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# Accountability and collaborative inquiry in a school-based early childhood program

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# Accountability and collaborative inquiry in a school-based early childhood program

## Abstract

The purpose of this paper is to examine the development of a professional learning community and the way in which an early childhood team can follow the developmentally appropriate practice guidelines and early learning standards to improve student outcomes.

Accountability and

Collaborative Inquiry

in a School-Based

Early Childhood Program

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MAE in Educational Leadership: Professional Development for Teachers
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*"Self-development is a higher duty than self-sacrifice" Elizabeth Cady Stanton, 1848.*

*"To train young people to think for themselves and not to accept the first idea that comes to them" (Jean Piaget on the aim of education.).*

Abstract

The purpose of this paper is to examine the development of a professional learning community and the way in which an early childhood team can follow the developmentally appropriate practice guidelines and early learning standards to improve student outcomes. In Chapter I, I describe the significance of the problem and state the research question.

The body of the paper is organized in three parts. In Chapter II, I examine current descriptions of developmentally appropriate practice and the way this is interpreted in early childhood programs. I then describe the history of early learning standards and the benefits and limitations of these standards. Finally, I will link assessment and accountability to the standards and developmentally appropriate practice.

In Chapter III, I examine the importance of professional learning communities in the development of the collegiality that is necessary if teachers are to be successful in the process of data-driven decision-making. I then examine how "looking at student work" can increase the impact of the professional learning community by giving teachers the tools to get to the heart of the matter.

Chapter IV describes how the system and the way that professional development is organized can influence teachers' practice and define the direction in which a professional learning community moves.

Finally Chapter V will use this research to design a model for a professional learning community to use the data-driven decision-making process and looking at student work to enhance their practice while remaining true to the developmentally appropriate practice guidelines.

Accountability and Collaborative Inquiry in a

School-Based Early Childhood Program

Chapter 1

Introduction

The purpose of this paper is to review recent research on the subject of the teacher inquiry process as it relates to accountability in early childhood classrooms, to analyze and interpret this data, and determine if the data-driven decision making process and looking at student work can better inform a group of early childhood teachers as they design strategies to improve instruction for all children in their classrooms. This paper will examine the ways in which developmentally appropriate classrooms currently use assessment to gather information about their students and use this data to inform the curriculum, how the recent advent of state standards affect teaching and learning, and what experts say about what is best practice for linking assessment to improved student outcomes in early childhood programs. Finally, it will describe the actions of one early childhood team as they implement the data-driven decision making model in a school-based preschool program and refine this process to include looking at student work in order to improve student outcomes in a developmentally appropriate manner.

Statement of the Problem

This paper will serve to link current research regarding developmentally appropriate practice, the influence of state standards, and accountability in early childhood classrooms with the teacher inquiry process. It will further investigate the development of professional learning communities, data-driven decision-making, and

how analyzing student work can guide teachers as they strive to help every student reach his or her potential. Finally, it will examine the role of the teacher, effective professional development, and the school system in this process.

The paper will then describe a team of school-based early childhood teachers as they attempt to improve their efforts to align assessment with practice to improve outcomes for all students in their classrooms. My research question is "Can a school-based early childhood team with a commitment to developmentally appropriate practice develop a professional learning community and refine the data-driven decision-making process to include looking at student work in order to improve outcomes for students?"

## Significance of the Problem

Early childhood teams have not typically used team meetings to analyze student work. Meeting time is usually spent on event planning such as parent meetings or field trips, sharing logistical and school-wide information such as staff development dates and building plans, or discussing items of general interest to preschool teachers. In the past, little time has been scheduled for early childhood teachers to discuss student work, curriculum, or to reflect on their current practice.

It is well-documented that reflection helps individuals and groups to maximize meaning from their experiences. Teachers require time in their schedules and multiple opportunities to reflect on their teaching practices in order to improve teaching and learning. In *Getting into the Habit of Reflection,* authors Costa & Kallick (2000) suggested "building in frequent opportunities for faculty and students to reflect on their teaching and learning enriches education for all" (p. 60). The act of reflection, particularly with a group of teaching colleagues, provides an opportunity for:

- amplifying the meaning of one's work through the insights of others;

- applying meaning beyond the situation in which it was learned;

- making a commitment to modifications, plans, and experimentation; and

- documenting learning and providing a rich base of shared knowledge.

"Every school's goal should be to habituate the reflection process throughout the organization- individually and collectively, with teachers, students, and the school community" (Costa & Kallick, 2000, p.60).

In the last few years, opportunities for early childhood teachers to collaborate and reflect on their practice have been organized in similar ways to those documented for elementary school teachers. In a description of one professional development opportunity for early childhood teachers in St. Paul, MN, Heidemann, Chang, & Menninga (2005) stated that "through professional development, teachers moved from a stance of confusion and tentativeness to one of confidence" (p. 86). In the *Words Work!* early literacy initiative funded by The Saint Paul Foundation (Amaris, Cheung, McKendall-Stephens, Murphy, Vang, & Zazgoza, 2003), the staff created a professional development system that aligned curriculum with assessment, collection of student data, and teacher planning. Teachers used what they learned through the assessment data to give direction to their planning and improve their instruction. In turn, through their drive to learn and increased literacy competence, the children demonstrated that when teachers learn, children do too.

Early childhood teachers currently use a variety of measures to assess students in their classrooms and have multiple measures to determine progress throughout the preschool year. According to Chen & McNamee (2007),

Assessment is a global term for gathering information for the purpose of

decision making. For classroom teachers, assessment is the process of listening, observing, and gathering evidence to evaluate the learning and developmental status of children in the classroom context. (p. 4)

Early childhood teachers in many school-based programs use curriculum-embedded performance assessments such as the Work Sampling System (Meisels, Jablon, Marsden, D., Dichtelmiller, & Dorfman, 2001) to report individual student progress. The Work Sampling System includes a portfolio of student work, a checklist of performance indicators, and a summary report that is based on teacher judgments as well as the checklist and portfolio items. These performance assessments are completed three times per year, but are based on a daily or weekly data collection process.

Standardized early childhood screenings such as the Brigance Screening for Four Year Olds (Brigance, 1979, 2004) are typically used as a pre- and post-test and give teachers information about basic concepts such as color identification, number understanding, personal information, and gross and fine motor skills. Screenings such as this lack rigor, if not relevance, for the important tasks that need to be undertaken in a high quality early childhood program. Many programs also use a standardized assessment of social-emotional development such as the Devereux Early Childhood Assessment (LeBuff & Naglieri, 1999) to determine the individual protective factors of initiative, self-control, and attachment and to rate behavioral concerns. The DECA includes a classroom graph and a curriculum guide so that teachers can use research-based strategies for individual children and for the classroom as a whole.

In order to gather additional, more relevant data, teachers may also employ some teacher-developed assessments that are linked to current research and the expectations of kindergarten teachers for beginning kindergarten students. These may

include screenings to assess Concepts about Print, Letter Identification, and Phonemic Awareness and additional information about number understanding such making sets of five or ten objects, replicating simple patterns, and recognizing numerals, shapes, and colors. Information about fine and gross motor skills may also be included in initial screenings in some programs. These assessments are used to inform teachers as they begin to plan lessons for their classrooms, but this linkage from assessment to practice is typically uneven and unfocused and does not include discussion among teachers in a learning team format or in any other systematic manner. "In effective assessment systems, teachers use multiple measures, such as informal observations, work sampling, and documentation along with more formal assessments, to guide their instruction" (Heidemann, Chang, & Menninga, 2005, p. 88).

While these assessments incorporate all of the areas of development that are part of a developmentally appropriate classroom, most early childhood programs do not have a specific curriculum in place. Early childhood curriculum is typically designed by the teacher and is eclectic in nature. A teacher may use the *Creative Curriculum* (Trister Dodge, Colker, & Heroman, 2002) as a loose guide for practice, but inform literacy instruction in part with reference to the kindergarten curriculum. There may be some elements of the High Scope ( Hohmann, Weikart, & Epstein, 2007) curriculum in place, such as the plan-do-review process for developing oral language skills. Social-emotional skills may be addressed by administering the DECA (LeBuff & Naglieri, 1999) and then using the supplemental materials when individual or classroom scores indicate a need in one of the protective factors (self-control, initiative, or attachment). Early childhood curriculum in a developmentally appropriate classroom can look messy and unfocused even when the teacher has a clear vision of how she wants her classroom

to be.

Because of the messiness of the curriculum, the need for play-based performance assessment rather than paper-pencil tests, and the need for dealing with the whole child in a developmentally appropriate classroom, getting to the most relevant data can be difficult. Even with formal training in data-driven decision making, early childhood teachers may struggle with aligning assessment and curriculum. Looking at data in a more systematic way is a relatively undocumented approach for early childhood educators. Some early childhood educators have begun to use teacher-developed rubrics to assess and measure progress and some training on the use of formative assessment is available. Nevertheless, an ongoing assessment process that links the curriculum to decisions about individual student progress is something new for most preschool teachers.

Teachers in school-based early childhood programs have not, until recently, been included in building-level initiatives. The early childhood teachers that the reader will be introduced to in the classroom design in Chapter V are interested in finding a way to use data-driven decision making in their early childhood classrooms. Because the school where the programs are located is a School In Need of Assistance and on the watch list for the third year in a row, the district and building administrators have developed a plan to address the achievement gap in the school. For the first time, early childhood teachers have been included in the training on data-driven decision making and common formative assessment and early childhood data will be included in some parts of the building report.

Therefore, the time is right for the team to take advantage of the training being offered and develop their own system for looking at student data in a developmentally

appropriate manner. The teachers on the early childhood team believe that it may be only a matter of time before they are required to compile data in the same way as the other teams in the building.

These teachers have also taken advantage of the expertise of the school psychologist who is assigned to their classrooms as part of the Area Education Agency team. This support has been invaluable in looking at data for students entering the General Education Intervention (GEI) process during the last year and it is hoped that her assistance with data collection and her ability to get to the right questions may, will enable teachers to devise strategies for all students, not just struggling learners. Her inclusion on the building SINA team will also provide information that is needed in order to more fully understand the process and how to use the data.

<center>Organization of the Paper</center>

This paper will be organized into five chapters. Chapter I introduces the issues, states the problem and the significance. Chapter II will look at the history of developmentally appropriate practice, the current status of state early learning standards and accountability for teachers, students, and programs and the impact that early childhood leaders suggest these efforts may have on young children. Chapter III will examine professional learning communities, the data-driven decision-making process as it is used in the school district where the early childhood team is employed, looking at student work, and the methods currently being suggested for teachers and building leaders who want to effect change in classrooms. Chapter IV will look at the role of the teacher as a change agent in the classroom and how professional development, the teacher inquiry process, and the system itself must align in order to effect the positive changes necessary in order to improve student outcomes for every student. Chapter V

will describe the early efforts of an early childhood team using data-driven decision-making in a professional learning community and then outline a design for the refinement of the process that is based on the research findings.

## Definition of Terms

**Accreditation-** The National Association for the Education of Young Children (NAEYC) has established a four-step process that programs must complete to prove that they meet NAEYC standards. This process assesses programs, provides them with self-study materials, and provides for verification visits to determine that the program meets NAEYC standards. Ten standards have been identified based on the latest research in early childhood education, and more than 400 criteria have been set up to help programs demonstrate that they meet these standards. During the five years of accreditation, programs must submit annual reports and are subject to unannounced visits by NAEYC assessors. The four step process includes enrollment, application, candidacy, and an on-site visit by NAEYC accreditors.

**Authentic assessment -** According to Arthur Costa "we are interested in observing how students produce knowledge rather than how they merely reproduce knowledge. A critical characteristic of intellectual ability is not only having information, but knowing how to act upon it." Teachers who use authentic assessment do not rely solely on standardized tests, worksheets, or chapter tests. They are more interested in constructing meaningful tasks that require that students apply what they have learned and demonstrate understanding of the material.

**Co-Teaching -** Co-teaching refers to a situation where two or more teachers contract to share instructional responsibility for a single group of students in a single classroom or

workspace for specific objectives with mutual ownership, pooled resources, and joint accountability although each individual's level of participation may vary. Although co-teaching is integral to the inclusive practices in many schools, it is not a requirement for inclusion to occur. Inclusion refers to a broad belief system or philosophy embracing the notion that all students should be welcome members of a learning community, that all students are part of their classrooms even if their abilities differ (Friend & Cook, 2004).

**Common Formative Assessments-** An assessment typically created collaboratively by a team of teachers responsible for the same grade level or course. Common formative assessments are used throughout the year to identify (a) individual students who need additional time and support for learning, (b) the teaching strategies that would be most effective to help students acquire desired knowledge and skills, (c) areas in which students generally are having difficulty achieving the intended goal, and (d) goals for the team and for individual teachers.

**Developmentally Appropriate Practice (DAP) -** DAP refers to those practices which are both age appropriate and individually appropriate for each child. In 1987 the National Association for the Education of Young Children (NAEYC) published a position statement on developmentally appropriate practices (DAP) for children ages birth through age 8 and revised it in 1997 and 2009. A developmental curriculum is designed to fit the needs of each child, in contrast to traditional curriculum into which we try to fit all children. DAP encourages teachers to look carefully at how children learn and develop classroom practices accordingly. NAEYC stated that "

the purpose of the position statement is to promote excellence in early childhood education by providing a framework for best practice. Grounded both in the

research on child development and learning and in the knowledge base regarding educational effectiveness, the framework outlines practice that promotes young children's optimal learning and development. Since its first adoption in 1986, this framework has been known as *developmentally appropriate practice"* (Copple & Bredekamp, 2009).

**Data-driven Decision-making (DDDM)-** School districts are required to collect several different types of data including demographic, achievement, instructional, and perception. This data is used to answer various questions in order to determine which programs and instructional strategies are working or not working and which students need additional support. Data-driven decision-making is the process of making choices based on appropriate analysis of relevant information.

**DINA (District in Need of Assistance) and SINA (School in Need of Assistance)-** Under No Child Left Behind (NCLB), public school districts and public schools must report the academic progress of all students in grades 3 to 8 and 11 and students by subgroups and their test participation rates in the subject areas of reading and math. Public elementary and middle school average daily attendance rates and public high school graduation rates are the additional indicators for public school districts. If a school or a district does not meet the annual early AYP state participation goals or state Annual Measurable Objectives (AMO) in either, the "all students" group or any one of the subgroups within the required grade spans (3-5), 6-8, and 11) in the same subject area (either reading or math) for two consecutive years, it will be designated as a school in need of assistance (SINA) or a district in need of assistance (SINA) or (DINA). If a district does not meet the goals for district level K-8 average daily attendance rate and high school graduation rate for two consecutive years, it will also be designated a

District in Need of Assistance.

**Intervention-** a research-based program or action that a district, school, or teacher takes to get better results.

**Pedagogy-** Cultivating the process of development within a given culture and society. It has been described as any conscious activity by a person designed to improve the learning in another individual and has three basic components: (1) the content of what is being taught, (2) the methodology or the way in which teaching is being done, and (3) the repertoire of cognitive and affective skills required for successful functioning in the society that it promotes.

**Professional Learning Communities-** Opportunities for teachers to meet regularly and frequently in order to discuss student progress in a collaborative and data-based manner. Formative assessments are typically used so that teachers can identify patterns and apply interventions that will assist students to meet goals that have been established by the group (McLeod, 2008). Professional learning communities are most effective when professional development is targeted toward the goals of the school community and when teachers have time to develop a relationship of trust so that data can be shared without fear of judgment.

**Reflective practice -** Reflection involves a cycle of thought and action based on professional experience. Reflective practice involves thinking about immediate consequences of teaching decisions and the long-term effects of these decisions and typically occurs in a trusting, collaborative environment when it is successful.

**National Center for Early Development and Learning (NCEDL) Study-** a study of pre-kindergarten programs in 6 states which had contributed significant resources to pre-k initiatives in 2001. All of the programs sampled were funded by the states and

were selected to maximize diversity with regard to geography, program settings,

program intensity, and teacher education requirements. The pre-k data collection took

place during the 2001-2002 school year. A total of 240 sites participated. The results

have been used in various ways in a variety of contexts.

**State-Wide Early Education Study (SWEEP)-** a 5-state study of pre-kindergarten

programs that were all state-funded. A total of 463 sites participated during the 2003-

2004 school year. This study employed the same research team, the same measures and

the same training criteria as the NCEDL study and has been used widely by researchers

for data purposes.

<div align="center">Standards</div>

*Program Standards*: Resources, activities, and instruction that programs offer to help

children learn (includes both Classroom Standards and Teaching and Curriculum

Standards).

*Classroom Standards*: Identify classroom characteristics such as the maximum number

of children in a classroom; the allowable ratio of adults to children; and the materials

and supports available to children and families.

*Teaching and Curriculum Standards:* Sometimes described as opportunities to learn,

educational experiences, or activities generally intended to guide administrators.

*Child Outcome Standards:* Describe the knowledge and skills children should acquire

by the end of the year (encompasses Content Standards and Performance Standards).

*Performance Standards:* Describe how it can be demonstrated that children have met

the content standards.

<div align="center">Early Childhood Assessments and Screenings</div>

**Brigance Preschool Screen-II** (Brigance 1979, 2004)- an all-purpose screening tool

that can give a sampling of a child's language, motor, social-emotional, and early learning skills in just 10-15 minutes. It can assist teachers with program planning and mandated screening compliance as well as indicate developmental concerns such as language, learning , or cognitive delays as well as to identify students who may be intellectually gifted. The Screens include updated standardization and norms that reflect the rapid changes in early development and curricula.

**Creative Curriculum** (Trister Dodge, Colker, & Heroman, 2002)- a scientifically based, research-validated, comprehensive curriculum with guidance on teaching literacy, mathematics, science, and social studies. The materials demonstrate to teachers what, how, and why to teach the curriculum and is an inclusive and strengths-based approach appropriate for all children ages birth to 5, including dual-language learners and children with disabilities. It includes ideas for working with children and families and has an emphasis on responding to children's learning styles and building on strengths and interests.

**Devereux Early Childhood Assessment** (LeBuffe & Naglieri, 1999)- a measure of "within-child" protective factors in preschool children and is a nationally normed assessment of two to five year olds. There is a five-step process designed to support early childhood teachers, mental health professionals, and parents to help children develop healthy social-emotional skills and reduce challenging behaviors. It is based on resiliency theory, has a strong parent component, and accompanying activities to assist teachers with activities for their curriculum that can enhance the factors of attachment, self-control, and initiative.

Chapter II

Developmentally Appropriate Practice, Early Learning Standards, and Accountability

Introduction

In Chapter II, I will describe developmentally appropriate practice in early
childhood programs and how these programs address age appropriateness, individual
appropriateness, and social/cultural awareness. This discussion logically occurs first
because it must be the guiding principle on which all other initiatives are based in a
high-quality early childhood program. I will then describe the history of early learning
standards and the impact of these standards on preschool programs, particularly
standards related to curriculum and assessment. I will then discuss what early
childhood experts say about the benefits and limitations of these early learning
standards. This is important because the school district where this team is employed
has adopted the state standards and uses them to guide curricular and assessment
practices. I will further describe how the learning environment, teaching practices, and
other program components must be planned and modified according to individual
differences in children and what is expected of children at specific ages. The question
of assessment and accountability in regard to the standards will be then be addressed in
order to define how teachers might use them to make data-based decisions in early
childhood classrooms.

Developmentally Appropriate Practice

Developmentally appropriate practice guidelines are well-documented in the
literature. The National Association for the Education of Young Children (NAEYC)

has published three position statements defining and describing developmentally appropriate practice in early childhood programs serving young children in (Bredekamp, 1986; Bredekamp & Copple, 1997, 2009). The most recent publication addresses and builds on the principles identified in the earlier editions and is a consensus document based on more than three years of discussion with current early childhood experts. The editors have also identified three major challenges in the field of early childhood education:

- Excellence and equity. Achievement gaps are present early in life and are evident because young children lack opportunities to learn, not because they are lacking themselves in any way.

- Intentionality and effectiveness. Good early childhood teachers are purposeful in the decisions they make about their practice. There is a current wide-spread belief that early education is of value and there has been an explosion of state-funded programs.

- Continuity and change. The current statement continues to demonstrate the values outlined in the previous documents and has also responded to expanding knowledge about improving teaching, curriculum, and assessment.

- Joy and learning. The core value that has always been part of a developmentally appropriate program is that childhood should be full of joy. Healthy development and learning cannot occur without attention to children's interest and engagement and the accompanying laughter, play, love, and fun (Copple & Bredekamp, 2009).

Developmentally Appropriate Classrooms and Programs

The concept of term "developmentally appropriate practice" is used widely in

the field of early childhood cared and education, but translation into practice in early childhood classrooms and programs can be interpreted in a variety of ways. According to several published resources on early childhood pedagogy, including NAEYC and the National Research Council, there are some broadly supported findings regarding components of quality preschool programs:

- Cognitive, social-emotional (mental health), and physical development are complementary, mutually supportive areas of growth all requiring active attention in the early years.

- Responsive interpersonal relationships with teachers nurture young children's dispositions to learn and their emerging abilities.

- Both class size and adult-child ratios are correlated with greater program effects.

- While no single curriculum or pedagogical approach can be identified as best, children who attend well-planned, high-quality early childhood programs in which curriculum aims are specified and integrated across domains tend to learn more and are better prepared to master the complex demands of formal schooling.

- Young children who are living in circumstances that place them at greater risk of school failure- including poverty, low level of maternal education, maternal depression, and other factors that can limit their access to opportunities and resources that enhance learning and development- are much more likely to succeed in school if they attend well-planned, high-quality early childhood programs.

- The professional development of teachers is related to the quality of early childhood programs, and program quality predicts developmental outcomes for children.

• Programs found to be highly effective in the United States and exemplary programs abroad actively engage teachers and provide high-quality supervision (*Eager to Learn*, 2001, p. 130).

Bredekamp & Copple (2009) discussed several interrelated themes that apply to programs that provide programming for young children.

It is through developmentally appropriate practice that we can create a safe, nurturing, and supportive place for young children to experience those unique joys of childhood. Seeing children joyfully, physically, and intellectually engaged in meaningful learning about their world and everyone and everything in it is the truest measure of our success as early childhood educators ( p. X).

Developmentally Appropriate Curriculum

Developmentally appropriate curriculum has also been discussed widely in the literature and recently has been a frequent topic in journals and other publications not specifically intended for early childhood professionals. This interest in what is happening in early childhood classrooms is linked to discussions about early childhood standards, accountability, and alignment with elementary curriculum. Gronlund (2006) describes her ideal for developmentally appropriate early childhood curriculum:

High quality early childhood programs across the country address academics, including assessment, and are accountable to early childhood standards. Research and professionally recommended practices recognize that young children learn best through manipulation of materials and hands-on experiences carefully planned and facilitated by knowledgeable teachers.

This learning looks very much like play- but play with a purpose ( p. 143).

Developmentally appropriate practice promotes a constructivist and interactive approach to instruction that comprises three components: age appropriateness, individual appropriateness, and social/cultural awareness. This definition states that the learning environment, teaching practices, and other program components should be planned and modified according to individual differences in children and on what is expected of children at a particular age (NAEYC, 1997).

Many experts in the field of early care and education have reiterated the themes outlined by NAEYC which should guide the practice of any early childhood program or teacher. Chen and Horsch (2004) described what developmentally appropriate practice must take into account and then used these guidelines in a university-school partnership in an urban district that required a major overhaul in order to meet the needs of the children and families being served.

- The importance of child-initiated, child-directed, teacher-supported play in the development of children in all domains, but particularly in the cognitive domain.

- The integrated nature of children's development, in that stimulation of one dimension of development affects other dimensions.

- The interactive nature of learning, whereby children acquire knowledge and skills "through active exploration and interaction with adults, other children, and materials" (Bredekamp, 1987).

- The role of the teacher and other adults as observant, responsive "scaffolders" in the learning process. (Chen & Horsch, 2004, p. 43).

The National Research Council (2001) states that preschool programs need to address social emotional, and physical development, as well as cognitive development. Learning in the preschool years will be most effective if it engages and builds on a student's existing understandings. Experts know that even in the earliest years of school, there is a wide variation among children in their knowledge, skills, and thinking. The curriculum in a preschool classroom must attend to the developmental level of each child.

## The Confusing Nature of DAP

In spite of the wealth of literature describing developmentally appropriate practice, programs, and curriculum, those in the field have not always been in agreement about how teachers of young children can provide the entire range of services that are often needed in early childhood classrooms. Some individuals have been conflicted about how to support children's emotional development through supportive adult-child interactions in addition to providing learning opportunities that enable children to gain necessary content and skills (Pianta, 2005). This is especially true when administrators in public school programs do not have a background in early childhood education and are charged with administering a preschool program within their school building.

Bredekamp and Copple (2009) state that "Fortunately, a continually expanding early childhood knowledge base enables the field to refine, redirect, or confirm understandings of best practice" (p. 6). In this most recent edition of the guidelines, they attempt to align their description of developmentally appropriate practice with the changing demographics of many preschool programs and outlined what they consider

to be the three core areas of knowledge to consider:

- What is known about child development and learning-referring to knowledge of age-related characteristics that permits general predictions about what experiences are likely to best promote children's learning and development.

- What is known about each child as an individual-referring to what practitioners learn about each child that has implications for how best to adapt and be responsive to that individual variation.

- What is known about the social and cultural contexts in which children live-referring to the values, expectations, and behavioral and linguistic conventions that shape children's lives at home and in their communities that practitioners must strive to understand in order to ensure that learning experiences in the program or school are meaningful, relevant, and respectful for each child and family (p. 10).

## History of Standards

While the specifics of developmentally appropriate practice have been well-documented and there has been little argument that it is something to be strived for, acceptance of early childhood standards has been less easily attained. According to Hatch (2002) the standards-based movement is threatening children in the same way that the curriculum shove-down movement did in the 1980s. "The point of attack has changed from curriculum to outcomes, but the consequences for young children may be the same" (p. 458).

There have been calls for reform since the beginning of public education, but in the last 25 years none so influential as the publication *A Nation at Risk* that was prepared by the National Commission on Excellence in Education at the request of the

Secretary of Education and completed in 1983. This document received much attention

as it outlined the need for school reform. In 1989, the nation's governors convened at

their Education Summit and established six broad educational goals that were to be

achieved by the year 2000. The goals were later amended to include two more. Goal 1 is

directed specifically at early childhood educators: All children in America will start

school ready to learn. According to many experts in the field this was the beginning of

the standards movement (Seefeldt, 2005).

Factors in the Exclusion of Early Childhood in the Standards Movement

The field of early childhood education has been relatively exempt from the

standards movement until quite recently. There are several significant reasons for this

omission, the first of which is the fact that standards were first developed in response

to Goals 2000: Educate America Act (1994) and addressed the mandate that all

students would leave grades 4, 8, and 12 having demonstrated competency in the core

academic subjects in the school curriculum (Seefeldt, 2005).

The second important factor in the omission of early childhood in the first

standards is in the characteristics of the field itself, in that early childhood programs

have traditionally been sponsored by a wide variety of agencies rather than the

Department of Education. Many early childhood programs are developed and run by

churches, community agencies, businesses, universities, corporations, and other

individuals, with only a fraction funded and sponsored by local, state, or federal

government. Figures from 2003 indicated that only 28% of public elementary schools

offered pre-kindergarten programs (Seefeldt, 2005). While this has changed somewhat

in the last six years, there continue to be a high percentage of early childhood programs

that are not under the auspices of public education.

The third salient point in the standards discussion is the philosophical differences that exist between early childhood professionals and public education. The field of early childhood education has long been grounded in the theories of child development and constructivism. These strong beliefs about how young children construct their own knowledge and how teaching should be matched to the individual child are described fully in the first edition of *Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth Through Age 8* (Bredekamp, 1987). In this document the author states that "the major determinant of program quality is the extent to which knowledge of child development is applied to program practices- the degree to which the program is *developmentally appropriate*" (p. 2).

Until recently, these three important differences in early childhood education have distanced the field from the standards movement that has defined school reform and legislation regarding public education. Recently, the field of early education has been involved at the federal, state, and local levels in setting standards for programs, teacher preparation, and curriculum and assessment (Seefeldt, 2005).

<center>States' Development of Early Learning Standards</center>

In 1999 only 10 states had a document that outlined expectations for children's development and learning prior to kindergarten entry (Scott-Little,Lesko, Martella, & Milburn, 2007). By May 2002, 27 states had an early learning standards document for preschool-age children and four states had developed a similar document to describe expectations for infants and toddlers (Scott-Little, Kagan, & Frelow, 2003). A survey completed by Scott-Little et al, (2007) indicated that 49 states plus the District or

Columbia had developed prekindergarten early learning standards and the one

remaining state was in the process of developing standards. Most of the states had

standards addressing outcomes for 3-5 year olds, some for only 4 year olds, and a

small number (14) had addressed standards for infants and toddlers in addition to the

standards for preschool children. Eight more states were in the process of developing

standards for this age group. The expanding knowledge about what young children are

capable of learning, efforts to improve the quality of early care and education, and

policy developments among states have all contributed to the need for standards and

accountability in early childhood programs.

<div align="center">Leadership in the Development of Early Learning Standards</div>

In recent years, the early childhood professional organizations have taken the

lead in developing program standards. The National Association for the Education of

Young Children (NAEYC) and the Association for Childhood Education International

(ACEI) have both issued position statements and publications describing voluntary

program standards, standards for teacher preparation, and curriculum standards.

Federal, state, and local governments have also initiated development of standards for

children ages 5 and under (Seefeldt, 2005).

Standards for curriculum and assessment guide classroom content in high quality

early childhood programs. The premise of these early academic standards is that by

implementing standards for systems, teachers, and the curriculum, the quality of

educational experiences that all children receive will be improved (National Research

Council, 2001). The term academic standards can apply to the quality of the systems

delivering education, the quality of the teachers and teacher preparation programs, and

the quality of curriculum content and its assessment (Seefeldt, 2005).

## Benefits of Early Childhood Standards

The development of early learning standards across the United States complements the desire to improve both short-term and long-term outcomes for young children. As the number of states providing preschool programs to children increases, the need for accountability about the benefits of these programs and the spending of taxpayer dollars to support them will become even greater (Gronlund, 2006).

With widespread reforms in K-12 education, and with early childhood education becoming increasingly "educationalized" it is not surprising that the accountability movement and its focus on standards, curriculum, and assessment is taking hold in early childhood education (Kagan, Carroll, Comer, & Scott-Little, 2006).

According to Gayé Gronlund (2006), "as an early childhood educator you already incorporate learning standards in all that you do with children. Whether you are aware of it or not, everything you do with them contributes to their learning about the world and their place in it. Teaching young children looks different than teaching older children" (p. 1). This view is reiterated by the Early Learning Standards Steering Committee (ELSCC) that was formed in Wisconsin to formulate and implement the Wisconsin Model Early Learning Standards (MELS). According to the document they produced, the Early Learning Standards recognize that children are individuals who develop at individual rates. While they develop in generally similar stages, there are diverse patterns of behavior and learning that become obvious as a result of the interaction of many factors, including genetic predisposition, physical characteristics, socio-economic status, and the values, beliefs, culture, and political practices of their

families and their communities (2003).

Standards name what students are to know and do, and this content along with its proficiency expectations, guides the types of practice and learning that everyone who is a part of the ECE process should be providing to the child (Brown, 2006). In order to devise a political response that will be sustainable for the current climate of accountability reform, early learning standards must address the issues of content, assessment, and levels of performance. The development of early learning standards across the United States aligns with the desire to improve both short-term and long-term outcomes for young children.

Preschool program standards typically guide both structural and program components or activities. Standards related to program components typically determine what goes on in the classroom and structural components are typically related more to health, safety, and nutrition; class size and adult-child ratios; and general layout and equipment.

Kagan and Scott-Little (2004), in their analysis of state agencies' development of early learning standards, suggested that early learning standards should not be a stand-alone document, but rather "serve as a pedagogical, curricular, and assessment reform within any age group" (p.394). For Kagan and Scott-Little, establishing horizontal alignment through the standards, assessment, and curriculum triad offers the field the opportunity to clarify the practices of early childhood educators with particular age levels of children across programs. Their ideal is a system that aligns horizontally through the content, assessment practices, and curriculum for children at particular age levels and promotes a vertically aligned system that outlines student growth in

knowledge and performance (Kagan & Scott-Little, 2004).

It is undeniable that there are benefits to the development of early learning standards. Some of these benefits include the acknowledgment that there are enormous potentials for learning and growth in the years birth through age eight and evidence that there is value in providing quality early childhood programs in order to enhance long-term success in school and in life. In addition, standards are a way to establish expectations for children at all ages, a common language for communication about children's learning, provide a framework for accountability, and demonstrate that developmentally appropriate practice can go hand-in-hand with academic content (Gronlund, 2006).

At the 2004 NAEYC Annual Conference a group of early childhood educators created a list of pros for the implementation of early learning standards:

- They can provide richness to our conversations about children's growth and learning.

- We can match standards to what we are already doing.

- They can be linked to primary standards so that we are indeed contributing to school readiness.

- They help us identify next steps and transitions.

- They are a strategy for professionalizing our field.

- They help us communicate across grades, among ourselves, and with our public.

- They help us have higher expectations for children.

- They result in authentic assessments tied to our curriculum.

- They provide accountability to us. (Gronlund, 2006, p.4).

## Limitations of Standards in Early Childhood Education

Although the reasons for developing and implementing early childhood standards are varied and mostly considered positive, the advent of standards-based education has not been embraced by everyone in the field (Scott-Little et al, 2007). Some of the most salient points brought to this discussion include fear that children will be denied placements based on what they know or do not know, fear that programs will be judged or even funded based on whether children in the program meet said standards, and fear that a child-centered approach will be lost in an effort to "teach to the test" or teach to the standards (Kagan & Scott-Little, 2004).

As early childhood education continues to rise to the top of federal, state, and local policy makers' agendas as a "tool" to improve children's academic performance in the later grades (Glod, 2006 cited in Brown, 2006), many researchers and experts within the field are concerned that policy makers understand the uniqueness that exists within the early childhood years (Stipek, 2006). These stakeholders want to ensure that K-12 education reforms are not just "repackaged" for preschool programs. Simply altering K-12 policy does not address the complexity and unique needs of early childhood students and the programs they attend. It is essential that those who make policy for early childhood programs "consider how the field of ECE can promote a vision of reform that moves beyond the linear logic that frames current education policy" (Brown, 2006, p. 1).

Early childhood teachers are questioning what will happen in preschools where accountability takes center stage and developmentally appropriate practice must adhere to the policy changes evident in state-funded programs. Concerns arise when teachers are forced to focus on a narrow set of skills rather than looking at the "whole child" and the unique needs of young learners. These concerns are based on pressure to raise academic achievement and to close the achievement gap in elementary and secondary education. Because kindergarten is becoming increasingly academic and children who enter formal school environments without basic math and literacy skills are at a decided disadvantage, accountability in early childhood programs is more important than ever before, particularly in those that receive public funds.

Balancing the need for academic preparation and measures to close the achievement gap with the need to nurture the social-emotional needs of young learners and provide curriculum that is engaging and relevant is a concern that many in the field have raised. According to Hatch (2002), "Holding all children to the same standards guarantees that some will face failure" (p. 458). The focus on academic preparation will undoubtedly have significant implications for the nature of preschool programs, and the consequences may not be positive. According to Stipek (2006), "Experts are worried that a focus on academic skills will come in the form of whole-group instruction, rigid pacing, and repetitive, de-contextualized tasks" (p. 741). Hatch cites David Elkind (1987), "young children experience significant and sometimes debilitating stress when they are expected to perform at academic levels for which they are unprepared" (Hatch, 2002, p. 458).

According to Deborah Stipek (2006) this is a concern well-founded:

I am seeing children in preschool classrooms counting by rote to 10 or 20 in

a chorus. When I interview the children, many have no idea what an 8 or a

10 is. They can't tell me, for example, how many cookies they would have if

they started with 7 and I gave them one more, or whether 8 is more or less

than 9. I am seeing children recite the alphabet, call out letters shown on

flashcards, identify letter/sound connections on worksheets (e.g., by

drawing a line from a b to a picture of a ball). Some can read the word mop

but have no idea they are referring to a tool for cleaning floors, and they are

not able to retell in their own words a simple story that had been read to

them. I am seeing young children recite by rote the days of the week and the

months of the year while the teacher points to the words written on the

board- without any understanding of what a week or a month is and without

even a clear understanding that the written words the teacher points to are

connected to the words they are saying. In these classrooms every child in

the class gets the same task or is involved in the same activity, despite huge

variability in their current skill levels. Some children are bored because they

already know what is being taught; others are clueless (p.741).

Many early childhood programs and early childhood education in general have a

long history of accountability and standard setting. In the past early childhood teachers

have used their considerable expertise and knowledge about the complexity of young

children to develop program standards and realize that children learn best when they

are nurtured, guided, and cared for. According to Hatch, "the history of early childhood

standards comes from an ethical commitment to doing what is right for the individual

child and not to measure productivity by an arbitrary set of narrowly defined

outcomes" (Hatch, 2002, p. 461).

In a position statement regarding early learning standards, the National

Association of the Education of Young Children & National Association of Education

Specialists in State Departments of Education (2002) stated that they lead to teaching

to the standards only in a cookie-cutter style curriculum and the uniqueness of early

childhood education is lost.

- They bring a pressure of accountability with the risk of a push-down
  in curriculum and inappropriate expectations for younger children.

- Direct instruction is assumed as the only way to guarantee that
  standards are addressed. The children's learning in self-directed,
  exploratory ways is not trusted.

- They can contribute to a a "we/they" mentality between preschool
  and elementary teachers.

- They take time for early educators to learn and work through, to
  figure out how to integrate into good practices. There is a need for
  reflection and interaction among colleagues in order to do so.

- They can result in testing and other inappropriate assessment
  methods being used.

- There is little money to support education and training of early
  educators in the standards and how to best use them. (Gronlund,
  2006, p.5).

For many in the field of early care and education, the emphasis on standards

raises concerns about the need to continue to provide programs that are

developmentally appropriate and the concern that some will use pressure to use the standards to engage in assessment practices that are not recommended for young children (Meisels, 2000; Neisworth & Bagnato, 2004). Reliability and validity is a concern that has often been raised in regards to early childhood students and programs and avoidance of standardized testing in early childhood programs has long been a battle cry for those who advocate for developmentally appropriate curriculum and assessment.

## Assessment

Assessment of young children has become increasingly necessary and required in early childhood programs in order to address the need for accountability. According to Bowman, Burns, & Donovan (2001), the more we emphasize instructional assessment, the more necessary it becomes to confront the issue of standards against which children's learning should be assessed. Standards consist of the values, expectations, and outcomes of education. It is important to deal with the issue of standards in early childhood, because standards provide a baseline of expectations to which pedagogy and assessment can be aimed.

Well-designed classroom assessment can provide the kind of specific, personalized, and timely information needed to guide both learning and teaching. The best teachers recognize the importance of ongoing assessment and continual adjustments on the parts of both the teacher and the student as the means to maximize learning with regular use of diagnostic and formative assessments to provide feedback for learning (McTighe & O'Connor, 2005).

The Early Childhood Education Assessment Consortium of the Council of Chief

State School Officers defines assessment as "a systematic procedure for obtaining information from observation, interviews, portfolios, projects, tests, and other sources that can be used to make judgments about characteristics of children or programs." They describe authentic assessment as assessment that does not use standardized tests. They also state that for young children the reliability of assessment information is not very high when standardized tests are used. This reliability and validity of tests increases for children as they get older (www.ccsso.org, 2005, cited in Gronlund, 2006, p. 17).

Bowman et al (2001) describe three broad categories of assessment that are typically used in early childhood programs. They include: assessment to inform instruction; assessment for diagnostic and selection purposes; and assessment for accountability and program evaluation. These assessments have various purposes and are of many types including informal and formal assessments, screenings, and evaluations.

In most early childhood settings teachers use a combination of assessments based on program requirements and teacher training. No single assessment will satisfy all educational needs or solve all educational problems. "If we are to use the latest research and information to improve early childhood pedagogy and instruction, it is important that early childhood educators and caregivers be trained to use assessments for purposes that will advance teaching and learning" (Bowman et al, 2001, p.259).

Chen & McNamee (2007) have described the difficulties of assessment for early child hood teachers:

Early childhood teachers, however, for the most part dislike assessment and

testing, and in many ways, for good reasons. Traditional assessments take time away from children's play and their engagement in sustained projects and activities. Numbers do not tell the whole story of a child's development, particularly because young children do not reliably perform well on standardized testing formats. Furthermore, one-time testing cannot accurately measure young children's learning because their skills are in flux and development can be sporadic. In terms of performance-based assessment, classroom observation can be useful, but connecting it to the curriculum and methods of teaching can be challenging. Some teachers find it difficult to know what kinds of materials to collect for portfolios and what criteria to use to evaluate them. These concerns and criticisms are legitimate. Overall, the assessments currently available to early childhood teachers have not fulfilled the promise of integration with learning and teaching processes. ( p.4).

Perhaps the most important thing to remember about assessment of all young children, whether they are typically developing or are experiencing delays, is that their development has great variability and is uneven and episodic. Intelligence is not necessarily stable in young children. For teachers who have experience with assessment of preschool children it is obvious in the lack of agreement across measures and the lack of reliability within measures. "Standardized, norm-referenced tests are especially vulnerable to misinterpretation because they imply a degree of certainty that assessments of young children simply cannot provide" (NRC, 2001, p. 240).

Accountability

Becoming accountable to the standards to which a program must answer presents a whole host of difficulties for early childhood teachers and program administrators. Early childhood programs are increasingly accountable for ensuring that young children make progress toward state and agency standards. It has become much more commonplace to apply standards to educational programs in order to measure accountability in these programs (National Child Care Information Center, 2006; Scott-Little, Kagan, & Frelow, 2003).

Calls for accountability can be used as an opportunity to improve practice. However, alignment of the assessment system and the standards to which a program is held accountable is an issue that has many programs trying to re-define the practices that they have considered to be sufficient and developmentally appropriate. This increasing emphasis on accountability in pre-kindergarten programs has illuminated the need for rethinking assessment systems within the field of early childhood education (Grisham-Brown, Gao, & Brookshire, 2007).

Using authentic assessment practices is the most likely way to ensure that this link occurs. There is evidence that the use of authentic assessment is superior in supporting children's attainment of important educational outcomes (Bagnato, 2002; Meisels, Bickel, Nicholson, Xue, & Atkins, 2001).

The contrast between the standardized or standards-based testing currently used for assessment and accountability purposes in elementary and secondary classrooms and the kind of assessment typically used to evaluate young children and the early childhood programs and the children being educated in them, must be obvious. Early

childhood teachers must continue to focus on performance-based assessment in naturally-occurring contexts. The accountability movement raises fears that young children will be scrutinized in the same way that older children have come to be evaluated.

The field of early care and education must create strategies that address these mandates while upholding high quality, developmentally appropriate early childhood assessment practices (Grisham-Brown, Hallam, & Brookshire, 2006). Teachers need to find a way to document the progress of children's development and learning systematically by linking assessment and curriculum development.

<div align="center">Alignment</div>

The issue of alignment is one that is being discussed at length in the field of early care and education. Many experts agree that alignment of standards, assessment, and curriculum is especially difficult in the early childhood years. Linking standards to the assessment process is critical to the attainment of this goal. Researchers agree that children will likely only make progress on assessments that reflect the goals of the program and link assessment and curriculum (Weikart, 2004). The assessment model that may align most successfully with a standards-based approach is one that is an authentic assessment approach coupled with a criterion-referenced measure for accountability, but administered within a natural context.

Alignment of assessment with standards is a frequently discussed topic in recent research (Grisham-Brown, Hallam, & Brookshire, 2006). Because of the breadth of many state standards, as well as the Head Start Outcomes Framework, it is unlikely that any published assessment instrument will align perfectly with them. Due to the

interest in finding the common ground between assessment and standards, many assessment developers have offered strategies for using their particular instrument as a tool to demonstrate progress toward the standards or outcomes by aligning the items of the tool with them.

Creative Curriculum (Trister-Dodge, Colker, & Heroman, 2003), Work Sampling System (Meisels, Jablon, Marsden, Dichtelmiller, & Dorfman, 2001), and High/Scope Child Observation Record (High Scope Educational Foundation, 1992) are some examples of this attempt to align standards or outcomes and assessment. Each of these instruments is considered a curriculum-based assessment and can assist teachers in the process of using assessment data to drive curricular practices (Grisham-Brown, Hallam, & Brookshire, 2006). The nature of all of these assessments is that a teacher can record an individual child's or a group of children's responses over time and while engaged in classroom activities that are typically occurring.

Catherine Scott-Little summarized the thoughts of many teachers and other stakeholders at the Closing Plenary Session of NAEYC's 15th National Institute for Early Childhood Professional Development in San Antonio in June 2006:

Early Learning standards are not inconsistent with developmentally

appropriate practice. Standards require us to be more intentional about what

we teach but do not mean that we should all be teaching in the same way.

Standards do not equal standardization; they define *what* we should be

teaching, not *how*.

By building on our heritage, we have the opportunity to demonstrate for

ourselves and for the K-12 education system how standards-based education

can be implemented in a developmentally appropriate way. The first

important steps are to refine the content of early learning standards, align

the standards with other elements of the early education system, make sure

we bring everyone along in this effort, and listen throughout the process to

make sure we are responsive to the needs of children, teachers, programs,

and ourselves (p.2).

## Chapter Summary

In this chapter I provided a description of developmentally appropriate practice

in well-designed early childhood programs to give the reader a rationale for the

classroom design in Chapter V. I further describe the development of early learning

standards and the reasons that this development has been difficult for early childhood

educators. I describe the benefits and limitations that have been suggested by early

childhood experts and observations by some of them as they see the standards

implemented in early childhood programs. These observations are important because

the school district where the early childhood team described is employed has adopted

state standards and uses them to guide curricular and assessment practices. The

questions surrounding assessment, accountability, and alignment to the standards is then

addressed in order to define how teachers might use these standards to make data-based

decisions in the context of thea professional learning community which will be

described in Chapter III.

Chapter III

Collaboration and Teacher Inquiry

Introduction

In this chapter I will describe current research on professional learning communities and the ways teachers can gain support from one another by sharing teaching strategies, trying out new ways of teaching, getting feedback, and redesigning lessons and methods of instruction. The development of the professional learning community is the first step in the process described in Chapter V and integral to the success of school reform and change efforts. I will then describe the history and reasons for the use of data-driven decision-making and how some successful schools are using data to confirm what is working and identify gaps between what is happening and the desired outcomes. I will then examine some models for looking at student work and the way that teachers can examine this work for what matters most as they develop a culture for collaborative inquiry in order to enhance staff development and increase student achievement. The development of the professional learning community and the nature of the relationship of trust that it implies is integral to the success of both data-driven decision-making and the process of looking at student work. When teachers learn to collaborate at this level, the benefits are limitless. In order for the team described in Chapter V to be successful the professional and personal relationships had to be developed and nurtured over time, I have focused on all three of these ideas in order to provide a rationale for the classroom design in Chapter V

Professional Learning Communities

Many experts in the field of school reform have described the benefits of professional collaboration as a mainstay of school change efforts. Jolly (2005) describes how powerful collaboration can be when teachers engage in ongoing discussion that is focused on results and includes reflection. This analysis is the "data" that helps teachers to adjust their practice and design strategies that are based on what is happening in the classroom. According to Joyce and Showers (1995), building time into the schedule for teachers to work together helps schools move from the isolated classroom model to a model of collaborative activity.

## School View

There is strong agreement that the old way of doing things, where teachers were isolated in their own classrooms except for daily forays into the teachers' lounge for coffee and "sharing" must give way to real collaboration with planned meetings, agendas, and specific goals. In her book *Creating Learning Communities: The Role of the Teacher in the 21st Century (1991)* Jalongo *describes* seven premises that she believes are important as schools look to the future. The last three of these premises describe how teachers must learn to work together for the collective good:

in order to become resources for one another, teachers need to understand the sequence of teacher professional development; teachers must use their collective professional judgment and strength to change schools for the better; and teachers' personal narratives, their stories, are a rich and virtually untapped resource for learning about learning.

According to Jolly (2005), school leaders must provide an environment where

teachers can learn together if they expect teachers to gain expertise. By working in groups, teachers can begin to teach each other about teaching by describing and analyzing their work in their own classrooms. The context in which teachers learn is critical to the success of any professional development initiative. When interactions with colleagues are supportive and non-confrontational, teachers may risk sharing some of the work done by their more problematic and less successful students (Langer, Colton, & Goff, 2003).

In their book *Transforming Schools,* Zmuda, Kuklis, & Kline (2004) state that in order to facilitate the kind of change that is needed to maintain a competent system, a school community may need to redefine the way that it thinks about itself and the way that members of the organization communicate among themselves. These changes may include helping the staff to see themselves as part of a complex whole, basing reality on data, helping teachers to focus on examining their work with colleagues, acting on a shared vision of what is good for the system and for individuals, and viewing student achievement as the responsibility of everyone on staff.

In their work Jalongo, Rieg, & Helterbran (2007) describe the way that collaboration can change schools in ways that have not been possible with previous school reform agendas:

Collaborative planning has the power to change schools for the better where other innovations have failed or faltered because it addresses two persistent and difficult issues in the field of education. First is the gap between research and practice. Collaborative teacher planning deals with this age-old division by blurring the boundaries. The words *research* and *expert* are no longer the exclusive province of university faculty as classroom teachers

participate in a form of action research with practical consequences: collaborative lesson design, planning, and evaluation (p.5).

## Team View

There is a strong evidence that development of a collaborative team can assist teachers in making changes to their practice that have been hard to manage in the past when teachers were more isolated and had fewer opportunities to engage in meaningful staff development and ongoing collaboration with like-minded professionals. "The best structure for fostering collaboration is the team—the basic building block of the intelligent organization" (DuFour and Eaker, 1998, p. 118).

In *Student Achievement Through Staff Development,* the authors , discuss the ability of teachers to make changes in their practice.

"First of all, the training research is affirmative in that it suggests that teachers are capable learners and are able to master a wide range of curricular and instructional strategies and use them effectively in the classroom. Second, it appears that staff development programs can be designed to allow educators to increase their learning capability. Third, educators, have the very human tendency to respond affirmatively to a positive social and organizational climate, and, given a chance, know how to create one" (Joyce & Showers, 1995, p. 173).

In *Change Leadership* the authors state that in order for change to occur the team must "be sure that the commitment you have chosen is one that feels powerful and that is likely to yield rich learning and progress (Wagner, Kegan, Lahey,Lemons, Garnier, Heising, Howell, Rasmussen, 2006, p. 53). It takes a great deal of time, tolerance, and patience for conversations among team members to begin to be

productive and it is essential that everyone sees that the school must be a continually

evolving entity (Zmuda, Kuklis, & Kline, 2004). According to Jalongo (1991) true

school improvement occurs in the classroom when teachers have the opportunity to

work together and not from political rhetoric or proposals for reform that come from

researchers and administrators.

<div align="center">Teacher View</div>

According to Costa and Kallick (2000) it is essential that a school create the

necessary atmosphere for reflection. Traditionally, education has viewed the past as

something to be put aside when current reforms are introduced. "In reflective schools,

there is no such thing as failure- only the production of personal insights from one's

experiences"(p. 61).

In order to develop reflective practitioners there are several factors that must be

included in the planning of professional development and collaborative opportunities

including drawing cognitive and emotional information from sensory sources; linking new

information to previous learning; comparing results intended with those achieved;

searching for effects and finding connections among causal factors, acting on information

and processing it by analyzing, synthesizing, and evaluating; applying learning and making

commitments to plans of action; and conducting an internal dialogue (metacognition)

about the reflective process (Costa & Garmston, 1994, cited in Costa & Kallick, p. 61).

It is also essential that team members possess personal characteristics that

enhance the collaborative process and that they have time to engage in conversations

"where people expose their own thinking effectively and make that thinking open to

the influence of others" (Senge, 1990, p. 9).

Langer, Colton, & Goff (2003) describe five personal characteristics that they

have observed in successful teams. They identified these characteristics as moral

purpose, relationships, efficacy, consciousness, and flexibility (p. 42). When educators

do the hard work necessary to implement these principles, their collective ability to help all

students learn will rise. If they are unable to initiate and sustain this work, their school is

unlikely to become more effective, even if those within it claim to be a professional

learning community. Dufour (2004) stated that "The rise or fall of the professional learning

community concept depends not on the merits of the concept itself, but on the most

important element in the improvement of any school- the commitment and persistence of

the educators within it" ( p.6 ).

Hord (1997) describes how professional learning communities can improve

teaching and learning- "Professional learning communities can increase staff capacity

to serve students, but success depends on what the staff do in their collective efforts"

(p, 58). In their introduction to *Education in a New Era*, Ann Lieberman and Lynn

Miller (2001) describe the greater sense of responsibility for the success of all students

that emerges in collaborative groups. Teachers gain assistance and support from each

other by sharing teaching strategies, trying out new ways of teaching, getting feedback,

and redesigning lessons and methods of instruction. They are able to make the

transition from exclusive concerns about "my classroom" and "my students" to a more

inclusive attitude about "our school" and "our students."

## Data-driven Decision-making

The use of data to drive decisions has led many schools to a more consistent and

effective way to do business. In their book *Transforming Schools,* Zmuda, Kuklis, &

Kline (2004) cite Schmoker (1996) on the use of data- "In a competent system, data are

"'signposts" on the road to continuous improvement ( p. 87). It is also essential that

these signposts be constructed collaboratively so that they can be trusted as reliable and valid. In order for this to occur, there must be an opportunity for continuous and frequent conversations about the data that is collected and that this data be used to establish shared goals. Teachers and their leaders must ask the essential question, "What are the gaps between what we believe and what we do and how do we close those gaps?" The data can both confirm what is working and reveal the gaps that may exist between what is happening and what the desired outcome is. This can inspire action (Zmuda, Kuklis, & Kline, 2004, p. 87).

## A Paradigm Shift for Teachers

Data-driven decision-making requires an important paradigm shift for teachers-and it is a difficult one for many. It requires that teachers be continuously focused on results rather than the historical emphasis on classroom processes and delivery. Educational practices are evaluated in terms of their direct impact on student learning. Any instructional practice, organizational structure, or school program that keeps students from achieving is reexamined and redesigned and programs that are successful are examined to see if there is room for improvement. Schools that have just begun this new emphasis on data-driven instruction often find that school staff require professional development and ongoing support in order to keep up the momentum (McLeod, 2008).

Data-driven decision-making (DDDM) is a system of teaching and management practices that gets better information about students into the hands of classroom teachers. Many teachers reject the idea of DDDM because of its association with the federal No Child Left Behind Act (NCLB). While this may be understandable, it is also

unfortunate because many schools and districts across the country are seeing

substantial improvements in student learning and achievement as they incorporate

data-driven practices. Teachers in these schools are finding that when data is used

effectively it can improve their instructional interventions for students, re-energize

their enthusiasm for teaching, and increase their feelings of professional fulfillment

and job satisfaction (McLeod, 2008). "When staff members perceive data to be valid

and reliable in collection and analysis, data both confirm what is working well and

reveal the gaps between the current reality and the shared vision in a way that inspires

collective action" (Zmuda, Kuklis, & Kline, 2004, p. 87).

## Types of Data and Uses

School districts typically use four kinds of data including demographic,

achievement, instructional, and perception data. When these kinds of data are

combined various questions can be answered, such as which instructional strategies are

working for which groups of students or a comparison of school results with "beat-the-

odds" schools in order to change teachers' attitudes about the potential success of low-

performing students. Many states report results to districts and schools in terms of how

they do against a standard, as well as how their results compare to schools with similar

demographics (Educational Commission for the States, 2002).

Nearly every state reports annually to districts on how well their schools and

students are meeting state standards and schools are being held accountable for helping

all children achieve state standards (ECS, 2002). In order for data-driven decision-

making to be most effective, it is essential that a climate of safety is developed at the

administrative level so that teachers view the process as one in which data will be used

to identify and learn effective instructional techniques from one another and not to be used for evaluative and punitive purposes. According to Zmuda, Kuklis, & Kline (2004) "data analysis unlocks the door to what has previously been a relatively private domain: the quality of student work within an individual classroom" (p.99). In a school where a climate of data safety exists, data can be used to highlight teacher strengths and structure professional development opportunities rather than to identify weaknesses and blame teachers (McLeod, 2008). Many teachers continue to view this process as suspect, especially when the atmosphere of trust has not been established between administrators and staff. When schools have developed a shared vision of what it's going to take to get positive results, this aura of suspicion can be eliminated.

## Successful Use of Data

Schools successful in using data to support decision-making and improvement use the district resources available to them, create a school structure where data use is embedded in the daily schedule, and use staff expertise to continually develop data analysis skills. Other school factors include: strong principal support and leadership; ongoing use and analysis of timely, student-level data; expert assistance in data use and instructional strategies; interventions to improve teaching and learning; school improvement plans and teams; and professional development opportunities for teachers (ECS, 2002). More specifically it was found that:

- Leadership at the school level is essential in supporting the use of data and principals in schools using data effectively meet with teachers regularly to review student data.

- Having an efficient way to analyze data and disaggregate it quickly makes the use of data more "do-able."

- Someone other than the principal is available to teachers to assist them in looking at data and developing instructional strategies.

- Schools and teachers have access to effective intervention strategies. Achievement helps teachers to stop blaming and take responsibility.

- Time is provided for collaboration and coordination.

- There is a data-driven school improvement plan developed by teachers and staff.

- Flexible student groupings are used when students master standards.

- School schedules allow for professional development time.

- Principals use classroom achievement results to create professional development plans and mentor teachers (ECS, 2002).

- Comparison data with demographically similar schools who have succeeded in changing student a

With funding shortfalls and expectations for accountability, most school districts will require increased insights in order to reduce costs, implement efficient and effective academic programs, ensure that available funding is used wisely, use all resources strategically, and provide every student with an opportunity to reach his or her full potential (Education Commission for the States Policy Brief (ECS, 2002). The appropriate use of data to make these decisions is a powerful way to ensure that these goals are met. "Data analysis will inevitably result in a mandate for change" (Zmuda, Kuklis, & Kline, 2004, p.99).

Looking at student work

Looking at student work is not a new idea, but with the advent of data-driven decision-making it is an approach that can give different results to teachers and school personnel and enhance professional growth for teachers. Development of the professional learning community is an essential first step in this process as the freedom to share the personal artifacts that are produced by students in a teacher's classroom requires trust. Opening oneself to this kind of examination is very difficult for many teachers. "Examining student work for what matters most" is a phrase that has been used for some time and implies that looking at student work in a more systematic manner could help to increase student achievement and enhance staff development (Little, Gearhart, Curry, & Kafka, 2003).

In *Looking at Student Work,* the authors state that:

The idea of looking at student work is not new. We suggest, however that the approach has little potential to transform teaching and improve schools unless educators conceive it more broadly as collaborative inquiry, which places the student at the heart of the endeavor. Collaborative inquiry is most powerful when teachers look at an individual learner's progress over time; when a theoretical framework guides the inquiry process; when teachers learn and follow collaborative norms; and when leadership and structures support the inquiry. As a result, teachers discover how specific students' understanding evolves and how they, as teachers, can promote this understanding. The approach also encourages school policies and practices that support learning at all levels (Langer et al., 2003, p. 44).

Case Studies

Studying the way that successful professional learning communities have evolved is a way to define the process and structure a classroom design based on what has worked for others. In *Looking at Student Work for Teacher Learning, Teacher Community, and School Reform* (Little et al,, 2003) the authors sought to define how teacher learning communities can maximize their efforts to improve student learning by looking at case studies of teacher work groups in three nationally recognized organizations- Harvard Project Zero, the Coalition of Essential Schools, and the Academy for Educational Development. In their two-year study they reviewed the literature on "looking at student work" and attempted to define what the experts were doing in the most successful examples of "examining student work for what matters most."

In Harvard's Project Zero: The "Evidence Project" was devised with the premise that student work offers a window into children's thinking and learning. Teachers' collaborative review of children's work provides a "significant model of school improvement from within"(Little et al, 2003, p. 2). Teachers organize their time and schedules so that they can combine conversations with trusted colleagues with individual interests about teaching and learning, always keeping the student at the center of the conversation. The project staff developed structured discussion guides and a project manual to help teachers organize discussion of student work in relation to a question of interest defined by a presenting teacher.

The Academy for Educational Development (AED) sponsored a project called "Building School Capacity to Improve Student Learning" and worked to "build the

capacity of school faculties to improve the quality of instruction through continuous, comprehensive, and critical review of student work" (Little et al, 2003). Teachers reviewed learning goals and considered the lesson plan, assignment, and their school's performance standards as they looked at individual student work and collaborated as grade-level teams.

The third project the authors considered was one entitled "Instructional Improvement Through Inquiry and Collaboration" which was part of the Coalition of Essential Schools. This particular project attempted to build on the existing elements of the whole-school reform model to focus the teacher communities on inquiry into teaching and learning. This teacher inquiry was integrated into the work of critical friends groups when possible and looked systematically at student work and teacher work evidenced by lesson plans, assignments, videotapes, and peer observations.

<center>Common Elements and Common Dilemmas</center>

The authors visited several school sites where the projects were ongoing and focused on how the various approaches for looking at student work offered opportunities for teacher learning. They found that the projects and sites shared three common elements:

- Schools organized frequent and regular opportunities for teachers to get together and look at student work. The conversations teachers engaged in were "learning-focused."

- Teachers got student work on the table and into the conversation.

- The projects and sites used procedural steps and guidelines to focus the conversations and had facilitators to organize discussions and

structure participation.

The authors also found that there were three common dilemmas in the examples they observed and dissected:

- concern for personal comfort and collegial relationships

- scarce time, many interests

- uncertainty about what to highlight in looking at student work (Little et al,et al., 2003)

Shirley Hord also found some of the same commonalities in the professional learning communities that she observed with colleagues at the Southwest Educational Development Laboratory while she was Director. She identifies these attributes:

- the principal shares leadership and power through inviting staff input in decision making

- a shared vision is developed through a commitment to student learning and that is articulated in the work the teachers are doing

- there is a shared learning among staff that is applied to solutions that address students' needs

- there is a review of each teacher's classroom behavior by peers as a feedback and assistance activity to support individual and community involvement

- physical conditions (including time) and human capacities support the learning community (Hord, 1997, p.58).

## CASL

What all of the case studies, articles, and teacher resources emphasize is

that teachers need a systematic, organized, and thoughtful plan in order to carry out the difficult work of teacher inquiry in a collaborative group. Another system for getting teachers to reflect on student outcomes is outlined in *Collaborative Analysis of Student Work: Improving Teaching and Learning*. The authors describe  the Collaborative Analysis of Student Learning (CASL) as "a teacher development system that helps educators develop a culture for collaborative inquiry and gain a deeper understanding of the link between their instruction and their students' learning around a standards-based target learning area." The specific components of the CASL system include:

- maintains a focus on student work samples relative to a particular standard

- engages teachers in the study of selected students' learning over time

- follows a systematic analysis cycle

- occurs within a collaborative culture for inquiry

- provides written documentation of teacher and student learning ( Langer, Colton, & Goff, 2003, p. 3).

The value of looking at student work resides in its potential for bringing students more consistently and explicitly into deliberations among teachers. Looking at student work has the potential to expand teachers' opportunity to learn, to cultivate a professional community that is both willing and able to inquire into practice, and to focus school-based teacher conversations directly on the improvement of teaching and learning. These benefits are worth pursuing (Little et al, 2003, p. 192).

## Chapter Summary

In this chapter I have described current research on professional learning communities and the methods teachers use to gain support from one another by sharing

teaching strategies, trying out new ways of teaching, getting feedback, and redesigning

lessons and methods of instruction. This development of the professional learning

community was the first step the early childhood team described in Chapter V pursued

toward their goal of using data to better inform instruction. I next described the history

and reasons for the use of data-driven decision-making and how schools can use data

to confirm that their teaching is working and to identify the gaps between what is

happening and the desired outcomes. This is the process that is currently used in the

school where the early childhood team is employed. Because of the nature of their

SINA status and the fact that the district now includes preschool data in their reporting,

the teachers have been charged with providing data in the same manner as the other

grade-level teams. I then examined some specific models for looking at student work

and the way that teachers can examine this work as they develop a culture for

collaborative inquiry in order to increase student achievement. Because the team

described is interested in finding a way to look at preschool data in a developmentally

appropriate way and have agreed that individual student data is way to get to this goal,

I chose to focus on these well-documented examples in order to provide a rationale for

the classroom design in Chapter V.

Chapter IV

The Keys to Success

Introduction

In this chapter I will review what the research says about the implementation of

professional learning communities and the keys to the success of this endeavor. I will

first outline the importance of the school system and the building culture in the

development of collaborative teams as this is essential in order for teachers to have the

support they need to collaborative effectively. Next, I will examine the importance of

staff development that addresses the essential issues if teachers are to be successful in

their efforts. I will then discuss the role of the teacher in the classroom, in terms of

content knowledge, teacher dispositions, and adult-child relationships in order to

define the importance of these factors in the improvement of student outcomes. The

importance of the issues of teacher content knowledge, adult-child relationships,

professional development, and a system that is responsive to teacher change efforts

will be tied directly to the classroom application that is outlined in Chapter V.

The System Matters

It has become evident by looking at the research, listening to consumers, and by

the current political climate that educators must find better ways to demonstrate their

accountability. School change initiatives are certainly nothing new, but the focus today

is much more results-driven. "Our education system was never designed to deliver the

kind of results we now need to equip students for today's world- and tomorrow's. The

system was originally created for a very different world. To respond appropriately, we

need to rethink and redesign" (Wagner et al, 2006, p.1).

# A Competent System

A competent system is the basis for any initiative that is part of the organization. Without the proper support network, individual schools and classroom teachers will be unable to sustain long-term success. Zmuda, Kuklis, & Kline (2004) described a "competent system" as one in which collegiality, systems thinking, continuous improvement, and accountability are linked. They further describe this system as one in which "teachers and administrators are active participants in the continuous improvement journey because they believe that what is being asked of them is collectively challenging, possible, and worthy of the attempt" (p. 20). In the view of the authors, a competent system has enhanced achievement for all students as the end goal, but focuses on change from the "inside out." This idea ties directly to the classroom application described in Chapter V.

According to Joyce & Showers (1995), " The life of the organization is embodied in its ability to enable its people to grow"(p. 173). This requires several significant shifts- from unconnected thinking to systems thinking, from an environment of isolation to one of collegiality, from perceived reality to information-driven reality, and from individual autonomy to collective autonomy and collective accountability (Zmuda, Kuklis, & Kline, 2004, p. 1). Teachers in a competent system have the freedom to try out new ideas and to work together to "figure it out."

Whether a school operates effectively or not increases or decreases a student's chances of success. "Marzano has shown that students in effective schools as opposed to ineffective schools have a 44 percent difference in their expected passing rate on a test that has a typical passing rate of 50 percent" (Marzano, Walters, & McNulty, 2005, p. 3). Joyce & Showers (1995) describe successful programs as having several

identifiable characteristics in common which they identify as: specific student learning goals; procedures tailored to goals and backed by research; measured outcomes based on summative and formative assessment; staff development initiatives that are based on learning new procedures; and data about the progress of implementation collected regularly and made available to staff.

Data-driven decision-making is one way that successful schools have begun to focus on specific student learning goals and to find a way to focus staff development efforts in the direction that is required in order for teachers to learn new procedures. But data-driven decision-making is not successfully done in isolation. Teachers need to collaborate if they are to examine the data for what is most important and make instructional decisions that are based on careful consideration of the information.

In a study done at the University of North Carolina in 2003, three elementary schools that have "beaten the odds" against their success were studied to ascertain what made them successful. One factor that emerged from the three-year study was fairly consistent- teachers in successful schools work collaboratively. As they collaborate they develop stronger instructional strategies and these strategies enhance student achievement. At the same time, teachers develop a stronger professional community so that there is social support for learning (Strahan, 2003). This "spiral of reform activity" links ongoing assessment and instructional improvement to enhance student accomplishments (Fullan, 1999, as cited in Strahan, 2003, p. 128).

Hargreaves (1997) found that successful schools encourage teacher risk-taking, learning from errors, and sharing of good ideas in ways that lead to increased self-efficacy, higher expectations, and improved learning (as cited in Strahan, 2003, p.128). These characteristics are evident in teams where teachers have spent time learning to

trust each other as professionals and to know and understand one another on a more personal level.

## A Focus on Change

Schools who want to be successful in engaging and encouraging teachers in the change effort must find the correct formula for each individual in much the same way that teachers in the classroom must find the *"zone of proximal development"* (Vygotsky, 1962) for students. Senge (2000), claimed that schools can be renewed and that significant change can occur by taking a learning orientation. This means involving everyone in the system in expressing aspirations, building awareness, and developing their capabilities together.

Fullan (2001) makes a strong case for the difficulty in leading a change effort: "Remember that a culture of change consists of great rapidity and nonlinearity on the one hand and equally great potential for creative breakthroughs on the other. The paradox is that transformation would not be possible without accompanying messiness" (p.31).

If a school system can find a way to meet the needs of the teachers so that there is a continuum of professional development and not a "one-size-fits-all" kind of orientation, there is a greater chance for the outcomes to be positive. Most teachers are eager to be successful in the classroom and this means that staff development must be individualized to some degree. According to Joyce & Showers (1995) there are identified significant obstacles in the process of site-based school improvement. Not only does the system have to make changes, but so do the individuals attached to the system.

Typically, a school system is not only short on time for individuals to study, it is

not structured to facilitate this kind of collective study. Consequently, few schools have developed the collegial processes and norms that permit collective decision making to proceed smoothly. Thus, many schools have great trouble making collective decisions or engaging in school wide action research. And, like individuals, faculties need support and training in order to learn how to study their settings, become knowledgeable about alternative solutions to problems, and learn new curricula and teaching strategies ( p.6).

Raver, Jones, Li-Grining, Metzger, Champion, & Sardin, (2008) say that "There is no simple formula for achieving program improvement within schools" (p. 23). Professional preparation is one factor in this formula and research indicates that higher quality early childhood education programming occurs with teachers who have degrees and specialized training.

Appropriate program assessment is another factor that assists in identifying strengths and weaknesses in specific programs and provides a baseline for later program evaluation. Currently available assessments do not provide teachers with everything needed to address the weaknesses that are identified. Additional training in the form of team meetings, mentoring, and consultation has also proven helpful in the change process.

A results-oriented school system frequently asks, at every level of the organization, two questions: "What evidence do we have that what we're doing is working?" and " How will we respond when we find out that what we are doing is not working?" (DuFour, Eaker, & DuFour, 2005, cited in McLeod, 2008, p. 8).

## Professional Development Matters

Schools have a long history of staff development initiatives. For many teachers the "one-shot, sit and get" type of workshop is what is expected with little follow-up or

sustainability. In the past, these "in-service training" opportunities were based on a

staff survey and did not tie directly to classroom practices or student outcomes. The

evaluation forms usually had more to do with the comfort of the room and the

freshness of the donuts than in the content and follow-up.

Changing teachers' professional practices is a complex process. Raver et al

(2008) say that professional preparation that provides a solid understanding of what

and how to teach is essential. However, accountability initiatives focused on holding

teachers responsible for the quality of their classroom can be a catalyst for improving

professional practice, provided they are coupled with adequate training and support

during the evaluation process The question is whether or not changes in teachers'

practices will be sustained, and if not, what is needed for positive change to continue (

p. 23).

According to Joyce & Showers (2005):

Much of the stress felt by educators is traceable to the lack of a solid staff

development system. A well-designed system will empower educators as

individuals, as school faculties, and as district faculties. Thus, it will

empower those whom they serve. A staff development system can change

these conditions easily.  The research regarding teacher training reflects the

positive impact of staff development programs that allow teachers to

increase their range of instructional strategies and that given these

strategies, teachers will use them effectively. They also find that teachers

will create a positive social and organizational climate if given the

opportunity and that this will further the benefits of the staff development

initiatives. "Creating a collective environment requires time as much as

anything else" ( p.3-4).

In a report issued in 2003, the National Center for Educational Statistics points to three criteria as most important in bringing about long-term changes in teacher skills and performance. They include teachers spending more time in professional development than they currently spend, teachers engaging in collaboration and on-the-job learning in a climate that supports professional growth, and teacher learning that is ongoing and maintains momentum over the long term.

Most experts agree that while the teacher is the key to successful staff development, there is also a history of professional development efforts that have not yielded the results that were hoped. The new age of staff development is a system change that happens from the inside out. According to McTighe (2004) in his forward for *Transforming Schools*, "Context matters. De-contextualized reform seeds thrown from outside the school are unlikely to take root" (p.vi).

Early Childhood Professional Development Models

Early childhood teachers have unique needs in the area of staff development in much the same way that young children have needs in the provision of curriculum and assessment that are discrepant from the needs of older students. Experts who have observed the efforts to provide developmentally appropriate staff development for early childhood educators suggests that teachers benefit from a collaborative model of training where their role as professionals in respected, and where both mentorship and didactic instruction is provided (Helterbran & Fennimore, 2004; Howes, James, & Ritchie, 2003, cited in Raver et al, 2008, p. 11). In a description of one professional development opportunity for Pre-K teachers in St. Paul, MN, Heidemann, Chang, &

Menninga (2005) state that "that through professional development, teachers moved from a stance of confusion and tentativeness to one of confidence" (p. 86 ).

A study conducted by Raver et al (2008) found that teachers make change in the way they operate their classrooms when they are given both extensive opportunities for training and "coaching" opportunities that support integration of their newly learned strategies into the daily routine. "That good teaching requires expert decision making means that teachers need solid professional preparation, as well as ongoing professional development and regular opportunities to work collaboratively" (Bredekamp & Copple, 2009, p. 6).

According to Pianta (2005) the rates of high and low quality classrooms suggest that access to high quality teaching is highly uneven across most early education classrooms across the United States. Because of these inconsistencies, efforts to provide training and professional development that focuses directly on raising the quality of instructional and socio-emotional interactions in such classrooms is needed.

In some schools across the country, elementary schools are beginning to provide preschool programs in collaboration with Head Start, Title I, state-funded programs, and federally funded special education programs (Desimone, et al,et al., 2004). This co-location can provide additional staff development opportunities for teachers, as well as providing opportunities for collaborative discussions among preschool and primary teachers to facilitate vertical alignment. It can also increase concerns about how accountability might take shape in preschool programs that are so closely aligned with school districts (Desimone, et al, 2004).

In the classroom design described in Chapter V., early childhood teachers have benefited from inclusion in training on data-driven decision-making process, common

formative assessments, classroom strategies from Marzano (2003), and book discussions designed to introduce teachers to collaborative team building.

## Teacher Expertise Matters

When teachers know their subject matter and understand how to deliver it in a way that meets the needs of the learners they are charged with teaching, the results are positive. The impact of an individual teacher can change the course of a student's academic life. According to Marzano et al (2003) the conclusion that individual teachers can have a profound influence on student learning even in schools that are relatively ineffective, was first noticed in the 1970s when effective teaching practices were first observed and documented. After reviewing hundreds of studies conducted in the 1970s, researchers Jere Brophy and Thomas Good (1986) found that: "the myth that teachers do not make a difference in student learning has been refuted" (cited in Marzano, Pickering, & Pollock, 2001, p. 3).

Recent studies show that competent, committed, and qualified teachers are the most important factor in improving student achievement and preparing their students to meet higher standards. Teachers are the ultimate decision-makers about what is taught, how much time is spent on a topic, and in what order they will be taught (Porter, 2002, p. 4).

The National Commission on Teaching and America's Future issued a report that stated teacher knowledge and expertise is the single most important influence on what students learn. In the report the commission found that teachers who know a lot about teaching and learning and also work in schools that support their relationships with students can overcome some of the other factors that are known to impair their chances of success in school (NCTAF, 1996). School reform in the past has often ignored the

obvious- what teachers know and what they do makes the crucial difference in what children learn. And schools must arm teachers with the knowledge, skills, and supports they need in order to make change happen. New classes, assessments, and innovative curriculum can only be effective if teachers can use them productively and this requires a continuous and sustained effort on the part of the school leaders (NCTAF, 1996).

According to Lee Shulman, "

the teacher must remain the key.... debates over educational policy are moot if the primary agents of instruction are incapable of performing their functions well. No microcomputer will replace them, no television will clone and distribute them, no scripted lessons will direct and control them, no voucher system will bypass them" (Shulman,1983, p. 504, cited in National Commission on Teaching and America's Future *What Matters Most in Teaching for America's Future*, 1996, p. 9).

## Good Teachers Know Their Subject Matter

Teachers are increasingly accountable for the content of their lessons and students are held accountable for what is presented to them. Early childhood teachers have the additional responsibility to teach content while managing to make the environment conducive to developmentally practice guidelines. When teachers have a solid understanding of their subjects, students have the possibility to understand it too. "The teacher is the defining factor in the classroom. Although it may sound trite and obvious, students are more likely to learn if teachers teach content" (Seefeldt, 2005, p.21). According to Will Rodgers, "You can't teach what you don't know, anymore than you can come back from where you ain't been."

Harvard professor Ronald Ferguson analyzed over 900 school districts in Texas

in a study designed to look at teacher influence in the classroom (Ferguson,1999, cited in Jolly, 2005). Researcher Linda Darling-Hammond reported that in this study the effect of teacher knowledge and skill was so strong that, "after controlling for socioeconomic status, the large disparities in achievement between black and white students was almost entirely accounted for by the differences in qualifications of their teachers." (Darling-Hammond, 2000, cited in Jolly, 2005 ).

In a study by Judith Langer, similar results were found in schools that were not low-achieving. She compared student performance in reading, writing, and English in 88 classrooms in four states. Over a two-year period, Langer found that student achievement was higher in classrooms with more skilled teachers. The immediate and clear implication is that more can be done to improve education by improving the effectiveness of the teachers that by any other single factor (Langer, 2002, p. 63).

According to the National Staff Development Council Standards for Staff Development in the 2001 revision,

"successful teachers have a deep understanding of the subjects they teach, use appropriate instructional methods, and apply various classroom assessment strategies. These teachers participate in sustained, intellectually rigorous professional learning regarding the subjects they teach, the strategies they use to teach those subjects, the findings of cognitive scientists regarding human learning, and the means by which they assess student progress in achieving high academic standards."(p. 32).

According to the NCTAF (1996):

At a time when all students must meet higher standards for learning, access to good teaching is a necessity, not a privilege to be left to chance. And

competent teaching depends on educators who deeply understand the subject matter and how to teach in ways that motivate children and help them learn. Like doctors, engineers, and other professionals, teachers must have access to high quality education and career-long opportunities to update their skills if they are to do their jobs well. In addition, quality controls must work to ensure that those who cannot teach effectively do not enter or stay in the profession ( p.6).

The bottom line is that for students to consistently achieve at higher levels, a school must have a faculty of teachers who continually work on and improve their own knowledge and expertise in content, teaching strategies, and assessment. No initiative or program a school adopts will substitute for effective teachers who have the knowledge and skills to help their students master subject matter. Hiring skilled teachers and providing them with professional development that enhances their content knowledge and their understanding of the teacher dispositions that enhance relationships and learning is "job # 1" for a successful school.

Good Teachers Help Students Make Connections

Students need content, but they must have a way to make connections between their lives and experiences and the subject matter being introduced. If they are merely "memorizing for the test" true learning is not taking place and the knowledge will not be sustainable.

Research has discovered a great deal about effective teaching and learning: We know that students learn best when new ideas are connected to what they already know and have experienced; when they are actively engaged in

applying and testing their knowledge using real-world problems; when their learning is organized around clear, high goals with lots of practice in reaching them; and when they can use their own interests and strengths as springboards for learning (Resnick,1987;Good & Bropshy, 1986; Braddock & McPartland, 1993; Lee, Bryk, & Smith, 1993; cited in What Matters Most: Teaching for America's Future, 1996, p. 11).

Research confirms that teacher knowledge of subject matter, student learning, and teaching methods are all important elements of teacher effectiveness (Darling-Hammond, (1996), cited in *What Matters Most: Teaching for America's Future*, 1996, p. 11). In order to be effective in the classroom, a teacher must possess high levels of knowledge and be able to present it in clear, challenging, and compelling ways. They must know how each student in the classroom learns and make ideas accessible to each learner, regardless of the ability of that student. "Expert decision-making lies at the heart of effective teaching" (Bredekamp & Copple, 2009, p. 5).

## Good Teachers Analyze and Individualize

In an age where accountability matters in every classroom and in every school, good teachers are continuously analyzing data and interpreting it in order to make decisions about instruction. In effective early childhood classrooms, this accountability must also include careful observation of individual students and the implementation of good questions to help scaffold learning.

Joyce and Showers (1995) have described an effective teacher as one who teaches the classroom as a whole and groups students for activities stemming from the foci that are developed, presents information or skills clearly and animatedly, keeps the

teaching sessions task-oriented, are non-evaluative and keep instruction released, have high expectations for achievement, have fewer behavior problems as a consequence of good teaching (p. 6).

In *What Matters Most: Teaching for America's Future* (1996) the report quotes Berliner (1986):

> Expert teachers use knowledge about children and their learning to fashion lessons that connect ideas to students' experiences. They create a wide variety of learning opportunities that make subject matter come alive for children who learn in very different ways. They know how to scaffold a student's learning so that their beginning steps can progress toward more complicated ideas and performance. They know how to diagnose sources of problems in students' learning and how to identify strengths on which to build. These skills make the difference between teaching that creates learning and teaching that just marks time ( p. 9).

Scott McLeod from the University of Minnesota Technology Leadership Initiative (2008) states that teachers who have adopted a results orientation continually seek out evidence about their effectiveness and then throw out the strategies that are proven to be ineffective and modify those that working so that they continually see better results. When teachers use data to drive instruction effectively they are always seeking ways to get better results for their students. "These teachers also are willing risk-takers who understand that trying something new and different may be the only path to improved outcomes" (p. 2 ).

According to Stipek & Byler (1997) teachers of young children are making decisions throughout the day and these decisions are "sometimes made in split seconds in the context of a room full of children with varying and significant needs" ( p. 305).

While this may also be true for teachers who work with older students, the reality is that in an early childhood classroom, the children are much more dependent on the teacher to meet their basic needs and meeting these needs must be coordinated with the teaching of academic skills. "Good teachers know well what each child knows and understands, and they use that knowledge to plan appropriate and varied learning opportunities that are embedded in contexts and activities that make sense to young children" (Stipek, 2005, p. 7).

## Good Teachers Keep Getting Better

Good teachers are life-long learners. As students and society changes, a truly effective teacher changes too. The methods that work for one group of students or even one individual student is not the method for all students. Simply printing out the lesson plans that were used the year before is not the way that great teachers operate.

Mike Schmoker (1999) has said that

"if educators constantly analyze what they do and adjust to get better, student learning will improve. By focusing initially on small, rapid improvements and then building upon those toward an ongoing process of continuous reflection about classroom instruction and student learning outcomes, teachers across the country are significantly impacting student achievement. When these teachers also are able to participate in professional learning communities and collaboratively identify and implement effective, strategic instructional interventions, their schools are not only surviving this new wave of accountability but indeed thriving in it." (cited in McLeod, 2008, p.9).

Good Early Childhood Teachers

Early childhood teachers who successfully navigate the complex system of curriculum, assessment, and accountability understand that there are fundamental differences in the way that they must present material, develop relationships with students, and interact with families. Using methods and curriculum that are not designed for preschool children is a recipe for disaster. According to Bowman et al (2001)

> While understanding of teaching and learning in the preschool years has broadened considerably, increasing knowledge suggests just how challenging is the task of the preschool teacher. There are no magic bullets, no right curriculum, no best pedagogy. We know that children can learn a great deal in the care of an adult who is tuned into the child's current level of development and his or her developmental challenges. We know that when carefully supported or scaffolded, children can be happily engaged in relatively complex thinking and problem solving. Sensitivity to individual children's current competence may be one reason for the links between developmental outcomes, positive caregiver behaviors, and formal professional education that is observed in empirical research (p. 234).

"Some of the best and most important teaching occurs when teachers as individuals or as members of groups push the boundaries of accepted curriculum" (Mardell, 2007, p.10). Teachers must constantly evaluate the content they are teaching and the manner in which they are delivering it. In *Developing Constructivist Early Childhood Curriculum* (DeVries, Zan, Hildebrandt, Edmiaston, & Sales, 2002) the

authors describe how an early childhood teacher in an inquiry-based classroom might approach the question of choosing content:

- Does the content promote open inquiry? Or do I wish to *lead* my students to comprehend a specific idea?

- Is the activity appropriate to the intellectual abilities of my children? Is it too difficult, abstract, or sophisticated? Or is it too simple?

- Does the activity allow for a wide range of possible responses? Or does it lead to a single, correct answer?

- Will the activity lead to new insights and awareness? Or does the activity stay with material that is familiar and well-known?

- Will the activity provoke the children's curiosity, engage their attention, and sustain interest? Would I be interested in it? Or is the activity boring or of only momentary interest?

- Does the activity allow *children* to do most of the thinking? Or is the activity teacher-centered? (p. 42).

According to Copple and Bredekamp (2009) "to be an excellent teacher means being intentional" (p. 33). "Teaching young children takes a great deal of skill. Preschools that are good learning environments for adults are likely to be good learning environments for children" (Stipek, 2006, p. 747). Chen & McNamee (2007) wrote that there are many elements to good teaching including the teacher's ability to figure out what and how children are learning, what obstacles individual children may have in the way of their learning, and how to scaffold learning for students in order to capitalize on their strengths. They believe that good early childhood teaches must be good diagnosticians with insight into how children are learning and how to reach their

fullest potential.

Judy Harris Helm (2004) has described the careful attention to a balance between "teacher-determined content and instruction of single skills and content" (p. 59) and a teacher-directed or child initiated approach in her work on projects. According to Helm, when class work never ventures beyond this single-concept, didactic way of teaching, teachers limit children's opportunities to develop the high-level thinking skills of analyzing, hypothesizing, predicting, and problem solving. Although the didactic, formal methods of instruction in discrete skills may yield better results on standardized tests, they have not proven to benefit children in the long term (Golbeck, 2001; Marcon, 1995, 2000, cited in Helm, 2004).

According to Eleanor Duckworth (1972, 1996)in her influential book,

> Certainly the material world is too diverse and complex for anyone to become familiar with all of it in the course of an elementary school career. So the best one can do is to make such knowledge, such familiarity, seem interesting and accessible to the child. That is, one can familiarize children with a few phenomena in such a way as to catch their interest, to let them raise and answer their own questions, to let them realize that what they can do is significant so that they have the interest, the ability, and the self-confidence to go on by themselves ( (p. 225).

## Relationships Matter

The adult-child relationship is increasingly recognized as an important indicator of a successful classroom. In recent years, researchers and policy makers have focused attention on the emotional climate of the preschool classroom as an important predictor of young children's socio-emotional adjustment and early learning (Goldstein et al, 2001; Pianta et al, 2005 as cited in Raver et al, 2008).

Bredekamp & Copple (2009) describe described the way in which teachers of young children must develop relationships within the classroom:

"To be effective, teachers must get to know each child in the group well. They do this using a variety of methods- such as observation, clinical interview, examination of the child's work, individual child assessments, and talking with families. From the information and insights gathered, teachers make plans and adjustments to promote each child's individual development and learning as fully as possible" (p. 9).

"Self-confidence is engendered better in classrooms in which all children's academic achievements are celebrated than in classrooms where only the best performance is praised, rewarded, or displayed on bulletin boards" (Stipek, 2006, p. 744). "Responding to each child as an individual is fundamental to developmentally appropriate practice" (Bredekamp & Copple, 2009, p. 9).

In order to be successful in the school environment, children must feel that their efforts are recognized and must trust the adults who provide their care and education. When this element of developmentally appropriate practice is ignored, children are unable to realize their potential.

<div align="center">Systems Theory</div>

Robert Pianta describes a multilevel systems theory for understanding children's development and learning within the context of four different system levels. The most distal level includes the culture and community with the specific systems of school, neighborhood, and church. The second and third levels include the smaller social groups including classroom, peers, and family, and the dyadic systems that include teacher, friend, and parent interactions. The fourth system he defines as the individual

child's biological and behavioral systems. According to Pianta, all of these levels
interact with one another and affect the child in various and idiosyncratic ways (Pianta,
1999, as cited in Stormont et al, 2003).

While many of these systems can affect the teacher and the student both directly
and indirectly, the teacher has little influence on the systems outside of the classroom.
Many systems exist inside the classroom that the teacher can impact greatly, including
small group interactions, interactions with peers and friends, and the teacher-student
interactions (Starmont et al, 2003). Through positive interactions with children,
teachers can teach important competencies that may protect children from developing
or sustaining problems (Pianta, 1999 as cited in Starmont et al, 2003). "The ease with
which biological interpretations are made for children's school-related problems (e.g.,
reading failure, behavior maladaptation) reflects an unfortunate inclination to attribute
the cause of problem outcomes in schools to forces that schools cannot influence or
control" (Pianta, 1999, p. 32).

## Routines and Schedules

Routines and schedules are important in every classroom, but in the early years,
establishing and implementing routines is essential in order for children to develop
school behaviors. Bredekamp and& Copple (2009) describe the importance of the
teacher's understanding of the make-up of the group and the daily routines in a
preschool classroom:

> An effective teacher begins by thinking about what children of the age and
>
> developmental status represented in the group are typically like. This
>
> knowledge provides a general idea of the activities, routines, interactions,
>
> and curriculum that will be effective with that group. The teacher must also

consider each child, looking at the child as an individual and within the context of family, community, culture, linguistic norms, social group, past experience (including learning and behavior), and current circumstances. Only then can a teacher see children as they are to make decisions that are developmentally appropriate for each of them ( p. 10).

Teachers must develop and maintain an ongoing routine that is fundamentally flexible and yet undeniably present. Unless this principle is adhered to, young children's needs will not be fully met in any early care or education setting.

## Adult-Child Relationships

Development of a positive adult-child relationship is the most essential and yet the most difficult thing a teacher does in the classroom. A teacher can promote the adult-child relationship and successful peer interactions in the classroom by engaging with children at times as a peer, facilitating conflict resolution when self-regulation fails, and providing a classroom environment where cooperation between adults and children and among children themselves is expected and facilitated (DeVries & Zan, 1994).

Marilyn Watson (2003) describes  some key points for teachers to keep in mind when building the adult-child relationships that are necessary in the classroom:

- Remember that all children, even those who appear aloof and defiant, want to be loved and protected by caring adults and want to fit in with their peer group.

- Examine and revise your working model of children by reflecting on how your personal history might influence your attitudes and understandings.

- Remember that all children are alike in their need for autonomy, belonging, and competence and that each child is unique in skills, intelligence, temperament, culture, and life experience.

- Find natural ways to get to know each student personally.

- Find ways to get to know and work with students' families.

- Help your students see that you care about them, and share your own life with them to give them an opportunity to know you (p. 53).

Developing Relationships with Students who Experience Difficulties

According to Marilyn Watson in her book *Learning to Trust,* wrote, " It's clear from attachment theory research that school readiness is not simply a matter of having heard lots of stories and being familiar with numbers and letters" (2003, p. 279). Children must also be able to regulate their emotions and behavior, form trusting relationships with others, and to seek help and support when needed. In addition Watson states that:

Especially troubling is the fact the finding that children who lack the emotional and social qualities to form positive relationships with others are also less likely to have acquired from their parents or caregivers the literacy, numeracy, and problem-solving skills needed for academic success. Children with insecure attachment relationships will have three huge deficits to overcome when they enter school: they will have little ability to regulate their own behavior and emotions, they will find it difficult to trust their teachers enough to use them as a secure base for learning, and they will have acquired fewer skills and less general knowledge on which to

build their school learning (p. 279).

of Duckworth (1996): "The development of intelligence is a matter of having wonderful ideas and feeling confident enough to try them out, and schools can have an effect on the continuing development of wonderful ideas (Duckworth, 1996, p. 10).

## Chapter Summary

In this chapter I have reviewed what the research says about the importance of the school and building culture in the development of a professional learning community and then examined the importance of staff development that addresses the questions teachers most want answered. I discussed the role of the teacher in the classroom, in terms of content knowledge, teacher dispositions, and adult-child relationships and then focused on some issues specific to early childhood teachers both in terms of staff development and in the area of relationships. These issues will be important in the development of the classroom application in Chapter V as I describe the team's efforts to develop a system that is developmentally appropriate and meets their requirements.

Chapter V

Classroom Application

Introduction

In this final chapter, I will describe the history of the data-driven decision-

making process for the school district and building where this early childhood

education team is located and the principles that guide the practice of the teachers on

the team. I will then describe the team, the change efforts in which they have recently

been engaged, and the efforts toward collaborative team building that they have

engaged in over the past three years. Next, I will discuss the knowledge gained during

professional development opportunities regarding DDDM, the steps taken during this

first year of their participation, and the team's accomplishments during year one.

Finally, I will describe the "ah-ha" that occurred for this group of early childhood

teachers as they worked to develop the end-of-year report for the district. I will then

outline a plan for implementing the process of "looking at student work" that they have

committed to. The appendix includes two teacher-developed protocols that will be used

in an attempt to find a "good fit," lists of questions to be used to guide participants in

the process of looking at student work, as well as the reporting forms developed for

this team, a reflection journal to assist them in thinking about the process, and meeting

agendas for both DDDM meetings and looking at student work meetings.

History of District and Building Efforts

The change process is never easy for any group of seasoned professionals.

Teachers, in particular, can be resistant to change, perhaps due to the frequent

directional changes that schools have traditionally engaged in, the lack of a shared

vision in some buildings, infrequent opportunities for professional development that is focused on student results, and few opportunities for collaboration regarding data or student improvement. Wagner et al (2006) outlineds these as goals to help teachers strengthen instruction and build community. When these disciplines are lacking in a school community it is difficult for teachers to come together to focus on what really matters. It may also help to identify where some of the intra-personal and interpersonal conflict about change has come from for this school and the early childhood team in particular.

The school district that employs this group of teachers historically has not included the early childhood programs when planning for system-wide changes. The leadership in the department has been largely assigned to dissemination of information and is not always cognizant of the day-to-day workings of a preschool classroom. The periodic departmental meetings have not included the type of professional development opportunities or discussions about teachers' work that building level teams do. The team leader meetings held at the building level are centered on information exchange or planning for future activities such as field trips and parent meetings. Teacher time is always a factor, but the fact that early childhood classroom schedules are dissimilar makes finding time for additional meetings unusually problematic.

The teachers do have common standards, but no real curriculum and so there has not been a shared vision of good teaching. There is assessment data, but it is somewhat subjective and the training in how to use the assessment data has not been effective. There was some "parking lot" talk about student results and urgency for instructional improvement, but there was no real data to support change or to demonstrate an increase in student achievement. There has been no obvious vision about the results

expected in the district early childhood programs. Teachers often express a feeling that what they do is not important to the district decision makers and the building principals.

The "vertical alignment" between preschool and kindergarten has not been evident, especially in the *Reading First* schools. The vertical alignment attempts have been decidedly from top to bottom rather than with a true sharing of vision between teams. This early childhood program has recently attained NAEYC accreditation which insists upon developmentally appropriate practice and the teachers have adopted an inquiry-based approach to learning in order to complement their beliefs about how young children learn, however the elementary programs have a more skill-based curriculum focused on improving scores on standardized tests. Looking at individual student data has taken a backseat to looking at classrooms as a whole.

Recently elementary teachers have focused on some research-based practices for effective teaching and use of common formative assessments given frequently in order to guide instruction. Kindergarten and first grade teachers have also expressed an interest in the Handwriting Without Tears curriculum adopted by the preschool teachers. This is the first time that vertical alignment has visibly gone in both directions.

The early childhood task force has also been addressing standards by comparing the Iowa Early Learning Standards to the Waterloo Kindergarten Standards in order to determine if there is alignment between the two. So, for the first time there is acknowledgment that preschool and kindergarten in the district need to complement one another.

It is becoming clear that According to Senge (2000) schools can be renewed and that significant change can occur by taking a learning orientation (Senge, 2000). This means involving everyone in the system in expressing aspirations, building awareness,

and developing their capabilities together. The early childhood teachers here have made a commitment to making their preschool programs a learning environment. The fact that this early childhood program functions as a "school within a school," and that the elementary teachers have been expected to use data to make decisions for some time, makes the decisions about the direction they want their learning to take more necessary. Administrative support has been directed towards the district-mandated data- driven decision-making model which will require that the teachers be self-directed during team meetings when trying to uncover the most recent research about programs who may have pursued a similar course of looking at data or individual student work in a preschool setting.

Some of the attributes outlined by recent research in the field of school reform have already been realized by the early childhood team in their adoption of a framework for meeting agendas that enables time to be used as efficiently as possible. Some of the benefits of establishing guidelines include a defined purpose, collaboration and sharing of ideas, a willingness to take risks, discussing each other's practice, trust and respect, and reflective dialogue. These teachers have already begun to work together in an atmosphere of support and trust. Wagner et al (2006) state that teachers must"be sure that the commitment you have chosen is one that feels powerful and that is likely to yield rich learning and progress (p.24).

Staff development will continue to be separate for early childhood teams and meetings at the district level and the building level will be focused on data from K-12 classrooms for the present. District administrators are currently discussing the addition of preschool data and in a recent visit from state SINA officials to this school, it was noted that the preschool teachers were meeting and reporting data for the first time.

One member of the SINA team expressed her congratulations that the preschool teachers had initiated this endeavor and that they were now included in the training and in the collection of data.

One benefit that could come from the pursuit of this endeavor is that if and when early childhood programs are required to provide student data at the district level, the teachers will have developed a plan for accomplishing this in a developmentally appropriate manner with the assessments and curriculum used in early childhood.

Description of Early Childhood Team

Development of a true learning community is a daunting task and requires commitment from everyone involved. The early childhood team being described in this paper has made the commitment to improve their practice by looking at student data and linking assessment to lesson planning and the development of strategies to improve their practice.

Their commitment to previous tasks such as the National Association for the Education of Young Children (NAEYC) accreditation process, training for the Parents as Teachers model for home visitation, implementing the Work Sampling System and portfolio assessments, and embracing the co-teaching model with full inclusion of students with disabilities, suggests that when this team commits to something they are ready to do the necessary work to see that it is accomplished with fidelity.

The relationships built over the last two years also suggest that team members realize how fortunate they are to work in a building with an early childhood team rather than being isolated in a school with only one early childhood classroom or in a building where not all team members do not subscribe to the habits of life-long learning.

To continue to grow as professionals under some adverse circumstances such as lack of administrative support, inadequate facilities, lack of funding, time constraints, and children and families with intense needs, teachers need to get into the habit of reflection and to begin to collaborate with colleagues in a meaningful way. Costa & Kallick (2000) suggest that "developing habits of continual growth and improvement requires self-reflection. As we as individuals, staffs, and organizations reflect on our actions, we gain important information about the efficacy of our thinking" (62).

The four teachers on this team are all informed professionals with an admirable work ethic and a commitment to providing developmentally appropriate programs to the children and families being served. One of the teachers has been eager to make some changes in the daily routine and to add some additional literacy, math, and science activities to the curriculum. The second teacher is more resistant to change, but when she is able to observe results from the efforts to infuse new ideas into the curriculum she is willing to include these ideas to her daily lessons. The third teacher (and team leader) is confident about her teaching, but also a life-long learner who is motivated to try new ideas if left on her own to figure things out. The fourth teacher is relatively new to the team and eager to add her ideas to the curriculum based on her experiences as a teacher in a demonstration school developed and operated by the local university and her experience in both inclusive and self-contained special education programs.

The early childhood team began to communicate about the changes that could be made in order to improve student learning and that would capitalize on the strengths of each team member. In addition, they were all motivated by the desire to have a comfortable work place and to have an exemplary early childhood program that would

meet the needs of the diverse student population served by the four programs, would

prepare the students for the next environment, and would provide an opportunity for

rigorous and relevant learning for the pre-service teachers placed in the classrooms by

the local state university.

These changes and the communication that enabled the teachers to focus on

improving student learning would appear to be a great start to the process of learning

to make data-informed decisions and to continue to develop a learning community.

During the interview process that was initiated by one member of the team, all three of

the general education preschool teachers expressed a desire to find ways to align

assessment with the curriculum and to improve student outcomes as a result of this

alignment.

However, as in many organizations, both large and small, the "frames" of each

teacher were somewhat discrepant due to their diverse backgrounds and training. For

this reason the team's definition of developmentally appropriate practice was not

completely aligned and the opportunities to come to a shared understanding had been

limited to monthly team meetings and "parking lot" conversations. Even at these

scheduled team meetings time was not usually allocated for discussion of curriculum,

lesson planning, or student data.

Another concern and a matter that increased confusion in the classrooms was

that there were no clearly defined strategies for improving teaching and learning and

there was little leadership from the early childhood department or the building

administrators on curricular issues for early childhood teachers. The district had

selected *The Creative Curriculum* as the designated early childhood curriculum, but

had provided no training for new employees on the implementation of this curriculum

and relatively little training for veteran teachers.

New teachers were not provided with a copy of the *Creative Curriculum* or of the Iowa Early Learning Standards that had been adopted by the school district. In fact, when the fourth member of the team was hired, there was no orientation for early childhood teachers to discuss curriculum and the standards and benchmarks such as that provided for elementary teachers. Teachers who were new to the district or the position were expected to "hit the ground running" or to rely on team members to mentor them with no additional time or monetary compensation.

## History of Change Efforts

In the last three years, three conditions have increased the urgency and motivation to focus some time on the "change quotient." One of these was the inclusion of students with disabilities into the classrooms and the addition of an early childhood special education teacher. The district expectation was that this teacher would have a co-teaching relationship in the preschool classrooms, but initially there was no formal training provided on the co-teaching model. The team was left to develop this complicated relationship independently during the first year and was offered some training by the Area Education Agency during the second and third year. This led to some intra-personal conflict for all of the teachers and interpersonal conflict within the early childhood team. This conflict would eventually lead to some positive changes that took shape over time.

The second factor that has contributed to the urgency for collaboration and change is the district decision that the early childhood programs housed together with the state's Shared Visions programs would enter into the accreditation process with the National Association for the Education of Young Children (NAEYC). This decision

was made due to the nature of the state funding which required this accreditation and because the district is committed to improving the quality of the preschool classrooms it operates. The accreditation process has recently been made much more rigorous than it was previously when the teachers from these programs had applied for and were granted accreditation. The process is arduous and time-consuming. Teachers are expected to complete the multiple steps of the process with little training, no extra time, and no decrease in the current workload. While all of this is stressful, it has also caused the team to pull together and use their strengths to develop a plan that could be completed in a timely manner. Each team member has had a voice in the process and this has helped to equalize them while identifying their differences in practice and in philosophy.

The third factor in this decision is that these early childhood teachers have recently been included in staff development opportunities organized as part of the building SINA plan. In the past, the staff development was offered to the K-5 teachers only, but since the district has become a PreK-12 district this school year, early childhood staff have been included in the staff development plans. Early childhood teachers are not currently required to engage in the data-driven decision-making process in all elementary schools, but department leaders have encouraged teams at the elementary schools where there is administrative support to begin to look at student data in a more systematic way. There is an understanding that this will soon be a requirement for all early childhood teams.

Zmuda, Kuklis, & Kline (2004) describe a cycle for a competent system with conversations centered on continuous improvement. The cycle begins with identification of the core beliefs of each member and the development of a shared

vision. The participants then monitor the data in order to identify habitual practices, form an action plan to include alternative practices and then continue to monitor the data to develop a shared vision for change (p. 90).

This process is reflective of the conversations this team engaged in as they began to determine what the important questions were for them as a team in the initiation of a data team.

<div align="center">Data Team: Year One</div>

In August 2008, early childhood teachers were trained in data-driven decision-making as part of district staff development opportunity for the teachers at the building where the team is housed. The staff development was included in the building SINA plan in order to facilitate school improvement and increase student achievement. This staff development was the impetus for the initiation of the early childhood team's own data team and becoming part of the building's data team process. The district provided time after the building level training to organize the process for the year, assign data team responsibilities, and decide on the content area(s) to be addressed. The building leaders including the principal, assistant principal, and reading coach assisted in the organizational process, provided coaching for the team, and answered questions generated by the discussion and the presentation.

Teachers used information gathered at a meeting with the building kindergarten team during the previous spring to discuss vertical alignment between kindergarten and preschool. At that meeting, kindergarten teachers indicated that in the area of literacy, early childhood students demonstrated literacy skills beyond what was expected for entering kindergarten, but that in the area of math and numeracy skills there was little difference between students from this preschool and others entering kindergarten. This

information prompted the early childhood team to focus on math to start the process of data-driven decision-making.

In March, all of the staff had the opportunity to participate in building-level staff development based on some of the work done by Marzano et al (2003). The staff had been engaged in a book studies and to further understanding and increase fidelity of implementation, a former teacher/administrator with the district, was engaged to determine the needs of individual grade-level teams to help them with the implementation of some of the specific strategies outlined in the book.

It was determined that the focus for the preschool team would be nonlinguistic representation. The facilitator spent three hours with the team identifying ways that they could align their current curricular goals with the use of additional nonlinguistic representation. They were able to devise a plan that would incorporate the goals of the decision-making process with the "assignment." The team decision was to determine what strategies preschool students were using when counting during classroom activities and during assessment and then share the findings of each classroom with the entire team. The "product" would be a poster or teacher-made book with photographs of students engaging in the strategies so that the "counters" with fewer strategies or less effective strategies could benefit from the strategies that the proficient "counters" were using.

There was additional discussion about how this might look in the classrooms and teachers decided that during small group time center time they would try using "counting bags" developed during the summer as part of the math curriculum during small group time center time. Teachers agreed that each classroom teacher would rotate groups so that each student was able to spend time in the counting activity and that the

teacher in each classroom would be responsible for the actual data collection and anecdotal records.

Vocabulary would be identified and replicated in each classroom in order to determine if the application was successful. Teachers developed a script that each would use in order to gather data. The poster or book will be called "What Do Good Counters Do ?". Teachers would do further reading to determine what the research says about strategies used by four and five year olds who are developing counting skills. The teachers identified several strategies that they have already observed in their classrooms: putting items in a line, moving items from the large group to the opposite side as they count, counting out loud, counting in head, recounting, partner check, finger strategy of placing an item near the tip of each finger, and use of a number line.

Teachers met again after the information was gathered and discussed the strategies they observed students using and determined that there was less variation than they had anticipated. Most students used the strategy of moving the items being counted from one side to the other as they counted or lined the items up before they began counting. One strategy that was observed in an ELL student was to sing the numbers as she counted the objects, which was a strategy the teachers had not anticipated. Another strategy that was unique to one student was to place his fingers on the table and place the objects in one-to-one correspondence with the fingers. The teachers further discussed observations of less proficient counters and determined that lack of a strategy was a common variable among these learners.

## The "ah-ha"

The teachers used this observation to generate ideas about other observations they had made as a result of the decision-making cycle. They looked at the reporting

forms required by the district and the revised form used by the kindergarten team and there was an "ah-ha" moment as they saw how the use of the form might be preventing them from realizing their initial goal of focusing on practices that would help them to remain developmentally appropriate as they looked at student data.

The team leader then asked the question, "is there a way that we can fulfill the obligations of our building's SINA plan and the district's goals of looking at student data to make informed decisions and focus on individual student work?"

The decision was made to meet with the principal to ask this question and to formulate a plan for further development of their collaborative team. This discussion took place during common planning time and the principal was able to assist the teachers in defining what the "have-to's" would be according to the SINA building plan and then how the team might be able to "tweak" the process in order to meet their goal of improving their practice, learning more about how preschool students learn and grow, and fulfilling the obligation they had identified for themselves that they would continue to provide a developmentally appropriate environment for their students.

The decision was made to investigate the process of looking at student work further and to develop a protocol or protocols to be implemented at least once a month during the next school year. The data-driven decision-making process implemented during the first year would be modified slightly and used at an additional meeting each month. In this way, the teachers felt that they would be meeting the requirements set by the school district and developing and using a process that would be developmentally appropriate and would further their knowledge about how young children learn math.

Year One Accomplishments

During the first year as a "data team" this group of early childhood teachers had some major breakthroughs as a team and accomplished some goals they had assigned for themselves. A few of these activities and assignments were of great assistance towards their main goal of "figuring it out" and some were of assistance in the development of assessment and curriculum. The following is a partial list of activities and assignments:

- Attendance at a building-level training by the district data coordinator in the process of data-driven decision-making

- Development of team roles and responsibilities

- Work with a building leader to "tease out" the particulars of the process

- "Vertical alignment" meeting with kindergarten team to determine what was working and what was not working so well in the preschool curriculum

- Decisions made about what areas would be addressed in the first year as a data team

- Addressing questions about the forms to be used for reporting

- Reading and studying the math curriculum identified by one team member as "state-of-the-art" based on research and university coursework

- Discussion of the assessment component of the curriculum to determine where to start

- Ordering the curriculum from the AEA to be viewed and assessed for usefulness

- Assessing students in a new way

• Researching activity ideas and strategies to be used in the classrooms

• Organizing an informal "store" before the winter holidays in order to allow preschool students to practice their beginning counting skills by purchasing gifts for their families

• Sharing ideas and developing a "book" of ideas developed from the research done by team members

• Reviewing the team process and asking for assistance from two building leaders in refining the team techniques

• Developing a list for parents to support efforts in the classrooms

• Dedicating one month's home visits to the math curriculum and ideas for parents to try at home

• Dedicating one "family gathering" to math games and developing some for parents to take home to use

• Development of improved teaming and communication based on a shared vision of what we want to do and learn

• Discussion with building principal about the purchase of a developmentally appropriate math curriculum for the early childhood classrooms based on the data compiled by the team

• Kudos from the SINA evaluation team about the early childhood team's inclusion in the "data book"

In addition the team was asked to answer a list of questions generated by the building leaders as a culminating activity for all of the building-level data teams in preparation for the SINA visit.

Data Team Questions for End-of-Year Report:

1. *What impact did the professional development( RF, EIS, CFA, DDDM) have on instruction? Instruction changed within our classrooms this year in math because of the CFA's we gathered.* The data drives further instruction. We better know how to group students as we scaffold learning with what they do know in order to take them to the next level of instruction. *Impact on student learning?* Students' knowledge of math is greater. We have a more consistent math language not only within each classroom, but with all of the PreK classrooms.

*How do we know?* The results of the CFA's have given us hard data to use to see     growth as well as to compare progress with peers.

2. *How has the fidelity of implementation increased?* The language by which we teach and assess is more consistent with those of teachers on our team. Our level of concern for math knowledge has increased this year as we have more closely examined the progression of learning in acquisition of beginning math skills.

3. *Describe the changes in communication from teachers to parents about math objectives and strategies?* We have developed activities with directions to give to parents periodically throughout the year. We have more knowledge about how children learn math and can share that information more accurately and completely than before using the CFA's and DDDM process in the area of math.

4. *What techniques do the students find most helpful in self-assessing their learning at the end of math lessons?* PreK children have  few techniques yet for self-assessing, but our goal is to empower them to develop strategies that help them to be successful and to acknowledge when those strategies are seen  used so that  they can

begin their own self-assessment. Ex. When a child recounts a set to tell the amount, a teacher will say, "You are doing something that good counters do. You're counting again, just to make sure you have the right amount" or "you move each penny to another place when you count and that is something that good counters know is important."

5. *What impact have the training and use of CFAs had on classroom instruction? on student learning?* Classroom instruction in the area of math has been challenged by PreK teachers as never before. We discovered that there was a step in the early counting continuum that we had overlooked in our teaching. Previously, we thought that once a child could rote count, the next step would be to make a set for a number that is verbally given. We had neglected the intermediate step of being able to count a fixed set and then to tell how many there were in that set. By giving that step instructional time with those students who had missed that sequence in their learning, we were able to help children experience success. This learning was easily assessed and teachers were better able to scaffold learning for these children.

6. *What impact have the math CFAs had on students' math skills, particularly in the areas of computation, measurement, time, and money?* It's difficult to assess such areas for emerging PreK mathematicians, However we teachers are more cognizant of the importance in using finger plays to act out simple addition and subtraction, to offer a variety of experiences for measurement activities in the water center and with linear measurement tools. Our work with number identification may give children beginning knowledge of time. Counting and comparing amounts of pennies that were brought for the "Pennies for Peace" project gives children practical experience with money as does their pretend play in the

restaurant or garden centers. Our students are able to interpret graphing results as they compare groups of items and think about which group has the most, least, etc.

## Our Commitment

The teachers on this team are in agreement that providing a developmentally appropriate curriculum is a central theme and they want to avoid any type of scripted teaching in their preschool classrooms. They agree that they will continue to strive for the kind of early childhood programs that the NAEYC standards are advocating. These include, but are not limited to investigations and projects, democratic classrooms where students help to set the rules, rigorous science and math curriculum that supports young children by providing them with interesting materials and authentic and relevant information, natural literacy that is infused across the curriculum, and opportunities to develop relationships with caring adults and peers from a wide range of backgrounds and abilities.

Gaye Gronlund (2006) describes the ideal in developmentally appropriate early childhood curriculum:

Quality preschool programs embrace curriculum that recognizes that young children need lots of activity, manipulation of objects, interaction with caring adults and peers, exposure to books, music, and nature, and opportunities to play indoors and out. They may use a combination of curricular approaches that incorporate learning areas or centers, a balance between child-directed play and exploration and teacher-led small and large groups, content that is sometimes determined by the children's interests, and recognition that learning occurs even in daily routines such as arrival and departure, snacks and meals, hand washing, toileting, cleanup, and transitions from activity to activity (p. 143).

## Year Two: The Plan

So, where will we go from here? The team met for again after meeting with the principal to begin making plans for next year based on what they have learned and what they want to learn. One of the questions answered by the principal in their meeting with her, was regarding the necessity for reporting data in the same way as the other teams in the building. She made it clear that the expectation was that the early childhood team would be required to continue to report pretest and post-test data with a form devised by the team or the template supplied by the district. This data must include:

- goal for the reporting period

- names of teachers present at the meeting

- number of students in each classroom participating in the common formative assessment (CFA)

- percent of students meeting expected growth

- names (initials) of students who are close to expected growth

- names (initials) of students further away from expected growth

- names (initials) of students needing extensive support

- identify the interventions to be used for students who need extra support

- identify the support to be used for students who require extra challenges

- identify the strategies being used to teach/practice the skills

- identify the district standard and objective to be addressed

- Continue to ask the question, "is the data driving our instruction?"

In two subsequent meetings, the team made several decisions about the way that they could fulfill the district and building requirements for data-driven decision-making for their classrooms as a whole and how they might also engage in some action research about looking at individual student work so that they could fulfill their team's and individual teachers' goals of keeping the focus on developmentally appropriate practice. There would be further professional development for the entire staff on increasing teacher expertise in the area of DDDM and on the use of common formative assessments, but the early childhood teachers would need to pursue the goals their team had outlined independently.

The plan for the team included assigning responsibilities and roles, using available SINA funds to order the math curriculum used in the fall and developed by Douglas Clements and Julie Sarama (2006) called *Building Blocks*, reading about and researching some additional early childhood math programs over the summer, and development of some new reporting forms and meeting agendas. The special education teacher agreed to develop a reporting form, two meeting agenda forms, a calendar for the year, a reflection journal, and research existing protocols for looking at student work in order to determine which of these protocols might meet their needs. If none seemed appropriate for early childhood, the team will devise one as part of their action research during the following school year. This will be done after trying out two teacher-developed protocols that have been used in existing programs. As part of their summer planning meeting the team will look over the new forms and design the plan

and meeting schedule for the year.

According to Ben Mardell (2005) from Tufts University Laboratory School, "Some of the best and most important teaching occurs when teachers as individuals or as members of groups push the boundaries of accepted curriculum," (p. 9).

Specific plans for the next year that the team has agreed on:

- The special education teacher on the team will use examples from other data teams to develop a reporting form that better meets the needs of the prekindergarten team and share it with the other team members before summer break.

- A laptop will be used at the meeting to decrease the workload outside of the team meetings for the person responsible for compiling data and reporting it. Team members will share responsibilities for compiling data and reporting to office. Reports will be sent to the principal via email after each meeting.

- The special education teacher will develop a data calendar" so that team meetings can be planned according to the discrepant daily and weekly schedules of team members. It will be disseminated to the group in May and displayed in a common place in the preschool area in the building.

- When the calendar is complete, the team leader will invite the building leaders to attend on a rotating basis in order to assist us with fidelity and to answer our ongoing questions.

- The team will use one meeting per month to compile group data for reporting to the office based on common formative assessments.

- The team will use one meeting per month to discuss student work with the use of protocol developed and disseminated to team.

- The team will participate in professional development opportunities during the coming summer and next year that are specific to the learning team goals.

- Team members will research some books and articles on preschool math development (including the *Building Blocks* information, articles by Clements & Sarama, and the website for NCTM-www.illuminations.org) to read during the summer months and discuss at their summer planning meeting.

- The team leader will gather pertinent data and present it to the principal so that the *Building Blocks* curriculum and supporting materials can be ordered for the coming school year.

- Through ongoing research, team members will add to their toolkit of strategies and ideas for teaching math to preschool students.

- Through ongoing research, team members will add to their toolkit of strategies and ideas for home visits and family gatherings around the subject of math.

- Team members will visit the website www.lasw.org over the summer to watch videos of teams in action as they look at student work and participate in professional learning communities with experience in looking at student work.

- The special education teacher will search for one or two protocols from websites and/or booksin particular the websites www.lasw.org and www.serve.org and the book *Collaborative Analysis of Student Work* by Langer, Colton, & Goff). Teachers will try out" these protocols and then agree to use one of them or develop one of their own.

Rationale for Use of a Protocol:

This team has worked for three years to develop the interpersonal relationships

necessary in order to be able to express opinions and ideas with the assurance that

those opinions and ideas will be accepted and discussed with honesty. The team has

also had time to discuss beliefs about their teaching and about what early childhood

curriculum and developmentally appropriate practice should look like in the classroom.

They have shared the difficult task of achieving NAEYC accreditation with many

hours of work logged and numerous planning meetings where ideas were shared.

During the first year of the data-driven decision-making process they were able

to uncover some new ideas based on the research and discussions generated by trying

out new ideas in the classrooms. These discussions resulted in a change in practice and

higher student achievement in the area of mathematical thinking. They have uncovered

some commonalities and differences in the way that they approach teaching in their

classrooms. They have agreed that there is more work to do and are ready to tackle a

new way of doing business- looking at student work in addition to looking at whole-

group data.

According to the experts at www.lasw.org, a website developed to assist teachers

in the development of professional learning communities, advised that when looking at

student work, a team should use a protocol that has been developed by other teachers

who have used the process successfully or one should be developed by the team to

meet the needs they have. According to the website:

- A protocol consists of agreed upon guidelines for a conversation.
  This structure permits a certain kind of professional conversation to
  occur. The protocol allows the group to build trust by doing

important work together.

- Protocols are the vehicles for building the skills and culture necessary for collaborative work.

- A protocol creates a structure that makes it safe for group members to ask challenging questions of one another and ensures that there is equity and parity in terms of how each member's issues are attended to.

- With the use of a protocol, the presenter has the opportunity to reflect on an issue or dilemma and to also have interesting questions answered of him that may lead to gaining new insight or perspectives.

- Protocols build in a space for listening and actually give participants a "license to listen" without having to continuously respond.

- Protocols assist participants to use time wisely in a place where time is always an important factor in any initiative.

- When using a protocol for looking at student work, the point is not to do the protocol well, but to have an in-depth, insightful conversation about teaching and learning.

In brief, a typical protocol for looking at student work would include:

1. a small group of teachers and/or administrators gathered together in a circle or around a table

2. one teacher is the presenter and brings examples of student work to present to the group

3. a facilitator gets the discussion going and makes sure that the guidelines and agenda for the protocol (that has already been

agreed upon by the group) are followed

4. The protocol specifies the time to be allotted for specific purposes which may include asking a focusing question, presenting the instructional context or the standards for the student work, description of the student work, asking clarifying questions, asking probing questions, providing feedback on the work, reflecting on the feedback, and reflecting on the process.

5. The protocol may last from 45 minutes to and hour and a half.

## Summary of Team Plans

The plan agreed upon is that the team will use the research and resources available to them and attend upcoming professional development opportunities as a team, use Common Formative Assessments along with the district early childhood assessments to obtain the data needed for the "data notebook required in the office, will utilize the building leaders' expertise to continue to hone their professional learning team skill-set, add to their teacher content knowledge by attending early childhood conferences and professional development on the subject of math, and begin to "look at student work in a systematic way based on the information shared and the resources gathered. They will use the team process, the newly developed protocol, and the lists of "good questions" to assist in the development of expertise in this endeavor.

## Chapter Summary

In this chapter, I have outlined the history of the data-driven decision-making process for this school district and the building where the early childhood team is located. I have described the team, the team's previous efforts to improve practice and student outcomes and the process used during the first year of their inclusion in the

data team professional development. I have then described their successes during the first year as a data team and the limitations they have discovered as they continue to attempt alignment between district expectations and their commitment to practice that is developmentally appropriate. I have further explained the *"ah-ha"* the team had during one of the later team meetings where they discussed the "what's missing for them as an early childhood team. Finally, I have outlined some steps the team will be taking in year two of the data team process and included protocols to be used, lists of good questions, facilitator's tips, and some general resources that will be use.

# Appendix

- Protocol for DDDM meetings

- Protocol for "looking at student work" meetings

- Facilitator Tips

- Clarifying Questions

- Suggestions for Participants- Asking probing questions

- Probing Questions

- Questions specific for this team

- Reflection Questions

- Questions for Reflecting on Protocols

- Reflection journal to be used by the team

- Art Shack Protocol

- ATLAS protocol

- Reflection Journal

- Meeting Agenda Form

- Data Team Reporting Form

Agenda and Time Guide for

DDDM meetings

| Activity | Time (45 minutes) |
|---|---|
| Welcome and "how was your day?" | 5 minutes |
| Review of Group Norms | 5 minutes |
| Review of Communication Skill | 5 minutes |
| Reporting of class data from CFA's | 5 minutes per teacher (20 minutes) |
| Group Self-Assessment of use of Norms and Communication Skills | 5 minutes |
| Plan for Next Meeting | 5 minutes |

Team Roles:
- Facilitator
- Timekeeper
- Recorder

Agenda and Time Guide for

"looking at student work" meetings

| Activity | Time (1 hour) |
|---|---|
| Welcome and "how was your day?" | 5 minutes |
| Review of Group Norms | 5 minutes |
| Review of Communication Skill | 5 minutes |
| Analysis of Student Work Samples | 15 minutes per teacher (30 minutes) |
| Debrief | 5 minutes |
| Group Self-Assessment of use of Norms and Communication Skills | 5 minutes |
| Plan for Next Meeting | 5 minutes |

Team Roles:

- Facilitator
- Timekeeper
- Recorder

# Facilitator Tips

(adapted from lasw.org and national School Reform Faculty)

- Take time to clarify terminology

- Alert people to the likely places/points in the protocol which will feel awkward

- Suggest that the presenters physically sit back from the group so as not to have any eye contact when the group gives their warm and cool feedback like when the group gives warm and cool feedback and speaks as if the presenters aren't in the room.

- Remind the group that the point of the last step is for the presenters to talk about what were, for them, the most significant feedback, comments, ideas, and questions they heard.

- Remind people that they can never know everything, but that they can know enough to be helpful.

- Be explicit about your role as a facilitator.

- Remember to debrief each feedback session as a whole group.

# Clarifying Questions

(clarifying questions are simple questions of fact and usually

do not require the presenter to think about the answer)

- How much time did the project take?

- What group format was used? whole group, small group, individual work

- How were the students grouped?

- What resources did the students have available for this project?

- How did you involve families in the project?

- How did you decide on this topic?

- How did you introduce the center or topic?

Suggestions for Participants as they ask Probing Questions:

- Check to see if you have a "right" answer in mind. If so, don't ask it.

- Refer to the presenter's original question or focus point. What did s/he ask for your help with? Check your probing questions for relevance.

- Check to see if you are asserting your own agenda. If so, return to the presenter's agenda.

- Sometimes a simple "why....?" asked as an advocate for the presenter's success can be very effective. Several "why" questions in a row may be necessary.

- Try using verbs: What do you fear? Want? Get? Assume? Expect?

- Think about the concentric circles of comfort, risk, and danger. Don't avoid risk, but don't push the presenter into the "danger zone."

Think of probing questions as being on a contiuum, from recommendation to most effective probing question.

In summary, good probing questions:

- are general and widely useful

- do not place blame

- allow for multiple responses

- avoid yes/no questions

- are usually brief

- move thinking from reaction to reflection

- encourage perspective-taking

## Some examples of probing questions:

(adapted from lasw.org and developed by Gene Thompson-Grove, Edorah Frazer, & Faith Dunne)

- Why do you think this is the case?

- What would have to change in order for....?

- What do you wish for ......?

- What is another way you might....?

- What would it look like if ....?

- What do you think would happen if...?

- How was ..... different from......?

- What sort of an impact do you think.....?

- What criteria did you use to .....?

- When have you done/experienced something like this before?

- How did you decide....?

- What might you see happening in your classroom if....?

- What was your intention when.....?

- What is the connection between..... and .......?

- What might you see happening in your classroom if....?

- What is your hunch about.....?

- What if the opposite were true? Then what?

- How might your assumptions about.... have influenced how you were thinking about.....?

- Why is this such a dilemma for you?

Questions specific to our work:

- What strategy do you think this student was using when he did it that way?

- What did you expect to happen when you grouped students in this way?

- What would understanding of this concept look like?

- What would the evidence be that this student understood the concept?

- How might your assumptions about parent involvement and interactions influenced your decision to approach the activity this way?

- What other approaches have you considered for communicating with parents about how they can be involved in their child's development of this skill?

- How could you assess this student's learning in this center?

- What are the mental relationships that this student had the possibility to construct?

- What other standards could be met during this activity?

- How could you arrange the activity differently so that these standards could be addressed?

- What materials will you introduce next?

- When those materials are introduced, what do you think this student will do next?

- How could you interest other students in these materials?

- How did you or how will you introduce this center?

- What prior knowledge did the student need to have in order to be successful in this center or activity?

Questions for Reflecting on the Process:

As a group, share what you learned about the student, about your colleagues, about yourself. Following are guiding questions for the process:

*Looking for evidence of student thinking:*

- What did you see in this student's work that was interesting or surprising?

- What did you learn about how this student thinks or learns?

- What about this process helped you see and learn these things?

*Listening to colleagues' thinking:*

- What did you learn from listening to your colleagues that was interesting or surprising?

- What new perspectives did your colleagues provide?

- How can you make use of your colleagues' perspectives?

*Reflecting on one's thinking:*

- What questions about teaching and assessment were raised by looking at this student's work?

- How can you pursue these questions further?

- Are there things you would like to try in your classroom as a result of looking at this student's work?

Questions for Reflecting on Protocols

(adapted from lasw.org and National School Reform Faculty)

- What did we learn?

- What worked well?

- Did the conversation move us closer to our goals? How?

- How did the discussion relate to other school issues?

- Did we do what we said we would- in terms of our purposes and our questions?

- How did the discussion relate to other school issues?

- Did we stay on our schedule/timeline?

- Did we actually focus on the students' work or on other issues?

- Did we follow the process as we planned? If not, why?

- How could the process be improved?

- How can we build on this to make examining student work a more frequent and important part of our own work?

# The Art Shack Protocol

(a combination of Describing Children's Work and the ATLAS Process for Learning from Student Work,

developed in the field by educators affiliated with National School Reform Faculty-NSRF)

This process is grounded in description, not judgment or evaluation. The major assumption is that all work bears the imprint and signature of the author and so offers important access to the maker's interest, ways of creating order, and point of view. The purpose is to understand this student's way of knowing.

The process is formal. During the descriptive portion of the protocol, the team speaks in go-arounds. You are free to pass. Everyone listens carefully. There is no cross dialogue. Comments are kept short (if you deep hearing yourself say "and," you've said too much). Use action words, descriptive words and phrases. The chair sets the focus for each round, listens, and takes notes for common ground.

**Getting Started** (10 minutes)

- The facilitator reminds the group of the group norms of collaboratively looking at student work and, with the group, establishes time limits for each part of the process. At this time the tone is set for description through a brief activity or exercise if the participants are unfamiliar with descriptive review.

- The presenter providing the student work gives a very brief statement of the assignment. The presenter should also describe only what the student was asked to do and avoid explaining what he or she hoped or expected to see.

- The presenter providing the work should not give any background information about the student or the student's work. In particular, the presenter should avoid any statements about whether this is a strong or weak student or whether this is a particularly good or poor piece of work from this student.

- The presenter may, at this time, inform the group of the question or dilemma s/he would like the team to consider.

**Examining Student Work (10 minutes)**

- The presenter may choose to read some of the work aloud or have someone else do so. There will be some time for silent examination of the work after reading, or the entire examination time may be silent.

- The amount of time needed to examine the work depends on the amount of student work, complexity, and number of team members.

**Descriptive/Interpretive Round Begin (30-90 minutes)**

- Each round (or rounds if the same focus is used for several rounds) is summarized by the facilitator and the focus for the next round set.

- Facilitator may vary the beginning person for rounds, and change order from clockwise to counter-clockwise.

- Facilitator may choose to insert a clarifying question round, where team members can ask the presenter clarifying questions- not probing questions.

- A pause for the presenter to reflect on what s/he is learning, either silently or aloud to the team, can be interjected into the rounds.

- There is no absolute order, nor focus for rounds, except for literal description rounds, which must always be done: "What do you see? Six colors used: one cloud, two people, one with red pants...."

*Rounds:*

- Literal Description Rounds

- Physical Description.....what do you see?

- What Student is Working on Rounds

- Elements that seem apparent (style, rhythm, tone, form....)

- Tasks student is trying to accomplish

- How the student is visible in the work

- What does the student appear to value? Offer evidence.

- What does s/he know how to do re:skills?

- What does the student seem on the verge of understanding?

- "I wonder"

- Teaching Focus Rounds

- What does the teacher appear to value, with evidence?

- What teacher expectations seem present in the work?

**Hearing from the Presenter** (5-10 minutes)

- At this point, the presenter comes into the discussion by offering any additional background, clarifying information, reflections, etc. that s/he wants the team to know about the work before continuing.

**Implications for Classroom Practice** (10-20 minutes)

Based on the group's observations and interpretations, discuss any implications this might have for teaching and assessment in the classroom. In particular, consider the following questions:

- What steps could the teacher take next with this student?

- What teaching strategies would be most effective?

- What other information would you like to see in the student work? What kinds of assignments or assessments could provide this information?

- What does this conversation make you think about in terms of your own practice? About teaching and learning in general?

**Reflecting on the Process** (10 minutes)

As a group, share what you learned about the student, about your colleagues, about yourself. Use these questions as a guide:

*Looking for evidence of Student Thinking*

- What did you see in this student's work that was interesting or surprising?

- What did you learn about how this student thinks or learns?

- What about the process helped you see and learn these things?


*Listening to Colleagues' Thinking*

- What did you learn from listening to your colleagues that was interesting or surprising?

- What new perspectives did your colleagues provide?

- How can you make use of your colleagues' perspectives?


*Reflecting on One's Own Thinking*

- What questions about teaching and assessment were raised by looking at this student's work?

- How can you pursue these questions further?

- Are there things you would like to try in your classroom as a result of looking at this student's work?


If the group has designated someone to observe the conversation, this person should report his or her observations.

# ATLAS- Learning From Student Work

(Learning from Student Work is a tool to guide groups of teachers discovering what students understand and how they are thinking. The tool, developed by Eric Buchovecky, is based in part on the work of the Leadership for Urban Mathematics Project and of the Assessment Communities of Teachers Project. The tool also draws on the work of Steve Seidel and Evangeline Harris-Stefanakis of Project Zero at Harvard University. Revised November 2000 by Gene Thompson-Grove for National School Reform Faculty- NSRF)

**Selecting Student Work to Share**

Student work is the centerpiece of the group discussion. The following guidelines can help in selecting student work that will promote the the most interesting and productive group discussions.

Choose assignments that involve lots of thinking and that give students some freedom in how they approach the task. Avoid work that consists primarily of answers with little explanation or that involves the application of well-defined procedure. At times it may be useful to share several pieces of student work to show different approaches with the same assignment.

Ambiguous or puzzling work tends to stimulate the best discussions. Since it does not readily match expectations, it encourages close attention to details and affords multiple interpretations. If this feels uncomfortable, it may be useful to start by examining anonymous samples of student work collected from within the group or gathered from other sources.

Another approach for selecting student work is for the group to plan a classroom activity jointly, teach it independently, then bring the student work back to the group for discussion. This approach is a good way to begin examining teaching or assessment practices based on

what the group has learned fro looking at student work.

**Sharing and Discussion of Student Work**

Discussions of student work sometimes make people feel "on the spot" or exposed, either for themselves or for their students. The use of a structured dialogue format provides an effective technique for managing the discussion and maintaining its focus.

A structured dialogue format is a way of organizing a group conversation by clearly defining who should be talking when and about what. While at first it may seem rigid and artificial, a clearly defined structure frees the group to focus its attention on what is most important. In general, structured dialogue formats allot specified times for the group to discuss various aspects of the work.

Consider the student whose work is being examined to be a silent member of the group. Assume, as for any member, that the student is acting in good faith and has put forth his or her best effort.

**Reflecting on the Process**

As a group, share what you learned about the student, about your colleagues, about yourself. Use these questions as a guide:

*Looking for evidence of Student Thinking*

- What did you see in this student's work that was interesting or surprising?

- What did you learn about how this student thinks or learns?

- What about the process helped you see and learn these things?

*Listening to Colleagues' Thinking*

- What did you learn from listening to your colleagues that was interesting or

surprising?

- What new perspectives did your colleagues provide?

- How can you make use of your colleagues' perspectives?

*Reflecting on One's Own Thinking*

- What questions about teaching and assessment were raised by looking at this student's work?

- How can you pursue these questions further?

- Are there things you would like to try in your classroom as a result of looking at this student's work?

# *Early Childhood Data Team*

## *Reflection Journal*

*Name:* _____     *Date:* _____

| | What? | So What? | Now What? |
|---|---|---|---|
| Dates | What is my new learning? <br><br> What did I implement? | How can I apply this to my classroom? What is the reaction (student, teacher, other) to the implementation? | How will I plan to use this in my classroom? <br> How will I plan to use this again? <br> What will I change based on the data collected? |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| Early Childhood Data Team Meeting Agenda | |
|---|---|
| **Meeting Logistics** Date: _____ Starting/Ending Time: _____ Location: _____ Materials needed for meeting: •Handouts •Laptop •Overhead/Screen •Chart Paper/Markers/Easel Preparation in advance of meeting: <br>• Email reminder to participants <br>• Run off handouts/articles <br>• Strategies for Discussion <br>• Classroom Data from implementation strategies <br>• Articles for discussion researched and read | **Roles for Group Members** •Facilitator: _____ •Recorder: _____ •Time Keeper: _____ •Other Participants: _____ _____ _____ _____ _____ _____ |

| Order | Agenda Item | Time | Process | Person Responsible |
|-------|-------------|------|---------|--------------------|
|       |             |      |         |                    |

# Data

# Team

# Reporting

# Form

# Data Team Reporting Form

Date:_____

Members Present

Roles for the Day

Welcome and "how was your day?"

Review of Group Norms

Review of Communication Skills

What District Standard is being addressed?

**Data Collection:**

Goal

CFA

Pre-Assessment Data

| Teacher | # students taking CFA | % of students meeting expected growth | names of students close to expected growth | names of students further away from expected growth | names of students needing extensive support |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Post-Assessment Data

| Teacher | # students taking CFA | % of students meeting expected growth | names of students close to expected growth | names of students further away from expected growth | names of students needing extensive support |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

How will we provide interventions for students who need extra support?

How will we provide support for students who need extra challenges?

_____

_____

_____

**New Goal:** _____

What **strategies** are being used to teach/practice these skills? _____

Strategy 1 _____

Strategy 2: _____

Strategy 3 _____

Strategy 4 _____

Strategy 5 _____

**Results Indicators:** What will you use to determine the effectiveness of your strategies? How will you know if the strategies are successful? Examples may include insight from student work, observational notes, photographs, professional development inservices, etc...

_____

_____

_____

**Interpretations:**

Is more instructional time necessary? Should we try another strategy? What do the results mean for us?

_____

_____

_____

_____

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