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Portfolios as developmentally appropriate assessment in early childhood education

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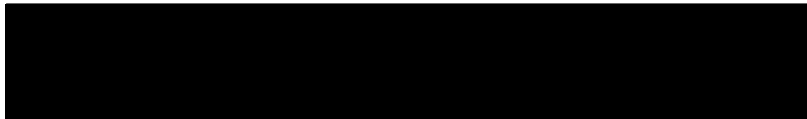
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AN ABSTRACT OF THE THESIS OF Deborah Thompson for the Masters of Science in Education presented August 7, 1991.

Title: Portfolios as Developmentally Appropriate Assessment in Early Childhood Education.

APPROVED BY THE MEMBERS OF THE THESIS COMMITTEE:




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Traditional use of formal assessment techniques in early childhood education is not congruent with the knowledge and philosophies that have begun to guide curriculum and practice. The discontent with current assessment approaches has created a need to develop alternate assessment methods. The practice of portfolio assessment is posed as a developmentally appropriate alternative in this thesis. Current literature on

portfolio assessment related to kindergarten/first grade setting supports portfolio assessment in both theory and practice in early childhood education.

The principles guiding philosophy and practice of portfolio assessment are aligned with the principles of developmentally appropriate assessment. Portfolio assessment is then a collection of student data through natural learning experiences or through techniques that resemble a natural learning experience. Anecdotal observations and the collection of artifacts are the primary method of data collection. These methods of data collection have been applied then to the curriculum areas of literacy, mathematics, science, social studies, art, physical and social/emotional in this thesis.

Current literature indicates that assessment practices must be developmentally appropriate and guided by objectives of the instructional program (IRA, 1985). Guidelines derived from this literature review direct assessment which is ongoing, varied and collaborative, with teachers, students, and parents all focusing on what the child can do. Strong correlations unite the curriculum objectives and assessment goals of all domains--physical, social, emotional and cognitive.

Portfolio assessment invites the student to become active participants with a role in both collecting and evaluating evidence of their own growth. The evidence of student growth

gathered through portfolio assessment will provide educators with curriculum planning information and information about student growth and development to communicate with parents, educators, and communities.

Portfolio assessment represents developmentally appropriate practices in evaluation and demonstrates integration of assessment and curriculum or teaching. Current literature promotes its use in early childhood education for all curriculum areas, and provides guidelines for effective adoption and use. This review of current literature will provide direction for school districts committed to adopting the practice of portfolio assessment at the early childhood level.

PORTFOLIOS AS DEVELOPMENTALLY APPROPRIATE
ASSESSMENT IN EARLY CHILDHOOD EDUCATION

by

DEBORAH THOMPSON

A thesis submitted in partial fulfillment of the
requirements for the degree of

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1991

TO THE OFFICE OF GRADUATE STUDIES:

The members of the Committee approve the thesis of
Deborah Thompson presented August 7, 1991.


Amy Driscoll, Chair

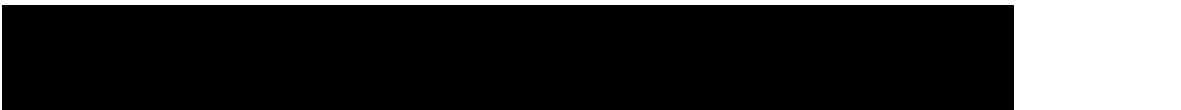

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CHAPTER 1

A CASE FOR PORTFOLIO ASSESSMENT

ASSESSMENT PRACTICES IN EARLY CHILDHOOD EDUCATION

Introduction

A wealth of recommendations describing developmentally appropriate practices for early childhood programs has surfaced from a new generation of researchers asking important questions about the growth and development of young children. The consequent study of these same children has provided answers powerful enough to reshape traditional views of curriculum and assessment held by the educational community (Teale, Heibert & Chittenden, 1987). New philosophies and curriculums, based on current research of early learners, are being embraced. These changes have resulted in the need to take a fresh look at assessment practices. The traditional use of formal, measurement-based assessment in early childhood is not congruent with the knowledge and philosophies that are beginning to guide curriculum. Practices respectful of the developmental needs of young children are being sought for assessment of their growth and development.

This chapter provides a rationale for seeking alternative assessment such as portfolios by describing changes in curriculum which warrant alternative approaches to assessment.

Within this body of work, the principles of developmentally appropriate assessment at the early childhood level will be established. The practice of portfolio assessment will be considered in the context of these principles. The current literature on portfolio assessment, as it relates to children at the kindergarten/first grade level, will be reviewed and used to discuss the use and appropriateness of this technique. Elements of this discussion of portfolio assessment will include recommendations for implementing a successful portfolio assessment program in a school system, methods of collecting data for inclusion, goals and strategies for specific curriculum areas, and the evaluation of data collected in a portfolio system.

The intent of this thesis is to direct philosophy rather than provide a work book of portfolio practices. To provide specific directions for portfolio assessment is not developmentally appropriate practice. The specifics of the portfolio must come from the curriculum objectives and assessment goals of the educational program. Rather than describing the literature support for portfolios in a separate format, this information has been integrated throughout the thesis to support, describe, explain and illustrate the main ideas of the thesis.

Assessment Tradition

Formal, standardized testing has been a part of education for more than one hundred years (Haney & Madaus, 1989). This

approach began with criterion referenced tests to determine a student's knowledge in different subjects according to predetermined criteria. With the development of norm referenced tests, school systems began to make broader comparative studies of student learning. Norm referenced, standardized tests caused the popularity of testing to escalate at the rate of 10% to 20% annually for the past forty years (Haney & Madaus, 1989, p. 683-84).

Curriculum Changes

Research on reading and literacy is challenging the assumptions about learning that form the foundations underlying the construction of formalized tests (Valencia & Pearson, 1987). The challenge is well described in a position statement written by the National Association for the Education of Young Children (NAEYC, 1987) entitled "Standardized Testing of Young Children 3 Through 8 Years of Age":

Current research on reading instruction stresses a whole language/literacy approach that integrates oral language, writing, reading, and spelling in meaningful context, emphasizing comprehension. However, standardized tests of reading achievement still define reading exclusively as phonic and word recognition. (p. 42)

The same position is extended to math in the statement,

Similarly, current theory of mathematics instruction stresses the child's construction of number concepts through first hand experiences, while achievement tests continue to define mathematics as knowledge of numerals. (p. 42)

Standardized tests are outcome measures; they do not give educators information necessary for changing these outcomes (Clay, 1990, p. 289). According to Clay, further problems can be attributed to the fact that standardized tests do not measure well at the earliest stages of learning and that they must be "made up of items that are relatively simple and quantifiable, involving only perfected responding and ignoring the partial successes of children in the process of learning" (p. 289). Thus current literature related to standardized testing clearly demonstrates the need for more sensitive, developmentally appropriate forms of measurement to guide curriculum and measure student growth at the early childhood level. This thesis poses portfolio assessment as a response to the need.

NEED FOR DEVELOPMENTALLY APPROPRIATE ASSESSMENT

Philosophical Discontent with Traditional Assessment

The philosophy of providing whole, richly contextualized learning experiences for young children in relation to language acquisition is often referred to as a whole-language approach. Kenneth S. Goodman writes in The Whole Language Evaluation Book (Goodman, Goodman, & Hood, 1989), that "whole language teachers" are rebelling against traditional evaluation, particularly standardized tests, because they find them "synthetic, contrived, confining, and controlling" (p. xi). He states that these tests are out of touch with modern

theory and research and that they reduce reading and writing to trivial, decontextualized, abstract skills to be tested with multiple-choice questions. Goodman goes on to add that "whole language teachers" believe that assessment can be useful only if it takes place in whole and richly contextualized learning experiences. Traditional assessment is inappropriate and tends to strongly underestimate growth in functional use of language (p. xi). Brian Cambourne and Jan Turbill (1990) propose that the principles that underpin a whole-language philosophy are so profoundly different from those that have guided other, more traditional approaches to language education that a different approach to assessment is required (p. 337). They also recommend that learning, teaching and assessment need to be brought back together with a process/product focus. Assessment should include the learner and other traditionally ignored participants in the evaluation of student development (p. 339). Such current thinking directs immediate development of alternate assessment, and specifically supports the use of portfolios. Portfolios have the potential to respond to major recommendations for whole, richly contextual learning experiences.

Developmentally Appropriate Curriculum

The principles that guide the whole-language approach are relevant to other components of the early childhood curriculum. Related practices are child-centered with an

informal structure that meets the educational demands of young learners but respects the rights of children to grow and develop in ways unique and appropriate to them. It allows children to find connections between the parts of their world and to form a solid foundation on which to build their structures for future learning. But when children are actively engaged in their environment, exploring and seeking answers to their questions, how can we know that learning is taking place? In a curriculum where the underlying philosophy promotes informal interactions between children and ideas and materials, can we justify measuring the results of these interactions with our proven standards of measurement? Many educators are concerned that changes in assessment methods have not accompanied changes in philosophies and subsequent educational practices. This thesis poses portfolio assessments in response to the change.

Assessment Definition for ECE

The terms "testing" and "assessment" carry two different meanings. Tests evaluate children against prescribed expectations (Strickland & Morrow, 1989, p. 634). They are only one particular way of gathering information about student learning and may appropriately fall under the umbrella of "assessment" in specific circumstances. The National Association for the Education of Young Children (1991) defines assessment as the process of observing, recording and otherwise documenting the work children do and how they do it.

This process is the basis for a variety of educational decisions that affect the child, including planning for groups and individual children, and communicating with parents. Johnson and Louis (1990) define assessment differently with: "Assessment is the multifaceted process designed to gather information about the curriculum and the effectiveness of its implementation. It may take the form of testing, observation, work samples or self-report" (p. 172). Assessment encompasses the many forms of information gathering available to educational decision makers (p. 21).

Direction From Natural Learning Theory

In 1990 Cambourne and Turbill described a learning process that they refer to as the "Natural Learning Theory." This process has been developed from naturalistic research that examines the ways in which language learning occurs in a child's natural environment. They explain that teachers can implement this theory to create classrooms where these same conditions are simulated and applied to the learning of the written form of language communication. These classrooms are characterized by the following teaching strategies: 1) immersion in a wide range of language forms and 2) demonstrations of processes that form the foundations of effective control of reading, writing, thinking and language use. Learners are valued, and high expectations are held. Students are given opportunities to make decisions about the kinds of learning they will undertake. The learning

activities that they engage in are functional and relevant rather than artificial and contrived. Approximations are encouraged, and responses that shape these approximations toward ideal and desired forms are readily and freely given (p. 338).

The Responsive Evaluation Model

Theory. Cambourne and Turbill (1990) argue that whole language teachers can borrow the principles inherent in this natural theory of learning and apply them to assessment. They have named this theory of assessment "Responsive Evaluation". According to these authors, this evaluation model was developed by Stake and then later extended by Guba and Lincoln. Cambourne and Turbill explain this theory as follows:

It rejects the assumption that assessor-assessee interaction needs to be carefully controlled through standardization of procedures or the imposition of a standard instrument. Rather, it is based on the assumption that the "human-as-instrument" is as effective and valid as the "test-as-instrument" when assessing human behaviors. This approach draws more on disciplines such as ethnography, anthropology, and sociology than it does on psychometrics and quantitative methods. Essentially, responsive evaluation is an approach that aims at the study of behavioral phenomena within the context of the situation. (p. 340)

Historically, this method of evaluation has been restricted to large-scale curriculum initiatives and educational programs and not applied to the learning of individuals in classrooms (Cambourne & Turnbill, 1990, p.

340). These authors go on to explain the process of responsive evaluation:

In responsive evaluation, the evaluator is encouraged to become as involved in the situation as those who are actually experiencing the educational program. The evaluator is expected to gather information by being "responsive" to those who are involved in the program being evaluated. This is usually done by talking to them, observing them in action and collecting "artifacts" or outcomes from the various situations observed. (p. 340)

The underlying principles of both responsive evaluation and whole-language philosophy are consonant (p. 340). It may be further argued that these principles could be extended to developmentally appropriate early childhood education in general.

Research. Cambourne and Turbill (1990) worked with teachers in Australia in co-researcher teams. Their purpose was to document and analyze how to apply responsive assessment procedures to whole-language classrooms. Together they identified the following five basic points that needed to be addressed:

1. When to record information.
2. How to record information.
3. What information to record.
4. How to make sense of the information collected.
5. Ensuring the trustworthiness of data (p. 340).

They conclude their study by stating that:

...responsive evaluation can be applied at the classroom level, and that the data it generates will tell us more about children's developing

control of language than the standardized tests that schools have. Such an approach to assessment can be as trustworthy and "scientific" as a measurement-based approach and leads to more and better learning by both pupils and teachers. (p. 345-46)

The principles and practices of the "Natural Learning Theory" and "Responsive Evaluation", as described by Cambourne and Turbill, may provide the foundation for assessment practices that reflect the principles of developmentally appropriate assessment. Portfolio assessment reflects the thinking and belief of Responsive Evaluation.

Goals of Assessment

Purposes in ECE. The need for assessment at all levels of education is without question. Harste and Woodward (1989), in their work "Fostering Needed Change in Early Literacy Programs" tell us that they believe "evaluation is at the heart of the educational process and that the chief purpose of evaluation is to improve instructional decision making" (p. 158). Assessment practices need to examine and record all aspects of student growth. With concrete information in hand, educators can accurately report the results of student learning to appropriate audiences. Recorded evidence will guide school systems in creating effective, developmentally appropriate curriculums for young learners (Au, et al., 1990).

NAEYC (1990) defines three major purposes for assessing young children. They include: 1) To plan instruction for groups and individuals and for communication with parents;

2) to identify children with special needs; 3) to evaluate the ability of the program to meet its goals (p. 32). Measurement-based methods currently used by school systems fall short in their ability to satisfy the outcomes an assessment program demands. Information used to plan instruction and communicate with parents needs to be ongoing, reflect the curriculum, and focus on the child's development within the parameters of the curriculum. This information will also enable educators to evaluate the effectiveness of the program.

The intent of this thesis is to explore the elements of assessment which may contribute to the first purpose as described by NAEYC (1990): to plan instruction for groups and individuals and to communicate with parents and other interested parties. The specific assessment methods and tools to be further described are chosen because they reflect general curriculum goals and are developmentally appropriate for children between the ages of five and seven.

Role of Evaluation in Curriculum Development

Decisions about when and how we assess learning need to be made very carefully. Johnson & Louis (1990) write that "evaluation controls curriculum" (p. 173). They refer to this statement as being an educational truism. Ersh (1990) describes a Newsweek magazine article published in January 1990 entitled "Not as Easy as ABC: We Need to Produce Students Who Know How to Think. And We Need New Tests To Help Us."

Ersh points out that even news magazines are beginning to believe that testing drives instruction (p. 1). As Elliot Eisner says: "What gets counted, counts" (Quoted in Ersh, 1990, p. 1). If this is true, educators must decide what they value in terms of student development and choose assessment procedures that reflect these beliefs.

CHAPTER II

PRINCIPLES OF DEVELOPMENTALLY APPROPRIATE ASSESSMENT

ASSESSMENT CHARACTERISTICS

Introduction

The challenge for educators is to use assessment methods that facilitate educational and curriculum goals while at the same time respecting the uniqueness of early childhood (Teale, Heibert & Chittenden, 1987). A policy statement of the International Reading Association on Literacy Development and Pre-First Grade (IRA, 1985) concurs with this belief, stating that evaluative procedures must be developmentally and culturally appropriate and that their selection be based on the objectives of an instructional program (quoted in Strickland & Morrow, 1989, p. 634). If programs for young learners are to be sensitive to their developmental needs, the following standards must be met when formulating the corresponding assessment procedures:

Objectives Encompass All Domains

The objectives of the instructional program to be measured should encompass basic skills in all domains-physical, social, emotional and cognitive. By using informal assessment practices, we can begin to gather other important

pieces of information about students which will give insights into their dispositions and feelings (NAEYC, 1991, p. 32). This information will enable educators to determine the effectiveness of their educational programs in promoting the kinds of behaviors evident in successful learners. We will be able to identify practices that help to promote the following student behaviors: eagerness to work and study without external rewards, positive feelings about coming to school, general cooperativeness, competent peer interactions, and high levels of interest in their projects and activities (Katz, 1989, p. 134). These attitudes are critical if our goal is to promote self-motivated, lifelong learners in our society. This type of information can be gained by observing and listening to children.

Match Between Curriculum Objectives And Assessment Goals

A strong relationship must be developed between curriculum objectives and the goals of assessment procedures (NAEYC, 1991; Teale, 1988; and Goodman, Goodman, & Hood, 1989). These two educational components should be seen as one process, intertwined and supportive of each other.

Ongoing, Continuous and Varied Strategies

The assessment of basic skills and attitudes needs to be ongoing throughout the year (Teale, et al. 1987; Strickland & Morrow, 1989; Oregon Kindergarten Guide, 1989): Continuous assessments can serve to guide the curriculum and to map each

child's progress over time. Many pieces of information need to be gathered to develop an accurate and consistent picture of each child's functioning. Assessment methods and settings need to be varied in both type and context (Strickland & Morrow, 1989; Teale, 1988). Assessment strategies can range from interviews and observations to collecting and reviewing samples of student work. It is important that assessment resemble regular classroom activities (Teale, et al. 1987). NAEYC (1991) states that "assessment relies primarily on procedures that reflect the ongoing life of the classroom and typical activities of children". Care should be taken to engage children in practices that do not "divert" children from natural learning processes or impede usual learning and developmental experiences (p. 32).

Developmentally and Culturally Sensitive

Developmentally appropriate assessment addresses the needs of the whole child. Children's cultural and developmental differences should be taken into consideration when assessment methods are considered (Strickland & Morrow, 1989; Teale, et al. 1987; NAEYC, 1991). To meet this criterion, it is recommended that assessment methods be varied and directed toward a broad range of skills (Teale, et al. 1987). There is great diversity among learners, due to one or more of the following circumstances: different learning styles or rates of learning, cultural and language differences and the varying stages of developmental growth each child has

attained (NAEYC, 1991, p. 32). These differences need to be respected in both curriculum and assessment planning.

These principles of developmentally appropriate practice will provide educators with guidelines for evaluating current assessment practices. Changes that meet the demands of the program's curriculum objectives while respecting the developmental needs of young learners can then be implemented.

ASSESSMENT RESPONSIBILITIES

Introduction

When evidence of student performance has been collected, who should take on the task of processing the information? The curriculum and assessment guidelines developed by NAEYC (1991) view assessing as an essential component of the teacher's role and state that the teacher is the primary assessor. This organization also recommends that the assessment process be collaborative, with parents, other teachers, administrators and the child being involved (p. 33).

The Role of Self-Evaluation

The writing of Goodman, et al. (1989) shares a similar philosophy that says: "Self-evaluation is the most significant kind of evaluation; pupils and teachers need to have a sense of why they are doing what they are doing so that they may have some sense of their own growth" (preface p. xii). In the early stages of schooling, children do not yet have the language or experiences to be competent

self-evaluators. One goal in early education should be for parents and teachers to model practices and values that children may adopt for their own use as self-evaluators. Children need to build a language for expressing their observations and opinions. The child's relationship with others and with his or her environment needs to be safe, secure and free of undue competition in order to build an atmosphere where self-motivated learning and assessment can flourish. Developmentally appropriate practice asks that students play a role in their own assessment. Student data collected through portfolio assessment will provide concrete evidence for young learners to observe and discuss.

Young Learner's Ability to Self-Assess

Research. Stipek (1981) conducted research involving children in kindergarten through third grade. The purpose of the study was to examine the accuracy of children's perceptions of their own ability. Stipek compared the self-perceptions of ability of low and high achieving students. The conclusions drawn from the research involving kindergartners and first graders showed that self-ratings were exactly the same for both high and low achievers. This was not the case for the older children. Stipek also noted that "the self-ratings of the kindergartners and first-graders were not significantly correlated (one-tailed test) to their classmates' ratings, nor were they, at times, even logical" (p. 407). There was also no correlation between the teacher's

rating and the child's self-rating. This again was not the case with the older children.

Stipek (1990) refers to earlier research done by Apple and King that provides evidence that teachers of young children tend to focus on behavior and work habits, and infrequently reward children on the basis of the quality of their products. As stated earlier, if we want children to become competent self-evaluators, concerned with intellectual growth, it is important for educators to model the values they hold for their own work and the work of their students. Giving rationales for evaluations will provide children with the language necessary for describing these standards (Potter, 1985 p. 206).

Conclusions. Stipek's work demonstrates the need for an assessment program that provides opportunities for teachers and children to review work together in order to encourage the development of self-assessment techniques that ask the child to make observations about his or her work that reflect personal values. Portfolio assessment will provide such opportunities.

Finally, NAEYC (1991) states that developmentally appropriate assessment practices are sensitive to the child's self esteem and psychological health. The information provided by their assessment should support parents' relationships with their children, their parenting abilities and their family culture. It should focus on the child's

strengths and progress (p. 32). When evaluation measures are used, it is because they add to the information available (Goodman, et al. 1989 p. xiii).

DIRECTION FROM RESPONSIVE EVALUATION MODEL

Basic Considerations

Cambourne and Turbill (1990) worked with teachers in Australia in co-researcher teams to identify considerations that need to be addressed in a classroom employing the principles of "Responsive Evaluation". These considerations, with descriptions, provide a working model that encompasses many principles of developmentally appropriate assessment.

Data Collection. Teachers agreed that they needed to gather information from the full range of daily language activities in their classrooms. They collected data during language time, and during math, social science, science, art, music and all other subject areas. Classrooms were organized to create multiple opportunities for gathering information by changing the distribution of time to allow for opportunities for data collection (see Appendix A-1). As an example, sharing times provide opportunities to record evidence of language growth. The ways in which other students listen, question and comment provide other kinds of assessment information (Cambourne and Turbill, 1990, p. 341-42).

Decisions about what to record was not easy. Researchers found that teachers wanted to record those aspects of language

learning that they were able to understand, know and value. As their knowledge of whole language increased so did the focus of their instruction, assessment and observations. Following is the consensus of teachers on what information needed to be collected: (a) strategies learners use as they read and write, (b) the level of explicit understanding learners have of processes they can and should use when writing, (c) learners' attitudes towards reading and writing, (d) learner interests and backgrounds, (e) and the degree of control learners display over language in all its forms (Cambourne and Turbill, 1990, p. 342-43).

The researchers discovered that teachers naturally developed sets of markers much as parents do with young children. Cambourne and Turbill (1990) define the term markers as meaning "...overt forms of language behavior that mark or give evidence of the presence of some kind of linguistic knowledge, skill, or attitude" (p. 343). (see Appendix A-2 for a beginning list of markers collected by these authors.) They also concluded from this portion of the study that "teachers will inevitably hold different values about language and will therefore have different aims and objectives" (p. 343). Researchers also found that as a teacher's understandings of whole-language philosophy grew, his/her beliefs and values about language became more similar (p. 343).

Assessing Data. Research data collected by Cambourne and Turbill (1990) showed that teachers process information about student growth by reading over the information they collect and trying to categorize it. The categories they devised were related to their values and beliefs about language and language development. The results of data collected on teachers showed that they spend the same amount, or less, time assessing in this fashion than when they did assessing in more traditional ways. Teachers felt they needed checklists (see Appendix A-3) in the beginning but eventually were preferring narratives that summarized what they had discovered about each child (p. 345).

Cambourne and Turbill (1990) found that when teachers were using a naturalistic, responsive perspective, they could not use another teacher's checklists. According to the authors of this research, "one generalization that has emerged from our research on this approach to assessment is that checklists will only "work" if they are grounded in one's own observation and belief systems" (p. 345). Researchers reported that the two most common sources of information used by teachers in this study were formal and informal conferences between the teacher and child and the collection of artifacts produced by the child (p. 341).

Ensuring the Trustworthiness of Data. Cambourne and Turbill (1990) refer to researchers Guba and Lincoln in addressing the issues of trustworthiness of data. Guba and

Lincoln maintain that the concepts of internal validity, external validity, reliability and objectivity typically applied to measurement-based assessment cannot be applied to data generated by Responsive Evaluation. Instead, the concepts of credibility, transferability, dependability, and confirmability should be applied. A further discussion of these qualities will be provided in the section on reliability and validity of portfolio assessment (Cambourne and Turbill, 1990, p. 340-45).

Summary

The research of Cambourne, Turbill and Stipek supports the elements of developmentally appropriate assessment as described in this chapter. Their data provide evidence that informal assessment methods can provide educators with the information necessary for developing curriculum and sharing evidence of student growth through practices that are developmentally appropriate in early childhood education. These practices build a strong foundation upon which to build future assessment practices. The following chapter will apply these principles of developmentally appropriate assessment to the portfolio approach.

CHAPTER III

PORTFOLIOS AS DEVELOPMENTALLY APPROPRIATE ASSESSMENT FOR EARLY CHILDHOOD EDUCATION

INTRODUCTION TO PORTFOLIOS AS ALTERNATIVE ASSESSMENT

Assessment portfolios have been described as a powerful alternative to traditional measures. The practices and intent of the portfolio process reflect the principles of developmentally appropriate assessment. The Association for Supervision and Curriculum Development has identified portfolio assessment as one of the top three current curriculum trends (Vavrus, 1990, p. 48). Wiggins (Instructor, 1990) explains that there is a growing interest in portfolio assessment for the following reasons: 1) states are moving away from standardized testing of writing and into process writing; 2) a move toward assessment reform is occurring due to the fact that educators neither value or have input into test design and 3) schools in other countries, business and higher education have moved toward performance evaluation (p. 51).

Portfolio use is currently being investigated for two main purposes. One use is as a large scale assessment technique, possibly to replace or assist standardized testing (see Farr, 1990; Wolf, 1989). The other is for purposes of

instruction and individual assessment. The intent of this chapter is to research and describe portfolio use for instruction and individual assessment at the kindergarten and first grade levels.

Definition of an Assessment Portfolio

Current literature on portfolio assessment is generally descriptive in nature. The state of portfolio use is in its infancy. Educators and researchers writing about portfolios offer their own definition of what they perceive an assessment portfolio to be. The intent of most of the literature is to describe literacy or writing portfolios and to make recommendations for their implementation. There is a lack of research data comparing the effectiveness of portfolios assessment with other traditional assessment techniques.

Vavrus (1990) offers a definition of a portfolio that explains the evolution of the technique in terms of classroom use:

A portfolio is more than just a container full of stuff. It's a systematic and organized collection of evidence used by the teacher and student to monitor growth of the student's knowledge, skills, and attitudes in a specific subject area. And so it is what's in the container, rather than the container itself, that becomes a student's portfolio.

A student's portfolio might have several distinct sections representing, for example, literacy, mathematics, science, or social studies.
(p. 49-50)

A definition provided by the Northwest Evaluation Association is similar but goes on to add that "The collection must

include student participation in selecting contents, the criteria for selection, the criteria for judging merit, and the evidence of student self-reflection" (Quoted in Paulson, et al., 1991).

Advantages of Portfolio Assessment

The universal purpose of a portfolio is to show progress on the goals represented in the instructional program (Paulson, et al., 1991). Portfolio assessment offers the opportunity for replacing or validating other more formal and possibly inappropriate methods of measurement at the early childhood level. It provides information to track student growth over time. Documenting and evaluating student thinking, attitudes and performance is possible within the learning environment and as a part of instruction when a portfolio method of assessment is established. "Portfolio assessment offers the opportunity to observe students in a broader context: taking risks, developing creative solutions, and learning to make judgments about their own performances" (Paulson, et al., p. 63).

Portfolio assessment can provide children with the attitudes and skills necessary to monitor self growth and guide their own learning. It is something done by or with, not to, the student. Children are provided the opportunity to learn about learning through the process of developing a portfolio (Paulson, et al., 1991, p. 61). Portfolios focus on

what the child can do and enable individuals to set goals based on their own growth.

Relationship with Developmentally Appropriate Assessment Practices

In August of 1990, the Northwest Evaluation Association sponsored a working workshop entitled "Aggregating Portfolio Data." A list of developmentally appropriate assessment practices reflected in the portfolio resulted (Bannister & Johnson, 1991). These practices demonstrate the ability of portfolio assessment to fall within the guidelines of developmentally appropriate assessment for young children. They are as follows:

- 1) Instruction and assessment should be integrated; both should be driven by the same desired student outcomes. Assessment should give clear direction for improvement and future learning outcomes.

- 2) There must be student involvement in the evaluation, i.e., develop their own investment in results.

- 3) Assessment must intrude as little as possible upon instructional time.

- 4) Assessment should convey the context and richness of the achievement produced.

- 5) Aggregation of portfolio data beyond the individual level should support, not hinder, the use of portfolios at the classroom level. A clear purpose for assessment via portfolios must be stated when aggregating data. Input from

classroom practitioners who use portfolios should be used to help shape designs for portfolio data aggregation.

6) The assessment process should promote joy, pride and ownership of the portfolio which students, teacher, parents, schools and districts share (p. 4).

Valencia (1990) provides other rationales for using portfolios as a developmentally appropriate assessment technique. Portfolios meet the demand of being anchored in authenticity. The information comes straight from the child in natural settings, allowing for developmental and cultural differences among students. The implementation of portfolio assessment is a continuous process. The gathering of data from many sources creates a more valid, multi-dimensional picture of the student. If the collection of data is done collaboratively between the child and teacher, reflection and self-evaluation become powerful components of portfolio assessment (p. 338). Portfolios have the potential for encouraging students to assume ownership and take charge of their learning (Paulson et al., 1991, p. 61).

REVIEW OF CURRENT PORTFOLIO PROGRAMS

A number of school systems and states are researching the practice of portfolio assessment. These studies of portfolios involve students at all levels. This review will briefly explain a few models currently being implemented that involve elementary school and high school programs. The choices were

made to demonstrate the wide range of portfolio uses and their ability to span many stages of child development.

National Writing Project

Pittsburgh Public Schools, in conjunction with the Educational Testing Service and Project Zero at the Harvard Graduate School of Education have been exploring alternative methods of assessing student achievement in the arts at the middle school and high school levels (Howard, 1990, p. 4). Their goal is to design ways of assessing student growth while at the same time promoting student responsibility for questioning and making decisions about their own work. This goal is the result of student interviews held about their work as writers.

The other goal of this project is to find ways to gather a history of growth in order to provide students with the information necessary to understand their own history as learners. Teachers and researchers, working together, began their study by interviewing experts--artists, musicians, and writers to discover how they sample and judge their own work (Wolf, 1989, p. 36). Building on the examples provided by the experts, these educators developed systems of portfolio assessment in the visual arts, music and writing. Teachers then engaged students in this assessment process. Howard (1990), Wolf (1989), and Camp (1990) all describe the resulting writing project in Pittsburgh involving eighth graders. Ersh (1990) reports on a teacher questionnaire

completed by middle and high school teachers that was a part of this study. They were asked to respond to the following questions:

1) How important is the taking of risks and experimentation by student writers? (87% responded in the categories of moderately to very important.)

2) How important is it for students to be careful in following the directions of an assignment? (96% responded that this trait was moderately or very important.)

Ersh suggests that the incongruity between encouraging risk and at the same time requiring strict adherence to assignment directions reveals a tension within teacher's theories about writing (p. 11-12).

Teachers were also asked about the relative importance of classroom activities regarding feedback to student writing. The response showed that: 85% feel that students responding to other students' work was moderately to very important; 92% felt that self evaluation was moderately to very important and 95% felt that teachers telling students how to improve their work was moderately to very important. Ersh (1990) concludes from these results that work needs to be done in helping teachers establish climates conducive to portfolio assessment (p. 11-12).

Vermont Portfolio Assessment Project

Vermont has drafted a statewide writing assessment plan. The plan includes one prompted/timed writing sample, one

student selected writing piece and a review of the student's writing portfolio. Writing portfolios are kept in all grades with formal review at the fourth and eleventh grades. Vermont is pilot testing writing and mathematic portfolios with fourth and eighth graders in 40 for the 1990-91 school year. This state plans to implement statewide writing portfolios by 1992. Portfolio assessment in science, history, and citizenship will be piloted in 1991-92 (Instructor, 1990, insert, p. 53).

Juneau Language Arts Portfolio For Grade 1

The Juneau School District has developed an integrated language arts portfolio. The portfolio is designed to include eight writing samples selected by teacher and student, reading samples, a reading attitude survey, a speaking/listening checklist, anecdotal observations and student self-reflections, developmental spelling lists, reading logs, drawings and illustrations, and a cassette tape of oral description of reading by the child. This project appears to be well thought out and organized. Organizational components are included such as a cover letter to be included in each child's portfolio that defines the district and state philosophies on the language arts curriculum and the intent of their assessment portfolio. Other components that provide structure to the portfolio includes a checklist of required portfolio components, and the definition of an assessment portfolio. This portfolio process appears to be quite formal and possibly not in keeping with the theories of

developmentally appropriate assessment (Juneau School District, 1990).

Orange County, Florida, Public Schools

This school system is in the process of implementing a portfolio approach to literacy assessment at the elementary level. The goal is to create a district-wide system that will involve 75 schools. The four core elements of their portfolio include: 1) a reading development checklist, 2) writing samples, 3) a reading log, and 4) a test of reading comprehension (Matthews, 1990, p. 421).

California Mathematics Project

In October of 1988, the California Mathematics Council and the EQUALS program at the Lawrence Hall of Science at the University of California, Berkeley agreed to write a booklet about alternatives to standardized testing in mathematics (EQUALS, 1989). Portfolios are a component of the alternatives outlined. Other parts to their proposed assessment alternatives include writing and investigations in mathematics, performance assessments, and self-assessment.

Mumme (1989) also describes a mathematical portfolio project designed by the California Mathematics Project at the University of California, Department of Mathematics at Santa Barbara, California. This writing offers recommendations for the development of elementary mathematics portfolios which include authentic information about students' mathematical

endeavors (p. 3). Student selection and reflection is a component of this system. Field testing of these portfolios indicates that not all items collected provide insight into a student's mathematical thinking but that they do provide evidence of the nature of instructional programs (p. 5).

Durham, New Hampshire Writing Assessment

In Durham, New Hampshire, Simmons (1990) has field tested the use of a writing proxy as a model for large-scale assessment. Twenty-seven fifth graders were randomly selected from the school district to participate in the study. The purpose was to compare the results of three writing samples chosen, from a portfolio, with the results of a timed, prompted writing piece. All writing was scored holistically. Students and raters listed three strengths of each sample. The results showed that the timed test and portfolio assessments produce essentially the same ordering of students (p. 263).

Summary

The portfolio projects described are for different assessment purposes and are at different stages of implementation. The study of portfolio assessment projects in progress provides implications and direction for school districts and states discontent with traditional assessment.

ESTABLISHING PORTFOLIOS IN SCHOOL SYSTEMS

Initial Decisions

The implementation of a portfolio assessment program is most successful when the individuals within school systems decide together that this method of evaluation will support the curricular and instructional priorities already in place (Valencia, 1989, p. 339). Goals of instruction are broad, not overly specific, isolated skills or individual lesson objectives (example: "to instill students with an interest and desire to read"). Valencia (1990) cautions that without this kind of specificity, portfolios have the potential to become unfocused holding files for odds and ends, or worse, a place to collect more isolated skills tests (p. 339). Meisels and Steele (1991) state that the assessment of the portfolio should be based on the child's continuous development toward a standard of performance that is consistent with the teacher's curriculum and appropriate developmental expectations (p. 3). On the surface, these assertions appear in conflict with the principles of developmentally appropriate practice that ask that learning begin with the child's own experiences and be allowed to develop at rates and in directions appropriate to the individual. A compromise between the two philosophies may actually provide portfolio assessment goals that respect the needs of children yet have a sense of direction.

Orange County Public Schools in Orlando, Florida have been working through the process of implementing literacy portfolios. Mathew's (1990) writing about their experiences suggests that the establishment of portfolios needs to start with a look at the strengths and weaknesses of existing assessment practices in order to identify future assessment needs (p. 420-21). Orange County educators decided that their assessment method should encourage students to view themselves as readers and writers, and that it must also help teachers to grow in their ability to understand how children learn and to document that learning through natural "kid watching" (p. 420). Other characteristics of their assessment program included concepts such as the need to focus on positive features of a child's development, and the need for consistency in processes used across the district. The Orange County experiences provide direction for school district adoptions of portfolios.

Need for Administrative Support. Administrators, school boards, parents and teachers must all be knowledgeable and supportive of proposed techniques for a successful change in program to occur. Mathew's (1990) description of the Orange County program attributes the success of their move toward portfolio assessment to the strong administrative support that exists in their district. Administrators in Orange County are reported to keep abreast of current issues and research and are in strong support of literacy education. Building level

administrators have been involved in staff development sessions. Administrator support has also provided extensive training in process writing for one half of the district's teachers. Many teachers have also studied emergent literacy, flexible grouping and writing to learn. The primary teachers have been involved in exploring emergent literacy concepts and new assessment procedures (p. 420).

Discontent with current assessment practices led to assessment changes in Orange County Public Schools. Their current model of assessment portfolios reflects principles of developmentally appropriate assessment. The knowledge gained through their experiences in developing literacy portfolios could be extended to the development of portfolio assessment for other areas of student development as well. Their experiences provide valuable information for other school systems intending to implement their own form of portfolio assessment.

Teale, Heibert and Chittenden (1987) concur with Orange County School District in the belief that administrators need to support the philosophy of employing more naturalistic methods of assessment with children. These authors feel that school district policies or mandates often undercut teacher's work towards more naturalistic, developmentally appropriate assessment methods by overvaluing data from formal, and often, standardized testing (p. 777).

Portfolio Design Process

Basic Considerations. The process of developing and implementing a school-wide portfolio system needs to directly involve the practitioners. Decisions about the intent and process of the system need to be made collaboratively (Jongsma, 1989, p. 265). The first decisions about portfolios are related to the purpose and goals of the assessment program. From those decisions, the following major design considerations must be addressed for a portfolio system:

1. Decisions and guidelines need to be made before the school year begins.

2. The individuals responsible for selecting materials for inclusion must be determined. Teachers, students, parents, administrators, and peers are all options.

3. The contents of the portfolio must be established.

This decision will be based on the purpose of the assessment portfolio in relation to the curriculum goals and instructional priorities. Another important consideration when making this decision is to leave the portfolio flexible enough to meet the needs of all administrators and teachers. Many researchers recommend establishing a small core of materials to be included within the student portfolio with a more extensive list of suggestions to supplement these required materials. As teachers and administrators gain experience and understanding develops, the opportunity to employ a broader range of assessment techniques will exist.

4. The assessment portfolio should be seen as an evolving document.

Jongsma (1989) describes a New Hampshire portfolio project that portrays their portfolios as being an ever changing document. These educators believe that as their understanding of how children learn continues to grow, so will their assessment practices. Assessment portfolios provide teachers with the advantage of observing and learning as an ongoing part of instruction. Provisions for revising the portfolio process should be built into the program.

5. Evaluation criteria must be established along with procedures for scoring data. Information might be scored as a whole or each piece may be scored separately.

The answer to these questions may come from the answer to the following question: What is the purpose of this assessment?

6. The audience of the assessment portfolio must be established.

Again, the answer to this question may come from establishing the purposes of the assessment.

7. A system for managing portfolios at the end of the school year must be designed.

Vavrus (1990) writes that passing on portfolios from year to year promotes continuity in education (p. 53). This author encourages the practice of the current and future teachers meeting in order to decide what information will be

of value to pass on, and what should be eliminated. Children may also have a place in deciding what they are willing to make public.

8. The portfolio may serve a different purpose during the year from the purpose it serves at the end.

Some material, such as partially finished work, may be kept during the year for instructional purposes. At the end of the year, the portfolio may contain only what the student is willing to make public (Paulson, et al., 1991:62) and what the teachers involved feel is helpful.

9. Classroom time needs to be re allocated to allow for observation, conferencing and self assessment. Teachers also need time to organize, review and evaluate portfolios.

Wiggins (1990) suggests that in order to implement portfolio assessment, time is a critical issue. He believes the use of professional development days as "assessment days" and a few free hours a week to manage portfolios is justified (p. 51).

10. Organizational components such as a cover letter can be included in each child's portfolio that defines curriculum philosophies and the intent of the assessment portfolio. Other components that provide structure to the portfolio may include a checklist of required portfolio components; criteria for evaluations; and the definition of an assessment portfolio (Juneau School District, 1990). (see appendix B for their examples).

Supportive Classroom Environment. Camp (1990) writes that it is easier to sustain portfolios when teacher's thinking and practices are philosophically congruent with the philosophy of portfolios. Classrooms where an emphasis is placed on learning and discovery and students are comfortable with taking risks in their learning would support portfolio use. In other circumstances, the very act of introducing portfolios into a classroom or school can become a first step toward creating an environment that supports writing and engages students as active, process oriented learners. According to Camp, this is especially true if the first experiences with portfolios are used to inform instruction and curriculum and to guide subsequent refinements of the portfolio approach (p. 10). Middle and high schools using portfolios as part of the PROPEL project reflected elements of a climate conducive to portfolio assessment. In the Arts Propel Project, an approach for developing classroom learning projects by students in close collaboration with teachers was implemented. Researchers noted the following classroom practices and attitudes evident in these successful models:

1. A long-term view to classroom work with an emphasis on sustained interest and effort.

2. A process for students to look back at the work created and processes used, as well as to help peers look at work.

3. A work-shop like atmosphere in which students were active learners and teachers structured activities and interactions to help students progress in their learning.

4. An emphasis on learning and discovery, not correctness or right answers (p. 10).

This approach encourages experimentation and taking risks, which contributes to student's ownership of their work (Camp, 1990, p. 11). The characteristics observed in these middle and high school classrooms appear to be appropriate for early childhood classrooms. Similar teaching techniques and philosophies about learning exist in developmentally appropriate settings for young children.

Howard (1990) describes this same climate as being one in which students can express their feelings about their own writing and that of others. Students can experience sharing and supporting peers in a positive manner and view works presented as ongoing, learning processes. Teachers can model questions with phrasing and intonation supportive and caring in nature. She describes an atmosphere of reflection and acceptance (p. 4). This atmosphere will help students to move beyond making positive or negative judgements about their selections for portfolio inclusion and encourage careful thought and analysis toward the elements of their work.

A classroom climate supportive of portfolio assessment will challenge traditional teacher and student perspectives. To put children into active roles as learners, teachers need

to rethink their roles in the classroom and begin to consider themselves as coaches or "enablers of student performance" (Wiggins, 1990, p. 51). The realization of these principles applied to the classroom will produce an exciting environment where opportunities for student and teacher growth abound.

Issues of Reliability and Validity. The informal nature of portfolio assessment is an important asset but may also be one of it's greatest problems (Valencia, 1990, p. 339). Valencia and Pearson (1987) believe that teachers have been taught that data from standardized or basal tests are more trustworthy measures of learning than data collected each day during the instructional process. They argue that informal assessment is considered more subjective and so teachers may be less likely to use their own data for decision making (p. 728).

As stated in an earlier chapter, Cambourne and Turbill (1990) refer to researchers Guba and Lincoln in addressing the issues of trustworthiness of data. Guba and Lincoln maintain that the concepts of internal validity, external validity, reliability and objectivity typically applied to measurement-based assessment cannot be applied to data generated by an informal assessment model they term "Responsive Evaluation." Responsive Evaluation asks that the evaluator gather information by being "responsive" to those who are involved in being evaluated. This is usually done through interviews, observations and the collection of

artifacts or outcomes from the various situations observed (p. 340).

Cambourne and Turbill (1990) maintain that responsive evaluation and whole-language assessment share the same underlying principles (p. 340). If these two educational practices are alike in their philosophies of learning and assessment, then the characteristics necessary to provide trustworthiness of data for one might apply to the other. This comparison could be expanded to include developmentally appropriate early childhood education in general because of the sharing of these common principles (NAEYC, 1991). Guba and Lincoln (Cambourne and Turbill, 1990) maintain that for responsive, or natural evaluation, the concepts of credibility, transferability, dependability, and confirmability should be applied. To ensure these qualities the following procedures need to be part of the process:

- prolonged engagement at the site;

- persistent observation;

- peer debriefing (using uninvolved peers to react to interpretations, give advice, and generally keep the assessor "honest");

- triangulation (pitting different observations, data, theories, contexts, etc., against each other in order to cross check interpretations);

referential adequacy materials (artifacts and other documents that can be used to test interpretations made from other data sources);

member checks (checking data and interpretations with those from whom they were collected);

purposive sampling (sampling that maximizes the range of information collected);

thick description (detailed contextual information);

and, audit trails (leaving a visible data trail that can be traced by another person from the final interpretation back to the raw data) (p. 345). These authors argue that data collected under these conditions is as trustworthy and scientific as those generated by a measurement-based assessment approach (Cambourne & Turbill, 1990, p. 345).

Valencia (1990) further maintains that ongoing assessment collects a variety of data that increases the reliability of the conclusions or decisions made as a result. She recommends that educators need to include two levels of assessment evidence in a portfolio to further address issues of reliability. These two levels are 1) required evidence and 2) supporting evidence (p. 339).

Required evidence is data from particular activities, checklists, or projects chosen from a common list. These assessments are tied to identified goals and included in the portfolios of all students at a grade level. They could be structured (e.g., an emergent literacy checklist) or more

flexible (e.g., best piece of writing every six weeks). This kind of information will enable educators to look systematically across students as well as within each student (Valencia, 1990, p. 339-40).

Supporting evidence is additional documentation selected by students or teachers. This type of evidence adds the depth and variety typically missed by traditional assessments. It allows the child's and the classroom's unique characteristics to become a part of the evidence of their learning (p. 340).

When the measurement of a learning task is part of the learning process, validity is not usually in question. The practice of labeling items selected for the assessment portfolio with the date, conditions under which the sample was produced and student reaction to work will ensure a better understanding of the information collected and of the learning process (Farr, 1990, p. 103).

DEVELOPMENTALLY APPROPRIATE REPORTING SYSTEMS

Introduction

The NAEYC (1991) Guidelines for Developmentally Appropriate Curriculum Content and Assessment in Programs Serving Children Ages 3 Through 8 recommends that a regular process exist for periodic information sharing between teachers and parents about children's growth, development and performance. The method of reporting should not rely on letter or numerical grades, because "Grades are considered

inadequate reflections of children's ongoing learning" (Bredekamp, 1987, p. 75). Reporting should instead provide more meaningful, descriptive information in narrative form (p. 33). Portfolios have the potential to provide meaningful and descriptive information, and a logical foundation for narrative reporting.

Discontent with Current Approaches

Grades. The two most common practices used to communicate children's achievement or progress, or lack of, are grades and report cards. Educators are questioning current reporting systems because they lack congruence with programs that reflect the principles of developmentally appropriate practice.

Armstrong (1991), sharing many of these same concerns, writes that grades subtly work against the learning process in the following ways:

1. Grades encourage schools to concentrate on lower-order thinking skills like rote memorization of facts. Essays and projects are difficult to grade objectively, and as a result, many teachers give little emphasis to these kinds of thought-provoking assignments.

2. These systems of punishment and reward frequently lead to forms of manipulation as students shift their focus from learning in collaboration with the teachers to determining merely what they need to know in order to get good grades.

3. Peer relationships turn from cooperative to competitive, especially when students are graded on the curve.

4. Assigning letter or number grades tends to lower motivation and create negative attitudes in many kids.

5. There are basic inequities built into the grading system. Bright students may also shortchange themselves by doing only the work necessary to earn a top grade (p. 34,36).

A study conducted at Old Dominion University in Norfolk, Virginia, suggested that lower-achieving children who attended elementary schools where grades were given felt more negative about school, peers, and family than similarly achieving children who attended schools that didn't grade their efforts. Another study revealed that when a task was particularly challenging (in this case, a difficult search-a-word puzzle), knowing that a grade would be assigned to their efforts hampered children's willingness to keep working until the task was finished; grading had transformed what was fun into work (Armstrong, 1991, p. 34,36).

Much of the research data and conclusions are derived from studies of grading older students. Since attitudes and expectations about grades may begin with the practices parents and students experience from the beginning of their educational careers, the insights are relevant to early childhood education practices.

Report Cards. Freeman and Hatch (1989) studied kindergarten report cards in the Ohio public schools. They

collected a stratified random sample consisting of 61 report cards representing six types of school districts. Analysis of their report card data showed that, in the state of Ohio, kindergarten children are expected to master specific skills in the areas of work habits, reading and math readiness. They found an emphasis on academic skills, with marking systems that negatively evaluate kindergartners (p. 595). An analysis was completed to determine the philosophical orientations or theories of learning evident in the cards. Each report card was examined to determine whether its elements reflected maturationist, behaviorist, or interactionist principles of learning (see Freeman and Hatch, 1990, for a description of these principles) and child development. In forty one percent of the cards, a behaviorist perspective, presenting negative evaluations of students, seemed to be preferred (p. 601). The trend toward competency-based, skill-oriented instruction derives from a behaviorist viewpoint (p. 597). Thirty percent of the cards reflected conflicting theories (p. 601). The researchers concluded their reporting by stating that a review of current literature indicates that these trends are not unique to Ohio (p. 602).

From their research, Freeman and Hatch (1989) provide considerations for educators to address in the development of report cards. The first is a concern that a focus on skill acquisition will not create the environments we desire for young learners. The second is a concern that concepts such as

play, self-esteem and other affective characteristics are not addressed in kindergarten report cards. Their final concern is that the negative effects of grading on young children need to be considered. The results of their analysis of kindergarten report cards support the belief that many report cards do not reflect the theories of developmentally appropriate practices currently being examined (p. 602-3).

The Oregon Kindergarten Guide (1989) reports that many teachers and administrators are not satisfied with report cards because total development and progress of children cannot be explained adequately on a typical report card bearing a checklist of behaviors and skills. Report cards that are checklists may give guidance to teachers in their observations, but they also may give the impression that the curriculum is nothing more than a set of skills. The child's knowledge, disposition and feelings are just as important yet they are not generally assessed well through report cards with a checklist format (p. 55). The Oregon Kindergarten Guide (1989) offers a progress report on which teachers comment about the child's skill development, knowledge, disposition and feelings. However, even a form such as this provides only limited explanations of a child's progress and is often not very meaningful to parents. (see Appendix C for a sample of this card and other narrative report formats).

A Developmentally Appropriate Alternative

The method of reporting to parents should provide meaningful, descriptive information in narrative form (NAEYC, 1991, p. 33). The national recommendation calls for the implementation of a narrative or prose form of reporting child development and learning to parents and school systems. Cambourne and Turbill, (1990); Baskwill and Whitman, (1988); Bredekamp, (1987) and Johnson and Louis, (1990) also advocate the use of written, narrative forms of reporting. Baskwill and Whitman (1988) offer an informative description of a narrative report:

It's a written report- not just a sentence or two but a meaningful description of a child's development and progress in various curriculum areas. It's as important in creating that kind of report as in recording daily observations of the children to focus on the "can do's." Include what the children can already do well, what strategies they are experimenting with and practicing, and what they might be expected to do in the next few weeks. Your comments must be well articulated and explained so the parents clearly understand what they mean. A poorly written anecdotal report will be of little use, so it's important to train yourself to become the best reporter possible. (p. 37)

Guidelines for Writing. In narrative reporting, the teacher's ability to successfully convey information through writing is critical. Baskwill and Whitman (1988) suggest the following two guidelines for learning how to write narrative reports:

1. Review files of the samples of work and anecdotal records collected for each child. Evaluate the information

against developmental stages of growth and learning and the established curriculum goals.

2. Pass the first few attempts along to a colleague, with samples of children's work, and ask what that person understands you to be saying (p. 37).

Narrative Samples. The section on anecdotal observations which follows, will offer additional information and suggestions for recording and describing student development that is accurate and objective. Cambourne and Turbill (1990) provide two samples of narrative reports in their work entitled "Assessment in Whole-Language Classrooms." One sample is written in a format appropriate for communication with parents:

Nicole is enjoying her reading and writing in class. She also says she now likes to read at home before going to bed. Her confidence is growing and she is more likely to come and ask for assistance when needed. She is prepared to have a go at her spelling in her writing and will now read back over her writing and correct many of the spellings. Words she can't spell she will ask other children to help her with. She is also beginning to use the full stop (period) in the correct place. Nicole loves to write for different audiences and does so very well. She wrote a set of instructions for kindergarten about how to play a game called "Thumbs Up, Heads Down." She wrote and rewrote her drafts until she was happy with them and then she wrote the instructions out in very neat handwriting, drew illustrations out in very neat handwriting, drew illustrations to support the instructions and finally read the book to kindergarten.... Nicole is progressing well in reading, writing, spelling and talking. Her writing ability is well above the class average. Her reading is just under class average but with her increasing confidence in her reading and her willingness to now read at home this is not causing me any concern. (p. 348-49)

The other sample models a format successful in reporting specific behavior to school systems (see Appendix C-2 for this version and a complete version of the report to parents). When a written communication concerning student growth and development is required, a narrative report system can fulfill this requirement within the guidelines of developmentally appropriate practice at the early childhood level. Assessment portfolios will provide rich data for the basis of this reporting form.

Conferences. Assessment portfolios will create a view of student growth and development that will provide parents with an accurate, informed perception of their child's strengths and abilities. The most effective way to give parents an understanding of how their children are developing is a parent-teacher conference (Baskwill & Whitman, 1988, p. 38). At a conference the teacher can share information gathered in assessment portfolios. Face-to-face interaction allows teachers to clarify any misunderstandings the parents may have and, at the same time, gather additional insights into the child's development from the parents. Finally, parent-teacher conferences provide time for parents and teachers to share information and set goals for the child (Oregon Dept. of Ed., 1989, p. 55). The Oregon Kindergarten Guide (1989) offers the following suggestions for providing successful conferences with parents.

Conference suggestions:

1. Parents should be given copies of dated work samples from throughout the reporting period with explanations about the changes in the work over time.

2. Parents need to see the anecdotal records kept on their child and be informed of the progress these records indicate.

3. Completed checklists should be given for parent questions.

4. During the reporting process, parents should be asked to provide additional information that might help with determining the child's true progress (p. 55).

Parent-Teacher Journals. Baskwill and Whitman describe a unique form of communication with parents in Evaluation: Whole Language, Whole Child (1988). They present a system of using teacher/parent dialogue journals to communicate about children. Parents are asked to relay any observations, thoughts or questions they may have about their child's work. They are asked to share anecdotes that will help teachers to understand their children. The practice of communicating with teachers through journals is optional, but Baskwill and Whitman report that parents who choose to use teacher/parent dialogue journals along with conferencing and other more traditional forms of communicating acknowledge their effectiveness (p. 38-39). The anecdotal information shared by parents in these journals would provide a rich source of

information on student development to add to the assessment portfolio.

Summary

Portfolios can provide an alternative to traditional assessment practices. Their methods and philosophies concur with the principles of developmentally appropriate assessment practices in early childhood education. Many successful portfolio projects are currently being implemented. They will provide needed directions as more communities work towards establishing portfolios based on their own curriculum guidelines and assessment goals. The next chapter will provide examples and descriptions of procedures and organization for early childhood assessment portfolios. Practices explained are meant to serve as examples of developmentally appropriate methods that may be useful in portfolio assessment programs.

CHAPTER IV

PROCEDURES AND ORGANIZATION OF EARLY CHILDHOOD ASSESSMENT PORTFOLIOS

The specific procedures and organization of an assessment portfolio cannot be established until the school system designing the portfolio decides the purpose or goals of their assessment program. Portfolio assessments should be directly related to the curriculum goals of the school (Strickland & Morrow, 1989). As stated earlier, the intent of this thesis is to investigate the use of portfolios for instruction and individual assessment at the kindergarten and first grade levels. While many of the instruments and practices to be explained in this chapter are appropriate or adaptable to other age groups, they have been chosen to meet the assessment needs of the grade levels stated.

DATA COLLECTION

Developmentally appropriate assessment requires the use of varied indicators of student performance. Items that might be included in developmentally appropriate portfolios include the following: selected daily work, work samples, logs, surveys, assessments, unit projects, photographs, audio and video tapes of student performance, checklists of behavior, parent surveys and observations, and notes from teacher-child

conferences and teacher-parent conferences (High/Scope, 1990; Valencia, 1990; Cambourne & Turbill, 1990; Calkins, 1989).

Appropriate Data

Meisels and Steele (1991) suggest that the following examples of work would be appropriate evidence for measuring development at the early childhood level. Samples of certain activities should be collected on a regular basis. Their recommended list includes:

- Student writing, drawing, number-writing,
- Logs of books "read" by students or parents,
- Photos of unusual block constructions,
- Observations written by the teacher of a child's handling of a difficult social situation,
- Notes or comments from the child,
- Copies of pages of journals with invented spelling,
- "Dot to Dot" alphabet or numbers,
- Drawings/illustrations inspired by story or music,
- Tape recordings of a child reading a story written by him/her or by a published author,
- Stories dictated to someone (teacher, parent, or older student) (p. 2).

In addition, Cambourne and Turbill (1990) report that the two most common sources of information indicated, by teachers in their interview study, were formal and informal conferences between the teacher and child and the collection of child artifacts. The following sections of this chapter will

information indicated in the Cambourne and Turbill study and for collecting evidence recorded by Meisels and Steele (1991). A discussion of teacher evaluation of these data sources will follow.

Procedural Guidelines

Collecting the products of a child's work provides evidence for continuous assessment of growth (High/Scope, 1990). Following is a set of recommendations for implementing this method of data collection:

1. Teachers and children should both be involved in the selection of work to include in a portfolio.

2. High/Scope (1990) recommends that teachers choose work that is typical or represents growth in the child.

At the time of selection a note should be made in response to the piece selected. Why was it selected? What does the selection represent?

3. Children should be guided to choose work that seems different or that represents a learning experience.

When a choice is made, information about what influenced the choice should be attached. An example might be the question the teacher directed towards the child for making his/her selection (ex. "Choose something you enjoy doing") If the child annotates a selection, that should also be noted along with the reasons for inclusion.

4. Decker and Decker (1980) suggest that "work samples should be collected on a systematic and periodic basis" (p. 61).

Writing samples, print copies, art work, anecdotal observations and samples of work in progress can be added monthly. Dated audio and video tapes, photos, skill checklists, interest lists, and reading lists can be added two or three times a year (High/Scope, 1990; Division of Special Services, Oregon, 1989).

5. Names, dates, the conditions under which the artifact or observation was produced should be included on all samples. A student system for attaching the form and filling in part of this information could be devised.

6. The portfolio should be accessible to students. They should play a part in filing their work.

Advantages and Disadvantages of Portfolio Collection

There are advantages and disadvantages to the process of collecting samples of student work. They are as follows:

Advantages. The evidence is real, not contrived when data are collected from natural learning situations. Student work is created as natural extensions of classroom learning so the collecting process is not time consuming. Samples of work may be used as direct evidence of progress and if dated, work may be interpreted later, and by others. This provides rich data for sharing with parents and for use when involving students in self-reflection.

Disadvantages. One of the disadvantages of portfolio assessment can be that storage of data becomes a problem. When video or audio tapes are used to collect data, some expense will be involved. Other disadvantages reported are the possible lack of representation of a child's ability and a tendency of audiences to read more into a single sample than might be accurate. Young children are proud of what they do and may not want to part with their work. Decisions about saving work at school for the assessment portfolios should include the students (Decker & Decker, 1980: 61).

Summary. The disadvantages to the process of collecting artifacts are issues that need to be addressed but are not insurmountable. If a school system decides that video or audio tapes are a critical component to their assessment program, and lacks the necessary funds, these items could become a part of the student school supply list. Classes or schools could also stage fundraisers to cover the cost of media.

As teachers gain proficiency at observing and assessing student work, the issues of reliability should decrease. If school systems include other components of evaluation such as anecdotal observations, progress notes, and student conferences, the concerns of student representation will not be an issue.

APPROPRIATE PORTFOLIO CONTENT

Performance Samples

Measurements such as developmental spelling lists, and individual assessments of math or reading abilities are examples of performance samples. They fall between testing and observational methods in terms of being a developmentally appropriate assessment technique with young children. Teale, Heibert and Chittenden write that "Performance samples occupy a place between the openness of observations and the somewhat artificial conditions of testing. Performance samples resemble observations in that they yield a record of highly complex behaviors on tasks that approximate the conditions and resources the student normally encounters in the classroom or other "real-life" settings. But performance samples are also test like in that they center upon predefined problems that can be administered systematically" (p. 175).

Recommendation for Using Performance Samples

Performance samples have a place in early childhood programs only when more natural, appropriate assessment methods fail to provide necessary information. When employed, the following recommendations should be applied:

1. The purpose of the assessment should be important and the activity implemented only if the data will serve a function in curriculum planning or reporting growth.

2. The activity should closely resemble a typical learning experience.

3. The specific skills or attitudes to be assessed should be approached through a variety of contexts before a conclusion is made (ex., In assessing a child's ability to identify alphabet letters, multiple strategies should be employed).

Summary. Performance samples may provide classroom teachers with opportunities for assessing skills that cannot effectively be addressed through other portfolio assessment methods. To meet the demands of developmentally appropriate assessment, they must be used very carefully.

Checklists

Checklists can be developed to guide observations and assessments. They can be helpful to educators transitioning from formal assessment methods to more natural, developmentally appropriate techniques. The Wright Group (1990) offers a number of checklists in their whole-language literacy program (see Appendix D). They explain that these checklists are primarily designed to be a learning tool to help teachers develop awareness of key concepts to observe. They state that the goal is to internalize the processes so that assessment is a part of every interaction with a child (p. 41).

In, Bringing It All Together, Johnson and Louis (1990) explain that checklists can help you systematize and record

observations efficiently. These authors caution that checklists can act as blinkers, leading teachers to notice only the behaviors listed and overlook others that may be significant. Checklists won't remind you of the development that occurs within a given category (p. 184).

Guidelines for Checklist Use. Following are guidelines for developing and implementing checklists as a part of portfolio assessment:

1. The checklist must come from the goals of the assessment.

2. A checklist will only "work" if it is grounded in the practitioner's observations and belief systems. It is difficult to use a checklist developed by another person (Cambourne & Turbill, 1990, p. 345).

3. It is not necessary to complete a checklist at one time.

4. The information on student development addressed by the checklist should first be collected through observation and student work samples. Other additional information needed could then be collected through methods such as student interview and performance samples.

5. Checklists may make it difficult to record degrees of behavior or specific information unique to the child being assessed. Opportunities for recording this evidence should be built into the system. When used carefully, checklists can provide structure to the methods of data collection associated

with assessment portfolio. Checklists may also promote teacher growth in the development of appropriate assessment techniques.

Anecdotal Observations

Observation methods are informal, open ended and unobtrusive (Teale, Heibert & Chittenden, 1987, p. 773). John Cryan (1986) quotes Sawin in saying: "Direct observation is the most basic of all evaluations and the one from which all others are derived" (p. 347). The Oregon Kindergarten Guide (1989) explains that ongoing systematic observation enables teachers to truly understand each child and meet his or her needs. It enables teachers to communicate more effectively with audiences requiring student information.

Teachers can benefit from observing children in any, and every, circumstance (p. 50). The act of observing and recording takes a commitment on the part of the early childhood teachers. In an environment that demands every minute of teacher time, the educator must make a decision to value observation and be dedicated to systematically building in the opportunities to observe and record child development. Valuing observations will permit teachers to step out of interactions periodically and observe student behaviors, conversations and activities. A classroom that reflects the value of self-motivated learners will encourage children to act independently and provide time to record observations.

Wortham (1990) explains that to use observations to measure child development, educators must be competent as observers and also have sufficient background information in child development. The combination of these pieces of information will provide the opportunity to understand the child's level of development and guide educators in providing experiences to further their growth (p. 90).

In addition to commitment, teachers need competencies in order to conduct trustworthy, systematic observations. The guidelines which follow work toward those competencies.

Observation Guidelines. The Oregon Kindergarten Guide (1989) offers the following information as guidelines for conducting successful observations:

1. Focus on observing exactly what the child does or says. Use action verbs. Note the date, time, and setting.
2. Record the observational details as soon as possible after an event or episode.
3. Observe in a variety of settings at different times during the day. Changes in time and in setting will often provide insights into childrens' behaviors. For example, children who are not comfortable on the playground may seek the solitude they never seek when in the classroom. During the time prior to lunch a child may become especially irritable. Identifying these times and circumstances assists in planning and making needed changes. Watching for patterns often leads to an explanation of behavior.

4. Focus on one child at a time.

5. Avoid calling attention to the child under observation.

6. Keep all observations confidential (p. 50).

Ensuring Objectivity. Informal assessment techniques are sometimes challenged because they do not have the proven standards of validity and reliability that formal testing measures provide. The need for accurate, objective reporting on observations is critical. Graves (1978) offers the following suggestions:

1) When recording observations, be sure to describe only what was done and said, not what you think it means. Interpretation can come later when you use this recorded material. You should rely on many observations before you make an assumption.

2) Be precise in the language you use. If Ann threw the blocks down, use the word "threw" instead of "put".

3) Identify your observation records with date, setting, time, and group so you can recall it later (p. 9).

Interpreting Observation. By adhering to the following guidelines for evaluating and reporting student information, educators will provide evidence of student growth in an accurate and professional manner:

Do not make assumptions beyond what the information warrants.

Avoid words such as "always" and "never".

Avoid labels.

Avoid conclusions you are not qualified to make.

Don't play psychologist.

Avoid value judgments. We all have things which bother us even though they are a part of normal child behavior. A good teacher knows what these are in his/her own case and is careful not to let them color his/her observations and interpretations. (Graves, 1978, p. 13)

When interpreting observations the following questions should be asked:

- 1) What did I learn about this child?
- 2) What conclusions can be made about this child's development?

The intent of developmentally appropriate assessments is to focus on what the child can do, and what they are may be ready to accomplish next (Leavitt & Eheart, 1991, p. 6).

Anecdotal Records

An anecdotal record is a written narrative describing a child's behavior (Oregon Kindergarten Guide, 1989). Teachers of young children are consistently observing and making mental notes of what they see. The key to lending credence to this assessment technique lies in the ability of classroom teachers to derive consistent, reliable information about student performance from their observations.

Strategies for Anecdotal Record Keeping. The Oregon Kindergarten Guide (1989) and Graves (1978) both describe many techniques for developing systematic observations to record specific behaviors and individual events that occur in early childhood classrooms. The following list is a combination of their suggestions:

1. Prepare and keep a daily anecdotal chart available. At the end of each day or week, transfer observations onto a monthly chart for each child. Patterns of behavior may become evident over time (see Appendix E-1 & F-2).

2. To track student choice and participation during activity times:

A. Time Checks

Use a participation chart to record student movement (see Appendix E-3). The teacher should stop every 15 minutes during the period and record the location where each child is.

B. Symbol or Name Charts

In each learning center place a wall chart with different symbols for each child, or the names of each child. If the child goes to the center, they flip over their tag. This also helps to make the child conscious of what he/she is doing.

C. Discussion

At the end of the day ask each child to share what they did during the day. Have someone take notes. Compare the child's reporting with your own (A difference may indicate what activities he or she values).

3. Make out 10 anecdotal record cards each morning and make yourself. Complete them that day. (See Appendix E-4)

4. Select one child each day and write about him after the children have gone home.

5. Force yourself to stop often and really look at what your children are doing as you teach.

6. Carry a small notebook and pencil in a pocket as a reminder to make some notes about happenings in the classroom.

7. Consider training classroom aides to help keep records.

8. Take notes on gummed address labels that can be peeled off and added to the inside of a child's file folder or record card (Baskwill & Whitman, 1988, p. 7-8).

Summary. These techniques will help practitioners develop effective skills in observing and recording student development in an ongoing, systematic style. Many different methods have been described to meet this goal. It is important that the method chosen be comfortable and enjoyed by the assessor in order to ensure the success of the observations as an effective assessment tool (Oregon Kindergarten Guide, 1989, p. 51 and Graves, 1978, pp. 12, 16, 20).

Interviews, Conferences and Surveys

Communication with parents or others familiar with the child provides rich data about the individual's personality, development, previous experiences and environment. These communications can be in the form of interviews, both formal and informal, and written surveys or descriptions of events. Parent interviews and written surveys provide information that cannot be readily obtained through other assessment methods.

The questions used in formal interviews or surveys are often developed by staff members although there are many published interview questions available (Decker & Decker, 1980, p. 59). Information about the birth, illnesses, development in the beginning years, family relationships, social experiences, personal interests, parent attitudes and personalities, parent perceptions about their children and goals for their children can all be addressed (Decker & Decker, 1980, p. 60).

Procedures for Designing and Conducting. Following are recommendations for designing and conducting successful interviews, conferences, and surveys:

1. The educator designing questions or choosing a published list needs to be careful in the wording and content of the questions employed in order to elicit the information desired.

2. The child and parents must be treated respectfully and in a positive manner. Appropriate assessment encourages parents to see their children and themselves in a positive manner, focusing on what the child can do and on what the parent has provided for his/her child.

3. The interviewer needs to be aware of personal biases and employ the principles of objective observations to his/her reviewing and interpretations of the information provided by an interview or survey (Decker & Decker, 1980, p. 60).

STUDENT INVOLVEMENT IN PORTFOLIOS

Promoting Assessment

Wiggins (1990) states that the goal of assessment is to put the student in a self-disciplined, self regulating, self-assessing position (p. 51). Many other respected members in the field of education concur with this opinion yet this is a stark contrast to common practice. The opportunity for self-assessment is a unique and highly commendable component of portfolio assessment.

As previously stated, one goal of early childhood education is to model positive assessment values when interacting with children and their work. Another is to build experiences into the classroom that will work to develop the language and attitudes necessary for successful self monitoring.

A Model for Involvement: Analysis and Decision Making

Samuel Meisels and Dorothy Steele (1991) describe a model for involving young children in making decisions and analyzing their own work. They suggest that the following process be employed:

Collect Work Samples. Regularly collect samples of student work. Meisels and Steele do not specify whose role this is, but a combination of teacher, child and parents could be involved. They recommend that three to four samples of children's work be collected each week. Then, on a weekly or

bi-weekly interval, items should be selected from this work sample collection for inclusion in the portfolio. It is also important to select samples of certain activities consistently across time to measure development across the entire year or a number of years. Examples would include writing samples, logs of books read by students or parents, and tape recordings of a child retelling a story.

Choose Items for the Portfolio. Invite individuals or small groups of children to examine their work samples and choose items for their portfolios every two to four weeks. To give guidance to this process, ask children to look for specific items by asking the following types of questions:

"Choose something that was the most difficult for you to do."

"Choose something that you are proud of."

"Choose something that you would like to work on again."

The directions given by the teacher should be noted on the selected items. All portfolio items should be dated (pp. 2-3).

Procedures for Management

Meisels and Steele describe another technique using three folders for each child marked "easy," "hard," and "fun." Every Friday students select something to put in each folder and the rest of the work goes home. Through this process, children become involved in reviewing their own work and thinking about what they are able to do. Teachers should talk

to students about the process of doing and selecting the work. There should be no right or wrong responses to portfolio collection. Both student and teacher select work that seems important for the portfolio (Meisels & Steele, 1990, p. 4).

Self-Reflection. Ersh (1990) describes a practice for encouraging students to select and make judgments about their own work that provides a different focus. When students are asked to choose a piece of work for their portfolios the directions are to "Choose an important piece." The definition of the term "important" is left up to the child. The explanation by the child of why the piece is important becomes part of the portfolio (p. 7).

Ersh (1990) provides questions that older students may answer in the process of analyzing their writing. Some of these could be adapted to conversations teachers hold with young children when reviewing the work in their portfolios. They are:

1. What do you notice when you look at your earlier work?
2. How do you think your writing has changed?
3. What do you know that you didn't know before? (p. 8)

Another suggestion made by Ersh (1990) is to ask children to reflect on the work in their portfolios at the end of the school year. Children then write or talk about how they have changed and grown as a writer. They conclude by setting personal goals for the following year (p. 8). It is also

suggested that students be asked what they think should be sent on by posing the following questions during a final portfolio review at the end of the school year:

1. What is your best piece?
2. What is your favorite piece?
3. What will help your new teacher to know you better?

(Vavrus, 1990, p. 53).

Peer Assessment. Peer evaluation may be another component of assessment. After self-evaluation has taken place over the course of the year, children may gather together in groups and share their writing journals and the evidence of their own growth. These components of growth can be listed collectively in a class chart that celebrates the success of the class (Woodley & Woodley, 1989, p. 72).

Benefits for Students

Portfolios allow students to assume ownership and take charge of their learning in a way that few other instructional or assessment approaches do (Paulson, Paulson, & Meyer, 1991, p. 61). Through self-assessment, children can learn to value their work and themselves as learners. If our National Goals ask for self motivated, lifelong learners, self-assessment practices will be a major component of future assessment programs. Portfolios offer a developmentally appropriate form of assessment with the potential for developing self-assessment and self-motivation at the beginning of children's school experiences.

PORTFOLIO ASSESSMENT FOR SPECIFIC CURRICULUM

Introduction

This section will apply the methods of data collection included in assessment portfolios to the specific curriculum content areas of the early childhood classroom. For the purposes of this discussion, the content areas have been separated. In application, the methods of assessment described for each part of the curriculum would be integrated just as the curriculum is in an early childhood classroom that reflects the principles of developmentally appropriate practice. Assessment practices for the following curriculum areas are included: literacy, mathematics, science, social studies, art, physical and personal/social development. The chapter will conclude with information for evaluating assessment portfolios.

Portfolios for Literacy Assessment

Teale (1988) writes that emergent literacy research has given the educational community valuable insights into how children develop. He recommends that those insights comprise a foundation for assessment based on instruction (p. 176). The theories and practices of portfolio assessment attend to children's development and provide educators with a means for implementing an assessment component to the curriculum.

Matthews (1990) describes a literacy portfolio currently being used in the primary grades that reflects this

perspective and addresses the elements of literacy assessment being advocated by authorities in the field. This literacy portfolio also reflects the developmentally appropriate principles that guide portfolio assessment. It is organized to be flexible and insure the success of its implementation and continued use.

Elements of Literacy Portfolios. The Orange County, Florida, school system described by Matthews (1990) decided to begin their transition to literacy assessment through portfolios by asking that four core elements be included in every child's portfolio. Those elements are:

1. A reading development checklist with four major sections: (a) concepts about print, (b) attitudes about reading, (c) strategies for word identification, and (d) comprehension strategies.

2. A list of books read by the student.

3. A test of reading comprehension.

4. Writing samples (a least one sample to be included each trimester).

A number of optional elements are also recommended. The optional elements include student self-evaluations, running reading records, audiotapes, anecdotal records, pages from reading logs, and any other measures that students or teachers feel would illustrate the growth of the student as a language learner (p. 421).

While this collection of literacy assessment procedures may not be all inclusive, it will provide a comprehensive picture of student development. The provision of specific elements helps teachers to feel successful and confident in their transitions to portfolio assessment. The open-ended, flexible nature of this approach allows additional components of literacy assessment to be included as teacher knowledge and experience increases.

In the next section are literacy assessments similar to the portfolio outlined by Matthews (1990, p. 421) to extend the theoretical and practical considerations of literacy assessment.

Additional Literacy Assessments. The methods of data collection proposed by portfolio assessment, including observation, the collection of work samples, student interviews, parent communications, performance samples and checklists all have a place in early literacy assessment and will serve to assess the elements of literacy development described.

One potential assessment is a reading development checklist to provide teachers with the opportunity to record observations in a systematic way. Checklists may be especially helpful to teachers transitioning from one method of assessment to another. When using checklists, it is important to remember their limitations. Concentration on the skills or behaviors listed may divert attention from other

significant information. The degree or specifics of other behaviors may be hard to record on a checklist. Matthews (1990) recommends that literacy behaviors be recorded once each trimester (p. 421). However, if observations are ongoing, the scheduling of checklist use may not need to be structured. The individual differences between children both in ability and growth rates may be a more appropriate guide for scheduling assessment. (See Appendix F-1 for a checklist developed by Morrow for assessing the literacy concepts listed above)

For portfolio assessment and other developmentally appropriate alternatives, the major components of literacy must be considered, to include (a) language development, (b) reading attitudes and voluntary reading behavior, (c) concepts about books and print, (d) comprehension of story, and (e) writing development (Morrow, 1989, pp. 184-86). The following section will describe each component and recommendations for assessment.

Assessing Language Development. Language development is assessed to determine whether the child is following expected stages of growth and to evaluate progress (Morrow, 1989, p. 65). It is also important to determine a child's ability to use language for participating effectively in the classroom. Geneshi and Dyson (1984) offer a checklist (see appendix F-2) to record observations of this behavior.

Assessment of language abilities will provide information necessary to develop curriculum to meet the needs of students.

Specific methods of portfolio assessment appropriate for assessing language development include checklists (see Appendix F-1), anecdotal records and audio tapes of children's conversations. Morrow (1989) recommends collecting natural language samples in an interview based on the following suggestions:

1. The adult doing the interview should be familiar to the child.

2. The child should not be aware that the conversation is being recorded, or the child should be made to feel comfortable around a tape recorder through frequent exposure.

3. Discuss the child's experiences in the interview. Encourage him/her to talk about his/her pets, families or events that are special to them (p. 66).

For assessment purposes, these tapes can be transcribed and analyzed if needed. Literacy Development in the Early Years (Morrow 1989) and Language Assessment in the Early Years (Genishi & Dyson, 1984) are valuable resources for analyzing the developmental levels of language acquisition.

Anecdotal records offer another means of recording language. The purpose of the record will influence what components of the interaction or behavior to record. Following are two examples of an incident recorded by Genishi

and Dyson (1984). The first relates behavior, while the second records behavior and speech:

2/12/82: Observation in toddler room: interaction between two 1 1/2 year-olds:

David sitting on floor with pacifier in mouth, next to Andy who has a basket in his lap. The grab opposite ends of it. Andy "wins." David takes a push toy and plastic flower, then holds flower above his head and throws it on floor. Andy picks it up and gives it to David.

9/16/82: Observation on playground of Ryan, 4-year-old. (I decided to watch Ryan who's often disruptive indoors, on the playground to see if he's different when he's able to move around more.) Ms. T. is pulling 2 kids in wagon. Ryan with Adam, running and chasing. Betty tells Ryan and Adam to get down from side of tree house that they are climbing. Ryan gestures at Betty (as if he's about to hit her?)

Ryan: "Spiderman! Did y'all hear me? Spiderman!"

Ryan runs to barrel, gets in and rolls in it a couple of times. Adam runs off. Betty has become monster, chasing Ryan while she's on toy truck.

Ryan: "Nu nu nu nu nu nu," taunting Adam and Charlie in tree house. "Hurry!" to girl on truck. Adds, "Hiya, Black Monster!" "Look at me, I'm holdin' on." (to Ms T.)

Ms. T.: "Well, hold on real good, OK?"

Ryan: "Bee beep. Bee beep." Goes up to Lynn on tricycle, saying, "Bee beep."

(Ryan moves as fast outdoors as inside, but the outdoor space seems to give him more energy outlets.) (pp. 82-83)

Assessing Reading Attitudes and Voluntary Reading

Behavior. Morrow concludes that direct observation of children's behavior while they are listening to stories or looking at books is probably the most effective method of

assessing their attitude toward books (1989, p. 99). In addition, the following questions will help guide a teacher's observations and conversations with students and their parents in order to understand a child's attitudes towards books and reading:

Does the child voluntarily read books?

Does the child bring personal books for you to read to the class?

How often does the child use the school library?

Does the child retell stories or try to read books with friends?

Does the child want to make books voluntarily?

Do parents report on the child's positive attitudes towards books?

Does the child initiate being read to by family members?

Does the child appear to enjoy or request books for story time?

Does the child have favorite books that he/she chooses often? (p. 99).

Attitudes and behaviors can be observed, recorded and collected and in time, a clear picture of each child's attitudes should emerge.

Chittenden and Courtney (1989) present a slightly different approach to recording the information obtained through observations. They provide a rating scale to determine the level of interest and investment a child may

have in literacy events (see Appendix F-3). A benefit of this rating scale is that it will draw attention to the fact that literacy development has multiple facets. The scale includes categories for observation such as story time, independent reading, writing, literacy use in reading related activities, informal settings and to serve a function (pp. 111-12).

Assessing Concepts About Words and Books. A concepts about print checklist assesses concepts such as book concepts (front and back cover), directionality, and the concepts of words, letters, and punctuation. The Story Box, a whole-language reading program published by The Wright Group (1990) provides a checklist for teachers to use in assessing a child's developing concepts of print (see Appendix D-3). These authors have designed the checklist to be a learning tool for teachers developing their observation skills. The checklist provides questions for the teacher to ask students during an interview and provides a brief description of the concept assessed by each question. The goal is to internalize the process so that evaluation is a part of every interaction the teacher has with a child. It is intended that eventually the actual checklist will become unnecessary and that the information listed will become part of the observations and anecdotal records (p. 41). Another technique describes a process for collecting these same data during a Guided Reading lesson (see Appendix D-1).

Assessing Comprehension of Story. Comprehension is the ultimate objective in reading. The early childhood years are the time to build the foundations of good comprehension (Teale, et al., 1987, p. 775). Children's comprehension of the story can be demonstrated and evaluated through:

story retelling,
attempted rereading of favorite books,
role playing,
picture sequencing,
the use of puppets or flannel boards to re-enact stories, and their questions and comments during storybook reading (Morrow, 1989, p. 119).

Morrow (1989) reports on a study of emergent reading behaviors that enabled Sulzby to identify stages that children move through in their development. These levels of development are described in Sulzby's "Simplified Classification Scheme for Children's Emergent Reading of Favorite Storybooks" as reported by Morrow (1989):

1. Attending to pictures but not forming stories. The child "reads" by labeling and commenting on the pictures in the book, but does not "weave a story" across the pages.

2. Attending to pictures and forming oral stories. The child "reads" by following the pictures, but weaves a story across the pages through wording and intonation like those of someone telling a story. Often, however, the listener too

must see the pictures in order to understand the story the child is "reading".

3. Attending to a mix of pictures, reading, and storytelling. The child "reads" by looking at the pictures. The majority of the child's "reading" fluctuates between the oral intonation of a storyteller and that of a reader.

4. Attending to pictures but forming written stories. The child "reads" by looking at the pictures. The child's speech sounds like reading, both in working and intonation. The listener rarely needs to see the pictures in order to understand the story. With his or her eyes closed, the listener would think the child was reading print. The "reading" is similar to the story in print, and sometimes follows it verbatim.

5. Attending to print. This category has four divisions: a) exploring the print, as evident in such strategies as refusing to read for print-related reasons; b) using only some of the aspects of print; c) reading with imbalanced strategies; and d) reading independently, or "real" reading (p. 118).

These stages describe the behaviors of children at varying levels of development. This information is helpful for determining and understanding a child's developing abilities. Genishi and Dyson (1984) encourage regular tape recording of children's retellings to document the child's

growing sense of how stories flow as well as growth in vocabulary, fluency, and complexity of language (p. 158).

Portfolio techniques of observation, anecdotal records, and audio or video tapes portraying student performance in story retelling or other story interactions will support the components of developmentally appropriate assessment in early childhood education.

Assessing Writing Development. At the early childhood level, children use both writing and drawing to communicate written ideas. The primary means of assessing writing development is through the collection of samples and observations of children involved in print and drawing. The principles of portfolio assessment support the demands of developmentally appropriate writing assessment. Following are guidelines for developing effective writing assessment techniques:

- 1) Evidence of writing and drawing should be collected throughout the year from a variety of sources. This evidence can be collected through journal writing, notes the child writes to friends or to his/her teacher, functional print such as signs, directions and record keeping methods designed by the child and written materials developed through dramatic play.

- 2) Parents may contribute anecdotes or samples of child writing and drawing from home.

3) Every piece of writing collected should bear the child's name, the date, the circumstance of writing and a translation of the piece. Children could be taught to attach a form to each sample and fill in at least the date and name independently.

The writing component of an assessment portfolio is the ideal place to introduce young children to the responsibilities of self evaluation. Children should be involved in selecting pieces of writing from their daily work to include in their portfolio. As outlined earlier, a brief note explaining the reasons for selection by the child or teacher should be include with each piece of writing that remains in the permanent portfolio.

Morrow (1989) explains that writing assessment in early childhood should be kept as informal as possible and should be based on children's self-initiated activities. There should be no formal evaluations of children's writing that would include grades or correcting their work. The purpose of assessment is to enhance the teacher's understanding of children's writing ability and to aid in program planning (1989, p. 167).

Specific writing behaviors and a list of developmental writing stages are included on Morrow's literacy checklist (see Appendix F-1). A writing profile checklist is offered by The Wright Group (1990) that may be helpful to teachers needing to assess and development curriculum for developing

writers. This checklist includes components related to the following areas: concepts of print, grammar, and the content of writing (see Appendix D-3).

The developmental levels of spelling may also be assessed by analyzing the writing collected through an assessment portfolio. Most of the methods for assessing the writing development of young children rely on the use of a performance sample. Requiring a child to participate in a spelling assessment of this nature is probably unnecessary. Writing samples collected regularly through portfolio techniques should provide the data required for making accurate assessments.

The portfolio methods of data collection applied to literacy assessment will provide teachers with valuable data to use in guiding the curriculum in classrooms of young learners and in reporting their growth and development to parents, schools and communities.

Portfolio for Mathematics Assessment

Hood (1989) uses the term "mathing" to describe the act of using mathematical language and mathematical thinking. She writes that, "they (children) may be observed "mathing" in any whole language setting that is rich in the elements of life" (p. 40). Portfolios offer data collection to include observations, performance samples, collections of artifacts and the use of checklists for effective and developmentally appropriate methods for assessing young learner's

understanding and application of mathematical concepts in their environment.

This section on mathematic assessments will describe the developmental stages young children work through in developing their understanding of mathematics as a philosophical base for assessment with portfolios. Informal and more structured techniques for assessing basic number concepts will be described as well as natural opportunities for evaluating the abilities of students to use mathematical language and thinking in their environment. The data gathered through these techniques will provide evidence of mathematical thinking and language development for the portfolio. This information will combine with other portfolio data to provide a complete picture of student knowledge and development.

Principles of Mathematic Concept Development. A published mathematics program entitled Math in Stride describes their curriculum as a developmental, activity-based elementary mathematics program (Clark, Carter & Sternberg, 1988, p. vii). Math in Stride (1988) is based on the following five principles of mathematical concept development:

1. Young children's development of math concepts follows a predictable pattern. These authors state that while the style and pacing of development may vary considerably among individuals, the development seems to progress through a predictable sequence moving from concrete to representational to the abstract level. When children are working at the

concrete level, they need to interact with new ideas by manipulating concrete materials to develop understanding. As this understanding develops, the ability to create a mental image of the processes will improve.

The final level of development, abstraction, takes a long time to establish. As the child moves to the abstract level, fluctuation between levels of functioning will occur. The representational images provided by concrete manipulations will enable this development.

2. Language is an integral part of concept development.

Children will develop concepts more efficiently and effectively when they are involved in situations where correct and consistent use of mathematical terms, clear stimulating questions, concise observations, and well-expressed reasoning are modeled and encouraged.

3. The individuality of children is a central factor.

The ways in which individual children may go through similar stages are varied and should be respected in both instruction and assessment.

4. The most productive learning occurs when children are actively involved. Interest is a positive and effective form of motivation.

5. Math is not an isolated discipline. It interrelates with all subjects and can be learned and applied in many experiences (pp. vii-viii).

These principles are powerful guidelines for the development of both mathematical curriculum and assessment that will meet the demands of developmentally appropriate education at the early childhood level. Portfolio assessment can meet the assessment demands. A collection of artifacts in a portfolio can be used to illustrate the sequence or pattern of mathematical concept development. Anecdotal records will relate the mathematical language used in activities like block construction where a group of peers each adds descriptive words and questions to the conversation. Observation techniques will provide information about the choices students make for when and how they choose to participate in activities that involve mathematical thinking. Artifacts and anecdotal observations will reveal how the child uses his/her mathematical knowledge in everyday activities. For example, the use of measurement and comparison as a child paints a picture can be noted. His/her questions about the time sequences of the school day or week provides evidence of mathematical language and thinking. Portfolio assessment provides the opportunity to assess the mathematical child through his/her natural activities.

Assessing Number Concepts. The understanding of basic number concepts may be evaluated by formal and informal measures. Hood (1989) asks that structured evaluations be used only when spontaneous occasions for such assessments do not occur (p. 40). She recommends conducting structured

evaluations once or twice a year, individually, and then recording them on checklists designed to meet this purpose. The following procedural outline (Hood, 1989) describes a process for assessing understanding of number concepts when a more structured approach is required.

1. The student is asked to count out loud. When they stop, ask, "And then?" to encourage further counting if possible.

2. To evaluate one-to-one correspondence, place blocks before the child and ask how many there are. (Record the number they count correctly.)

Observe for the following behaviors while the child counts the blocks:

(a) Does the child touch each block and say a number?

(b) Does the child arrive at the correct number without touching the blocks?

(c) Does the child have an organized way of counting the blocks?

Additional blocks can be added or taken away as needed to get a true sense of the child's ability. Some children cannot organize a group of piled blocks but have no trouble counting them when presented in a line. Some children can count to a higher number when manipulating objects.

(d) Count out three blocks with the child. Hide one while the child watches. Ask, "How many do you see?" Then ask, "How many are hiding?" Look together to see if the

child's response is correct the first time. Continue playing this hiding game a few more times with three objects, hiding one, two or all three. If the child is correct for each of the combinations, play the same game using five objects. The final number at which the child is successful is then recorded. Conservation of number, or numberness, is the most important number concept that is assessed and usually needs to be assessed formally (pp. 40-1).

This checklist of information derived from the performance sample to assess a child's developing number concepts can become a part of his/her assessment portfolio. Observations and future conversations with the child may provide additional evidence to add, verify, or build upon the information collected by this interaction between the student and the teacher.

Assessing Other Areas of Mathematics. Hood (1989) writes that there are many opportunities to observe children using mathematics at play and as a part of directed activities. Children compare things as they work and play together ("Mine is longer."). They discuss shapes when building, drawing, writing and reading. Measurement is used for cooking, building, drawing, and sharing materials. Logical thinking is used when children predict the outcomes of stories, interact with peers and adults, and plan their activities. Children discuss time in terms such as lunchtime, yesterday and birthdays. Money is used in both real and play situations.

Children interact with bus money, lunch money, and pretend money in dramatic play (1989, p. 41-2).

Time must be built into instruction for watching and recording these moments. Careful observation will help teachers to know who is using mathing in their play and to know which children would benefit from more activities to help develop their understanding and use of mathematical concepts in thinking and problem solving. The methods of data collection a portfolio presents will provide the means for gathering and building this rich information into a valuable picture of student performance that will guide the teacher in curriculum planning and communication with appropriate audiences.

Portfolio for Science, Social Studies and Art Assessment

Curriculum areas such as science, social studies and art will be effectively evaluated through the implementation of assessment portfolios. Because these disciplines are best taught in an integrated format, they are also best assessed as interrelated subjects. The methods of data collection included in the broad categories of "collections of work" and "observations" will provide educators with evidence necessary to evaluate the growth and development in science, social studies, and art.

One promising method of teaching and learning that integrates subject areas, encourages the student to be responsible for his or her own learning, and provides rich

opportunities for informal assessment, is the "project approach" (Katz & Chard, 1989). The principles of this educational approach are aligned with opportunities for gathering evidence of student development in the areas of social studies, science and art as well as the other curriculum components of an early childhood program. The project is philosophically and pragmatically congruent with portfolio assessment.

The Project Approach. Katz and Chard (1989) explain that project work as an approach to early childhood education refers to a way of teaching and learning, as well as to the content of what is taught. This approach emphasizes the teacher's role in encouraging children to interact with people, objects, and the environment in ways that have personal meaning to them. As a way of learning, it emphasizes children's active participation in their own studies. The content or topic of a project is usually drawn from the world that is familiar to the children (p. 3).

A "project" is an in-depth study of a particular topic that one or more children undertake. It consists of exploring a theme or topic such as "Going to the Hospital." Work on a project extends over a period of days or weeks, depending the children's ages and the nature of the topic. Projects involve children in advance planning, carrying out the plan, and then deciding on a way to reflect and share what has been learned (Katz & Chard, 1989, p. 2).

A large body of research on children's development and learning in the last twenty years supports the project approach as an appropriate way to stimulate and enhance children's intellectual and social development (Katz & Chard, 1989, p. 9).

Evaluating the Project. During a project (Katz & Chard, 1989) children keep work in a project book or folder which allows for the teacher and child to note and monitor their progress. Teachers can keep records of individual progress. The kinds of records will vary according to the age of the student. For each child, a record can be developed that notes which activities were undertaken and the level of proficiency. When it is necessary to determine a program's effectiveness in meeting the district or state curriculum goals, one approach is to compose a matrix with curriculum competencies on one axis and the main project work activities a child undertakes on the other. When a competency is addressed through a "project", a check mark can be entered in the appropriate place in the matrix (see Appendix G).

At the conclusion of any project, the children and the teacher reflect on the skills, techniques, strategies and processes of exploration that have been used in the project work. Evaluation can occur when planning for a culmination presentation. Teachers are encouraged to guide children in looking back at their own work during the course of a project. Children can talk to each other and the teacher about the

skills they have practiced in the project. The older the child, the more explicitly the evaluations can be discussed. The project book or folder is then a component of the assessment portfolio that will provide evidence of growth and development in all disciplines and may include a strong component of self-evaluation (pp. 128-32).

Portfolios for Assessment of Physical Development

Physical development progresses rapidly in the early childhood years (Wortham, 1990, p. 97). Most methods of collecting portfolio data: artifacts, performance samples, observations and parent interviews and surveys can work together to develop a complete physical profile of a child. Physical development can be specifically described in terms of gross and fine motor skills, and assessment should include both.

Assessment of Gross Motor Skills. Gross motor skills are most effectively assessed through observation and reporting by both school personnel and parents. Meisels and Steele (1991) recommend that an assessment portfolio should include the following information:

(a) Notes recorded by the teacher of the child's skill/progress in singing, fingerplays, or listening to music.

(b) Notes from the teacher or parent/child interviews about favorite active games, dance lessons, etc., at home or at school (p. 3).

Other ways to assess gross motor development could be through observing children as they move through an obstacle course that requires activities such as crawling, hopping, climbing and balance. These observations could be recorded directly on a checklist. Observing children on outdoor play equipment could also provide much of the same information and meet the demand of developmentally appropriate practice that asks that assessment data be collected through naturally occurring, child initiated experiences.

Assessment of Fine Motor Skills. Fine motor development can also be assessed through observation and interviews. The collection of artifacts demonstrating fine motor development can also be included. Meisels and Steele (1990) recommend the following types of portfolio artifacts to be included as representation of fine motor skills.

1. Portraits and drawings of family members.
2. Photos of unusual lego or block construction.
3. Collages using various shapes that have been drawn and cut from paper or magazine pictures (p. 3).

Other ideas for assessing fine motor skills would be samples of cutting, sewing, and clay projects. Observations of skills such as buttoning, zipping and tying would lend further evidence.

Observing Physical Development. Wortham and Steele (1990) explain that the purposes of observing physical development include the opportunity to learn how children

develop motor skills; to become familiar with the types of physical activities children engage in as they practice their skills; and to become familiar with individual differences in physical development (p. 99). The process of observing evidence of physical development will enable the educator to address the following questions:

1. What are the child's physical characteristics? How do these characteristics affect the child's motor abilities?

2. What types of large motor activities does the child enjoy? What kinds of activities does the child use to exercise and develop gross motor skills?

3. What types of small motor activities does the child enjoy? What kinds of activities does the child use to develop and exercise fine motor skills? (Wortham & Steele, 1990, p. 99).

Information concerning a child's physical development works together with other facets of assessment to provide a clear picture of the whole child.

Portfolio Assessment of Personal/Social Development

In the early childhood years, children move from egocentricity to social interaction with others. As children interact in various contexts, their social skills develop and expand (Wortham, 1990, p. 99). A review of current research exploring characteristics of the positive and negative social interactions of preschool children provides evidence that early success and acceptance in social interactions will

determine an individual's subsequent success in social relationships with peers (Kemple, 1991, p. 48). This climate of social success promotes optimal learning in school experiences.

Observations of Social Development. Teachers can help children develop positive strategies through careful observation and analysis that will determine the strengths and weaknesses of individual children's social development.

Kemple (1991) provides questions to consider in the course of an observation:

1. Does the child have greater success interacting with one or two peers than with larger groups?

2. Does the child consistently resort to aggression as a means of solving problems, or does he have some more appropriate alternatives at his disposal?

3. Does the child often seem to misinterpret the apparent intentions and emotional cues of other children?

4. When rejecting a playmate's suggestion, does the child provide a reason or an alternative suggestion?

5. Does the child make seemingly irrelevant responses to playmates' communications?

6. Does she ignore questions and comments directed to her?

7. Do the other children in the class consistently rebuff or ignore the child's attempts to engage in play, even

when he or she is using strategies that "should" work? (p. 52).

The Role of Play. Play has a key role in social development by providing a context in which children can acquire many important social skills such as turn taking, sharing, and cooperation, as well as the ability to understand other people's thoughts, perceptions, or emotions (Johnson, Christie & Yawkey, 1987, p. 99). Childrens' understanding of emotional expressions and emotional situations has been found to relate to how well they are liked or disliked by their peers (Kemple, 1991, p. 50). Johnson, et al. present three play observation scales that are appropriate for use by early childhood educators and parents. The information they provide will help the early childhood educator to facilitate play that will meet developing needs. These scales include: 1) the Parten/Piaget scale, which gives a broad view of social and cognitive levels of play; 2) Howe's Peer Play Scale, designed to analyze social play; and 3) Similansky's Sociodramatic Play Inventory, which provides information about dramatic play. These observation scales will enable teachers and parents to observe social behavior through play. Descriptions, instructions for their use and examples of how the information can facilitate play is provided in Appendix H (p. 148-49).

An understanding of the child's attitudes and abilities to interact socially will provide the format for activities specifically designed to promote social development.

Observations and parent interviews and surveys can work together to develop a complete personal/social profile of a child.

Evaluating Assessment Portfolios

Portfolios are a powerful tool for documenting, analyzing, or summarizing the child's growth and development. Assessment of the portfolio at the early childhood level should be based on the child's continuous development toward a standard of performance that is consistent with the program's curriculum and also with appropriate developmental expectations (Meisels & Steele, 1991, p. 3). Vavrus (1990) contends that the key to assessing the student portfolio is through the setting of standards relative to the program's educational goals as the portfolio assessment methods are developed. The portfolio data can then be evaluated in terms of standards of excellence or on growth demonstrated with an individual portfolio (p. 53).

Reflecting Developmentally Appropriate Practice. The stance taken by Vavrus (1990) may be more congruent with the theories of developmentally appropriate practice in early childhood education than the recommendations for evaluating portfolios provided by Meisels and Steele (1991). If the assessment practices associated with portfolios are developed with the program goals of curriculum and practice in mind, these standards can be woven through the content of assessment data collected in the student portfolio. Evaluation of the

assessment portfolio may then be given to describing the accomplishments of the student through terms of growth. These descriptions should reflect developmentally appropriate expectations within the disciplines of social, emotional, physical and cognitive development.

Elements of Evaluation. Systematic methods of data collection and organization will support the practice of evaluating portfolios. Teachers and students need a system for describing and explaining their decisions for selecting work chosen for portfolio inclusion. Written statements can be attached to documents that 1) identify the sample by student and date; 2) relate the activity that prompted the work; 3) explain why the document was selected; and 4) interpret what the document shows about the child in terms of instructional goals or student growth (Vavrus, 1990, p. 52). Meisels and Steele (1991) recommend that work within the portfolio be filed chronologically and into categories (p. 4). Broad categories such as social/emotional, physical and cognitive development will aid in organizing and evaluating data efficiently.

As a final task, children can be guided through a self-reflection of their work over the year. By reviewing two or three examples of writing and drawing collected over time, the child will see evidence of his/her success. A conversation between the student, teacher, and possibly the parents will celebrate the child's growth. This self-evaluation procedure

encourages children to value themselves and their learning, while bringing their knowledge of personal growth and success to a more conscious level (Hull, 1989, p. 81).

Summary

Paulson and Paulson (1990) write that "What we see when we evaluate a portfolio is the product of the glasses we wear when we evaluate portfolios" (p. 5). When the principles of developmentally appropriate assessment guide portfolios, it will insure that student evaluation is appropriate and respectful to the emotional and developmental needs of young children.

The primary procedures of data collection for portfolios assessment include the collection of artifacts and anecdotal observation of children as they work and play. These methods are effective for assessment in all curriculum areas. Portfolios provide opportunity for assessment to occur naturally and include the child. The data on student learning collected through portfolio assessment will provide parents and educators with a better understanding of how children learn.

CHAPTER V

CONCLUSION

INTRODUCTION

There are three major parts to this conclusion. First, a summary of the theories and principles of developmentally appropriate practices for ECE and recommendations to guide assessment portfolios will be reviewed. Second, the limitations of research and current understanding of how young children learn and the consequent curriculum and assessment practices, in this case, assessment portfolios, will be discussed. Third, suggestions for future study and change will be made. The understanding of what constitutes developmentally appropriate assessment practices is still developing. The need and desire to know how to empower students and encourage them to be independent, self-directed lifelong learners makes this field of study exciting and unquestionably rewarding.

SUMMARY OF LITERATURE

Questioning and concerns about the formal testing of young children is increasing. Current opinion suggests that traditional, measurement based assessment is not in congruence with developmentally appropriate practice at the early

childhood level. Developmentally appropriate practices describe curriculum and assessment as intertwined, with each resembling the other. Developmentally appropriate practice recommends that children need to be encouraged to become self assessors and learn how to direct and evaluate their own learning. Developmentally appropriate assessment needs to center on the child's strengths, what he/she does know. School and classroom climate, as well as teacher, administrator and community understanding and support are necessary to initiate and maintain a developmentally appropriate assessment approach.

The portfolio assessment approach has recently emerged in both theory and practice as having the potential for providing developmentally appropriate assessment. This approach is based on using data collected primarily in natural situations of learning to document student growth and guide curriculum. It encourages the child to be an active participant in the processes of collecting and evaluating data. Portfolios have the potential for changing the nature of assessment. Rather than being a test of success or failure, assessment can be viewed as a celebration of achievement and the opportunity for directing future learning.

Limitations

The major limitations of this work is the lack of quantitative empirical evidence to support the advocacy of assessment portfolios. The other limitation occurs from

knowing that while many inroads have been made into the understanding of how young children learn, there is still much more to be discovered.

To date, the vast majority of literature exploring the use of assessment portfolios has been in the form of descriptions and opinion. Much of the information has been obtained through observational studies of school systems where portfolio practices are being implemented and through surveys of individuals involved in these implementations. These are valuable sources of data. Professional communities employing portfolio practices as a means of portraying ability and achievements have been another source of information (artists are one example that has been studied, Howard 1990). The third source of information contributing to the research on assessment portfolios are the related studies done in the area of whole-language and other informal, integrated, natural learning curriculums. These provide indirect research support for the portfolio approach. Direct evidence of portfolio assessment as an effective and developmentally appropriate means of assessment has not yet been established.

The study of how young children learn has provided the educational community with information and impetus to implement developmentally appropriate practices in schools. While the information has been powerful enough to shake the structure of traditional practice, further research and development is essential. The body of knowledge derived from

research on the growth and development of young children is still relatively small and is necessary for the development of comprehensive assessment practices.

IMPLICATIONS FOR THE FUTURE

The current level of understanding and implementation of developmentally appropriate assessment practices indicates that there is much more work ahead. Research and study in all areas of curriculum development and assessment at the early childhood level must provide additional evidence of the need to restructure practices in our schools.

The information reviewed for this study of portfolio assessment as developmentally appropriate practice in early childhood education suggests a need to know more about how children learn in natural environments. Morrow (1990) recommends not only that this research continue, but that it be especially directed to children outside the ethnic and cultural mainstream (p. 56). Current research has documented and described the developmental stages that children move through in their processes of growth and learning. Instructional strategies including assessment now need to emerge from the developmental stages described.

The lack of quantitative research on assessment portfolios implies the need for evidence to validate this approach to assessment. As this evidence is pursued, the following areas of study offer important considerations:

1. The effectiveness of specific principles and practices associated with assessment portfolios. There is a need to establish and prove the validity of high-quality, informal methods of student assessment (Morrow, 1990, p. 56).

2. Comparisons of data collected through portfolio assessment techniques and traditional criterion referenced measurements need to be made.

3. Development of the self-perceptions of students involved in formal versus informal assessment methods needs to be studied.

4. Validity of data collected from natural learning activities in comparison to that collected by performance samples should be acquired. These practices both fall within the guidelines of portfolio assessment but one may be considered more appropriate for use with young children. Can comparable data be collected from both ?

5. The ability of portfolio assessment to encourage self monitoring, independent learning in comparison to the ability of other assessment methods to elicit these behaviors should be made.

6. How the information provided to parents about student learning through portfolio assessments and reporting techniques recommended within the body of this writing will affect parent's perceptions about their children or school systems in either positive or negative ways would be valuable.

These questions for future research are stated in general terms, but they reflect the information educators will need when advocating for practices that respect young children, their learning, and their development.

Education of the community and school systems is needed. Policy makers must understand the distinction between classroom assessment and accountability testing. These two practices are so different that it may not be possible to merge the two (Shepard, 1989, p. 7). While the study of informal measures to document growth and guide curriculum continues, so must efforts continue in searching for appropriate methods for providing measures of accountability and evidence of the effectiveness of the policy goals of school systems.

For the principles of developmentally appropriate practice to become an integral part of early childhood programs, the education of teachers, administrators and the community is critical. Morrow and Smith (1990) explain that to a larger degree than with standardized tests, the instrument for informal measures is the teacher. Teachers and administrators implementing successful, informal assessment programs will require more inservice to help develop their knowledge (p. 56-7). Understanding of child development, observation and writing techniques, knowledge about how young children learn and the developmentally appropriate concepts from all educational disciplines at the early childhood level

need to be further developed in classroom teachers and administrators. This will enable the classroom teacher to become an effective "instrument" in assessment practices.

The move toward a shift in current educational practice needs to continue. Classroom practices must be restructured to shift the responsibility for learning and evaluation from the teacher to the student. The teacher will need to see his/her role as being a coach or supporter rather than a director of student learning. Traditional uses of time will need to be addressed as school systems shift their curriculums to reflect the principles of developmentally appropriate practice both in the organization of student contact time, preparation and inservice time. Portfolios provide the assessment approach to support these improvements.

The restructuring process outlined above appears to be an overwhelming task. If these changes are implemented in thoughtful and realistic steps, they will succeed in improving current practices in early childhood education. The efforts of the educational community will be rewarded when children flourish in their learning environments and work to create a society that values education and encourages lifelong learning.

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APPENDIX A

RESPONSIVE EVALUATION

Time Plan:

language session

1. whole class session 10-15 minutes read aloud, aspects of writing demonstration.
2. sustained silent reading 15-20 minutes
3. one hour "activity time" (teacher sets up learning activities in which to observe children using and applying a range of language behaviors as part of the everyday classroom procedures, ex. setting up formal proof reading activity or retelling stories)
4. pupil sharing 15-30 min. (teacher listens for and records evidence of language growth and ways children listened, questions and comments were recorded--good information on listening and interpretative skills)

(Cambourne & Turbill, 1990, p. 346)

Some Markers of Control of Language

The consistent occurrence of markers is evidence of a high degree of control. Inconsistent use of markers or approximations is evidence of growing control. Absence of markers (i.e., after consistent observation) is evidence of lack of control. These markers apply to both oral and written language use.

I. Sense of Audience When Communicating

- A. Recognition of audience's degree of background information.
- B. Recognition of presence or lack of shared knowledge/values in audience through choice of words/form of language.
- C. Use of pronouns, for example, explains "who," "he," "she," and so on are when retelling and/or sharing an experience.

II. Control of Conventions Appropriate to Language Contexts

- A. Written Language
 - 1. accurate spelling
 - 2. accurate punctuation
 - 3. legible handwriting
 - 4. use of standard English grammar
- B. Spoken language
 - 1. accurate pronunciation
 - 2. accurate use of standard English grammar
 - 3. clear diction
 - 4. appropriate intonation and expression

III. Use of a Range of Registers

- A. Use of form of text appropriate to purpose
- B. Use of vocabulary appropriate to audience and purpose (e.g., colloquialisms)
- C. Recognition of common characteristics of the form of text used (e.g., report, narrative, instructions, recount, exposition)
- D. use of appropriate organizational structure of the form of text used
- E. Use of setting appropriate to form of text
- F. Recognition of stylistic devices and techniques used by other authors (author craft)
- G. Use of stylistic devices and techniques used by other authors
- H. use of metaphor, analogy, and simile appropriate to context

IV. Vocabulary Acquisition and Use Appropriate to Context

- A. Use of vocabulary appropriate to register
- B. Use of a range of synonyms
- C. Use of unusual or new words in writing, speaking
- D. Willingness to seek meaning of unknown words
- E. Use of precise terms (e.g., warm instead of a bit hot)
- F. Appropriate use of specialist vocabulary (e.g., body rather than block of water when map reading)
- G. Use of vocabulary from one context to another (e.g., words and phrases from material that has been read or heard occurring in writing or speech and vice versa)
- H. Spillover of vocabulary from one context to another (e.g., words and phrases from material that has been read or heard occurring in writing or speech and vice versa)

V. Control of Grammatical Options

- A. Appropriate use of tenses
- B. Appropriate use of pronouns
- C. Appropriate use of prepositions
- D. Absence of overgeneralizations (e.g., runned, mouses)
- E. Ability to paraphrase (high degree of control of syntax and vocabulary)
- F. Logical sentence construction

VI. Sentence Complexity

- A. Young children use short, simple sentences, often joined by and or then.
- B. Mature language users may also make appropriate use of longer, more complex sentences by combining sentences and ideas (e.g., "The dog chased the cat. The cat lives next door," are two simple sentences, "The dog chased the Cat THAT lives next door" is a more complex sentence).

VII. The Range and Number of Conjunctions Used

Conjunctions signal logical relationships between what comes before them and what comes after them. The range and type of conjunctions that are used regularly signal the kinds of logical connections that language users can articulate. Immature language users use a limited number of conjunctions and often use them inappropriately.

VIII. Confidence in Using Language in Different Language Contexts

- A. Willingness to share information during sharing/discussion sessions.
- B. Willingness to volunteer comments and/or answer questions during sharing/discussion sessions.
- C. Willingness to question others during sharing/discussion sessions.
- D. Willingness to respond to questions and criticisms about own language products (pictures, written text, oral test)
- E. Willingness to use language for a variety of purposes and audiences.
- F. Willingness to attempt new language tasks.

IX. Comprehension of What Has Been Heard or Read

- A. Understanding shown in answers to questions or associated activities.
- B. How well the child's retelling reflects the original text in main ideas, balance of detail, theme, sequence.
- C. Coherence of a learner's retelling of an experience to an audience.

Evidence of specific levels of comprehension.

- 1. LOW LEVEL: lists of unrelated items, no evidence of selection.
- 2. MODERATE LEVEL: some degree of coherence, some evidence of selection.
- 3. HIGH LEVEL: ability to select main points and generalize to other examples.

(Cambourne & Turbil, 1990, p. 346)

LANGUAGE EVALUATION SHEET: WRITING

Name: _____

- Displays a willing attitude towards writing.
- Willingly seeks and accepts advice.
- Attempts a variety of genres.
- Able to gather/brainstorm for information.
- Can select a topic.
- Makes a positive attempt to edit to the limit of his maturity.
- Shows organization toward a story form (beginning, middle and end).
- Consults a variety of sources in search of information.
- Writes leads that arouse interest.
- Writes descriptively and gives details.
- Reveals a growing vocabulary.
- Sequences ideas logically.
- Writes satisfactory endings.
- Shows improved control of spelling.
- Displays word attack skills.
- Structures sentences correctly:
 - a. simple punctuation;
 - b. commas;
 - c. question sentence;
 - d. speech marks.
- Structures a paragraph using a topic sentence.

LANGUAGE EVALUATION SHEET: READING

Name: _____

- Shows obvious enjoyment and displays a willing attitude towards reading.
- Borrows books regularly from the school library.
- Can talk about reading and the reading process.
- Reads for a sustained period of time.
- Knows how to choose a book suited to his needs and interests.
- Applies strategies to overcome reader's block.
- Recognizes good and bad miscues.
- Predicts meanings in texts by appropriate use of cues (graphophonic, semantic, syntactic).
- Selects literature appropriate to his reading ability.
- Understands the value of rereading parts for information.
- Can skim to obtain information.
- Can handle longer texts.
- Shows developing reference skills.
- Can summarize, including all major points.
- Selects reading material appropriate to his reading ability.
- Selects a range of literature to read.
- Can describe storyline development in particular novels: setting, problem, climax, ending in order.
- Can identify characters and character traits.
- Can classify books--fiction, nonfiction, fantasy, and so on.

EXPECTATIONS

This is a second checklist developed as the teacher became more informed about language and literacy.

- * Positive attitudes toward learning;
- * seeking/accepting advice willingly;
- * accepting responsibility for learning and organization;
- * accepting mistakes as a natural part of learning;
- * having confidence to discuss learning;
- * accepting the necessity for justifications in discussion and argument;
- * control of a variety of genres in reading, writing, speaking;
- * making considered decisions with regard to reading, writing, and speaking;
- * understanding the need for preparedness/correctness when going public;
- * consulting a variety of sources in search of information;
- * reading for a sustained period of time;
- * recognizing good/bad miscues;
- * having strategies to overcome blocks in reading/writing;
- * understanding the value of rereading for information;
- * making a positive attempt to edit;
- * displaying a developing vocabulary;
- * controlling the conventions of writing;

- * understanding the elements of various forms of writing;
- * applying knowledge.

(Cambourne and Turbill, 1990, p. 347)

APPENDIX B

PORTFOLIO ORGANIZATION

JUNEAU SCHOOL DISTRICT

10014 Crazy Horse Drive
Juneau, Alaska 99801
(907) 586-2303

FIRST GRADE LANGUAGE ARTS PORTFOLIO, 1990-1991

Every first grade student portfolio must contain the following items:

_____ 1. Cover Letter

* Student writes or dictates letter to reader of portfolio, explaining why certain pieces were selected, and thoughts on how he/she feels about him/herself as a Reader/Writer.

* Letter should be done in late spring.

_____ 2. Reading Samples One per quarter

_____ * Self-selected by students, with teacher guidance if appropriate.

_____ * Will include free reading choices and instructional reading material.

_____ * 4 Samples will be included in final portfolio.

_____ * "Reading Record Sheet" will accompany each sample.

_____ 3. Reading Attitude Survey Twice each year, before parent conferences.

_____ * Students interviewed by volunteer's or instructional aides.

_____ * Responses analyzed by reading diagnosticians using "Reading Interest/Attitude Continuum."

_____ 4. Writing Samples

_____ * Student self selects one and teacher selects one per quarter.

_____ * Should include final drafts and "works in progress."

_____ * Samples should be drawn from:

Journal entries
Original stories
Retold stories
Non-fiction directions/descriptions/instructions.

_____ First and fourth quarter samples must include district writing sample as one of the two samples.

_____ See "Writing Rubric" for evaluation of district writing samples.

_____ Writing Record Sheet. One per quarter.

_____ 5. Speaking/Listening Skills Checklist One per quarter.

(Juneau School District, 1990)

FIRST GRADE PORTFOLIO

INTRODUCTION

This folder represents the work of a child who has spent time in an integrated whole language classroom as outlined by the City and Borough of Juneau School District's Language Arts Curriculum. In designing this folder, developmentally appropriate practices as defined by many well-known researchers and advocates for the education of young children were also considered.

Our district philosophy states, "When we think about the art of communication, we must include reading, listening, writing and speaking. The four processes all require initiation of thought and communication of ideas. Communication, then, is always filtered through the individual's own background and experience, and is very personal." it is the belief of this committee and the Juneau District that language is the essential key to academic success in all curriculum areas.

This belief echoes the State Board of Education's expectations for all students in Alaska. through the portfolio process Juneau first graders will begin to demonstrate that they too can meet the State's outcomes for all Alaskan students, at a level appropriate to their age and development. We believe the portfolio helps demonstrate that each student is:

1. Developing oral language skills through listening and speaking to effectively express his/her feelings, ideas and concepts.
2. Developing reading comprehension skills as well as developing positive attitude toward reading as a lifelong activity.
3. Learning to write effectively for a variety of purposes and audiences.
4. Developing decision-making skills.
5. Experiencing success in activities that develop his/her talents and skills, building his/her self esteem.

In Juneau the Language Arts program includes but is not limited to: oral language experiences, read alouds, shared book experiences, independent reading, language experiences, writing-as-a-process, using developmental spelling, response longs, and includes opportunities for collaborative and cooperative learning. The curriculum is easily extended to all content areas.

the work represented in this portfolio presents a comprehensive assessment of the child's education achievement in Language Arts.

Portfolio designed by:

Kathy Hanna

Bernie Sorenson

Myrna Allen

Phil Loseby

Lori Hoover

Susan Hanson

Joyce Smith

Laurie Schoenberger

Mary Claire Harris

Mary Tonkovich

Ed McLain

Annie Calkins

Michael Opitz

READING ATTITUDE CONTINUUM

NEGATIVE ATTITUDE	NEUTRAL	POSITIVE
<ul style="list-style-type: none"> • Not always sure how s/he feels about reading to others (scared, embarrassed) • Not sure how well s/he can read • Resistant and often does not like to read aloud feels or acts confused • Avoids the task of reading independently • Often needs assistance by another reader or has others read aloud to him/her • Often unable to choose appropriate level books • Views reading as work or something someone tells you to do • May articulate that s/he is "not" a good reader • Would rather stick to familiar books • Little confidence in abilities as a reader 	<ul style="list-style-type: none"> • Reading to others is okay but would rather not • Feels s/he is not a good reader • Does not always like to read aloud - says its hard • Will take part in independent reading, but not on a consistent basis • Can choose an appropriate level book but not consistently • Rather be read to than to read independently • May say s/he is not a good reader • Often needs assistance to move to a more challenging book 	<ul style="list-style-type: none"> • Views reading as a chance to learn • Likes to read to others • Feels good about how well s/he can read • Enjoys reading aloud • Things friends like to hear him/her read aloud • Often chooses to read to self rather than have • Views reading as fun and a way of learning more • Self-initiates the reading task • Likes the challenge of a new book • Perceives self as a good reader

(Hanna 1990)

Portfolio Definition

A portfolio is a purposeful collection of student work that exhibits to the student (and/or others) the student's efforts, progress or achievement in (a) given area(s). This collection must include:

- student participation in selection of portfolio content;
- the criteria for selection;
- the criteria for judging merit; and
- evidence of student self-reflection

NWEA Working Retreat: Aggregating Portfolio Data August 2-4, 1990

(Hanna, 1990)

APPENDIX C

REPORT CARDS

SAMPLE KINDERGARTEN PROGRESS REPORT

		<u>Attendance</u>				
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>Total</u>
Name _____						
School _____	Year _____	Present _____				
Teacher _____		Absent _____				
The purpose of this report is to highlight those areas and activities in which your child has been especially successful. Goals for the next nine weeks may be established jointly by the teacher, parent, and child. In addition to this report, the teacher keeps anecdotal records and samples of student work.		Tardy _____				
		<u>Parent/Teacher Conference Date</u>				
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	
		<u>Fall</u>		<u>Spring</u>		
Your child's teacher is happy to join with you in planning and discussing your child's progress.		<u>Height</u> _____				
		<u>Weight</u> _____				

PHYSICAL DEVELOPMENT

GOAL

SOCIAL-EMOTIONAL DEVELOPMENT

GOAL

INTELLECTUAL DEVELOPMENT

GOAL

RECOMMENDED YEAR-END PLACEMENT

(Oregon Kindergarten Guide, 1989:67)

Samples of a Teacher's Narrative
Reports Written for Different
Audiences

A. Report for Parents: Nicole Smith.

Grade 2

Nicole is enjoying her reading and writing in class. She also says she now likes to read at home before going to bed. her confidence is growing and she is more likely to come and ask for assistance when needed. She is prepared to have a go at her spelling in her writing and will now read back over her writing and correct many of the spellings. Words she can't spell she will ask other children to help her with. She is also beginning to use the full stop (period) in the correct place. Nicole loves to write for different audiences and does so very well. She wrote a set of instructions for kindergarten about how to play a game called "Thumbs Up, Heads Down, she wrote and rewrote her drafts until she was happy with them and then she wrote the instructions out in very neat handwriting, drew illustrations to support the instructions and finally read the book to kindergarten. This writing task took a great deal of effort and reading the written product helped to increase her confidence in her ability as a reader and writer. Nicole likes to read narratives (stories). She still does not feel confident about reading aloud to her friends because she worries about making mistakes. She still doesn't like to guess at unknown words. This slows her reading down and then she forgets what the story is about. I

am trying to convince her that she can use the first letter of the word and have a guess at it, then read ahead to see if it makes sense. She is beginning to do this but needs more support. Nicole is very eager to discuss things with me or with her friends in the small group discussion activities. She is very confident about helping her friends with their writing and spelling. She is also very confident and reliable at taking messages to other teachers for me.

Nicole is progressing well in reading, writing, spelling, and talking. Her writing ability is well above the class average. her reading is just under class average but with her increasing confidence in her reading and her willingness to now read at home this is not causing me any concern.

B. The Beginnings of a Report Written for the School:

Nicole Smith,

Grade 2

1. Sense of audience when communicating.

Nicole is developing a good sense of audience in the oral mode. She works well in small groups listening carefully to the other children and being able to give constructive criticism about her peers' writing. This is also developing in her writing. She wrote a procedural text for kindergarten children and was constantly adding information "because kindergarten are only little."

2. Control of conventions appropriate to language context.

Nicole is quite confident to have a go and approximate her spelling. She has begun to realize that spelling needs to be conventional "so other children can read it." She is reluctant to proofread her own writing although she shows she can proofread other children's. In the recent proofreading activity she was able to identify all but two words as being incorrect and was able to correct six of these. She uses various strategies to spell words she needs: how they look, phonemic segmentation, writing the word several times until it looks right, asking for advice. She understands the use of full stop and capitalization for the beginning of a sentence and titles. She understands the use of comma. She has control of the spelling rules: "i-e," "ee," "ight," "ong." She needs to take more responsibility for proofreading her own writing.

3. Control of a range of registers/genre.

Nicole can write a recount (Going to Sally's House) and made a good attempt at writing a procedural text (instructions for kindergarten on how to play the game "Thumbs Down, Heads Up"). She need a great deal of assistance with this piece from me. She understands the purpose of narrative and was able to orally change a recount she had written into a "once upon a time" narrative. This growing control of the narrative was evident in her recent retelling.

(Cambourne and Turbill, 1990, pp. 348-49)

High/Scope Student Progress Report

Dear Parent:

This report summarizes my observations of the behavior and products of your child, _____ during the period from ___/___/___ to ___/___/___ . Included with it are:

- my daily observation of events and products representing your child's behavior pertaining to the topics listed
- checklists on your child's behavior that I have completed
- products made by your child, such as pages of writing and computation, pictures made and photographs taken, audiotapes, and videotapes.

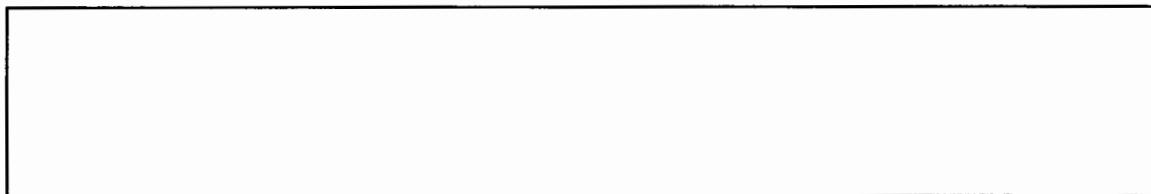
This information will give you an idea of your child's developmental status and daily achievements. For a time, we have become partners in teaching your child. I trust that you will communicate with me about your child freely and often.

Sincerely,

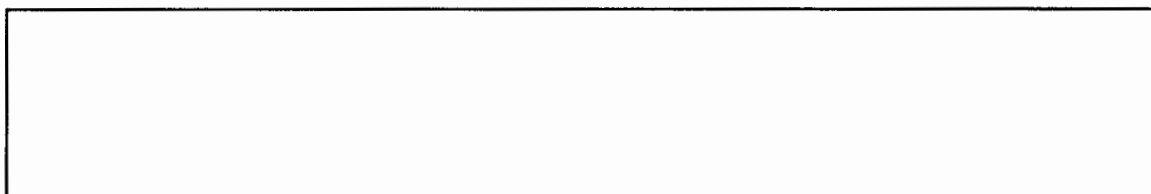
LANGUAGE AND LITERACY (speaking, listening, reading, interest in reading and writing)

(High/Scope Foundation, 1990)

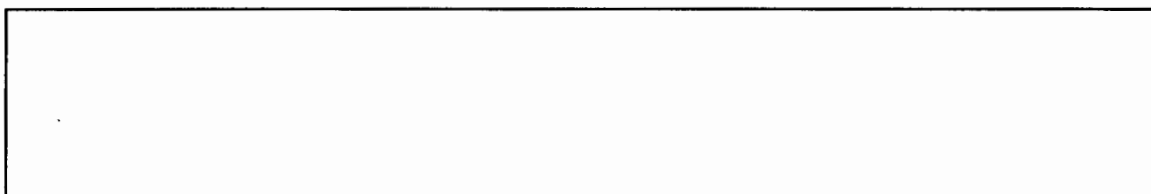
MATHEMATICS AND SCIENCE (Classifying, comparing, counting, adding, subtracting, measuring, using time concepts, graphs, interpreting data)

A large, empty rectangular box with a black border, intended for notes or examples related to Mathematics and Science.

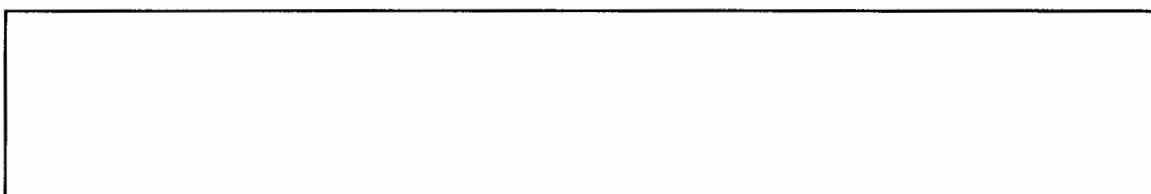
THE ARTS (drawing, painting, making, building, pretending, role playing)

A large, empty rectangular box with a black border, intended for notes or examples related to The Arts.

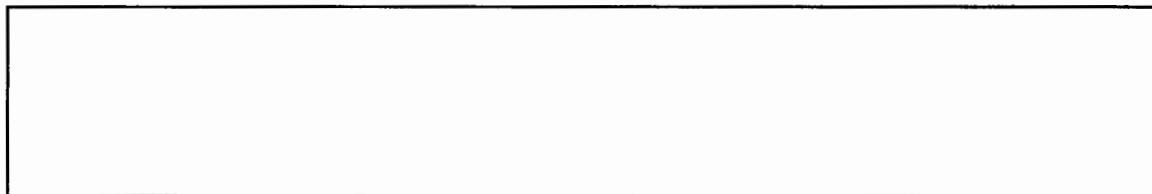
MOTIVATION AND INITIATIVE (interest in learning, making decisions, planning, organizing activities, reviewing activities, following classroom rules)

A large, empty rectangular box with a black border, intended for notes or examples related to Motivation and Initiative.

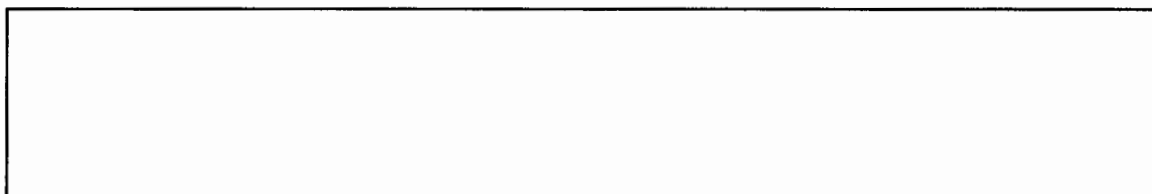
SOCIAL RELATIONS (getting along with adults and classmates, having classmate friends, interpersonal problem solving, expressing feelings acceptably)

A large, empty rectangular box with a black border, intended for notes or examples related to Social Relations.

MOVEMENT (following movement directions, moving the body, moving with objects, moving creatively, expressing beat, moving with others to a beat)



OTHER (specify any other curriculum topic that has received attention)



APPENDIX D

LITERACY CHECKLISTS

Guided Reading Quick Evaluation Sheet

Skills	Student Names										
	Danny	Rita	Suki	Eric	Jose	Cathy					
One - to - one	+	-	✓	-	-						
Return Sweep	+		+		✓	✓					
Title	+	+	+	+	✓	✓					
Word	+										
Letter											
<p>Notes</p> <p><i>Danny and Suki are progressing nicely, good models.</i></p> <p><i>Rita, Eric, and Jose need more guided practice on their one-to-one correspondence. Jose got the return sweep for the first time! Suki self-corrected her one-to-one correspondence</i></p> <p><i>Eric and Rita found the title easily. Jose and Cathy looked at others to confirm their location of the title.</i></p>											

CONCEPTS OF PRINT CHECKLIST

Individual Profile of:		
Teacher Questions	+	X - Concept
Before reading, ask the child: Show me the front of the book.		Book concepts--front cover.
Show me the back of the book.		Book concepts--back cover.
Point to the title.		Book concepts--title.
Point to the title page.		Book concepts--title page.
Which page do we read first?		Directionality--beginning of text.
Where does it tell the story?		Reading concepts--print carries the message.
Which way do we go when we're reading?		Directionality--left-to-right in a sentence.
Where do we go when we get to the end of the line?		Directionality--return sweep.
During reading, ask yourself: As the child reads and points to the text, is there an exact match between number of words spoken and number of words printed?		Reading concepts--one-to-one correspondence.
After reading, ask the child: Can you put your fingers around a word?		Word concept.
Can you find two words that are the same?		Word concept.
Show me the first word on this page.		First word.
Show me the last word on this page.		Last word.
Can you put your fingers around a letter/word?		Letter/word concept.
Can you tell me the names of some letters on the page?		Letter concept.
Can you find a capital letter?		Capital letter
Can you find a small letter?		Small letter.
What's this: . (period)		Punctuation marks.
, (comma)		
? (question mark)		
" " (quotation marks)"		
NOTES:		

Writing Profile Checklist

NAME: Joseph		AGE: 6.2	DATE: March 9
Concepts of Print ✓			
Directional Rules	✓	Starts left	<i>Used a letter format quite well!</i>
	✓	Moves right	
	✓	Starts top	
	✓	Moves to the bottom	
	✓	Returns to left at end of line	
Letter / Word	✓	Clear space between words	
Sound / Symbol	✓	Letter sequences used effectively	<i>Pless riet Montussore</i>
Grammar			
Punctuation	✓	. (period)	<i>Good use of print in the environment such as date and phrases from the book.</i>
	✓	, (comma)	
	✓	! (exclamation point)	
	✓	? (question mark)	
	✓	" (quotation)	
Sentence Composition	✓	C (capital at beginning of sentence)	<i>Complex sentence structure using the word "and"</i>
	✓	N (capital for names/titles)	
	✓	Correct grammar	
	✓	Simple sentence structures	
	✓	Complex sentence structures	
2nd language student			
Content			
Elements	✓	Beginning	<i>Excellent communication using letter format.</i>
	✓	Middle	
	✓	End	
	✓	Emotions	
	✓	Events/actions	
	✓	One topic	
Art	✓	More than one topic	<i>N/A</i>
	✓	Other letter format	
	_____	Tells the story	
	_____	Elaboration of detail	
	_____	Single picture	
	_____	Sequence of pictures	
	_____	Labels	
	_____	Letters appearing	
	_____	Captions to illustration	
	_____	Art equal in value	
	_____	Art dominant	
Cognitive Expression	_____	Art subordinate	
	_____	Relating personal experience	
	✓	Observation <i>acute</i>	
	_____	Comparison (alike)	
	✓	Comparison (different)	
	_____	Classification	
	_____	Cause/effect	
	_____	Relationship of living things	
	_____	Sequence/time	
	_____	Elaboration of detail	
	✓	Response to experience	
	_____	Expression of other people's feelings	
	✓	Problem solving	
✓	Questioning or wondering		
✓	Content <i>knowledge of business communication</i>		

Guided Reading Quick Evaluation Sheet

Skills	Student Names										
Notes											

APPENDIX E

ANECDOTAL RECORD KEEPING

SAMPLE DAILY ANECDOTAL BEHAVIOR CHART

Date: _____

AlainAllenBeckyBryanChuckConnieDannyDavid D.David P.ElizabethErikJeffreyKellyKevinLeslieMarkMindyNickyPhillipSherryTodd

Write a brief statement on each child during time set aside for observation.

(Oregon Kindergarten Guide, 1989, p. 57)

SAMPLE MONTHLY ANECDOTAL BEHAVIOR CHART

Child _____

Month _____

Monday	Tuesday	Wednesday	Thursday	Friday

Use daily behavior chart to complete this form. Look for patterns of behavior

SAMPLE PARTICIPATION CHART

This chart can enable you to know which centers individual children get involved with and which centers are seldom used. Check it each day. It takes about three minutes.

Week of November 1

Children	Centers									
	Tempera Finger Paint	Glue/ Paste Scissors	Clay	Blocks	House- keeping	Dramatic Play	Carpentry	Table Games		
Becky	X	X		X				X		
Billy		X			X		X	X		
Bryan	X		X			X	X			
Catherine					X			X		
David		X					X			
Frank		X		X		X	X	X		
Grace			X		X		X			
Jackie	X	X		X			X			
Keith				X	X	X		X		
Mary	X		X					X		
Mary Beth		X	X	X		X		X		
Neil										

Notes:

ANECDOTAL RECORD

Use four (4) per day for one week - Practice!

Anecdotal Record		
Child:	Date:	Location:
What Happened:		

APPENDIX F

LITERACY ASSESSMENT

CHECKLIST FOR ASSESING EARLY LITERACY DEVELOPMENT

Child's Name _____

Date: _____

	Always	Sometimes	Never
<u>Language Development</u>			
Makes phoneme sounds	_____		
Speaks in one-word sentences	_____		
Identifies familiar sounds	_____		
Differentiates similar sounds	_____		
Understands the language of others when spoken to	_____		
Follows verbal directions	_____		
Speaks to others freely	_____		
Pronounces words correctly	_____		
Has appropriate vocabulary for level of maturity	_____		
Speaks in complete sentences	_____		
Uses varied syntactic structures	_____		
Can be understood by others	_____		

The items on this checklist correspond to the stages of language development from birth to 6.

	Always	Sometimes	Never
<u>Reading Attitudes and Voluntary reading Behavior</u>			
Voluntarily looks at books	_____		
Asks to be read to	_____		
Listens attentively while being read to	_____		

Always Sometimes Never

Responds with questions and
comments to stories read
to him or her

Concepts about Books

Knows that a book is
for reading

Can identify the front, back,
top, and bottom of a book

Can turn the pages of
a book properly

Knows the difference between
print and pictures

Knows that the pictures on a
page are related to what
the print says

Knows where one begins
reading on a page

Knows what a title of a
book is

Knows what an author is

Knows what an illustrator is

Comprehension of Story

Always

Sometimes

Never

Retells familiar stories using
the pictures in the book
to help recall the details

Retells a story without the
help of the book and
demonstrates knowledge of
details

Retells stories with
readinglike intonation

Always Sometimes Never

Includes elements of story
structure in story
retellings:

setting(beginning,time,place
characters) _____

theme(problem or goal of the
main character) _____

plot episodes(events leading
toward the solution of the
main character's problem
or attainment of his or
her goal) _____

resolution(problem solved,
goal achieved,
story ended) _____

Responds to story readings
with literal,inferential,
and critical questions
and comments _____

Responds to story readings
with inferential and
critical question and
comments _____

Participates in story-
reading behavior by
reciting or narrating
stories as the teacher
is reading them _____

When read to,fills in words
of a story according to
knowledge of syntax
and context _____

Concepts about Print

Always

Sometimes

Never

Knows that print is read
from left to right

Knows that oral language can
be written down, then read

Knows what a letter is and
can point to one on
a printed page

Knows what a word is and
can point one out on
a printed page

Is aware of environmental
print and can read some
signs and logos

Recognizes some words by
sight in book print

Can identify letters by name

Associates some sounds with
letters

Asks questions about letter
names, words, and sounds

Attempts reading by attending
to print

Begins to use story context,
syntax, and semantics to
identify words

Writing Development

Always

Sometimes

Never

Independently explores
with writing materials

Attempts writing in order
to convey meaning, regardless
of writing stage

Always Sometimes Never

Dictates stories or sentences
he or she wants written
down

Copies letters or words

Forms identifiable letters

Writes from left to right

Check() the category or
categories at which the
child seems to be writing

___ uses drawing for writing
drawing

___ differentiates between
drawing and writing

___ scribbles for writing

___ uses letterlike forms
for writing

___ uses learned letters
in random fashion for
writing

___ uses invented spelling
for writing

___ uses conventional spelling
for writing

General Comments about the Child's Development:

	Situations						
	Informal Interactions				Formal Interactions		
In each of the following situations:	with peers	with teachers	with other adults in school settings	in drama, role-playing activities	in small group activities	in sharing time	in large group activities
<p>Does the child willing participate orally?</p> <p>Does the child listen attentively to others?</p> <p>Are the child's contributions -relevant to the topic? -responsive to others?</p> <p>Does the child ask questions or request needed assistance?</p> <p>Does the child speak fluently, with apparent ease?</p> <p>Does the child speak audibly? Too loudly?</p> <p>Does the child use nonstandard forms?</p> <p>Does the child demonstrate an ability to change language style (word choice, pronunciation), particularly in role-playing activities?</p>							

Checklist for observing children's use of oral language

(Geneshi & Dyson, 1984, p.204)

Child _____ Grade _____ Teacher _____ Date _____

Ratings of child's interest/investment in different classroom contexts
(based on observations over a period of several weeks)

Settings and Activities	Degree of Interest/Investment		
	Very Interested, Intense	Moderately Interested	Uninterested, Attention is Elsewhere
Story Time: Teacher reads to class (response to story line; child's comments, questions, elaborations)	_____	_____	_____
Independent Reading: Book Time (nature of books child chooses or brings in, process of selecting, quiet or social reading)	_____	_____	_____
Writing (journal, stories, alphabet, dictation)	_____	_____	_____
Reading Group/Individual (oral reading strategies: discussion of text, responses to instruction)	_____	_____	_____
Reading Related Activities Tasks (responses to assignments or discussions focusing on word letter properties, word games/ experience charts)	_____	_____	_____
Informal Settings (use of language in play, jokes, story)	_____	_____	_____
Books and Print as Resource (use of books for projects; attention to signs, labels, names; locating information) telling, conversation)	_____	_____	_____
Other	_____	_____	_____

APPENDIX G

PROJECT APPROACH

Theme _____

Child's Name _____

Care Competencies	Activities															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Reading																
A																
B																
C																
D																
E																
Writing																
A																
B																
Listening																
A																
B																
C																
D																
Mathematics																
A																
B																
C																
D																
E																
F																
G																
H																
Science																
A																
B																
C																
D																
E																
F																
Social Studies																
Geography																
A																
B																
C																
D																

/ = Competency addressed by activity

✓ = Activities completed by child

This matrix was formed by combining the Missouri State Competencies with the activities included in a project.

At the top of the matrix page the teacher indicates the theme or name of the project and the name of the child whose activities are to be recorded.

The left handed column, entitled "Core Competencies," corresponds to the attached list of Missouri competencies. The alphabetical listing on the matrix corresponds to the letters under each heading on the Missouri competency list.

A check mark can be entered in the cell if the competency is addressed by the activity. A circle can be drawn around the check mark when the child completes the activity.

(Katz & Chard, 1989, p.174)

APPENDIX H

SOCIAL/PLAY OBSERVATIONS

THE PARTEN/PIAGET SCALE

This social participation scale allows the observer to focus on social and cognitive categories of play behaviors and two areas of nonplay simultaneously. (Cognitive elements of play include behaviors such as constructive play, make believe and games with rules (Johnson et al., 1987, p. 149). The scale below shows the twelve play categories assessed by the Parten/Piaget scale.

TABLE 8-1
Social-Cognitive Components of Play: Twelve Categories

	<i>Solitary</i>	<i>Parallel</i>	<i>Group</i>
Functional	solitary-functional	parallel-functional	group-functional
Constructive	solitary-constructive	parallel-constructive	group-constructive
Dramatic	solitary-dramatic	parallel-dramatic	group-dramatic
Games	solitary-games	parallel-games	group-games

Source: Adapted from Rubin, Watson, and Jambor (1978)
There are also two nonplay categories: unoccupied and onlooking.

Guidelines for Using the Parten/Piaget Scale

1. Become familiar with definitions of the various play and nonplay categories. See "Parten/Piaget Categories: Definitions" in this section.
2. Prepare a separate recording sheet for each child being observed. See "Parten/Piaget Recording Sheet" in this section.
3. Review "Coding Play with the Parten/Piaget Scale" in this section, for examples of how a variety of play behaviors are recorded on the recording sheet.
4. Select a sampling procedure for making systematic observation. Johnson, et al. (p. 152-53) recommends a multiple-scan sampling procedure:
 - A Shuffle recording sheets to establish random order.
 - B Start observations with child named on top recording sheet.

C Observe for 15 seconds.

D Place a tally mark in the box corresponding to the category of play observed.

E After recording, place child's form at bottom of stack.

F Repeat procedure for the next child named (p. 153-54).

Observe about half of the group at a time. When 20-30 observations have been made on each child, the recording sheet will reveal the child's play patterns. When evaluating the play patterns, the child's age should be

Look for answers to the following questions:

"Is the social level of play appropriate to the child's age?"

"Does the child regularly engage in cognitively mature forms of play?" (p. 153-54)

For information about the developmental levels of play and suggestions for appropriate intervention techniques, refer to Play and Early Childhood Development (Johnson, et al., 1987)

Parten/Piaget Recording Sheet

Name: _____ Observation Date _____

		COGNITIVE LEVEL			
		Functional	Constructive	Dramatic	Games with rules
SOCIAL LEVEL	Solitary				
	Parallel				
	Group				
		UNOCCUPIED/ONLOOKING/TRANSITION	ACTIVITIES		
Nonplay					

PARTEN/PIAGET CATEGORIES: DEFINITIONS

Cognitive Levels

1. **Functional play**--repetitive muscle movements with or without objects. Examples include: (a) running and jumping, (b) gathering and dumping, (c) manipulating objects or materials, and (d) informal games (parading).
2. **Constructive play**--using objects (blocks, Legos, Tinkertoys) or materials (sand, Play-doh, paint) to make something.
3. **Dramatic play**--role playing and/or make-believe transformations. Examples include:
 - (a) Role playing: pretending to be a parent, baby, firefighter, shark, superhero, or monster.
 - (b) Make-believe transformations: pretending to drive a car (arm movements) or give an injection with a pencil (object use).

Use of miniature versions of real objects (toy cars, toy iron) is not scored as dramatic play unless there is evidence of role taking and/or make-believe transformations.
4. **Games with rules**--recognition and acceptance of and conformity with *established* rules. Examples include: tag, Mother May I, marbles, checkers, and kickball.

Social Levels

1. **Solitary play**--playing alone with materials different from those of children within speaking distance; no conversation with others.
2. **Parallel play**--playing with toys or engaging in activities similar to those of other children who are in close proximity; however, there is no attempt to play with the other children.
3. **Group play**--playing with other children; roles may or may not be assigned.

Unoccupied/Onlooking/Transition:

Unoccupied behavior, onlooking behavior, moving from one activity to another.

Nonplay Activities:

Activities which must conform to a preestablished pattern, as in academic activities, teacher-assigned tasks. Activities involving coloring books, worksheets, computers, and educational toys (shoelace boards) are often best considered nonplay in nature.

Source: Based on Rubin et al. (1978)

CODING PLAY WITH THE PARTEN/PIAGET SCALE

The following examples illustrate how different types of play behavior are coded with the Parten/Piaget scale:

1. Two children are in the housekeeping corner. Each is pretending to cook and prepare a make-believe meal. The children are aware of each other's activities, but they do not interact. (parallel-dramatic)
2. Several children are chasing each other around the room. (group-functional)
3. A child builds a block structure. No other children close by. (solitary-constructive)
4. Several children play London Bridge. (group-game)
5. Three children are on the floor building "transformer" robots out of interlocking plastic blocks. At the moment, they are not interacting. (parallel-constructive)
6. The three children from #5 pretend that their "transformer" robots are battling with ray guns. (group-dramatic)
7. A child, playing alone, pretends to make a phone call using a toy telephone. (solitary-dramatic)
8. A child is watching several other children playing in the housekeeping corner. (onlooking)
9. Several children are in the library corner reading books. (nonplay-activity)
10. Two children are rolling toy cars across the floor. There is no indication of make-believe, and the children are not interacting (parallel-functional)
11. Three children are enacting a hospital scene. One child has taken the role of a doctor, one is a nurse, and the other is a sick patient. (group-dramatic)
12. One child is bouncing a ball on the floor. Several other children are nearby, but they are playing with blocks and are not interacting with the "target" child. (solitary-functional)

13. A child is wandering about, not doing anything in particular. (unoccupied)
14. Several children are working together to build a highway out of blocks. (group-constructive)
15. Two children are feeding hamsters at a science interest center. (nonplay-activity)

The figure below illustrates where these examples would be marked on the Parten/Piaget recording sheet. In actual practice, tally marks would be used rather than numbered descriptions of the activities.

	Functional	Constructive	Dramatic	Games with rules
Solitary	(12) ball bouncing	(3) block building	(7) telephone call	
Parallel	(10) car rolling	(5) building robots	(1) meal preparation	
Group	(2) chasing	(14) road building	(6) battling	(4) London Bridge

Unoccupied/Onlookingtransition

Activities

Nonplay	(8) watching "house" play (13) wandering around	(9) reading book (15) feeding hamsters
---------	--	---

(Johnson et al., 1987, p.149-162)

HOWES' PEER PLAY SCALE: DEFINITIONS

Johnson et al. (1987) reports on an observation scale developed by Howes that examines play behaviors in more detail than the "Parten/Piaget Scale" (p. 155). Howes Peer Play Scale has two categories of parallel play and three group play categories. "Howes Peer Play Scale: Definitions" offers descriptions of these five levels:

Level 1--Simple Parallel Play:

Children, in close proximity to one another, are involved in similar activities but do not engage in eye contact or any social behavior. For example, several children might be sitting near one another playing with blocks, totally absorbed in their own play. It is as though they were not aware of one another's existence.

Level 2--Parallel Play with Mutual Regard:

Children are involved in similar activities and engage in eye contact. For example, children who are playing with blocks would occasionally look at one another and at other block constructions. The children, though not socially interacting, are aware of others' presence and activities. Children at this stage often imitate each other's play. One child might, for example, copy another child's block construction.

Level 3--Simple Social Play:

Children direct social behaviors to one another. Typical behaviors include vocalizing, offering objects, smiling, touching, taking toys, and aggression. The children's play activities, however, are not coordinated. For example, children playing with blocks might make comments on each others' constructions (e.g., "That's pretty."). Or, on the negative side, one child might take another child's block, and the other child respond with a verbal reprimand or aggression.

Level 4--Complementary/Reciprocal Play with Mutual Awareness:

Children engage in activities in which their actions reverse other children's actions, demonstrating awareness of each other's roles. For example, one of the children playing blocks may offer a block to another child, who receives it and then offers another block back. Or the two children might build a joint structure, taking turns adding blocks. At this level, however, no conversation

or other social exchange takes place between the children.

Level 5--Complementary/Reciprocal Social Play:

Children engage in complementary and reciprocal activities, as in Level 4, and in social exchanges, as in Level 3. For example, children building the joint block structure might converse back and forth. ("Don't put that block there. It's too small.") Or several children might plan and then act out a make-believe story (i.e., group-dramatic play).

Source: Based on Howes (1980)

Howes scale focuses on two dimensions of peer play, (a) the complexity of the social interactions among children and (b) the degree to which their activities are organized and integrated (p. 157). "Coding Play with the Peer Play Scale" gives examples of how to record different play behaviors with this system:

CODING PLAY WITH THE PEER PLAY SCALE

What You See

1. Two children, close to each other, are riding big trucks around the center of a room. At one point, their paths separate. The "target" child looks around the room until he finds the other child. Then he goes back to driving his truck.
2. Two children in the block area are building a house together. They direct each other as to which blocks to use and where to place them.
3. In the dramatic-play area, a boy is sitting in a chair while another child is pretending to give him a haircut. There is no conversation.

How You Code

This would be coded as Level 2, Parallel Play with Mutual Regard, because the child being observed showed an awareness of the other child. If the "target" child had not looked at the other child, it would have been Level 1, Simple Parallel Play.

This would be coded as Level 5, Complementary/Reciprocal Social Play, because the children are playing with each other and are carrying on a conversation. If they were not talking, it would be Level 4, Complementary/Reciprocal Play with Mutual Regard.

This would be coded as Level 4 because the children are playing together and showing an awareness of each other's role but are not conversing or directing social bids to each other. It would become Level 5 if they talked to each other or if one child offered a mirror to the other (a social bid.)

4. Two girls are working on puzzles next to each other. One child says, "I can't do it." The other responds, "Just keep trying all the pieces.
- This would be coded as Level 3, Simple Social Play. The two children have directed social bids to each other, but they are working on separate puzzles (as opposed to working complementarily on one puzzle). If the second girl had left her puzzle to work with the first girl, it would be coded Level 5 (conversation continues) or Level 4 (no further conversation).

Source: Zipser, 1982

Use the 15-second sampling procedure as described for the Parten/Piaget scale to obtain data for recording. Nonplay categories and a column to record when the child is interacting with a teacher is included.

When examining completed record sheets for patterns in social play behavior, column totals will give a detailed picture of the child's level of social play. Looking across the columns will provide information about circumstances that may encourage the child to accomplish higher levels of social play (Johnson et al, 1987, p.157)

Peer Play Scale Recording Sheet

Child's Name _____ Dates Observed _____

Time	Solitary Play	Simple Parallel Play Level 1	Parallel Play with Regard Level 2	Simple Social Play Level 3	Same Activity with Regard Level 4	Same Activity with Social Bid Level 5	Non-play Activity	Onlooking/Unoccupied Transition	Teacher Involved (Y= Yes)	Area in or Object Used

SIMLANSKY'S SOCIODRAMATIC PLAY INVENTORY

Dramatic play engages children in cognitive, linguistic and social elements of interaction. This type of play takes place when two or more children, together in a group, adopt roles and act out a story or real-life situation. Group dramatic play is regarded as one of the most, if not the most, important forms of play (Johnson, et al., 1987,p.159).

The Sociodramatic Play inventory gathers information related to a child's development of skills necessary for engaging in dramatic play. The inventory consists of play described in "Sociodramatic Play Inventory Definitions".

SOCIODRAMATIC PLAY INVENTORY DEFINITIONS

Role-Playing:

Children adopt roles (family member, firefighter, Count Dracula) and communicate these roles through verbal declarations ("I'm the mommy") and role-appropriate behavior (taking care of a pretend baby).

Make-Believe Transformations:

Symbols are used to stand for objects, actions, and situations.

1. Objects are used as substitutes for other objects (pretending that a block of wood is a drinking cup) or verbal declarations are used to create imaginary objects (staring at one's empty hand and declaring, "My glass is empty!").
2. Abbreviated actions are used as substitutes for real actions (pretending to be hammering by moving one's hand up and down) or verbal statements are used to create an imaginary action ("I'm hammering the nails in").
3. Imaginary situations are created through verbal declarations ("Let's pretend that we're on a jet plane").

(Johnson et al., 1987, pp. 149-162)

Social Interaction:

At least two children are directly interacting with each other in connection with the play episode. (In terms of the Peer Play Scale, this requires at least Level 4 play, Complementary/Reciprocal Play with Mutual Awareness.)

Verbal Communication:

Children engage in verbal exchanges related to the play episode. These exchanges may take two forms:

- I. Metacommunication statements are used to structure and organize the play episode. Children use these comments to:
 - (a) designate the make-believe identities of objects (Let's pretend the rope is a snake.)
 - (b) assign roles ("I'll be the Daddy, and you be the baby").
 - (c) plan story lines ("First, we'll go to the market, and then we'll go to the toy store").
 - (d) rebuke players who act in an inappropriate manner ("Mommies don't talk like that!" or "That's not a hose, silly - it's a snake").

2. Pretend communication statements are appropriate for the role the child has adopted. A child enacting the role of a teacher might announce to other players, "You've been naughty children. You will all have to go see the principal."

Persistence:

Children engage in sustained play episodes. Age should be a factor in determining the length of time required for crediting a child with persistence. Based on research by Sylva et al. (1980) and Smilansky (1968), we recommend that preschoolers be expected to sustain at least 5-minute episodes and that kindergartners be expected to keep their episodes going for at least 10 minutes. Play-period duration is another factor which needs to be taken into consideration. If play periods are very brief (10 to 15 minutes), the above time requirements will need to be reduced.

Guidelines for using Similansky's Sociodramatic Play Inventory

1. Select two or three children to be the focus of your observations. These should be children who exhibited low frequencies of group-dynamic play when observed with the Parten/Piaget scale.
2. Focus your attention of these children for the entire play period, shifting back and forth among them. Watch one child for about a minute, then shift to the next child.
3. At the end of the play period, place a check in the appropriate column of the SPI recording sheet for each sociodramatic play element observed in each child's play. If an element (e.g., social interaction) occurred only briefly during the play period, place a "?" in the corresponding column to indicate that this behavior is beginning to emerge but is still not fully developed.
4. If a child appears to be missing one or more of the play components, observe the child again on another day. It is premature to conclude on the basis of only one observation that a child does not possess a particular play behavior.

Once the children have been observed several times, the recording sheet (see next page) will reveal which elements on the sheet are absent in each child's play. Intervention can be directed as needed (Johnson et al., 1987,p.162-63).

Sociodramatic Play Inventory: Recording Sheet

Name	Role Play	Make Believe			Interaction	Verbal Communication		Persistence
		Objects	Actions	Situations		Metacommunication	Pretext	

Source: Adapted from Smilansky (1968)