He remembered this closeness by citing it as a "thank-you feather" for our class turkey at Thanksgiving time. He also enjoys delivering my dittos to Mrs. F. (age 7)

Helpfulness is the key word in Terry's mode of relating to both adults and children. He has a seemingly uncanny sense of the needs of others which is in fact based on his close observations and on his sensitivity to people. He senses the teacher's moods and concerns and without request or verbal commentary turns up her lost keys or helps to clean up a mess. He anticipates that a child momentarily out of the room might miss snack and reminds teacher.

Terry is very sensitive to people's needs and uses helping as a means of pleasing or gaining acceptance with peers or adults. While Terry is involved in working he will offer his help to his peers. Terry enjoys working with Donald on his classwork. The boys help and check their work together. (age 7)

As noted in past records, Terry is always there and ready to help out even in very distressing situations. He can anticipate your every need almost as if he could read your mind. He can find lost objects miraculously, have a paper towel ready to hand you the moment something is spilled, just to cite a few examples. (age 7)

The other side of Terry's sensitivity to others is his own sensitivity to the opinions of him held by adults or children. As many of the examples note, Terry thirsts for affirmation, praise, and positive recognition. In the absence of that

affirmation, Terry falters, makes mistakes, and becomes discouraged. An incident, described below illustrates his sensitive awareness of criticism, his response, and a quality of dogged persistence in the face of defeat. Terry had ventured to do a cutting project that required fine hand control, difficult for him to achieve.

"Cat" outlines have been drawn on black paper, Terry cuts the cat out with short fast snips. He talks occasionally with the other children at the table, saying at one point, "I did it myself!" He stands up to cut. The others are all sitting. Two girls at the table: "We're doing better than Terry, right? Yea, we're doing better than Terry." Terry hears, keeps cutting, sighs and says, "I didn't cut off his tail." He goes over some rough edges to smooth them out and get closer to the line. He is distracted for a minute by a group in the doll corner and also glances over at the Teacher from time to time, but he continues cutting. Having been distracted he does cut off the tail, saying softly, "I did mine." He stops cutting, cleans up, and takes unfinished cat over to table where Teacher is. "That's it Terry" says Teacher. He goes back to "cutting" table and keeps working. He cuts a bit more off the tail looking over his shoulder at group in the block corner. He says something about cutting the tail off. Teacher asks him to hold it up. He shows his work to the Teacher, holding it limply, no facial expression. "I think the pussy-cat said 'ouch!'", the Teacher says. Terry doesn't respond, he keeps cutting. Teacher comes over, trims some pieces and says "We can put the tail back on." She finds tail, and begins to trim it. Terry gets tape from Teacher's desk and brings it back to her. He also gets chalk in order to draw on the cat's face. Teacher fixes another child's cut-off tail. Terry smiles. He draws on the cat's face with three circles. Then Terry begins his name. (age 5)

Terry is attentive to his school work and it is obvious that learning is very important to him. He thrives on the routines of daily seat work, spelling quizzes, and homework. He is a highly organized and persistent worker, and these daily activities carefully completed sustain Terry's confidence in his own ability to do what is expected of him.

The quality of Terry's thought underlying the conformity to school tasks is an interesting mix of deep feeling and ability to perceive and utilize serial order and pattern. He is much more willing to be visible in the latter area than in the former. From an early age, Terry demonstrated competence with sorting, patterns, and sequence. He enjoyed puzzles, pegs, blocks, and design work of various kinds. These skills were easily translated into number and mathematics and Terry's success with numbers strengthened his confidence significantly.

Terry paints diary cover. Remembers all directions told to him by teacher about painting, finishes and asks "When is Math?" He asks this several times during the morning. (age 6)

Terry is sitting at the table with his math group. I give each child one paper and Terry tries to help me as I am passing the papers out. The class is asked to look at the picture on the top of the paper. The question is asked "How many groups of ten?" I direct the children to count how many groups of ten in each picture and tell what it is equal to. Terry begins work before I finish giving the full set of directions.

He says that he knows what to do. He stands while he works and busily does counts and fills in his answers. He runs up to me and says that he is done. (age 6)

Terry quickly brings the teacher the math pages for his group. While she gives directions, Terry says out loud that he knows what to do. He takes his paper on subtraction with missing addends and puts his name on top and begins. He quietly uses his number line to perform the equations. His paper is corrected and he smiles proudly as a big star is put on top. (age 6)

Teacher read a book to the class, I Know a Lot of Things and she asks children to think of something they can do. Terry responds "I can do math." He goes to his seat to draw a picture. He draws himself with his math book. (age 7)

At a later point, the teacher notes that "Terry still shows great interest in math. He can grasp new concepts very easily. He enjoys helping others with their work. [For] independent activities, he chooses pattern blocks and math games."

Attunement to feeling and underlying meaning is both more pervasive and more elusive in the records and observations on Terry than the references to his competence with pattern and serial order. The reaching out to people and the helping hand he consistently offers are fully and easily documented. However, embarrassment and uncertainty mask some of the other dimensions of feeling. Most notably, in his early school years, Terry often found it difficult to verbalize his thoughts. Given the closeness of speech to the center of the person, it is an avenue easily affected and blocked by feeling, especially feelings of inadequacy. Terry's speech pattern was inconsistent--sometimes he was able to speak clearly and on other occasions, a word earlier spoken clearly would be jumbled. Terry received speech therapy. The weight of evidence in the record suggests that lack of clarity was largely a function of hurrying, embarrassment and confusion over what was expected of him. With age, and especially with Terry's increasing self-assurance, his speech became clear and concise, although he continues to be quiet and to employ a gentle touch or a gesture rather than words to convey the sympathy and helpfulness that is the basis of his relationship to others.

It needs also to be noted that Terry never had difficulty in hearing what was meant or being asked. Indeed, many of the examples already cited suggest an unusually alert and discerning listener. The great sensitivity to words and language emerges at times even in the assignments of the sort in which Terry seeks to be most conforming and least personally visible.

All four children keep intent on work and respond to teacher as she leads the marking of each line of work. They are on the second worksheet. The first had 16 items. This one has 30. With teacher helping, they are all four on the same item together. Terry reads along. At times he is ahead and knows the words. Terry chooses correct word as teacher reads choices, e.g. to "rule" is to...command-coach-control. Terry chooses command and marks it. (age 8)

Children are doing sentence slotting. Terry is very alert. His eyes are open wide and he is sitting up on his knees listening attentively. The

group is asked to slot adjectives for the sentence, The clown is _____. Terry immediately writes sad, lonely, alone and yells out "Look I got three words already!" He looks around the room several times and glances at the books and flies to the last page of our story. He notices the happy face on the clown and quickly jots down "happy" checking with me to see if it was correct. He is pleased with his list of words and looks at it smiling. (age 8)

Terry's deep love of stories and storytelling provides confirmation of his intuitive grasp of meaning; stories are also the link that unifies his predilection for sequence, on the one hand, and feeling on the other. A highlight of his school experience to date was the visit of an author of children's books. Following the visit, he then systematically read each book she has written.

The strength of Terry's deeper thinking is in likening or integrating new knowledge or experiences to experiences and knowledge already in his command. He is always alert to these similarities and quick to see a new application of extension of what he has learned. Obviously linked to the observing and memory capacities noted earlier, this attunement to likeness and relationship creates an ever-deeper base of secure knowledge. The quality in Terry's thinking which makes serial order and pattern easily accessible has served him in decoding skills as well as in number. While letters were harder than number since their order is arbitrary, his persistence and steady effort carried him through. At age 8, he is a good reader, able and eager to read to others. For daily silent reading, he keeps hidden away a stash of books that he especially loves or else makes a beeline to the library corner to get a preferred book.

Early difficulties with cutting, coloring and other small motor activities are largely resolved, but in general, Terry's use of his hands continues to be for communication: he reaches out to people, taps them, gestures to them; he gives things, passes things out; finds things; and cleans up. He has a light and gentle touch.

While school success is immensely important to Terry and something that he has worked hard to achieve, his greatest talent is for community and facilitating communications among people. This is not to imply that he does not have other strong interests, including sports, prehistory, water, and all things hidden beneath the surface; but that he has a real and unusual capacity not only for helping but also for inclusion. Terry takes everyone in--not one friend in particular, although he does now have a particular friend, but all his classmates. He knows everyone's name and birthday, where each class member is at a given time, and the wants and needs of each. The strong capacity for likening and integrative learning are strengths in grasping the relatedness, fit, and give-and-take that are the very essence of life in a community. A special role that he has assumed reflects his own particular and self-assigned place in the group: he is the aide-de-camp and the official greeter; the person who knows the whole functioning of the class and the intermesh of detail within that functioning and also the person who can reach out to include in an appropriate way outsiders and visitors.

Terry was in the office and a teacher said, "There is Terry; he can take you to Mrs. F.'s room. Donald can show you too." Terry moved quickly out of the door and down the hall. Donald ran up to him and engaged Terry in a tussle of arm thrusts around Terry's trunk. Terry said,

"Donald", and pulled himself out of the grip, then moved faster and stayed clear of Donald. He ran light-footedly up to his classroom door. With a courtly sweep of his hand, he ushered the observer into the room. He ran ahead, then, to sit in the group with others on the floor at the teacher's chair. (age 8)

Terry's solid position in school is confirmed in the last Staff Review reported. Excerpts from that review summarize the strides forward he has made over the past five years.

Terry is most eager to learn. He assumes responsibility for all assigned classwork and homework....His increase in confidence is clearly related to an increase in academic skills. He continues to be a highly motivated learner and admires those who have achieved success....His present school situation, which is quite predictable and gives him opportunities to practice his newly developing skills, supports Terry's learning style. (age 8)

Matthew
"My Name is Matthew"

A handsome, robust, well-proportioned boy, Matthew has had from age 4, a definite point of view, strong feeling, strongly expressed, and a determination to preserve the integrity of his own viewpoint. At various times, Matthew has, in the 5 years spanned by the records, identified himself as black, strong, lucky, having a good brain, able to fix things, and liked by his classmates. He has also described himself as not liked by some because he is black and as not liking to be happy; however, expressions of pride are the dominant motif in his statements of identity.

[Matthew] is standing and working on his drawing. Other children say, "Mine stinks." Matthew says, "Mine don't." (age 6)

Matthew's awareness of self, evidenced in his self-comment, is equalled in intensity by his demand to know his place in the scheme of things.

When Matthew enters the group he seeks out special praise by bringing a toy from home or immediately pointing out something special he is wearing...When he doesn't want to join activities, he says "I don'ts have to, you can't make me." (age 4)

Five years later, his third grade teacher describes "a strong posture which seems to say 'Here I am—I stand for me' and 'I'll make the decision when I'm ready.'"

The counterpoint to that strong personal posture is an acute attunement and sensitivity to acceptance and recognition and the opinions of others, especially adults. Throughout his schooling, this need has been expressed in resistance to change of teachers, including substitutes and specialists, and in a refusal to accept the routines of the new situation, frequently in a manner that also indicates that he knows what the routines are.

For the first few weeks of school Matthew showed a strong loyalty to his teachers from last year. He would go straight to their classroom from the bus and enter our classroom frowning and sullen. Although he still visits them before entering our class, he now seeks out his own teachers and seems more willing to be an integral part of our group...[he also] tested limits by resisting class routines. He would decide to work with the toys after the children had been told to put them away; arrive at the snack table when we were dressing to play outside...he dismissed reminders and suggestions to prepare for transitions indicating an unwillingness to conform. (age 5)

It is equally consistent throughout the records that Matthew is always responsive to praise and that a close, friendly contact between his mother and the teacher strengthens his trust in the school context immeasurably. The importance of a close home-school relationship was noted from the first in the observations made by the teacher in the Prekindergarten year.

Matthew has made major growth in his acceptance of school routine, acceptance of the authority of the teacher, and recognition of his role within the class. The change was somewhat gradual since the return from Winter vacation, but has become quite obvious since Matthew's return from Spring vacation. Since that time he has been completely cooperative. As he has begun to trust the consistency and reliability of his teacher, Matthew has begun to confide his feelings and those of his mother who means a great deal to him....It seems that the dramatic improvement in Matthew's behavior coincides with the successful parent conference and follow-up reports of his positive behavior. (age 4)

When the adults recognize Matthew, are themselves attuned to his pride and sensitivity, and are aware of Matthew's strong sense of family and the bond between Matthew and his mother, he is able to channel his pride and high aspirations for himself in a productive way. His strong sense of identity and pride of accomplishment also mean that Matthew can provide himself with recognition over a job he judges to have been well-done or an activity he has enjoyed. At periods when the school and home contexts are particularly well-meshed, Matthew freely verbalizes his feelings of confidence and competence over his accomplishments.

He frequently says he likes school and during an enjoyable activity of color mixing with food color and water, Matthew verbalized "I'm so lucky." He wouldn't elaborate further when questioned but just seemed to have a generally good feeling about himself and school.

The teacher approached as he left (the house) corner and helped him find a way to help others clean up rig-a-jigs. He talks and makes play out of sorting the pieces by shape and color. Moves from table back to house corner urging aide to go with him. Pushed the mirror into place--said to aide: "I did a good job--It looks beautiful. E., look how good I cleaned up the house. You know who told me to do it? My brain. I did it all by myself. I'm a strong man--let me do it." Helps put manipulatives away. (age 5)

When Matthew feels that a supportive adult context is not there, for whatever reason, he can be resistive to the point of being unmoveable, and if pushed further, he becomes angry.

The teacher alerted me (Principal) as we passed each other (11:00 or 11:15) in the corridor that Matthew appeared to be testing. She had instructed him to complete his math and he was not attending to the task at hand. We agreed that he was to be sent to the office if he refused to do so. Within a short time the teacher located me in another classroom to advise me that Matthew had been sent to the office after having thrown a chair onto the floor in the classroom where the student teacher was conducting a lesson. (age 7)

Matthew's third grade teacher notes that "he needs a great deal of praise, encouragement and support. He tests all strangers who enter his world before he trusts them. Then he seems to relax and tries harder to cooperate."

Matthew is frequently noted to embrace his classmates, sometimes literally, to view them as a supportive unit to himself, and to see himself as having a place within their circle. He readily converses with one and all, and is an enthusiastic participant in activities and projects that call for the participation of a group of children. The earlier records note gestures to include other children in projects and also some definitiveness of viewpoint on how an activity should proceed:

(puppetry project)

Jonas is invited to make some finger puppets but refuses. Matthew says, "Come on".... "Help, help," Matthew calls out for the puppets. "Fire, fire, Fire Dept. hurry up, there's a fire." Matthew closes the curtain. Someone says the puppet show is finished and Matthew says, "no it ain't." Then he calls to Jonathan "you have to wait." Matthew, "Once upon a time there was a girl named Sally." (age 5)

A long observation made in Matthew's second grade year underscores both definitiveness and inclusiveness.

10:35. Runs over to group of boys and immediately becomes involved with their kick ball. Matthew has the first turn as kicker and states the rules of the game. The others say "Ok" although, at this point, four boys are playing. Matthew has had 3 out of 4 turns. He kicks very well. Somehow the stated rules (whoever catches it has a turn) are ignored and Matthew's again kicking the ball. The configuration remains the same. Matthew verbalizing and making up the rules as they go along. "Blue" boy makes some objection, mild, then shrugs his shoulders and lets Matthew have the ball. When "orange jacket" tries to keep the ball, "Blue jacket" makes him give it back to Matthew. Matthew keeps kicking and calling out strikes. The others made increasing objections; Matthew gives the ball to "red jacket." The group has changed. This now seems to be the team. Matthew starts running bases and tries to steal a base. The game is now what is important. All four boys are playing, kicking and running. It becomes a chase of "red jacket" with the ball trying to catch Matthew. A new child (small, green jacket) has entered the game. He is cheered on by Matthew and the others. Matthew now abiding by the rules. Matthew runs home, and when he gets there, ends up by putting his arms around "blue jacket." "Green jacket", "Run, Matt, Run. Matt run." Matthew is tagged by the ball, but still seems to be in the game. A group of girls wander over into the field. Matthew embraces the entire group (3 or 4) with one arm and gently leads them off the field saying, "Girl friends, girls friends". (age 7)

At a time when Matthew was made to sit alone at a table because it was the teacher's best judgment that his socializing and continuous talking were hindering his academic work, he was acutely aware of the separation and the reason: "She always say I don't work, but I do".... During this period, the following comments were made to an observer:

I sit alone. Put that down. I sit alone. Sometimes Stevie used to sit alone....(later) You see, I have...friends in this classroom. But the other room, they don't like me. They don't like Evangeline. You see, we're black. They don't like black people. Jonas in the third grade, and

Charlotte likes me. But the rest of them--no way....(at another point), Do you want me to tell you my friends are? Melissa, Nadine, Belinda, Carrie, Kent...(he goes on to name all the children in his class.) (age 7)

Matthew's sense of solidarity within the circle of his classmates is the more notable as he is the only black child in the class, and because of his own strong identification as a black.

To maintain and develop Matthew's own sense of identity, to help him to make the contributions that he aspires to make, to help him to find, as one observer phrased it "a place in the sun", an arena is needed which gives room to his talent and also offers the adult and group support that his strong-mindedness requires. In particular, Matthew's pride in family and in being black needs to be in the forefront of the minds of the adults who teach him; from some fragmentary comments, it would appear that the life and accomplishments of Martin Luther King offer a model to Matthew for furthering his own ascendancy and aspirations.

Matthew's focus on himself--and his urgency to gain a perspective on his identity--is literally represented in recurrent efforts at self-portraiture. The first reference to these portraits occurs early in his school career.

Matthew spent about half an hour working with clay today, modeling flat figures and using pegs for arms and legs. He was quite pleased with himself and worked cooperatively with three other boys. He told me the three faces were his face. (age 5)

A later drawing captures a certain essence of Matthew--a mood, an atmosphere, a critical aspect of character--that places it unmistakably within the definition of a portrait.

Summary of Description of the Drawing of Matthew.

This drawing is of Matthew. It is spare with not too many details. It captures the essence in a kind of shorthand portrayal. Most details are in the face, head and hair. There is a contrast between arcs and angles. It shows a person centered on a hill and in the space on the page. The figure is expansive as well as still and constrained. The arms are reaching out and up, the eyes look upward on an upturned head. The legs are more fluid, but there is a rootedness to the feet which is suggested by a line which loops over one foot as if to anchor it. That foot is stepping out toward the viewer. It looks as if he were on top of the world--where he might be still looking upward but wanting to go higher.

The figure wears a contemporary "I ♥ N.Y." Tee shirt. Most lines are sure and strong, but the heart is drawn a bit shakily, which adds to the motion of the picture, as if it were palpitating or beating.

Feeling and access to feeling in himself and others, a powerful capacity both for language and for encompassing whole thoughts or projects, are the basis of Matthew's considerable talents--they are also intimately related to the difficulties he sometimes encounters with school expectations and routines. Matthew's feelings are often on the surface and his moods fluctuate through the full range

from exuberance to fury; the pervasive tone, however, is cheerful, hopeful, inclusive of others, expansive, and robust. There is nothing small, mean, spiteful, or grudge-holding in Matthew's passionate make up. Any verbal outburst (he never hits) is followed by apology and renewal of relationship. That same expansiveness is true of his work. As his third grade teacher says, "...When he has chosen a project, he is very enthusiastic and involved....He sees his chores clearly....and gives directions to others who wish to join him. Matthew gets so involved that he often loses track of the time and has difficulty stopping." (age 8)

Matthew also has depth and reserve of feeling. He has a sense of privacy and of personal loyalty (particularly where family is concerned). He knows that there are things to be kept to oneself and things to be sorted out inside oneself before they are made public. The death of his uncle was a deeply moving event in Matthew's life, and one that he did not relate at school until two months after the occurrence. When he did tell it, it was a spontaneous and wholly coherent account that included his own participation in the rituals surrounding a death and funeral.

The capacity to use language to express feeling, to relate events, to comment, to guide action and thought, to provide rhythmic support for work is Matthew's primary mode of learning and thinking. Matthew is pre-eminently the speaker and specifically, the dialogist. Nothing in Matthew's day is unaccompanied by speech, and the speech is dramatic, flavorful, rhythmic, musical, inventive and complete with enhancing body gesture.

Matthew's voice is loud and clear, sometimes referred to as unmodulated, with a tempo and rhythm unmistakably his own. Dramatic play with the puppets, blocks, sand, or in the house corner have afforded Matthew some of the most effective arenas for stating his thoughts and ideas, for creating stories, and for formulating a perspective on people and the human issues that are interesting to him. Hearing stories—an activity he adores—or telling them offers the same opportunity. An early observation of Matthew in the sandbox provides a small sample of his dramatic dialogue.

Singing (humming) while he works, playing next to but not really with the other children.

"No, that's poison, don't touch that, it's really poison"—to children coming close to the sand cups in the carton.

Playing with the sand, spreading sand out on the sandbox seat. "When you eat this—make pretend—it really make you die. I have to dig really fast to get the poison." Keeps on digging. (age 5)

A slightly later observation illustrates Matthew's natural feel for the sense of a word that results in inventive expressions and vivid imagery.

Now with two girl puppets—one black and one white. "This is the mother" he points to black puppet. Then, seeing audience is not listening he calls out, "Teacher, they're not being the studience." (age 5)

That same feel for words, their sense and their power makes Matthew a terrific swearer when angry, and disinclined to give up his own speech patterns and ways of speaking for more grammatically correct phrasing and standard pronunciation. While this rubs against school standards, there is admittedly more punch in

even minor variations of the standard such as "and I don'ts have to" than in "I don't have to."

Matthew's uses of language to guide an activity are pervasive, varied, and nearly always include recognition and encouragement of his own efforts. Matthew quite literally talks himself through a hard (or boring) task, using both rhythm and words to support himself. In every sense, he is his own companion, and that supporting dialogue is probably essential to his struggle to confirm his identity and to establish a perspective on it. Another way of viewing this learning mode is that for Matthew nothing ever simply "is" or is merely done, or is just a fact or piece of information; he is always enacting it and in that process, establishing a relationship to it, enhancing it, enlarging upon it, and giving it life and zest. His teachers identify this characteristic approach throughout the record as playful or "turning work into a game." The following long excerpt illustrates this use of language and also the kind of small, factual detailed task that is difficult for Matthew to do, even when he has the required knowledge.

Back to his seat with his book. Teacher comes over to help him. Follows teacher's working with him very closely. Answers teacher's questions after considering each one. (Closed or open figures to be colored.) Sitting on one leg on his seat running pencil over the page as he responds to teacher.

Teacher, "What color should that be made?"

Matthew, "Brown, I don't got no brown."

Colors the figure (triangle) brown, carefully trying to stay within the lines. His answers show an understanding of the assignment (color square green, triangle brown, etc., etc.). Wipes his running nose with the flat palm of his hand, begins to color with the green crayon. To Irene, "I got my own green now. Here's your green. I gave it back to you."

Dana, "No, don't give it to me."

Matthew, "Yes. I don't want to be a sneak no more. Me and Travis don't want to be a sneak no more. Do we, Travis!" (Travis, "No. No, Travis don't want to be a sneak no more.") Puts down the crayon, snuffles through the book. "See", to Ivan and whomever else walks by his desk and listens, "I'm way past this page." Finds another page in the book (not the one assigned), starts working numbers in the blank boxes (incorrect responses). The recorder cannot determine if he is reading the examples and answering them or writing numbers at random in the boxes.

Starts turning pages again, sniffing, calling out to John across the room, "I'm on C, John." Meanwhile, turning the workbook pages. Closes the book, opens it again at random and starts turning pages again. Stops at a page and starts coloring again with a purple crayon (not the assigned task, I think.)

Singing to himself, "Color the house red, color the house red, you color the house red, red, red."

Smiles at recorder. "God, I've got to get back to the page I was up to. God, I forgot the page I was up to." Stops at another page, writes a

number. Picks up his book, goes over to the teacher and asks her if he can work on a certain page. Teacher says he is not ready for it. Returns to his seat, paging through the book, finds a picture (half colored) of a girl, and starts coloring the arms red.

Gets out of his seat, stands behind Irene, watching what she is doing, ruffles Jonas' hair.

Another couple of strokes on the figure and takes his book over to the teacher, "I finished." Teacher goes over his errors with him, mostly he responds correctly when teacher asks him what he should have done (shape and color matching). Takes book back to his seat to finish and correct his work.

"Jonas, is this all you up to. Jonas, I don't believe it. Me and Irene is already past that." (age 6)

The very first records on Matthew note the strength with rhythm, open-ended project materials and drama, and the need for large spaces and long blocks of time.

He has extremely long concentration when working at a variety of activities. Sand play, water play, and cutting, listening to records or working with trains and tracks. He enjoys playing alone in the housekeeping area.

Matthew is not interested in drawing or pasting or small motor activities. He becomes impatient with puzzles. (age 4)

Skills presented step-by-step or piecemeal bog Matthew down even when he has grasped the concept. Similarly, his retention of these facts fluctuates, even though his understanding and memory of complex stories is unflinching.

Matthew's long attention span is still directed towards the areas of language arts and open-ended messy activities. He seems less comfortable with structured activities which have a proper way of being done. When he works with mathematical materials with the teacher, he shows an understanding of the concepts. However, alone he counts rapidly without an apparent grasp of one to one correspondence. (age 4)

Matthew's concept development appears very erratic. Skills learned previously are not retained well. He sometimes knows names of colors, shapes, letters and numbers, and sometimes not. Academically related tasks require adult supervision for proper completion. Yet Matthew is eager to learn and to do what is expected of him. He should adjust easily to 1st grade but will probably require a longer readiness time before beginning academic work. (age 5)

Matthew is fully and painfully aware of school expectations and standards. A positive perspective on his own excellent ability to grasp and to carry through whole, complex projects is difficult for him to attain. Increasingly his sense that he is not going to be able to cope effectively with certain delimited academic tasks is causing him at times to pull back and protect himself—and, his pride.

Matthew is involved in formal learning in a partly non-committal way. He rarely gives me the sense that he comes willingly and openly to a learning situation. (age 8)

His academic skills at the middle of third grade are described as follows:

- Reading - SIR—Tricky Trolls
 - reads word by word
 - can remember easy vocabulary—sight vocabulary
 - can select book from class library
 - can sound out words--needs reinforcement--phonics method
 - attitude--positive
- Writing - letters neat, clear
 - successful in cursive
 - enjoys creative writing but format is short stories (few sentences) or cartoons
- Math - needs reinforcement in counting, seeing patterns, computational skills past 10 are weak
- Science - most involved during activities
- Storytime - a good listener, enjoys all aspects of storytime
- Spelling - can perform consistently and almost perfectly on spelling words (age 8)

There has been no diminishment in Matthew's love of books and stories, his rich imagination, his dramatic and expressive language, or his pervasive interest in people. Long projects continue to hold his interest for extensive periods of time and to bring satisfaction and reward.

Minerva
"I'll Teach It to Me Myself"
("Take It, Play It, and Do It Right")

Tall, stately, and graceful, Minerva has been described as a regal and commanding presence, in spite of being a vigorous thumbsucker well into her 7th year. From an early age, she has also given the impression of standing alone and relying upon herself, while keeping an alert and watchful eye and listening ear on everyone and everything around her. Minerva's intentness on picking up by eye and ear what is expected of her and what she wants to know is part of a pervasive attitude of wanting to know whatever needs to be known before it is taught or before she is asked and, if possible, first and fast. Pickiness, slowness, and sameness are an anathema to Minerva.

Watches board intently. Thumb in. Plays with four fingers. Follows with eyes. Called on to correct another child's answers. Does so firmly, thumb does not go in for awhile. (age 5)

Her eyes are glued on the teacher as they sing "Diez Inditos" forward and then backward accompanied by fingers... (age 5)

She sits casually, one haunch on the table top and follows a series of movements (demonstrated by the teacher) which change with increasing rapidity. She gets them all right. (age 5)

Minerva's focus is never on an isolated fact or on a static event. She searches always for the process, secure in her faith that there is a right way that can be found and then counted upon. When Minerva has determined the process, order, or pattern of something, she is dead certain of what constitutes "right" and "wrong" within that context, and is insistent that others meet that standard.

Class stands for exercises and she does a series of movements which require knowing right from left correctly. She walks to parallel table to help a boy (Jerry) who is incorrect. "No, that's the wrong hand," and she takes his correct hand and puts it in the correct place. (age 5)

If child doesn't respond, she becomes annoyed. May push child into place and tell him again what to do, e.g. (she thrust an) instrument into child's hand (and said), "take it and play it and do it right." (age 5)

Her mastery of the school situation and her air of assurance cause other children to seek her help in spite of her often pedantic tones and definitive commands.

Minerva was copying work from the board. Child asked her for help, she didn't answer but helped with clues. Gave directions to other child. (Bradford) agreed and was glad to accept help. Acted as teacher to rest of group. Children accepted help gratefully. Asked me for time. Very careful writing in book. "Perfection"--otherwise erases. Distracted by problem in room. Checked out problem, then continued right back to her work. Took work chart to table, so she could see it better.

Activity—fill in missing letter for word. Liked (through facial expression) that she had control over room—did her own thing. Sits upright in chair. Another child asked if word began with a certain sound. Minerva answered (a little sharply) and if the children didn't pay attention to her she insisted they do. Consistently gets asked for help by other children. When Minerva had trouble with a word on the chart log, she asked me instead of other children. Didn't address the teacher, just told her where she was going. Wanted certain child to sit next to her. (age 6)

As this observation indicates, Minerva has by age 6, absorbed all of the school teacher mannerisms and even the ways to offer instruction, that is by "clues", not answers. In achieving this identity with the teacher, Minerva places herself apart from most of the other children and also gives herself a large measure of control in the school situation. However, for Minerva, standards, forms, and correctness are too static to be ends in themselves, and she openly terms boring or refuses anything that is repetitive or overfamiliar.

Mrs. K. comes over and speaks to Bob about a trick, "the magic E in words like this that I will discuss with you and Dora and Minerva". Minerva's head shoots up, brows furrowed. "I know that already!" She is adamant, shaking her head, "no", when Mrs. K. suggests she could use review. (age 6)

Trip to Napoli Bakery. Comment: I was there before. It's silly. (age 6)

A different perspective, a variation, an absurdity are Minerva's great pleasure, and make her open and eager for knowledge and new information. The manner in which she observes and forms knowledge is through a naturally comparative eye and ear which focuses her attention on likenesses and differences, on the places where an idea, word, color or shape bounds another or differs from it.

March 3: Started to review. Minerva: "I know it. I taught it to me myself." Teacher read story "Wacky Wed". Asked for meaning of wacky. Minerva made the appropriate motion. When questioned about what the motion said, "That's what you said yesterday about communicating." Later teacher introduced word "absurd". Minerva giggles, "That whole book is absurd." (age 6)

Always hunting for the relatedness in things, she accumulates knowledge which is flexible and interconnected.

When asked an addition problem, "What is 8 and 1?", she asked loudly "1 plus 8?", and answers loudly and firmly "9". (age 5)

[The] teacher teaches three new [Spanish] words, and Minerva remembers that "muchacha" is "girl", with a big grin. She seems to like the sound and repeats "chacha" to herself several times. (age 5)

A discussion of babies carried on African mother's backs is connected with American Indians and Minerva corrects Tyler: "Papoose." She also points out to Ms. P. that the T. has forgotten to write the words for "four." "Giraffe," she remembers as an animal that lives in Africa.

Thinking of antelopes, she also volunteers "reindeer." She recognizes a marketplace as such but doesn't remember about barter. Suddenly she calls out for Ms. P's attention, and points out that "nne" (4) and "nane" (8) are "almost the same." (age 5)

When school assignments are dull by her standards, Minerva characteristically livens them up with variations and elaborations, decorative touches, or with drawings or messages. Pattern, harmony and elaboration of pattern, whether visual, musical, or gestural, are immediately accessible to Minerva and of great interest and importance to her. Descriptions of her drawings note that they are consistently coherent, that things "hang together" and have unity and purpose. However, the balance and symmetry that contribute to that coherence is counterpointed by layers, intricate design, and multiple and varied perspectives. Drawings sometimes suggest an inner dimension that is not visible (e.g. a hole in a tree). An inward dimension is also a function of the curved lines and areas characteristic of Minerva's style which creates a circling motion that carries the eye inward.

Minerva grasps any body rhythm immediately, and musical rhythms, poetry, and dance are satisfying to her.

February 25: Free choice of play activity. Minerva goes to doll corner. She takes a tambourine and dances and plays the tambourine while looking at herself in the mirror. She has a look of total enjoyment on her face. (age 5)

Minerva enjoys poetry and has brought poetry in...
She also likes to paraphrase poems... (age 8)

However, Minerva's preferred activity, whenever the classroom context has permitted it, is dramatic play, usually involving a housekeeping corner. Minerva is in her element as the director of a tableau or "set piece" involving domestic life and within that context, open to endless (but controllable) variation.

Play time. Minerva asks if she can play in the doll corner. Minerva goes to the refrigerator and says the eggs aren't in the right place. She proceeds to put them in the egg carton. She tells Caroline they need some chairs in case someone comes to visit. Minerva takes small cup and says, "Baby is going to drink out of this." Minerva started out giving all the directions although eventually Caroline started to do some of her own rearranging without any disagreement from Minerva. Minerva is the imaginative one describing various occurrences such as "The dinner isn't ready, the sink is leaking." Henry walks over to doll corner and Minerva invites him in. Henry goes in, sits down, and Minerva tells him, "Don't sit there, sit here. That's my seat."

Richard, Tasha, Minerva, Michelle; Minerva delegates all duties. Husband is away for long time. Richard, who is nephew, attempts to cook. Minerva: "We can't eat that. It's junk. Find something to do. I'm the mother." Richard, "I'm going to be in a C.B. contest." Minerva cooks.

Tasha feeding the baby, "Not that, take this." Richard, "I'm going shopping." Minerva stops. Gives Richard money from pocketbook. Richard told to clean up before he leaves. Minerva and Joan giggle

over contents of purse. Giggle again. "Mrs. K. This pocketbook (has no pockets). Did you see one like this?" Minerva put on red velvet robe and took over from Richard. (age 6)

Minerva also directs towards herself her interest in order, process, variation, and elaboration. Well put together and casually graceful in every gesture, she is conscious of appearance, hairstyles, and beautiful things. Her drawings are often of female figures in ruffled dresses, adorned with earrings, necklaces, and other embellishments.

Ms. P. Draw-a-person: drawn in this order: face outline, eyes with lashes, hair on top, earrings, hair on sides, dress, ruffle on dress, legs and feet, flower on dress, design on ruffle, more top hair and forehead curl, nose, mouth. Smiles throughout.

"Finished?" (yes.) "Anything else?" (whoops!) teeth (?), bosom (shows with gestures on her own body, totally non-verbal, grinning!) (age 5)

Her convictions about the right way to do things and correctness are also brought to bear on her own actions. Always aspiring to do the right thing in school, to finish her work, to do work that is (by her standards) boring, she often chooses a friend who models that kind of propriety. Unable to live up to her own standards, she makes ever renewed resolutions to be "good" and "nice".

My own rules

"I must work as fast as can be"

"I must not be slow when you blow" (whistle)

"I must listen to my teacher"

"I must learn nice things"

"I must be good."

"I must not be bad."

"I must obey class rules.":

"I must not be evil." (age 8)

She also acknowledges her own feelings:

I like school only when we have playtime and I don't like school because you have to work so much. And our teacher gives us so much work. I hate being in second grade and I wish I was out of college—no school forever. (age 7)

The process and order to which Minerva is attuned exceeds the immediacy of school life, and contributes to the expectancy, anticipation, and hopefulness that are so much a part of her temperament. It is also a hopefulness tinged with something akin to forbearance and resignation; life has not been easy for Minerva, and the chronic illness of her mother and the death of her father are realities she lives with.

Minerva: "If you live to a hundred you want to die." T. "If you feel good you don't want to die." Minerva: "Everybody dies." T. "Some people live a long time." Minerva: "We're going to live a long time." T. "Who?" Minerva: "My mother, brothers, sister and me." (age 5)

Minerva assumes she will go to college (her sister who takes care of her is in college), and school is a part of that process. She also anticipates an active career.

M. tips her chair back and begins rocking back and forth. "When I grow up I'm going to be a teacher, and when I finish being a teacher, I'll be a nurse, then I'll be a store lady, then a shopping lady for clothes." (age 6)

On a more daily basis, urgency to get the assigned work done and her firm grasp of the school structures lead Minerva to anticipate increasingly teacher directions and assignments. At the same time, her concern to do things perfectly or correctly slows her down. Her third grade teacher reports that she puts the headings on her papers in advance of the class in order to get a headstart but then proceeds at a painstakingly slow pace because of her need to perfect her handwriting. At an earlier age, Minerva's urgency and anticipation made her intent on having the first place in line and on being the first to have an answer or turn.

Minerva is determined to make it in the world, and she makes it clear that she understands that school plays a part in realizing that goal. Teachers and observers have characterized her as a survivor, as someone bound to come out on top. Teachers have consistently commented that, while very bright, she is not the most intelligent child in the class, but that her alertness, force of will, resilience, self-reliance, and charm make her certainly the most ascendant.

The balance Minerva has to maintain in school is delicate and complex. On the one hand, she has to balance her own strong will and temperament against compliance with adult authority and school structures. On the other, she has to balance the necessities of self-reliance essential to her survival and daily life with the need for adult nurturance and protection. She maintains that balance well. She identifies strongly with female figures, and looks in each new figure for a likeness to other important women in her life to find a basis for trust, sometimes noting actual similarities and sometimes cavalierly ignoring such physical dissimilarities as skin color.

Many times will go to Mrs. M., pulls her down and kisses her. Mrs. M. and Minerva's mother are same complexion. Minerva sometimes says things at lunch like "Thank you, mommy," and "aren't you my mommy?" to Mrs. M. but it is probably teasing, because the other children then pick up on it. (age 5)

Minerva has been eyeing me with recognition and finally gave me a friendly wave. I am sitting near Ms. K. (T) and Minerva volunteers "You look like her. You both look the same." She never mentions our skin, only our eyebrows, lipstick, cheeks and eyes. I invite her to compare our lips. "She got blue and you got brown." She smiles. When I ask her if I looked like Mrs. P. (last year) she says, "no, except your mouth and tongue." (In both comparisons, there are really no similarities.) (age 6)

Reprimands from teachers are accepted without sulking or grudges.

May 10: Was sent back from [the special, higher level reading group to which she is assigned] for not doing her work. I supplied her with other

work and told her that I was disappointed. Selected the work she wanted to do and brought it slowly over for approval. Feet dragging. But then sat down and carefully went to work. Face calm and absorbed. Erased mistake and went on with her work. (age 6)

However, even when Minerva complies, she maintains her own viewpoint. Told to be quiet, she is--except her feet which are busily nudging the boy next to her. Given tedious work, she makes it decorative and lively by embellishing it. At bottom, she cannot respond to sameness, repetition, ugliness and above all, dissonance. In the case of the latter she is outspoken and sometimes, pleading.

They bang the ruler on the desk
And, they make me have a headache
And, they be yelling....

Please don't yell. (age 7)

Minerva's outward forcefulness and will is counterpointed by depth and inner thought and her self-reliant loneliness by a yearning for kinship. Deeper feelings surface slowly and rarely, but recurrently noted expressions of dreaminess and abstractedness suggest plentiful inward thought. The death of her father was announced without emotion when it occurred, but was confided with feeling to teachers about a year later and has continued to come up at intervals. On one occasion another child's remarks about her family was one of the very few times that Minerva has ever been observed to be near to tears.

On the bus on the way to the museum Minerva told me that her father died. She had mentioned this on previous occasions. She said her mother and sister cried but she didn't. I asked her if she knew why she didn't cry, and she shrugged her shoulders. I told her that when you're sad sometimes you cry inside and feel bad without anyone seeing you cry. I asked her if she cried inside. She smiled and said, "yes." (age 5)

(describing cooking done at home)

"Then I made a birthday cake. It was my father's birthday. He died." I asked her why she made the cake. "I just make it anyway", she said. "How do you feel?" With hesitation and some thought she said, "I felt sad because he wasn't here." (age 5)

April 28, 1978: At dismissal. Eyes downcast, clung to my hand as I passed in front of line. When asked why she seemed so sad, said quietly, almost a whisper, "Richard, he be talking about my father and mother, and I don't like that." Mrs. K. "But Richard doesn't know your parents." Minerva: "But my father is dead and it makes me feel bad." Walked slowly, eyes down despite hug and kiss and my comment. "Everyone feels bad when someone they love dies. I'll talk to Richard about it." (age 6)

Minerva stands alone--literally and metaphorically. In keeping with her earlier statement, "I'll teach it to me myself", a recent drawing was labelled "me, myself and I." While her older sister's care and attention is consistent and loving, she is virtually without parents. Her own determined will and force are not qualities that make her generous and sympathetic to her peers, although she is a

definitely recognized authority and presence—and increasingly a helpful one. They are qualities that build a strong inner identity which sets her apart, and also provide direction and purposefulness to her life and thought. Minerva sees the path before her and has set her foot firmly upon it. That firmness of purpose and future orientation are touchingly visible in resolutions written by Minerva on January 2.

My New Year's Resolutions. I will resolve to try to write faster and get my work done on time because I'm a smart third grader and a smart person and I shouldn't be a poor worker. I should be a good worker. I will resolve to stop working and writing when the teacher says put your books away. Because I must do what she says and that's one of her rules she tells us. I will resolve to get a good and excellent report card. Because I do not want to stay like a third grader. I want to be a fourth grader and on to a college girl. (age 8)

The inward statement--the necessity and determination to preserve her own self--is reflected in a few phrases written at Thanksgiving.

"When I think of Thanksgiving, I say thanks for my heart."
"When I think of Thanksgiving, I say thanks for my life and me."
(age 8)

In her own writing and drawing, Minerva reveals a vision of the future that is full of love and warm familial ties. In the collection of drawings, there are many spontaneously conceived portrayals of an archetypal family: father, mother, and a baby in a carriage. There are hardly any assigned drawings that do not feature this family drawn in miniature in a corner (see dinosaur drawing, Plate #2). Family is Minerva's logo. In these drawings, the feminine figure is strong and beautiful and almost always decoratively adorned.

In a recent drawing, a girl, Fee Fee, is portrayed looking out a window. She is drawn in the sky at center and midpoint of the paper. Below, feet slightly above ground, stands a boy with the characteristic features that Minerva uses on male figures. He is between a big rose (so labelled) and the familiar tree with a hole in the trunk recurrent in much of Minerva's drawing this year. He is singing to Fee Fee, "What you gonna do with my lovin'. I'm crazy about your smile." Although Fee Fee is smiling, there are raindrop tears on her cheeks. Above her in the window is the inscription "I'm dreaming." The dream appears in a balloon over her head depicting trees (with holes in the trunks), sun, and clouds marked to signify rain; the two trees are joined by a hammock holding a person. The drawing in composition and content depicts inward dimensions, layers, depths, and also anticipation and hope: a disembodied window in the sky with a girl looking out from within and down from above; a dream; a boy singing his love but to a girl up above him and at whom he is not looking; and the holes in the tree trunks suggesting inner space.

A bit of poetry and a description of herself as a new teacher confirm the inner hopefulness and yearning Minerva conveys in the drawing:

I will give my love a palace
Wherein she may be
And she may unlock it
Without any key. (age 8)

Minerva changed the writing assignment on teaching from "If I Were Teacher", to "A New Teacher." She starts, "If I were a new teacher I would:

treat my class children nice
make them smart and proud
give them soda and a treat after lunch
take them on trips
buy them something
sometimes give them cereal and juice for breakfast
not yell
be gentle
let them take a nap for awhile
cook and always have lots of parties
give the girls a person to dance with them

Minerva writes what she would do "If they would not be good":

they would get a punishment assignment
they would get a lot of homework
I would not let naughty people do things,
but "there would be lots of parties even if they were bad." (age 8)

Another fragment of writing carries the same dream and waiting qualities as the window picture and underscores Minerva's needs to protect and preserve her own self for the future. The assignment was to write "My Favorite Place in the Bronx".

My favorite place is in my bed. Every morning, I would be glad to stay in bed because I do not want to go to school.

I would sleep and sleep like Sleeping Beauty. (age 8)

And, by implication, awake to find the dream come true.

Whatever the longing to sleep and dream her way into a romantic visionary future, Minerva in fact follows the hard part of work and effort, but work and effort enlivened by romance, quest, wonder, and her own inner confidence.

Of herself, in the past year she has said: "I am the prettiest girl in New York, I'm quite a good reader, and I'll work no matter what."

A writer, a reader, a good mathematician, a dancer, an artist, Minerva's educational potential is enormous. Although school chafes and frequently bores her, she is determined to make the struggle to fit her own expansive thought and body into its confines.

3

Perspectives: Commonalities and Contrasts

Each of the seven children portrayed in the previous chapter has a characteristic way of relating to the world which is the key to personal continuity, and also the key to each child's fundamental and ongoing educability. It is as if certain ideas, things and qualities called to each of the children in a voice that child could hear, or as if those ideas, things, and qualities beckoned and led each child along particular paths. The voices each hears and the paths each follows are true guides to the education of the person, and also provide direction for the most limited goals of schooling or training. To hear the voices the child hears and to follow the pathways alongside the child opens for the teacher and parent a natural and continuing access to the experiences that will nourish and further the child's growth. This hearing and following also suggest ways to make knowledge which is more obscure and difficult at least accessible, and possibly interesting, to the child.

For example, Kenny's multiplicity of perspectives make space and geography particularly available and interesting disciplines to him. That flexibility of perspective also makes the isolated elements involved in many approaches to decoding skills difficult, and context and pattern is the more effective instructional method. Or to take another example, Mark's generalized proclivity for forms and formulae is a perspective which gives access not only to number but also to the ethics and laws of other societies.

Often times, the parent or teacher comes to the understanding of the child's talent and particular perspective on the world by having observed the child's spontaneous engagement with things or ideas on repeated occasions. This is illustrated in Joel's record by the teacher's statement following her account of many actively sought experiences with small manipulatable units:

It occurred to me today, after watching Joel play with the wooden animals and blocks yesterday, the wooden people today, and the

arrangements of funnels at the water table today — that a consistent theme is the ARRANGEMENT and RE-ARRANGEMENT of the materials. He stays intently engrossed with the same material, shifting them in various formations.

As the illustration exemplifies, the continuity of perspective may at first be obscured by the variety of seemingly disparate materials and activities through which it is being stated. However, time, an observing attitude and reflection allow the continuity and coherent wholeness of the child's interests and orientation to become visible.

Efforts to educate that strengthen the child's perspective by recognizing it and reflecting it back, increase the child's personal productivity. However, it is by relating the personal perspective to the encompassing continuity of universal human themes and traditions of knowledge that the child's experience is enlarged and extended. For the seven study child these themes include the following: the origins and the hidden sources of life (especially Joel, Luke, Mark, Terry, Kenny); identity (especially Matthew, Minerva); kinship and community (especially Minerva, Terry, Joel); survival (especially Matthew, Minerva); cycles and change (especially Mark, Luke); the forces of nature and the inner forces of feeling and will (all seven); beauty and harmony (especially Minerva, Joel); and security and freedom (all seven). The larger traditions of knowledge that link each of the individual children's perspectives including mapping, storytelling, building, drama, drawing, dance and poetry.

Whether explicitly and consciously or implicitly only, classrooms and teaching practice of necessity must make some room for individual perspectives, for universal human experiences and for traditions in knowledge. Efforts to educate that run cross-grain to the child's perspective lead to confusion and loss of confidence — as illustrated in Kenny's struggle to learn to read. Historically and typically, schools and classrooms have been more amenable to some perspectives than to others. On the one hand, Matthew's need to relate to things and ideas by speaking and conversing places a strain on the usually accepted school structures. On the other hand, a child like Terry, for whom daily steady effort on routine seat work is a comfortable pace, fits quite neatly, in that respect, into the typical schoolroom format for learning. The art of teaching is to create that interplay of persons and perspectives which strengthens the contribution to be made by each individual to shared experiences and interests which in turn creates a strong and mutual community of interest for the support and benefit of all.

Summarizing the portrayals of the seven children in terms of the contrasts in perspective among them creates a groundwork for drawing educational implications for each one and for the curriculum and teaching practices that would comfortably encompass all of their perspectives. It needs to be noted that a contrast has the effect of highlighting differences without making judgmental comparisons. Contrasting colors contribute each to the other's value and importance, creating dramatic effect and cohesiveness; so do contrasting perspectives and persons. Similarly, the contrasts among the children are not judged as better or worse in terms of a preconceived standard of school behavior, learning or success. At a later point, there will be a discussion of the kinds of classroom continuity needed by these different children individually and communally. For now, the reader is asked to picture the seven children within one classroom setting and to imagine their numbers multiplied four or five times over in order to grasp

the range and richness of perspective — and the enormous potential for educational experience — available in any classroom.

The Contrast of Perspectives. *Mark's* dominant orientation is toward the varied and visible surfaces of things. His interest in travel most literally addresses his zest for variety and change — for new viewing points and for new vistas. There is a vivid image of Mark rolling along on his bike, noting all that passes and storing it for retelling to his parents or at school. His parallel interest is in the forms, formulae, rules and procedures that establish a surface order for an experience, a learning activity, or a relationship.

The affinity for forms covers a wide range of materials, activities, and ideas: number patterns, written procedures or formulae, story forms, manners and etiquette, rules, styles. Forms are equally available whether written, spoken, or visual; the unspoken standard (for example, behavior and etiquette) is internalized without communication as a "rightness" that Mark intuitively feels to be congruent with the deeper complex of values in which he is embedded.

His orientation in space is direct, linear, and unimpeded — the forward motion of running, and the smooth traversing of a path or road on a bike or in a car. Easy, direct body movement is echoed in an ease with learning achieved through direct, linear application of prescribed formulae and procedures. His orientation in time is toward the future, with formulae, traditions and memories from the past in service of future action and its control.

Dramatics and storytelling deepen and qualify the authority and detachment inherent in Mark's attraction to law, formulae, numbers and tradition, while a strong preference for vivid, "new growth" colors such as yellow confirms his future orientation and also lends a youthful and exuberant counterpoint to the formality of his demeanor and thought. Storytelling and formulae represent two quite different ways of organizing experience, the one addressed to meaning and the other to logic; sequence is the link that connects them. In combination they have formidable power.

The dimensions of the world and knowledge that this perspective makes particularly available for exploration and contribution are Culture, Ethics and Law. Mark's is the perspective of the builder, the law-giver, and keeper of traditional values. Mark's use of color in the visual dimension infuses formality with liveliness, youthfulness, and dramatic appeal. In gesture, Mark's perspective is most boldly stated through his voice which expresses the full range of his perspective from law-giver to *raconteur*.

While Mark is seeking on the surface for processes, laws, and forms that allow him to see how things happen in order to be in control of them, *Kenny* is looking for the internal and invisible relationships that hold large contexts together. The relationships within the natural world of earth, sky, and sea hold the most interest for him, but all part-whole relationships within a framework are accessible to him: puzzles, bicycle parts, etc. *Kenny* likes to see things from all angles, and he actively changes his viewing point to achieve that end. Focused as he is on encompassable totalities rather than linear sequence, his movement is to encircle and get the overview, the underview, and the inside view. He alternates between this energetic searching and absolutely still absorption. In contrast to Mark's direct and linear spatial orientation, *Kenny's* spatial orientation is up, down,

around, and under. His orientation in time is toward infinity and the boundless, for example, the mysterious zero and the depths and flow of water.

Maps and mapping are Kenny's characteristic way of establishing and ordering experience. These are applied to a wide range of experiences: to represent familiar and unfamiliar landscapes, to solve problems, to locate people, to give directions, and to encompass and locate his own complex perspectives. At times the boundary between map and depiction is slender since many of Kenny's drawings "map" an observer's perspective of the world, for example, a view of the sky or the water. Maps encompass the unencompassable, make visible invisible paths, place and locate things in a variety of perspectives, and chart the unfamiliar so that a safe return from the journey is assured. A secure mooring has equal weight with exploration in Kenny's perspective; many drawings contain both impulses, the exploration, and ropes, the mooring line, and sometimes the rope is both path and guideline.

Kenny's seeking and exploring the unknown through the boundless depths and heights, the availability of multiple perspectives on any situation, and the navigator's inclination to chart and to map, combine breadth of vision with problem-solving talents.

Dimensions of the world and of knowledge that this perspective makes particularly available for exploration and contribution are Space, Geography, and Dimensionality. Kenny is the inventor and the explorer, the charter of new courses, in contrast to Mark, the lawgiver and storyteller. In gesture Kenny's perspective is stated most characteristically through facial expression, especially looking; hand; full body movement -- and least through voice.

Luke's orientation is toward the why and how of things. Where Mark's seeks for laws, replicable procedure and verification, Luke explores, experiments, and reworks. Luke applies his questioning to people, as a search for motive and purpose; to physical phenomena, as a search for cause and explanation; and to sequential events or visual patterns, as a search for connection and for hidden elements.

That proclivity for the underlying relationship, the inferential, the invisible pattern in thought or nature is confirmed in a deep interest and talent for disclosing what is hidden or not visible, whether an inner structure or a camouflaged surface. While for Kenny the interest in the hidden is for the mysterious secret place or for treasure to be discovered through journey and exploration, the hidden for Luke is something to be detected or discovered by observation and thought. Luke's orientation in space, like Mark's is over the surface and toward a goal, but the route is likely to be circuitous and challenging rather than smooth and direct. His orientation in time combines present effort with anticipated future goals, but goals within a definable and foreseeable future. Luke figures out workable, manageable objectives and then sets about methodically to achieve them.

A continuing interest in origins, cycles, and reptiles qualifies Luke's pragmatism, and confirms his orientation toward the hidden. An affinity for color and rhythm are the counterpoint to reasoning and problem-solving. The unimpeded and ever-increasing flow of feeling into movement, dance, painting, singing, and especially drama lend lightness and richness to Luke's thought.

Reasoning about inner relationships and structure, ability to set manageable goals while recognizing the depths of experience, and the affinity for color and rhythm indicate Luke's combination of logic and inferential thought with artistic and aesthetic talent. This double perspective makes the realms of Science, Logic and Art particularly available for exploration and contribution.

Luke is the man of reason and the dramatist in contrast to the inventor and explorer (Kenny) and the law-giver and storyteller (Mark). In gesture, Luke's perspective is vividly stated through his large and inflected voice and the motion of his quick and agile body.

Although interestingly different from each other, Mark, Luke, and Kenny share a relatively outward orientation manifested in an interest in objectives, and the laws and principles that govern natural and social events. By contrast, *Terry's* orientation is toward feelings and persons, including an early awareness or consciousness of self. The focus of this orientation is his own secure fit in the larger scheme of things and the place and fit of other persons. Since adults exercise control over the child's world, he is especially attuned to adult feelings and authority. Terry's sensitivity to feelings, atmospheres, and moods, gives him a sympathetic and intuitive grasp of the needs of others, his alert observation of the scheme of things within the immediate social context of the classroom or school, gives him the capacity to be on hand to help out wherever needed. Terry's access to social arrangements is also indicated in an early capacity to pick up and remember stray bits of cultural knowledge such as the birthdays of presidents. This kind of memory for useful knowledge in combination with a strong grasp of serial order and sequence are Terry's most secure avenues to school learning.

Terry's orientation in space confirms this engagement with feelings and persons. He is concerned to see the whole classroom — frequently circling it, gently touching people, sometimes repeating their names softly, and observing the relationship of each person and activity to the totality of classroom activities. He often locates himself on an edge of a group where he has a full view, or next to the teacher, anticipating that she may need materials or equipment which he can hand to her. Terry's orientation in time is toward the daily classroom routines and the pattern of daily events. This orientation supports his self-assigned roles in the community as an aide-de-camp, maintainer of rituals, and facilitator of other persons.

Terry's particular talent as a facilitator is to find what is not present, what is invisible and what is lost. His finding, unlike Luke's reasoning and detecting, or Kenny's search for the unknown, is always related to persons and is based on his "feel" for the situation. His strong grasp of serial order and sequence make numbers, patterns, and stories readily available to him in a way that is akin to Mark's, but without the detached formality or the highly dramatic gesture that Mark brings to these mediums. The story side of Terry is related more to feeling and depth than to drama.

Sympathy, the facilitation of persons, and a talent for ritual; access to step-by-step seriation and a steady pace; an attunement to the invisible or hidden combine depth of feeling with order and pattern. One dimension of this double perspective makes Feeling and Social Relationships available to exploration and understanding, while the other makes Fact, Number and Information readily accessible. In gesture, Terry's perspective is stated largely through hand, eye, and ear, and only minimally through voice and speech.

Joel, like Terry, has an orientation toward the classroom community and the circle of persons who compose it; unlike Terry, that community of persons is assumed, as is Joel's own place within it. Joel's statement, "Let's make a circle," or "Hey, you guys" connotes an unspoken camaraderie and acceptance quite unlike to Terry's careful, even searching observations. Joel's orientation towards circles of people is one aspect of a dominant orientation toward containers and containment: that which shelters, that which encompasses, and holds. In keeping with this, his orientation in space is in terms of bounded areas -- the house corner, a block structure, a rocking chair. The counterpoint to Joel's orientation toward containment is spilling or bubbling over and freeing. This is manifested particularly in his absorption in open-ended materials, particularly water and bubbles.

Joel is also attracted by small manipulative objects which are open to arrangement and rearrangement or which can be connected. Pattern, replication and derivation of new patterns from old are echoed in his frequent and successful efforts to duplicate other children's arrangements and his pleasure in hearing stories repeated or in stories that have repeating rhymes within them. The willingness to repeat, to go over, to re-work is one of Joel's major strengths in making sense of new experiences.

Joel's orientation in time is closely related to repetitive activity and is largely an extension of his own natural pace and rhythm. Every day is fresh for Joel and he counts on a steady and predictable classroom schedule to support him. Within that schedule, his own deep and immediate absorption in the materials sustains an even pace and movement. Joel's stories reveal this same smooth flow in an unquestioned unfolding of events linked together by "and then, and then." Unlike Luke, cause, purpose, and motive are of little concern to Joel. People and events are taken at face value and accepted, as are the classroom routines and structures. Therefore, disorder or disruption of routine are unsettling to Joel. Disruptions don't elicit the negativism and resistance characteristic of Terry, but rather floundering and loss of boundary. Joel is the patterner, the adapter, and the co-equal and supportive partner. Unlike Terry, who is the facilitator, Joel is inclined to wait and see and then to go along with the group's activity. He sees a pattern and uses it -- like Mark -- but in a more serial, step-by-step manner which is akin to Terry's. However, Joel's arrangements involve more direct replication and more reworking of variations than Terry's.

Immediacy and deep absorption, the proclivity for pattern and repetition, and confidence in the power of a mutually supportive group combine persistence, steady effort and a talent for linear relationship and sequence with adaptability and warmth of feeling. The dimensions of the world and of knowledge that this blend of perspectives makes available are Feelings and Beginnings and also Design, Boundary and Building. In gesture, Joel states his perspective through his whole body and through the context of circles.

Matthew's orientation is toward himself and his own identity -- not egocentrically or selfishly but with determination to maintain and develop his own viewpoint. His identity is closely linked to his sense of solidarity with his mother and father, to being black, to being smart, to being a good fixer, and to making it. While Joel and Terry assume or look to establish a place for themselves in the scheme of things, Matthew wants the scheme of things to make room for him and recognize him.

In keeping with this attitude, his orientation in space is expansive. He occupies a lot of space, literally and metaphorically; he moves through space, is always on the move, and includes in conversation everyone with whom he is in contact, spreading a flurry of sound in his wake. Isolation or boundedness and constraint, whether in terms of the work he's asked to do, the work space, or the time allotted, arouse resistance and sometimes anger. Similarly, there are no single facts or static events for Matthew, all things are enhanced, made larger and fuller, or reworked as a story or dream. Like Kenny, he is attuned to wholes and particularly to complex projects in which he can take a directive role, for example, puppets, dramatics, sports.

Matthew's orientation to time in large part meshes with his orientation in space — long, uninterrupted spans in which he is free to pace himself. Linear, step-by-step tasks are left to the last minute and then are often completed with dispatch and reasonable accuracy, especially if he can depend on context clues for answers. Matthew also has a future orientation not unlike Mark's and Luke's, intimately related to his high aspirations for himself. Unlike Mark or Luke, he has little capacity to set a realizable present goal or to work steadily toward attainment of larger goals. For Matthew, time is right now and a distant future.

The tension between conforming to a group and being himself on his own terms is a constant point-counterpoint, in Matthew's perspective. Pervasively cheerful and inclusive, with strong feelings and ideas to share, he has also to insist strongly on his own independence. A facet of the orientation toward himself is a capacity to be his own companion, to talk to his work as to another person, and in effect, to fill gaps in his contact with others by his own voice. In keeping with this, he recognizes his own efforts in a positive way; however, he is also painfully alert to expectations he has not met and to criticism from others.

Matthew explores the world by testing it, challenging it, and rebelling against it. These modes are applied across virtually all experiences: working with materials, interactions with people, physical activity, and play. Matthew's perspective is that of the storyteller and myth-maker, a perspective that softens willfulness and force with sympathy for the shared human condition.

A strong will, dramatic power, a proclivity for the spacious and the open-ended, and ascendancy and commitment to his own identity combine a passionate determined temperament with largeness of thought. Matthew is the dramatist and dialogist, the weaver of tales and the forger of identity, with the charismatic potential of the born speaker. Drama is the discipline that is most immediately accessible to Matthew, but other realms in which the speaker excels, for example, politics and law, are also potential avenues for his talents.

In gesture, Matthew states his perspective through a powerful and authoritative voice and an equally powerful command of language.

Minerva's orientation, like Matthew's is toward survival and forging her own identity. She is focused on process and relatedness, and is always alert to a path that will carry her forward and support her growth. Keenly attuned to the world's demands as they are communicated through school expectations, she translates her own proclivity for relating ideas or actions into an active search for the processes and forms inherent in school learning that will allow her to achieve those expectations. Like Luke, she assumes that figuring things out is her own

responsibility and going beyond that, she assumes she will be her own teacher. Along with her searching eye which informs and teaches her, there is also an eye attuned to the boundaries where things and ideas meet or diverge. Likening and contrasting is the process through which she evaluates a contextual whole or a series of events. The fine intellectual discrimination this close examination supports is matched and complemented by an aesthetic which combines intricacy and layers with balance and symmetry. Variety, harmony, blends, and variations -- and above all beauty -- are what Minerva strives and hopes for. What is least palatable to this subtle and discriminating view of the world is discordance, ugliness, sameness, and slowness.

Self-reliance, effort, force, personal identity and integrity are balanced in Minerva's perspective by a yearning for kinship, inwardness and depth of feeling, and dreams of the future. Minerva's logo on her drawings and assignments is an archetypal family, in which the woman is portrayed as strong and beautiful. Her art work and writing reflect thoughts and visions of a bright and secure life -- a security which she has achieved for herself through her own efforts.

Minerva's orientation in time contributes significantly to her complex perspective. Alert to the present and its demands, that alertness is in the service of her hopes and expectations of the future. Unlike Luke and Terry, she does not find satisfaction in daily routines and achievements, but unlike Matthew, she accepts them as necessary for achieving her longer term hopes and dreams. She confidently expects to go to college -- and then to be free of school forever and able to follow her own pursuits. Minerva also has a dreamy inward side, visible in occasional thoughtfulness, abstractedness, and sadness. The realities of life and death are a present part of her life and lend to her inwardness a quality of pensiveness and poignancy, quite unlike her outward forcefulness.

Minerva's perspective is in its own way as complex as Kenny's. Minerva takes in and digests all external processes, procedures, expectations, standards and forms as they apply to symbolic systems (number, alphabet), behavior, and school learning and structures. The dimensions of the world and of knowledge that this assimilation makes available for exploration are Culture and Standardized Knowledge. In this regard, Minerva's perspective is that of the pedagogue, the moralist, and the traditionalist. In sharp contrast, Minerva's re-creation of the world in her own image is applied to her inner self and identity, to art, to dreams, to visions of the future, to writing -- and to the cultural standards she assimilates. Re-creating opens the realms of art and regeneration. For Minerva, the perspective of the artist (writer, dancer, drawer), and the perspective of the eternally feminine are equally weighted and equally part of an investment in Identity and Family (kinship, survival).

Each of the seven children offers a perspective that opens a realm of knowledge for study; these realms are complementary and contrasting, and each overlaps, deepens or extends another in multifaceted patterns. Viewed in this way, the perspectives of the seven children are a self-evidently rich resource for curriculum and for articulation of classroom settings and teaching practice. The realms of knowledge suggested include:

Culture

Ethics, Law, Fact, Information, Standard Knowledge (or, "coin of the realm")

Space
 Geography
 Dimensionality

Science
 Logic
 Number
 Cycles and Change

Feeling
 People
 Depths, Origins, Sources

Identity
 Heroism
 Myth
 Creation

Art
 Creation
 Image
 Music
 Dance
 Writing
 Drawing
 Painting

Their contrasting modes of questioning and exploration are through:

Traditional Forms	Serializing and Sequencing
Story	
Number System	Patterning
Procedures	Arranging
Rules	Connecting
Styles	Layering
Information	
Maps, Charts, Diagrams	Absorption and Assimilation
Drawing	Immersion
	"Swallowing", Rote, Memory
Experimentation, Reasoning	Testing and Challenging
Detecting	Rebelling
Problem-Solving	
Rhythm and Color	Speaking and Challenging
Dancing	Rebelling
Acting	
Writing	Re-Creating/Creating
	Dreaming
Listening and Looking	Visualizing
Intuiting	Imaging

The classic perspectives reflected among the seven children are those characteristic of:

the Builder the Lawmaker	- the traditionalist (the father/authority/judge)
the Explorer the Navigator the Inventor	- the seeker
the Experimenter the Logician	- the speculator, the verifier
the Actor	- the dramatizer
the Intuitive the Facilitator the Coordinator	- the communalist
the Delver the Wanderer	- the innocent
the Patternner	- the adapter
the Rebel the Challenger	- the individualist
the Speaker	- mythmaker
the Pedagogue the Moralist	- the conservator
the Artist	- the creative
the Feminine	- wisdom, receptivity

The overlaps of perspective, knowledge and ways of questioning create an intriguing interplay among the seven children. Minerva and Mark combine traditionalism, in the form of law-authority-ethics and wisdom-receptivity, in a virtually classic complementarity of the masculine and feminine perspectives. However, Minerva's artistic, creative side which draws on deeply inner feeling is in contrast to Mark's storytelling and dramatizing of actual happenings, and especially those encountered during his travels. The oppositional perspective to Mark's stance as the lawmaker is Kenny's perspective as the seeker, the charter, the pathfinder. Their common investment in space and movement through it, is differentiated by Mark's linear movement over the surface and Kenny's effort to encompass the boundlessness of space in all its dimensions and perspectives. Akin to Kenny as a seeker, Luke's speculative reasoning is focused on internal relationships (motive, purpose, cause) rather than the conquest of space.

Luke, Terry, Kenny and Joel have a shared interest in the hidden, although for each there is a different, sometimes overlapping, orientation: for Luke, the source, the invisible and the camouflaged; for Kenny, the secret place and the infinite; for Terry, the lost or missing; and for Joel, the source or the beginning.

Mark, Terry, and Joel are attracted to forms of knowledge, materials, or information that come in discrete units and can be combined into linear, sequential, or serial orders; for Mark the details and steps are organized through a formula or procedure, while for Terry and Joel each step is taken in turn. For Joel, the arrangement or pattern among units requires a repetition and rearrangement that does not apply to Terry and Mark. A subtle variation on the serial ordering of discrete units is Luke's ability to grasp the causal or logical order among seemingly disparate or isolated occurrences.

Kenny, Matthew and Minerva are most drawn to totalities, whose order is accessible via part-whole relationships, harmonies and complementarities, or varied perspectives. In terms of space, Matthew occupies the most and Joel the least. All of the children need to move around within the classroom but for Kenny and Terry movement is a requirement for observation as it is to a less intense degree for Minerva and Matthew. Matthew fills the space while Mark is most contained; Kenny circles; Joel seeks the corners; Terry, Luke and Mark move to the edges; and Minerva is at the center.

For Joel, Terry, and Luke the present is the dominant time dimension, although the beginnings of things are of interest for Joel and Luke, and, as noted, they are each in different ways involved in the hidden or unseen. The future is anticipated in the present by Mark and Minerva, while for Matthew an urgent concern for the now and the immediate is in conflict with high aspirations for a distant future. For Mark, the present stretches smoothly ahead into a future with which it is continuous. For Minerva, now, inner dreams, and memory are tightly interwoven. Kenny's deep time sense is of the boundless and the infinite.

For all seven children, although in different ways, dramatics and storytelling are important. Each is a close observer, although the orientation and focus of observation varies. The strongly communal children among these seven are Terry and Joel while Minerva, Matthew and Kenny each in quite different ways state a particularly individual perspective. However, for all of the children, the context of the classroom community -- and especially the adults in it -- is critically important.

The contribution of each of these children to others is through contrasting but related interests and common interests engaged in through contrasting and complementary perspectives.

Implications: The Shared Needs and Strengths of Children

Following seven very different children through seven different schools and encounters with many different adults has several advantages. One is that the abstract categories for thinking about schools which have become over-familiar are grounded again or maybe for the first time, in the actuality of the children's experiences. In the context of the children's concrete experiences, curriculum content, "skills," methods of instruction, and achievement pale by comparison with the rich, lively, and palpable day-to-day reality of school life.

The differences among the children described in the earlier chapters are part of the reality. Each child brings to the classroom unique but shareable perspectives and inclinations that can provide the basis for a community of learners in which each member actively contributes to the learning experiences of the others. Another aspect of that reality are the common strengths, interests, and needs among the seven children.

Earlier chapters have alluded to such commonalities among the seven children as strength of memory, power of observation and love of books, stories, and conversation. However, the implications of these commonalities for schools, teaching practice, and curriculum have not been elaborated. Similarly, the needs shared by the children are implicit in the descriptions of each one's school life, although in this discussion those needs have not as yet been fully articulated. Among them are pride and the need for recognition; preservation of self; the need for personal identity and group membership; independence and self-determination; the need for context and continuity in the school experience. How these needs are recognized and met, how the children themselves cope, and the consequences when these underlying and primary concerns cannot be effectively addressed by either child, parent, or school, has deep implications for schools and schooling.

It might be argued that seven children are too few a number and too select a group on which to base a discussion of common strengths, interests, and needs; or

that seven children cannot provide a basis for drawing implications for learning and school experience that would have validity for children in general. While acknowledging that argument, I would like to suggest the idea that the common strengths, interests, and needs that emerge from the seven descriptions are in fact, of a universal nature. Each of the seven children through his or her individual life and consciousness illustrates particular aspects of these universal experiences.

For example, wherever there are people, there is language, storytelling, and conversation. It can, therefore, be considered a primary and original mode of education for all persons. Equally, all persons learn about the world — things, people, ideas — through observation, while memory is the peculiarly human capacity underlying anticipation, hope, prediction, and choice. Finally, the need to have a recognized place in the scheme of things and to develop and maintain an integrity of person speaks to our common bond as social beings. The requirement for context, landscape, and wholeness of experience is the underpinning for meaning and the human struggle for a worthwhile existence.

Knowledge or discipline then, represent the formalization or systematization of such universal questions and themes as origins, beginnings and endings; change, transition and recurrence; rhythm, pattern and replication; certainty, uncertainty and proof; as well as themes implicit to human passions and values such as love, hate, greed, or beauty.

Some of the imagery and content of these themes has already been presented through the discussion of the seven children's most compelling interests: journey, quest, and mapping; light, dark and color; water and things hidden in the depths; name, identity, and heroes; and house, dwelling, and family. If education is thought of in its intrinsic relationship to universal human concerns, then the means for making these broadly universal interests concrete, contentful, and accessible to thought and practice is being accomplished through close examination of the particular interest — that is through the study of the individual life and consciousness. What the study of the individual in turn allows is a reworking and reconsidering of universal concerns from the vantage point of concrete experience and contexts. When I note, for example, that all of the seven children love stories, I am called upon to think how for each, and for all seven together, this interest is being actively and thoughtfully addressed educationally. For the children collectively, the many stories they are told have the potential of putting them in touch with the story of the world. As Dunne says,

The story world is like "the old moon in the new moon's arms" as the dark part of the moon is sometimes called. The child is like the new moon, but he holds the old moon in his arms. His experience and consciousness are the thin edge of a new world, but through stories he has access to the old world of human experiences.³

Among these many stories, each child will have favorites which are heard or read with profound interest — an interest that suggests an engagement and

³Dunne, J. Time and Myth: A Meditation on Storytelling as an Exploration of Life and Death. Notre Dame: University of Notre Dame Press, 1975, p. 58.

living through of challenging questions and ideas. I am obliged, therefore, to consider whether each child and all seven of the children have access to the stories that will extend, deepen, and lend order to their own life experiences. Similarly, when each of the seven actively works to make sense of things, ideas, and events by searching for pattern, context, and points of relationship, I feel compelled to think how the skills and information they are required to learn facilitates their efforts.

In the pages that follow, therefore, the experiences of the seven children illustrate and particularize strengths, interests, and needs that in their multiple aspects are all part of our common human experience. Thus, the specific experiences particular to these seven children will serve to illuminate the school experiences of children more generally. The discussion begins with the children's shared needs and concludes with the strengths and interests they hold in common.

Shared Needs: Context, Wholeness, Continuity

For each of the seven children, learning, understanding, personal ease and relaxation were supported by any school experience providing, even to a minimal degree, context, wholeness and continuity. Among the factors contributing to those supportive experiences for the seven study children were the following:

- close school and parent contact and understanding (See particularly Joel, Matthew, Luke, Terry)
- linking home and family experiences with school activities and curriculum; the ongoing sharing of experiences (See particularly Mark, Terry, Kenny)
- inter-age groupings, permitting a child two years with one teacher (See particularly Terry, Joel)
- clear, orderly, flexible classroom routines under the direction of a responsible, consistent adult (See particularly Mark, Kenny, Joel, Minerva, Luke)
- consistent but flexible instruction based on observation and understanding of the child's mode of learning (See particularly Joel, Luke, Terry)
- activities such as drama, stories, conversation and music that involve group support for individual participation (All seven)

Continuity. Among early childhood educators, there is usually a clear and differentiated understanding of the spirit of cooperation and mutual concern, essential for a positive home-school relationship. The importance of respect for a family's privacy, of flexibility in including parents in the classroom, of willingness to meet the family at home if that is desired, and an appreciation of the parents' deep and important knowledge of their child are all aspects of that understanding.

Among the study children, Joel in particular exemplified the results of that kind of positive and powerful merger of home and school. The fact that both

understood and responded to Joel's needs for extra time to consolidate his school skills, has meant that a child who was otherwise almost certainly slated for special education has been kept for the most part in the mainstream. By age 9, Joel had consolidated his school skills in reading and numbers in spite of the earlier lags in academic areas, and was also a valued and respected member of his class. Given those gains, it is regrettable that it was ultimately deemed necessary to arrive at a diagnosis such as "neurologically impaired."

Each of the other children is also instructive about the range and quality of the school-home relationship. For example, Minerva and Matthew were at pains to protect their families from intrusion from the school and from other children. Minerva turned to teachers to assist her when other children talked about her family, and at the same time accepted unquestioningly her older sister's strong belief that school success is important and that she, Minerva, had to do her part by cooperating with her teachers. Matthew, absolutely loyal to his home and his mother, was resentful of questions at school that might invade that relationship. Thus, it is striking in a record spanning five years, that Matthew's most productive and successful school year was the one year when a teacher herself established a strong and friendly rapport with his mother. Luke and Mark, in contrast to Minerva and Matthew, brought home to school daily through anecdotes of family and neighborhood events, while their parents also maintained a strong involvement in the children's school lives through conferences and visits to the classroom.

For Terry the crucial moment was the difficult initial transition from home to school in which the school supported a continuity of experience by encouraging Terry's mother to stay with him in the classroom for a number of weeks. Contacts with Kenny's parents on the other hand, were most effective through home visits. In this instance, the mother's thoughtful observations gave teachers valuable insight into a highly complex child. Kenny, like Luke and Mark, also told many stories that related home and school experience, and took great pleasure in his mother's participation as a helper in the school swimming program.

Transitions, Fragmentation, and Inter-Age Grouping. Most of the seven children moved yearly to a new teacher and virtually all experienced a period of discomfort or adjustment during the transition period. Moves to other teachers or environments for special help or a specialized class in the course of each day or week were also the characteristic experience. These experiences were sometimes much enjoyed and sometimes were acutely uncomfortable. Kenny's or Luke's pleasure in gym class are good examples of the former, while Minerva's participation in a special reading class for better readers which separated her from her classmates offers a good example of the latter. The decision to isolate Matthew at certain times within his own classroom illustrates another fragmenting experience which was strongly resisted by the child. For all seven children, specialized classes involving the whole class were far less stressful than those special services which removed the child from his or her home group.

It is worthy of note that five of the seven children were made observably nervous and tense by transitions while the other two also expressed concerns although not as strongly. Two of the more susceptible children (Joel and Terry) gained great strength through the possibility of inter-age groupings that allowed each of them to remain two years with the same teacher. For Terry, those two years provided a secure base allowing him the opportunity to acquaint himself with the whole school structure and to gain a sense of control and security. For Joel it

gave the time he needed to gain skills needed for academic success. It is quite possible that a similar opportunity might have offered needed continuity for Kenny in learning to read and for Matthew in learning to trust adults and to accept their authority.

Order, Self-Determination, and Control. Clarity, flexibility, and orderliness in teachers and in classroom structures were highly valued by all the children. Many examples could be given, but Minerva's statement most vividly describes what is felt by the child at those times when school seems confused, noisy and arbitrary, while Luke's conviction that the teacher can always re-establish order provides the other perspective.

They bang the ruler on the desk
And, they make me have a headache.

And, they be yelling

Please don't yell. (Minerva)

A student in our class, Jane, came into class with her hair in total disarray. Luke commented, "Miss T., why don't you do something about Jane's hair? It's not combed." The teacher combed Jane's hair, and Luke was quite relieved. (Luke)

In each and every one of the child studies there was strong evidence of the urgency of the children to have school make sense so that each could feel some degree of control over the events impinging on them. Their own efforts to make sense and to find or create order were as diverse as they are, and plainly some of the efforts worked better than others. However, in each instance the search for a pattern and for stability was clear.

Mark's unremitting attention to rules, Terry's close observation of the structures and patterns of daily classroom activity, Minerva's imitations of the teacher's voice and mannerisms, Matthew's relentless assertion of his own pace and timing, Joel's arrangement and rearrangement of patterns, Luke's search for causal relationships among events and Kenny's alertness to replication and the spatial relationships in the classroom each illustrate a different way of achieving order. Those approaches which were most adaptive to the school format through knowledge of rules and structure (Terry, Mark, Minerva) worked most smoothly. Matthew's resistance to the school format through assertion of his own rhythm and pattern was probably least effective.

However, whatever way the child made sense of school demands, those efforts did give the child a degree of control and some room for independent choices. The records and observations offer many small and large examples of control and choice. For example, Terry's and Minerva's knowledge of the daily classroom patterns allowed them to anticipate activities and to be prepared. Minerva also found ways of retaining independence by reorienting assignments, keeping her feet in motion but the rest of herself still, and decorating tedious pieces of work. By contrast, Matthew's insistence on room enough and time helped him to maintain his own powerful viewpoint even though it conflicted with the immediate school demands for small, task-oriented segments of learning.

Amid the variations, the critical point to note is the importance of order and self-determination to all the children, and the intimate relationship of that need to the predictability of adult attitudes and behavior. Departures from the usual schedules, fragmentation of classroom activity, noise and confusion, and,

particularly, the arbitrary nature of these disruptions are the enemies of choice and self determination. Equally, consistency and responsiveness among adults offer the child the maximum options for anticipation, self-control, and the exercise of choice.

Observation as a Basis for Continuity and Flexibility in Teacher Practice.

A quite unlooked for finding in the study is the close connection between each child's characteristic mode of learning and his or her characteristic mode of coping with adult authority. Thus, Mark's search for the formula or rule in learning was echoed in a relationship to adults based on a mediating structure of standards and rules. Minerva's propensity for likening, for finding similarities, was extended to identification with the teacher and the teacher's mannerisms. Terry's watchfulness and observation as a learning mode was echoed in watchfulness for the teacher's needs which supported his own role as the teacher's assistant. Luke's search for underlying reasons and causes was translated in a relationship to his teachers based on reasonableness, direct questioning, and discussion of expectations. Kenny's independent and unusual perspective as a learner was reflected in an equality with adults notable for its humor and also its distance. Matthew, who talked and questioned his way into all his school work, creating a context of dialogue, often used his running commentary to resist teacher instructions and demands. Joel's learning through immersion, repetition, and reconstruction relied strongly on the teacher's physical presence.

Knowing when to allow a child distance or when to offer close support in the classroom, when to provide a model or when to explain a procedure for a task, when to give direct instruction, or when to let the student learn by working alongside, are part of the teaching art. The importance of these decisions point up the fatal flaw in "teacher proof" materials which necessarily assume a standard learning style and ignore the quality and importance of human exchange in learning and thinking. The intimate relation in these studies between the nature of the child's approach to the teacher and the essence of his or her own way of learning underlines the enormous value of close and ongoing observation by the teacher. It also indicates the value of classroom structures that permit imaginative variation in instructional practice and in student-teacher interactions.

A dramatic demonstration of this value occurs when the children's different ways of learning to decode are viewed in the light of the instruction that was available. As noted in the individual portrayals, learning to decode was related for each child to his or her broader mode of learning and also to stories and storytelling as the larger and antecedent context for decoding. As noted earlier, all of the children had a deep appreciation and love for stories. Each was a storyteller, relating the events and happenings of his or her own life and thought as a way of weaving together a coherent and meaningful existence. Each was also available to the stories told or read, that extended and related his or her own story to experiences that were apart from their immediate experiences. The largeness and contextual wholeness of the story was available to each of the children. On the other hand, teaching the children to decode most frequently involved breaking wholes into parts, relating isolated sounds to isolated letters, mastering the arbitrary sequences of the alphabet, and mastering the equally arbitrary linear left to right of print sequence. Variations on phonetic analysis in the instruction of the seven study children as reported by their teachers included visual word patterns and rhyming, writing and dictating stories, personal dictionaries, labelling, and other whole language approaches.

For two of the seven study children, Matthew and Kenny, the orientation toward totalities as the conveyors of meaning made learning to read according to isolated units difficult and often painful. For a brief period Kenny was given a more varied and experiential approach to reading that brought some relaxation and success. Matthew in his self-determining way continued to use context and context cues to good effect, although this was not always the approach encouraged by the school.

Mark's ability to apply a rule enabled him to achieve decoding skills effortfully but with steady progress. Fluency and understanding were more difficult for him and followed by a year the achievement of the technical skills.

On the other hand, it was the technicalities of decoding that were more elusive for Luke, and initially for Terry as well. The arbitrariness of the alphabetic order and the connecting of sound with a letter were difficult for both. For Luke the lack of an overview or context was also a hindrance. When he did get a feel for the whole toward the end of the second grade, he pursued the goal of fluency with customary perseverance and a consequent and steady achievement of skill. Terry's capacity for linear sequence and his willingness to work hard on small isolated tasks brought steady gains in skill after an initial period of strain and confusion. Understanding was not a problem for either Terry or Luke and their engagement in reading and their pleasure in books was enormous.

Joel's progress with decoding was much slower than Terry's but like Terry, Joel depended on repetition. For Joel this meant patient, daily one-to-one instruction and practice. This instruction combined reading to Joel, talking with him, and connecting experiences in books to him and to the classroom. Joel also took great pleasure in books.

Minerva entered reading most easily. Often bored with decoding exercises, she decorated and elaborated worksheets and letters with pictures of girls, families, and flowers. As noted earlier, the special reading class for better readers to which Minerva was assigned was irritating to her and quite often upsetting.

Overall, wholeness, continuity and meaning, although a proclivity of the children, was not the primary emphasis of their reading instruction. Except for Joel, learning to read was to a greater or lesser degree an experience disconnected from other classroom activity, daily conversation, and stories. To the extent that context or wholeness was found or established, it was usually a function of a child's own efforts — e.g., Minerva's drawings or Matthew's focus on illustrations. Both Terry and Joel also had the advantage of a consistent approach to instruction over a two-year span.

An emphasis on wholeness, continuity and meaning, together with observation, would have dictated a range of instructional practice more closely related to the child's general mode of learning and way of accepting instruction. Sometimes a teacher's observation did identify this relationship and with remarkable clarity. Kenny's third grade teacher, for example, recognized that Kenny did much better with decoding when a conversational and casual relationship was established by the teacher, and when the teacher supported the flow and continuity of Kenny's reading by supplying words rather than requiring Kenny to sound them out. When Kenny broke his right arm, the same teacher also noted that the handicap allowed Kenny to put forward a renewed effort by learning to write with his left hand better than

most children can with their right hand. In this instance, the ambidexterity and freedom of perspective that characterizes Kenny's mode of learning proved to be a strength.

It was also a teacher's observation of Joel's availability to replication and repetition that guided instructional practice in reading, and school policy made it possible for him to be placed in an inter-age grouping in order to sustain the continuity of instruction.

From the knowledge available from the observations, a similarly appropriate reading instruction could have been tailored for each child, within a common context of rich language experiences and storytelling. Books, storytelling, conversation, discussion of daily activities and home experiences, dramatic play and dramatization comprise a common context of language activities in which all seven children would have been actively participant. For one of them (Matthew), skill instruction needed to be built directly on speech and stories. Such techniques as reading simple stories familiar to him, reading back to him his own stories, and reading stories or dialogues written out for him would have provided the context cues that he looked for. Given the context and discussion of the story, reading along with him and then sotto voce slightly behind him would have strengthened confidence and maintained the conversational style and accompaniment that he himself used to support his work efforts. For somewhat different reasons, and with emphasis on the conversation and the companionable reading together, these same techniques would have offered support to Luke and Kenny.

Minerva, Terry and Mark each needed books of a high quality that could support imagination and feelings. Fairytales and myth, would have offered rich content for Minerva's active inner world and memory. Mark and Terry, who in different ways find feeling difficult to acknowledge and to express, might have been able, through stories, to find a path to their inner selves and thus to enriched meaning.

Summary. Context, wholeness, and continuity have in common the properties of relatedness, pattern, and cohesion. For the children, the learning experiences and environments which were most effective were those which allowed recognition of the familiar aspect in a "new" idea or experience; provided access to a pattern or recurrent cycle among ideas or experiences; made visible a framework which in turn related isolated details to each other and to the whole. Frameworks, pattern, and the blend of the familiar with the novel are keys to the child's independence as a learner, to meaningful choices, and to internalized learning. Fragmentation, isolated bits of knowledge, and abrupt change undermine the child's capacity to predict, to understand, and in general to make sense of what is going on around him; then the learner is in danger of being reduced to responding solely to external standards with consequent loss of confidence and the loss of the ability to make choices.

Shared Strengths: Memory and Observation

The children's reliance on observation and memory for learning and for maintaining a sense of self and of others emerged in the data slowly, and only in the fifth year of the study did it become clear how consistently and pervasively the children used these modes. For one thing, the children themselves accepted these natural talents as "givens". Equally their teachers noted the fact of their

memories and observations incidentally but, for the most part, did not relate them directly to the learning process or to curriculum content. The notion of actively engaging a child through memory or observation, or of educating and focusing these talents, came up only rarely. The most notable examples in these studies are probably the recognition of the relationship between Luke's attentiveness to physical detail and his talent for science activities, and Terry's retention of such useful school knowledge as Washington's and Lincoln's birthdays.

When the importance of these modes became evident, a little reflection suggested that schools do not usually give favorable recognition to observation and memory, except in the one instance for scientific investigation and in the other for retaining facts, words, and numbers. Otherwise, observing and memory are not valued. For example, the child who is a "watcher" or a "dreamer" is frequently a source of concern to teachers. That concern is understandable since watching and dreaming lack the property of active engagement that most of us as educators associate with brightness and eagerness to learn. Observing and memory are also difficult for a conscientious teacher to justify because they do not result in any immediate way in a product. For these reasons the seven children's different ways of using observation and memory are instructive and also suggestive of ways in which observation and memory might be made more central in the learning process.

Observing. In recognition of the concern felt about "watchers", let's turn first to the two children who are most typical in that respect: Joel and Terry. Superficially they appear quite similar--inclined to wait or be on the fringe of activity, and also inclined to follow another child's lead. However, in the larger context of time and ways of relating to things and people, the two children's purposes for watching are quite different. For Joel, watching is a primary learning mode. He typically watched how another child undertook an activity and then modeled his own actions on his observation. Watching was virtually always a point of entry and a way of getting into an activity for Joel. As he gained more confidence and certainty, the watching time has become less protracted and a capacity for concentrated involvement with activities, always noted in the records, increased.

For Terry, because of his profound interest in people, watching is an end in itself. His habit of placing himself on the edge of a circle or of circling the room gave him access to the gestures and activities of all the people in the room. It is the basis of his deep grasp of other persons' wants and needs and of the overall structure of the classroom and the school community. In Terry, watching is the indication of a talent for the psychological and the intuitive.

By contrast with Terry and Joel, Luke is probably the most visible and active observer among the seven children. What he observed was in part visible because of his verbal commentary, and in part because of the clear focus of his observation. On the one hand, he was highly attentive to physical details which he was eager to name and describe. The teacher's comment on the clarity, accuracy, and relatively objective description of the gerbil illustrates that attentiveness. On the other hand, quite distinctively, his observations had the character of searching for, or detecting, the invisible or the hidden. For example, he liked science experiments involving air and incubation, and he took great interest in finding hidden objects or camouflaged words in figures.

Both Kenny and Mark engage in observing in ways that are related to Mark's focus on outer physical events. However, Kenny also shares with Joel the use of observation as a guide for modelling his own activity, and with Terry, the use of observation to gain an overview of classroom structures. As an observer of outer events, Kenny demonstrated a truly remarkable talent for varying the angle of observation, for example, perspective in drawing; for perceiving spatial and part-whole relationships, for example, puzzles, machine parts; and for internalizing a process, for example, shifting gears in driving. Kenny also deliberately practiced observing by seeking unusual vantage points and new views of familiar objects. In this respect, he stood out quite markedly from the other children in the study.

Mark's observations are linear, broad and geographic by contrast both with Luke's fine discriminations of physical detail and searches for the hidden, and with Kenny's attention to spatial relationships, perspectives, and process. The landscape, the skyline, and the differences between landscapes were his focus. Mark scanned, watched the passing scene when he was travelling, and took in the larger picture or context of action.

Minerva, like Terry, is a close observer of persons and their mannerisms and gestures which, unlike Terry, she then easily took on. Since Minerva also is an observer of process, there is another kinship with Terry, although for Minerva the attentiveness to process was more linear and specific to school work and structures than Kenny's wide ranging observations. However, Minerva's most common observational tool is the comparing and likening of things and ideas. Where Luke discriminated among things, Minerva drew them together by noting similarities and possible relationships. Her observations, for this reason, were dotted with imagery in a way that is quite unlike the observations of any of the other children.

Matthew observes himself and other people in relation to himself. The observations took the form of a running commentary that suggested some of the same psychological grasp and depth characteristic of Terry. However, for Matthew the emphasis of observation was on self-characterization, "I'm a good fixer", and personal identity, "I'm black", rather than on other people's needs and concerns.

Observing and the Learning Process. The seven children each used observation to support their deepest interests and concerns and among them they demonstrate both the flexibility and the power of observing. Observing can give insight into persons, or further a grasp of underlying process. It can provide detailed descriptions of isolated objects or a large picture sketched in broad strokes. Equally, it can penetrate and reveal hidden or obscure points of relationships: spatial, temporal or imaginative. It can also provide a model for action and reduce risk. Stated most simply, observing allows the child to make some outer event an inward experience. How and what the child observes are therefore keys to his or her interests and thinking.

How can observing be educated and made central to the learning process? I suspect that as with so many other things, the very fact of recognizing its importance to the learning process creates the climate for making observation a significant part of the classroom setting. In the first place, that recognition highlights those activities already present in the classroom that support and offer practice in observing. Perhaps the teacher makes a practice of dismissing children by calling out colors, or holds discussions in which children describe natural objects like gourds or pumpkins. Or, at an even more fundamental level, seats the children

in a circle for group meetings and so ensures that each sees the faces and gestures of the others.

Animals, growing plants, jars containing decomposing vegetation, terrariums, life cycles such as frogs or butterflies, seasonal changes, mystery boxes, and trips all provide the opportunity for children to practice observation, and the opportunity for the teacher to discover each child's special strengths as an observer. When the teacher is aware of the importance of observation, she is easily able to identify and take advantage of the observational aspect of almost any classroom experience. Equally, that awareness allows the teacher to identify materials or activities to be added to the classroom because of a child's special interests as an observer, or because they are especially conducive to observation.

Memory. What is observed is also remembered. While observing describes the child's openness to the world, to people, and to experience, memory describes what the child keeps and holds as inward experience. In memory, observations originally bound to specific and concrete experiences are freed and made available to imaginative and fanciful, or literal and descriptive, reconstruction. The "dreamer" may be wrapped in a world of imaginings, or of deep thought, or of contemplation and reflection, or of future possibilities.

For each of the seven children, the link between observation and memory and between memory, anticipation and dreams is clearly, if subtly, evident. Minerva is perhaps the most complex of the children in this respect. Attentiveness to gesture and her ability to re-enact it gives her a degree of control in the immediate situation. At the same time, her sensitivity to process provided her with access to memory's most powerful potential—anticipation of the future. On the other hand, there is also much evidence of a rich inner life and fantasy supported by stories and dreams. Minerva's visions of her future and her images of herself within them provided a second landscape through which she sustains and survives the very real and difficult circumstances of her present daily life.

Matthew, in the commentary that accompanies all of his observation, also weaves a story and an image of himself. For Matthew, that story was what sustained his own identity and placed his experience in relationship to other heroic blacks. Isolated facts and piecemeal school knowledge were hard for Matthew to retain. By contrast, Mark's memories and stories were of what he saw in his travels. They were, therefore, studded with detail, color, and factual information such as the length of the George Washington Bridge. His retention of facts, in particular, contributed greatly to his ease in acquiring school knowledge. However, the more colorful side of his memories were vivid portrayals very like in spirit to Matthew's dramatic dialogues.

Terry, like Mark, remembers all kinds of useful school and cultural knowledge. Mostly picked up by listening, factual information seemed quite literally to stick to him. When Terry could offer his knowledge correctly and appropriately in a class discussion, it was a source of great pride. Terry was the memory for his class. He knew everyone's birthday, where everything was, and could be counted on to bring in needed information or materials from home or to remind other children of similar obligations.

For Luke, memory provides the context for understanding new observations and experiences. The power of his thinking in terms of causal relationships,

prediction, purpose and motive revealed an ongoing reworking and rethinking of experience. Luke's memory articulated the pattern of relationship among events rather than facts or bits of knowledge.

Kenny's memory is most strikingly revealed in what he drew. His observation of things from several angles or from a novel perspective were restated in maps and diagrams, remarkable for their clarity and accuracy. Without a large encompassing framework to "map" them, small units of isolated symbols such as letters were hard for Kenny to retain. A map held a memory for Kenny in the same way a story or dialogue held memory for Matthew.

For Joel, memory is strengthened by replication. Joel re-worked, re-told, and duplicated all of his activities. Often beginning from a model borrowed from another child, he internalized a procedure by replicating it and then by systematically varying it. That same practice or repetition and re-working was also his most reliable way of learning academic skills. Stories re-read and then retold by him also supported memory, and were particularly valued by him if they had repeating rhymes within them which he could anticipate through memory.

Each of the seven children are differently engaged with memory, but for each memory maintained the continuity of daily existence. What is remembered can be entertained as a recurrent expectation or possibility and to some degree that lends the person power and control. Equally important, what is remembered can be re-thought, revised, reworked, and mulled over at leisure to gain a better understanding of events going on around them. That memory also sustains personal identity and a sense of self was particularly visible in both Minerva and Matthew, in their quite different struggles for survival.

Memory and the Learning Process. Bringing memory more consciously and fully into the learning process is again probably largely a matter of recognizing its importance and value, and identifying the activities in the classroom that draw upon or sustain memory. For example, all of the study children loved to share their memories through anecdotes of home, travel, and friends. Like all shared memories, these conversations strengthened the bond the child felt toward the teacher and toward the other children. In the classroom this sharing can sometimes be formalized in group discussion by asking the children to contribute memories around a common experience such as "When You Were Little" or "What You Dream About" or "When You Were Sick." "Do you remember when..." is also an opening that brings a flood of memories.

Simply valuing and recognizing each child's stories is a major support to the continuity of memory, because it is in storytelling that the child establishes his or her own relationship to life events. In storytelling the child is vigorously engaged in weaving together inner motifs and life happenings to make an understandable, orderly and coherent whole. Sometimes these stories emerge as conversation, sometimes as drawings, sometimes as dramatic play, sometimes as told stories, and sometimes as written stories.

While each child in the class will tell stories involving a number of motifs and themes, the teacher alerted to the importance of these stories will be able to observe through time certain dominant motifs and themes that are recurrent and central to the child. The seven study children illustrate this point. Matthew stood at the center of his story and struggled to make outside events respond to his

strong inner determination to maintain his identity and his name, while Minerva, also at the center of her story, projected the achievement of a warm and secure future. By contrast, the adventures in Joel's stories were all in the company of a supportive group of comrades. Luke's stories, like Minerva's, involved effort and searching but the search was more immediate and finite. Exploration was also the major motif in Kenny's stories, with return and the homeport an important part of the journeys. Mark's stories were mostly of home and family and family trips, while Terry who is the least verbal of the children, interrelated knowledge gleaned at home from the television and conversation, to his daily school experiences.

By the same token, stories told and stories read place in the child's hands the possibility of relationship to experiences apart from his or her own life and times. The unity and oneness of human experience speak through the story's independence of time and place. Fairytales, myths and legends of long ago, adventures of persons in distant lands, are all available to the listener, and lend to memory its power as imagination. What can be imagined can also be lived, and it is the story world that opens up the world of possibilities to the child.

Ritual and traditions of all kinds strengthen collective memory and provide the root or base for individual memory. Rituals in the classroom can be as simple as a song known and loved by all to be sung before morning snack, or marking on a calendar and celebrating each child's birthday.

There are also the larger traditions evolved by persons through the ages such as the holidays that mark the solstice and ensure the safe transition of the seasons. These enduring traditions with all their cultural variations, as well as the ritualizing of daily activities in different cultures, make available to children the commonality of human experience. Dances and songs are also a part of the child's access to these stories and to the memories of different peoples. Finally in his or her own world there are the spontaneous rhymes and chants that accompany games, or the exploits of favorite TV heroes shared through play, drawing, and conversation that bridge personal memory and unit the child with his peers.

Memory, Observation, and the Classroom. Memory and observation require each other, and both together describe a fundamental and powerful way of establishing a working relationship to things, events and people. What is remembered or kept in inner experience and what is observed and absorbed from outer experience have their meeting ground in what we call ideas. To have good ideas empowers the learner to pursue further knowledge, and thereby provides the basis for lifelong educability and for making independent choices.

Therefore, a classroom context shaped through thoughtful reflection on these two fundamental human capacities can give continuity to the child's early education and ensure firm ground for his or her future education. While specific curriculum content or method of skill instruction may be subject to various interpretations depending on what is currently fashionable, the school or the individual teacher through the kind of reflection described above can effectively "ground" the curriculum, whatever it may be, in a consistent core of experiences that will sustain each child's education.

On the side of memory, conversation, stories, drama, painting and the plastic mediums, songs, dances and games are the fundamentals of classroom activities. On the side of observation, natural objects and the natural world,

inventions and machines, along with the observer's tools of magnifying glasses and other lenses, timers and measurers, provide those fundamentals. Between the two, and serving both, are drawing, mapping, writing, numbers, and reading; for it is through representation that the observer's eye is sharpened and the thinker's mind is clarified and ordered.

The alternating rhythm of the classroom between memory activities and observing activities can be achieved in relation to the day, the week, or the seasons. Because the memory activities sustain wholeness and continuity they can be employed effectively on a daily basis as follow-up to the observing activities, and in the longer view be used both to introduce and to conclude broad time spans and large blocks of work.

Thus, taken at the day-to-day level, observing activities can provide a helpful starting point for the children. However, these energetic activities need to be interspersed with the expressive memory activities such as painting, drama, and dance. Memory activities can also punctuate the day through maintenance of rituals which surround food, formalized conversation, and group singing. The day's ending can be marked by drawing the children together to hear a story.

In terms of broader time spans or a new area of study, memory activities need to precede and thus provide a basis and context for the observation activities. For example, when an area of study such as the fall season and the harvesting and preparation of food is to be introduced, it is supportive to the children's deeper understanding to begin with their own stories and memories of fall. As the study progresses, stories, poems, traditions, rituals, and songs can be selectively introduced by the teacher to surround and embed the busy and more individual activities of collecting, cooking, describing, comparing, constructing, and drawing. At the conclusion of the study, a dramatic performance, or a ritual feast, can weave together the many individual threads of the study. This important and communal occasion will preserve the wholeness of the learning experience in the children's memories.

By and large, observing activities are more individual in character than memory activities, and support the questioning, searching, and seeking side of the child's mind. Scientific investigation, natural history and geography, machines and inventions of all kinds, and construction and building fall broadly in this realm. These activities have in common that the child moves out actively and bodily into the world of things, struggles with its physical properties, and finds satisfaction in using his or her own hand and mind to deal with these properties. The individual perspective emerges strongly in these activities through the child's preferences for particular modes of observing and questioning and for the aspects of the world and the expressive mediums that compel his or her attention.

On the other hand, while memory activities certainly have an individual component through personal memory, they are largely activities that are communal and strengthen the reflective, inward, and imaginative side of the child's mind. The plastic mediums such as sand, clay, paint, water, language, literature, art and music, myth, lore and tradition fall broadly in this realm. These activities are all evocative of personal expressiveness around shared and universal themes. The shared themes unite the child's own perspective with those of his or her peers and with broader traditions in art, music, or literature. Thus, the traditional format of the fairytale "Once upon a time" empowers the child to tell his or her own story,

placing the child as a storyteller in an intimate relationship to the age-old fairytale genre. The particular blend of individual memory with collective memory provides access to the individual child's inner dreams and thought, while the children's participation in the larger traditions creates the strong bonds of community.

Of course, individual children may tend more characteristically toward the memory or toward the observing activities. Equally, time of day, seasons, or changes in personal rhythm as a function of growth or other change may direct the child's interest at one time more in the outward direction of questioning and searching and at another time more in the direction of inward reflecting and imagining. Within these broad contexts, each child will also seek out and express recurrently a particular range of interests, motifs and themes through certain preferred mediums.

In a way that can be likened to the production of a community quilt where individuals make squares according to their own color and design preferences, the children's individual choices of motif and medium embellish with rich detail and subtle nuance the general activities offered by the teacher. These individual choices and preferences, like the separate squares in the quilt, make each child's strengths and gifts visible through the contribution made to the larger design and harmony of total classroom activity. Taken together, the complementarity of individual activity and collective interests gives to each classroom community a characteristic, if subtle, blend of color and detail that describes its particular design and composition.

Concluding Thoughts and Recommendations

When the children's school lives are viewed within the context of the total documentation of the Prekindergarten Program, there are some broader and more structured implications to be drawn from the study. In particular, the children's pervasive need for context, wholeness, and continuity in the learning environment suggests a close look at prevalent school practices reported in the records: yearly promotion; "pull-out" programs offering special services to children; school scheduling that interrupts the flow of activity; and classroom organization that isolates or compartmentalizes the learning experience. It is of particular interest, therefore, that interviews with administrators of schools attended by the study children identified fragmentation of time and school programs as their major source of concern.

The factors contributing to fragmentation which these administrators specified ranged from such large scale problems confronting the American public school system as declining school populations, which are forcing major school reorganizations, to the more daily problems encountered in scheduling a range of varied school programs and services. However, the central focus of their concern was the increasing number of specialists and specialized services which are helpful in intention but are finally interruptive:

Another fragmentation is funding that is meant to help us, but arrives in October with the result that teachers are removed from the classroom to implement the new program and new staff are hired in November.

...classroom teachers have consistently identified a fragmentation of the classroom as a result of the large number of special services that are available to children. There is a generalized expression of fragmentation because of many people going in and out of the room all day, and more specifically the following disruptions can be identified:

- whole class leaving to go to gym, etc.
- small groups leaving for reading, for trips, etc.
- individual children leaving for testing, learning disabilities class, etc.

The impact of these fragmentations of time and classroom setting on the child and the curriculum was of urgent concern to these principals, and the need for reorientation and re-ordering of priorities was evident in many of their statements.

Some teachers want the additional services of experts, some don't. However, as these services have multiplied, I have been made very nervous that at times no one is aware of all the services a child is receiving--nor does any one person feel really responsible for the child...

I think we need to re-orient our approach. Rather than thinking in terms of services and which children can be assigned to the particular service, we need to start with the individual child and let the quality of his total school experience determine which--and how many--services should be made available to him or her...

...Help to a child is meaningless unless someone can put the whole thing together...

...[Special subjects and the hiring of specialists] also fragments the curriculum.

The most generalized concern of these educators is that fragmentation leads to a loss of responsibility since no one person feels responsible for the child or the class.

Also, of course, the child feels less responsibility under these circumstances to any one adult since the adult-child relationships are interrupted and intermittent. The administrators attributed the loss of responsibility to a lack of continuity in the teacher's knowledge of what is going on in the total context of the child's learning and lack of consistency in adult expectations as these are perceived by the child. This discontinuity and inconsistency they felt was the end result of "pull-out" programs and multiple specialist services.

By extrapolation, the principals' concern for continuity in the teacher's knowledge of the child can be generalized to yearly promotion and other compartmentalizations of the learning experience. From the children's experience and teachers' and principals' observations, transition and discontinuity are threatening to the quality of the school experience for young children.

On the basis of the documented experiences of the children and the observations of principals and teachers a number of recommendations for the organization of the schools for young children can be made. However, it should be noted that the strong connecting threads among the separate recommendations are continuity of time and wholeness of experience. The recommendations are the following:

1. Inter-age class groupings within a primary unit, PreK-Grade 3.
2. Specialists' services incorporated within the child's home classroom
3. Heterogeneous groups of children with respect to ability and skills as well as age

The Creation of a Primary Unit. PreK-Grade 3 establishes the most flexible and encompassing organization for the implementation of the above related recommendations. Such an organization acknowledges the need for continuity in the child's learning experience over a broad time span, and also suggests the need for thoughtful program planning among the teachers responsible for the various age groupings within the unit.

That kind of planning can take into account both the changing and the continuing needs of children from age four through age eight. It can also take advantage of the broad time span to create a variety of *heterogeneous and inter-age grouping* responsive to the needs of the particular child population to be served by the unit. However, in light of the five year study, the basic premises behind such class groupings are to allow the teacher and child a two year time span and to include children, without discrimination according to skill or ability, within these broad age groupings. The basic premises take into account the needs of young children for familiar environments, for consistency of classroom structures and instruction, and for the opportunity to grow and learn without the pressure to meet school-determined expectations within narrowly defined time frames.

Intimately related to this last need is the right of the child to be defended from early classification or tracking as a problem learner. Early classification and/or tracking have the effect of lowering expectations for the child so identified or placed. These practices also tacitly confirm the notion of a single and standard school environment to which all children must be able to respond at the "appropriate age" in order to succeed at school. Heterogeneity and inter-age groupings, on the other hand, confirm the range of individual growth and learning patterns among young children, and encourage flexibility in establishing a comparable range of school environments which support these individual patterns.

The establishment of a primary unit also encourages the formation of a corps of teachers and ancillary staff mutually responsible for the school experience of all the children within the unit. The immediate effect of this acknowledgement of the identity of the primary unit and the shared responsibility of the staff is to create the possibility of ways for teachers to share their knowledge of the children and thus to support the child's transitions within the unit. Practices introduced in support of the five year study (see chapter 1) such as teacher observations and records and the Staff Review of the Child are examples of ways that sharing of teacher knowledge can occur. The *inclusion of specialists* in the Staff Review process and the involvement of specialists in observations of children within the regular classroom setting are avenues that might be explored in the search for ways to offer children needed special services without removing them from the classroom.

Integrative Learning: Curriculum and Skills. The continuity of personal perspective, the consistency of learning mode for each child regardless of the content to be learned, and the interests shared by the children, invites reconsideration of the division of the school day into subject matter specialties and the teaching of skills in reading and math according to standard methods. The study

suggests, for example, that a child's most effective way of entering reading is intimately related to that child's mode of learning in other, more open-ended activities. It also suggests that certain underlying interests are shared among the children and are observable through their art, storytelling, and construction activities.

These interests cut across the traditional disciplines and also invite the contribution of each child's unique perspective to a community of interest. Among those interests for this population were water; the depths and the hidden; home, family and dwelling; exploration and the unknown; journey; and name, identity and survival. Another population of children would expand and qualify the range of questions and interests. However, beyond the specific motifs and imagery are the underlying questions noted earlier that unify the diversity of motifs and themes. These pertain to origins, beginnings and endings; to change, transition, and recurrence; to rhythm, pattern, and replication; and to certainty, uncertainty, and proof. At the level of motif, imagery and themes, and at the level of these underlying questions, the largeness of the children's interests breaks through the boundaries defining history, geography, or science. The scope of the children's interests and the continuities in each child's individual perspective and learning mode lead to the following recommendations for curriculum and skill instruction for a primary unit, PreK-Grade 3:

1. Classrooms amply provisioned with open-ended materials such as water, blocks, sewing, clay, paints, sand, wood, and natural objects such as plants and animals.
2. Multiple and varied materials and experiences available for individualized learning and instruction in reading and math skills.
3. Large time blocks available for individual and group activity that encourage conversation and movement and also integrate subject matter disciplines and skills.

Classroom provisioning that emphasizes open-ended materials unifies the learning environment throughout the Primary Unit and supports opportunities for the ongoing observation of children as learners and thinkers. Continuity of the learning environment eases transitions, and also provides the time needed by the child for the exploration and deep engagement with materials that leads to concentration, productivity, mastery, and refinement of skills. The teachers, in turn, are provided with a rich context for observation of the individual child's choices and pervasive interests and the child's characteristic mode of learning. The open-ended materials also provide a maximum degree of freedom for the teacher and for teacher decisions, since these materials can be shaped and reshaped to support a wide range of curricular activities.

By extension, the availability of these varied open-ended materials supports the *individualization of skills teaching in reading and mathematics* through the access the child's engagement with these materials provides to the child's characteristic mode of learning. This integration of language and number activities with the ongoing classroom projects in turn offers a guide to the appropriate emphasis for specific skill instruction for each child in reading and computation. Thus, the availability of several different entry points to these skills supported by a

multiplicity of materials and methods is a natural outgrowth of a pluralistic and varied classroom setting.

Finally, *large time blocks and a free flow of conversation and physical movement* permit the teacher the possibility of imaginative shifts of emphasis in order to call the children's attention to the different aspects and implications of the materials with which they are engaged. Thus, drawing can be recognized for its potential for recording a child's observation of an animal or insect on one occasion, or, on another, for mapping, or for storytelling. Similarly, an interest in dinosaurs can be channeled equally toward archaeology and pre-history, fairytales and dragons, or toward the relationship of animal forms to the geographical environment. The balancing of emphasis among the various disciplines is supported by the teacher's attention to the unique perspectives of each of the individual children. That attention is focused on the way in which each child's perspective contributes to and rounds out the possibilities inherent in any particular interest and the way in which these perspectives in combination expand the thought and outlook of the whole of the classroom community.

Teacher Practice and Teacher Education. In the light of the previous discussion and recommendations, it is clear that the most far reaching implications of the five year study are for teacher education and practice. Specifically, the study suggests the central importance of the interplay of two focal points of teacher awareness: the recognition of each child's unique perspective including his or her characteristic mode of learning, and attention to the collective themes and questions which underlie the children's interests and activities and also the subject matter disciplines. This emphasis on awareness carries the further suggestion that knowledge of specific methods of instruction or specific teaching techniques are secondary to teacher perception and understanding of the learner and of the root questions and issues inherent to curriculum and to the learner's own activities.

Awareness, attention, and recognition are all aspects of observing, when observing is directed toward meaning and understanding. It is the kind of observing referred to by Louis Pasteur when he said, "In the Fields of Observation, Chance Favors the Prepared Mind." That is, to be fully observant requires that the observer recognize the significance of the observation. For example, Joel's teacher, who noticed that his approach to any material was to arrange and rearrange it, saw the meaningful pattern amidst a seeming diversity of activity. To see the child from a variety of perspectives, in different contexts, engaged with varied materials, and most importantly, *through time* is the key to observations that address pattern, recurrence, points of relatedness among occurrences, and finally, meaning. Thus, the teacher and the parent are in the best position to observe and to formulate knowledge of the child—if the capacity to observe is articulated, developed, and recognized.

The other side of observation is remembering and reflecting. What has been observed in the immediate teaching activity gains power and articulation when it is re-lived, re-thought, and re-addressed in the context of other observations and through the perspective of other observers. Therefore, record keeping by teachers, interviews with teachers concerning curriculum and/or practice and teacher group discussions based on observations and records as in the Staff Review of a Child, all serve to strengthen and broaden the teacher's capacity as an observer—and as a responsive teacher.

Within the five-year study, demonstration of the importance of observing and of the use of observations for teaching, in order to make educational choices responsive to the individual and collective needs of children, leads to several recommendations. It should be noted that the following recommendations are premised on identification of a working unit of teachers of the sort that would be possible through creation of a Primary Unit:

1. Formation of a teacher support group, preferably organized across grade levels to promote mutual responsibility among a group of teachers for the continuity of learning experiences for a specific cluster of children.
2. Establishment of a program of record-keeping to be carried out by teachers which would encourage brief, descriptive accounts of the growth of individual children, and might include some or all of the following components:
 - individual daily activity and academic records
 - collections of children's work (drawings, stories told or written, etc.)
 - regularly scheduled (weekly or bi-weekly) observational records by teachers which would selectively address the child's physical presence and gesture, social relationships, disposition, interests and activities, and academic work
3. Establishment of a program of observations to be carried out by administrators and by ancillary staff which would support the teachers' observations and records, and might include some or all of the following components:
 - observations of individual children at the request of classroom teachers
 - playground observations
 - observations of aspects of the classroom setting such as block construction and quiet reading
 - interviews with individual children or small groups at the request of classroom teachers
4. Formation of regularly scheduled discussion meetings which would permit staff to share observations on children, curriculum, etc., and to arrive at recommendations for strengthening the learning environment. These discussions might include any or all of the following components:
 - Review of Curriculum
 - Review of an Issue (e.g., privacy or bus behavior)
 - Review of a Child

- Review of a Class
- Review of a School
- Review of Teaching Practice

Formation of a Primary Unit is the basis for the teacher education recommended here. If the unit is small, the entire staff can meet together on a schedule to share observations and records. In a larger unit, parallel clusters of teachers can be established, each grouped to span the grade levels. Since the first emphasis *in establishing a program of record-keeping* is on sharing teacher knowledge in the interests of strengthening the learning environment and increasing the continuity of the program, the formation of such a unit is of central importance. This kind of working unit makes possible the group participation *in review discussions* that is needed to articulate the knowledge that teachers have. It is of equal importance, that observations and interviews by ancillary staff and administrators begin at the same time, and in support of teachers' record-keeping. When teachers recognize the value of their own observations and knowledge, and when other staff support their efforts through further observation, then the climate is favorable for a more formalized system of consistent and ongoing record-keeping by teachers. Those records are ultimately the backbone of an ongoing, internal program for professional development.

The impetus needed to refocus educators on children and their interests as the basis for educational choices depends upon a recognition of teaching as an art which, like all arts, requires practice, reflection, and room to grow. The schematic recommendations offered here for a way to develop the teaching art are merely illustrative of other possible approaches that keep persons (teachers, parents, and children) at the center of the learning and educational process. They are offered in the hope of opening for discussion the critical question of the education of teachers at a time when teacher "burn-out", "teacher-proof" materials, and, in general, the technologizing of the schools, are the dominant topics in any discussion of education.

Appendix

Illustration of Records and Observations

Format for: Staff Review of the Child

Reflective Conversation: Description of Child Work

Illustration of Records and Observations
(Excerpted from data booklet on Kenny, 9/79-5/80)

Observation (by Field Consultant, first day of school, 1979)

- 9:55 1) 23 children, 1 adult (6 no shows)
 Brian Wildsmith arrival posters on bulletin boards
- 2) Orientation time about room uses and supplies -- and weekly schedules
- Gym: Tuesday, 9:45 - 10:25
 Art: Wednesday, 9:45 - 10:25
 Lunch: 12:40 - 1:10
- 3) All children at tables (four at most at one table) with container for each child by his place for papers, etc. Ken at table with three other boys. Hair shaggy, medium length, bangs. Blue and white long-sleeved plaid flannel shirt, unbuttoned; bluejeans; blue and white sneakers; white and red shirt underneath. Pale, sitting very still except follows teacher (as he moves about room pointing things out), by turning his whole body on chair seat.

When teacher shows abacus and explains that it sits on the cabinet containing games, puzzles and math kinds of manipulatives, Kenny leans forward and peers at shelves, smiling slightly. Leans back, still, mouth slightly open; as teacher takes out a few of the games to show them. Each one will be gone over in detail before it is to be used. Books are available now for use in spare time or free reading.

Teacher's Observations and Records.

9/13/79 Sat Ken next to a girl! (Michelle). He was asking Joe a lot of questions -- spell this, spell that. Joe was bothered. So . . . I spied an empty chair next to Michelle. "Ken would you like to sit next to someone who would like to help you spell words and help with other things?"

"I guess so."

"Do you know Michelle back there?" (turning him around).

Ken shrugs shoulders.

"Well, how about it?" "O.K." So we move Ken; however, no communication with Michelle all morning. I sat and helped Ken with his spelling, he dictated to me. He seems to lack either the mental imagination to invent sentences, verbalizations, etc., or he lacks the nerve to express these things, because with

fat		
hand	Book 2	
fast	Unit 1	he seemed to not be able to get past
last	Spelling	I am ...
can		I like ...
		I went ...
		I have ...

9/14/79 Ken sits at desk writing, wears red banded Snoopy tennis watch. Pencil has special eraser on the top. He writes, bites on lower lip. Walks to substitute teacher's desk to have her check picture. Moves lower lip, looks for sticker in box.

Walks over to me. We chat about the summer. Ken went to camp with Bobby and his mother. "It was kind of funny. There was a tornado and we couldn't watch T.V." He said that when his father comes to camp, he only watches T.V., but he came up later. "It's dangerous; there's a cliff-like place with a T.V. antenna up there so the reception is better. It's going to slide off. He should put it in a tree." Bobby and he sawed trees that fell over in the storm.

He talked about building forts, some were behind bushes. He had several of them.

He counted the stickers. Wants a candy bar as a treat when both sides are filled. Teacher says, "Seven more minutes to finish math."

"Ken smiles at me. "I'm done."

9/25/79 Ken asked for maps (world) to take home. So I gave him two blank ones and a book from which to copy. He seemed very responsive, eager, etc. This was carry-over for Social Study Lesson earlier in which he did very well. (Copying from board various names of continents and oceans, then coloring, all to make a book of oceans and continents.)

Also this morning he was first in group with paper and heading ready to go! I verbally praised him for it. He beamed (embarrassedly).

Report of a Home Visit

Mrs. B. came to the door when we knocked. She invited us in and asked if we would like to be in the front room or kitchen. . . . We chose to stay in the kitchen and sat at the kitchen table for the rest of the visit We told Mrs. B. of the status of the study and the intensive look at Kenny which is underway. She had not really understood what it was all about although she knew Kenny was being studied.

We then talked about Kenny, some about his strengths, but mainly about his not being able to read. She indicated that he is really bothered by not being able to read. At the end of first grade and

again at the end of second, he didn't think he should pass because he couldn't. She added that "of course," he gets very attached to his teacher and doesn't want to change rooms.

. . . Mr. G. said that he's concerned about Kenny's reading, too. He knows it embarrasses Ken but that he has been doing better the last couple of days and isn't at all shy about asking for help. Mrs. B. stated that she's very happy Kenny has a man teacher this year. "It would be different than having another 'mother figure' shouting at him all the time."

. . . As we left, Mr. G. asked if Mrs. B. would be able to go on the field trip on October 11 - a train ride around Onondaga Park. She said she would like to but has to wait to see what her work schedule will be that week.

REVISION OF FORMAT
THE STAFF REVIEW OF A CHILD

January, 1977

The Prospect School

Prepared by
Patricia F. Carini

THE STAFF REVIEW OF A CHILD

The primary purpose of the Staff Review of a Child is to bring varied perspectives to bear in order to describe a child's experience within the school setting. On the basis of this description and discussion of its implications, the staff comes to recommendations for supporting and deepening the child's school experiences and, according to need, offers ways to support the teacher bearing major responsibility for the child in implementing the recommendations. It needs to be emphasized that recommendations are meant to support the child's strengths and interests and to support ways to structure the classroom in order to facilitate those strengths. Since an underlying premise of the Staff Review is respect for the integrity and privacy of the child, it is not appropriate to the intention of the review to make recommendations that have the purpose or effect of controlling, changing, or modifying the child. It is also important that the teacher with primary responsibility for the child have the opportunity to question and to seek clarification of the recommendations. If a recommendation is literally not possible for the teacher to implement, it is her responsibility to describe as fully as possible the reasons that make its implementation impossible. This may allow the recommendation to be reformulated in other and more workable terms, or it may raise an issue of values or ethics that needs further discussion, and would be a suitable topic for a Staff Review of an Issue.

The perspectives through which the child is described are multiple to insure a balanced portrayal of the person that neither overemphasizes some current "problem" nor minimizes an ongoing difficulty. The presenting description of the child is by the teacher(s) currently responsible for the child and addresses the following facets of the person as these characteristics are expressed within the classroom setting at the present time:

the child's stance in the world: gesture, posture, inflection, rhythm, energy

the child's emotional tenor and disposition: tone, expressiveness, intensity, range, pattern

the child's mode of relationship to other children and to adults: attachments, variation and consistency, quality, range

the child's activities and interests: modes of engagement, pattern of involvement, range, intensity

the child's involvement in formal learning: modes of approach, interest, patterns of involvement

the child's greatest strengths and the areas of greatest vulnerability

Because the purpose is to portray the child, not to analyze, categorize, or explain him, descriptions do not include jargon, labels, conclusions, or clinical terminology. However, since the portrayal is intended to evoke the presence of the child, description is through ordinary usage made as particular, concrete, and rich

as possible, rather than in terms of "behaviors" or such general statements as "she has respect for authority."

Example: Description of "Physical Presence" and "Emotional Tenor" excerpted from a full description of Humphrey, from Staff Review Notes, September 14, 1976.

Humphrey is thin and he has grown quite tall, has a lanky quality. He moves freely and is well coordinated. This strength is demonstrated in skill on the rope, basketball, and kickball. However, in swimming, Humphrey looked very skinny and insecure, he is afraid of the water and the other kids knew it. Hand and small muscle control is fine, but not as notable as his overall body coordination. His drawings are intricate, but he does not get into really fine line work. He does finger weaving and building, but doesn't get as involved as with activities that involve his total presence, such as drama and sports.

Humphrey is cheerful and friendly. He is well liked in the group. Humphrey is a diplomat, often has the right phrase to retrieve a situation. In keeping with this, he is a good sport and an excellent team member. Humphrey can be counted upon to support younger children or to accept other kids in his activities. There is little direct expression of anger, but there are a few side remarks. When someone he likes is cruel to him, (e.g., Einar last year), he is wounded and cries. Humphrey is a gentle person.

Following the descriptive presentation of the child, the current perspective is embedded to an historical perspective through a review of past records, observations, family and medical data provided by the child's parents to the school, and sometimes examples of the child's work (drawings, journals, writing, etc.). It should be stressed that from regard for the privacy of families the only family data that is included in the Staff Review is that which has come from them directly and is part of the school record. The historical perspective contributes depth and connectedness to the current perspective, and calls attention to the protracted continuities and transformations in the child's life and experience at school. To complete the perspectives, current observations of the child by staff other than the presenting teacher are added together with any current work or statements of the child's that would contribute his other perspectives directly.

Since the Staff Review of a Child brings together all of the persons concerned with the education of a group of children, it affirms the staff's shared responsibility for the child. It also contributes to the continuity of the school experience for children in two ways: it focuses on the connectedness of any one child's experiences from one year to the next and it confirms a school ethic and philosophy shared, articulated, and implemented by all staff as that applies to the children at large or to any particular child.

The Staff Review of a Child also has the purpose of contributing to staff development by bringing a professional staff together on a regular basis to address their common interest and commitment: children. From this ongoing study of individual children, knowledge of human development in general and of the uniqueness of each child's perspective is extended and deepened. This study also

contributes to the renewal of teaching practice, since the Staff Review culminates in recommendations for ways to structure the classroom setting and to adapt teaching practice in support of the child.

In the interests of involving all staff fully, it is desirable that the staff meet as co-equals for Staff Review, and that the key roles of Chair, Presenting Teacher¹, and Recorder should rotate appropriately. Each of these roles involves a different kind of reflection on the child and a different use of the records and each contributes differently to professional development. Also, it is desirable that the role of chair should not become a hierarchical position confirming professional expertise by virtue of special training (school psychologist, social worker, etc.) or position (principal, head teacher, supervisor, etc.). The Staff Review strives for a balanced view of the child as a person and the rotation of the chair minimizes the possibility of any particular viewpoint becoming dominant.

Note: The Staff Review of a Child is a formal procedure in order to preserve the seriousness of purpose and the respect owed to the child and to his or her family. Also, the review is guarded in terms of what may or may not be said in describing the child or the child's family. The child is not to be described through clinical, categorical, conclusive, or pejorative labels, and only family data contributed directly by the family to the school can be included in the review. At the close of each Staff Review, there is a critique of process to evaluate formality of procedure and rigor in safeguarding the privacy of the child and the family. This critique can also include evaluation of any other aspect of the procedure.

¹ This role rotates only among teaching staff since only teachers have the ongoing contact with children necessary in order to offer sufficient detail and balance in the presentation.

GENERAL OUTLINE OF PROCEDURE:

The process has five steps: (1) Presenting the Child; (2) Historical Perspective; (3) Extension of Presentation and Discussion (additional observations, commentary, questions); (4) Recommendations; (5) Critique of Process. Summaries are made as needed, but customarily to conclude Steps 1, 3, and 4.

1. Presenting the Child

Chair:

Opens the meeting by identifying the Recorder for the review. The chair then gives the following data:

- name of the child to be reviewed
- age
- dates of any previous Staff Reviews
- focus of the Staff Review or presenting problem

Presenting Teacher:

To elaborate the focus or problem for which specific recommendations are needed, or to identify the review as exploratory with the purpose of coming to know the child better.

On the basis of her current records and observations, to describe the child according to the following facets:

- the child's stance in the world: gesture, posture, inflection, rhythm, energy

- the child's emotional tenor and disposition: tone, expressiveness, intensity, range, pattern

- the child's mode of relationship to other children and to adults: attachments, variation and consistency, quality, range

- the child's activities and interests: modes of engagement, pattern of involvement, range, intensity

- the child's involvement in formal learning: modes of approach, interest, patterns of involvement

the child's greatest strengths and the areas of greatest vulnerability

If there are co-teachers, one or the other should make the presentation, with comments to be added by the other at the conclusion of the presentation.

Chair:

Summarizes presentation.

2. Historical Perspective

Chair:

Summarizes previous records, reading from them if that is appropriate. Invites the specific additions of any teacher who previously taught the child, if necessary.

Summarizes family and medical data: members in the family; any pertinent early childhood information; any medical problems; etc.

3. Extension of Presentation and Discussion

Chair:

Asks for a summary of formal observations (if any) from the staff member(s) who made them. (There are circumstances where these more appropriately follow the teacher's initial presentation.)

Invites comments from other staff and any questions they would like to ask of the teacher(s). If discussion is protracted and a lot of new material is introduced, the Chair should make periodic summaries.

Summarizes discussion.

4. Recommendations

Chair:

Invites recommendations.

Asks for the presenting teacher's response to recommendations, either as they are made or at the close of several if that is more appropriate.

Summarizes recommendations. If many implementations for one basic recommendation have been offered, these should be condensed to a manageable form.

5. Critique

Chair:

Invites a critique of process and specifically asks for evaluation of the safeguarding of the child's and family's privacy.

Asks for each participant's evaluation if voluntary comments are not forthcoming.

The Chair concludes the meeting by:

setting a date for a brief follow-up review² of the Staff Review just concluded

setting a date for the next Staff Review; teachers to select a child as the subject of that review; according to the child selected, to name the Presenting Teacher

assigning roles of Chair and Recorder for the next Staff Review according to a schedule of rotation

The Staff Review as outlined here usually takes no more than 1½ hours, and it rarely takes less than one hour and fifteen minutes.

The Staff Review demands a high standard of professional ethic and respect for the privacy of the child and the family. Any group undertaking it should consider this and include only those persons who can commit themselves to these standards.

² See "Format for Staff Review: To Use in Review of a Full Staff Review of a Child."

ROLES AND RESPONSIBILITIES

The Chair

The Chair reviews all historical records and data on the child prior to the meeting and prepares a summary. If there are gaps in the records or questions arise, the chair should confer with appropriate staff ahead of the meeting in order to have as complete a summary as possible.

The Chair opens the meeting, summarizes, invites comments, regulates discussion, calls for the recommendations and critique, and closes the meeting by setting the dates and roles for the next Staff Review and for a follow-up review of the Staff Review just completed. The Chair has the responsibility for maintaining the formality of the procedure and for curtailing any comments that invade the privacy of the family or are disrespectful to the child.

Presenting Teacher

The Presenting Teacher is responsible for focusing the Staff Review by stating some central issue or problem for which she would like support and recommendations. If the review is exploratory, particular areas around which the teacher feels confused or in need of more understanding should be identified.

The Presenting Teacher is responsible for reviewing all current records and the child's work. On the basis of this review, she should prepare notes for a presentation prior to the meeting according to the outline on page 1 and page 4.

Following the review, it is the Presenting Teacher's responsibility to carry out agreed upon recommendations.

Recorder

Keeping a record is clearly important and often proves to be the most difficult part of the process. There is a great variation in people's style of notetaking, and no one style is necessarily more appropriate than any other. It is important, of course, to know when the conversation took place, who was Chair and who was recorder, and who the participants were. Beyond this a group that meets together periodically may want to discuss what use the notes will be put to and what, for these purposes, constitutes an appropriate record. Completeness of notes refers to the content of what was said and the content is generally most helpful. If discussion is rapid and parts are missed, these can often be recovered through the Chair's summary. Notes are best done as soon as possible while memory can still supply details.

Notes should be carefully filed. They will be needed as reference points for future Staff Reviews. The recommendations should be given as a separate record to the Presenting Teacher. Periodic examination of the Staff Review records often reveals a pattern of concern or interests among the staff and these can form the basis of other useful discussions.

Other Staff

Other staff should be prepared to offer any observations for relevant interactions with the child who is being reviewed. They are collectively responsible for the critique of process and are also expected to contribute any recommendations they feel would be helpful.

Format

Reflective Conversation: The Person and Medium

Rationale:

to describe a medium (blocks, paint, clay, . . .) according to its potentiality for holding and representing the child's thought and meaning

to explore the realms of imagery held by specific motifs recurrent in the child's work (e.g., monsters, houses, towers, enclosures, . . .)

to describe a particular piece of work and then a range of work to make visible the following dimensions:

- the repetition and variations in the way the medium is used: repeated strokes in painting, repeated colors, symmetrical layers in blocks, . . .
- the repetition of the motif or theme (house - smoke, windows, . . . ; monsters - dark colors, flames in mouth, eyes, . . .)
- the divergencies in the way the medium is used: e.g., variations in thickness of paint, elaborations of a symmetrical structure, . . .)
- the divergencies with the motif or theme (house - but not entrances. . .)

to summarize and pattern the coherence of the work and the body of the work and to identify its transforming power

to describe the hand of the artist or constructor as it is revealed in the work by making visible the following dimensions:

- the repetition in the way the medium (or motif) is approached: e.g., sequence of painting or building; precision or looseness in making lines. .
- the divergencies in the way the medium (or motif) is approached

to summarize the artist or constructor's engagement with the medium and the motifs

General Outlines of Procedure:

The process has three steps: reflection on the medium, reflection on motif, and description of work. The first two steps often take an hour and the third, one and half to two hours. Thus, two separate meetings makes the most comfortable arrangement.

Chair:

Step 1. Have participants jot down and then share experiences and thoughts, imagery evoked by the medium.

Summarize according to patterns emergent in the commentary.

Step 2. Have participants jot down and then share experiences, thoughts, imagery evoked by the motif to be explored.

Summarize according to patterns emergent in the commentary.

Step 3.

- A. Either present a child's work (one central piece and perhaps two supportive) or invite teacher to do so.

Include age of child, provisions available, other pertinent data on setting.

Invite descriptions of work — stressing that obvious things (e.g., color, number of blocks . . .) be named.

Summarize as needed; note repetitions.

Summarize complete description through identifying coherence and divergence of work(s).

- B. Repeat process to describe hand of artist (in practice, this often merges with A. as description progresses).

- C. Invite teacher (if present) to describe other of the child's work in the ways it intersects or counterpoints the work described.

Also invite teacher to answer queries on the child's style of working, . . .

- D. Invite (if appropriate) discussion of the medium for the curriculum it supports and for the practical considerations of maintaining the medium effectively in the classroom.

Roles:

The Chair. The Chair prepares an outline of the process ahead of time as a guide to all the components of the material to be put forth. She/he consults with the presenting teacher about what will be presented and at what point in the process. The Chair introduces the topic, calls for discussion, and gathers the discussion together into summaries where it seems that these would be an impetus to deepening the descriptions and pattern-finding. At the end the Chair concludes and asks for comments on the process. If there is to be a further conversation, the time, who will be Chair, who will be Note-taker, and what the subject will be can be established. If the subject is a child's work that needs to be read or studied ahead of time, this can be arranged.

Presenting Teacher. The Presenting Teacher volunteers a child's work or particular material or piece of curriculum that she wishes to examine. She selects and makes any preparation for presentation that is necessary, including discussing with the Chair when particular background information will be introduced. (The issue of selection is dealt with separately below.) In some cases, the teacher may want to make notes for herself or reproduce pieces of work for the participants.

Recorder. Keeping a record is clearly important and often proves to be the most difficult part of the process. There is a great variation in people's style of note-taking, and no one style is necessarily more appropriate than any other. It is important, of course, to know when the Conversation took place, who was Chair and who was Recorder, and who the participants were. Beyond this, a group that meets together periodically may want to discuss what use the notes will be put to and what, for these purposes, constitutes an appropriate record. Completeness of notes refers to the content of what was said and the content is generally most helpful. If the discussion is rapid and parts are missed, these can often be recovered through the Chair's summary. Notes are best done as soon as possible while memory can still supply details. They are distributed to all participants.

Selection and Presentation of Material:

The selection of topic, e.g., writing, can be decided by the group as a general interest or because one member has a particular interest such as in children's diary-writing or an individual child's writing. A group which wishes to try the process might want to establish a topic that would carry through several sessions and find this especially desirable if the subject is complex, as writing is. The initial discussion could then be devoted to exploration of the group's own experience with the material or medium and subsequent sessions would focus on the work of particular children.

The teacher's selection of a child's work and of the pieces of that work can be guided by personal interest or question. All work by the child will represent that child in some way, though the continuities will perhaps be more evident in pieces of work within the child's oeuvre that are not extreme departures from the child's usual production or response.

Presentation will obviously vary depending on the kind of objects or materials involved. Samples of children's writing, for example, can be typed and edited in a minor way to facilitate reading but it is important that the original also be available. In all discussion and description of children's work the original quality of the child's work is important. For subjects or materials that are without "product" or involve whole groups for children, other ways of representing the children's engagement to the Conversation groups will need to be invented. As groups work with different objects, materials, or experiences, their ways of handling the presentations will be of great interest. Blocks, cooking, biography, games, transportation . . . will undoubtedly all make their own demands as far as presentation is concerned.

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