University of Northern Iowa

UNI ScholarWorks

Graduate Research Papers

Student Work

2010

Welcome to the Iowa Early Learning Standards: a professional development opportunity

Tammy R. Bormann University of Northern Iowa

Let us know how access to this document benefits you

Copyright ©2010 Tammy R. Bormann

Follow this and additional works at: https://scholarworks.uni.edu/grp



Part of the Curriculum and Instruction Commons

Recommended Citation

Bormann, Tammy R., "Welcome to the Iowa Early Learning Standards: a professional development opportunity" (2010). Graduate Research Papers. 136.

https://scholarworks.uni.edu/grp/136

This Open Access Graduate Research Paper is brought to you for free and open access by the Student Work at UNI ScholarWorks. It has been accepted for inclusion in Graduate Research Papers by an authorized administrator of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

Welcome to the lowa Early Learning Standards : a professional development opportunity

Abstract

In 2006, early learning standards were written in Iowa for children from birth to five years of age; however, very few opportunities were designed to inform early childhood personnel of the existence of lowa's early learning standards, and how they were reflected in early childhood programming. In 2008, a grant from the Iowa Department of Management was awarded to Tammy Bormann of Early Learning and Caring Resources to write a training series for early childhood personnel based on the *Iowa Early Learning Standards; Welcome to the Iowa Early Learning Standards*. In 2010, Tammy worked with Child Care Resource and Referral of Central Iowa to design and offer a *Train-the-Trainer* workshop to provide training to instructors, who contract with Child Care Resource and Referral, on how to instruct the series. This project includes the outline for that *Train-the-Trainer. Welcome to the Iowa Early Learning Standards* and the Train-the-Trainer workshop were guided by three underlying questions: (1) What are early learning standards?, (2) What is contained in the *Iowa Early Learning Standards*?, and (3) What is effective professional development?

University of Northern Iowa Instructional Resources & Tech Svcs - SEC 222 Cedar Falls, Iowa 50614-0609

WELCOME TO THE IOWA EARLY LEARNING STANDARDS:

A PROFESSIONAL DEVELOPMENT OPPORTUNITY

A Graduate Project

Submitted to the

Division of Early Childhood

Department of Curriculum and Instruction

In Partial Fulfillment

Of the Requirements for the Degree

Master of Arts

UNIVERSITY OF NORTHERN IOWA

By

Tammy R. Bormann

December 2010

This Project by: Tammy Bormann

Titled: Welcome to the Iowa Early Learning Standards: A Professional Development

Opportunity

Has been approved as meeting the research requirement for the

Degree of Master of Arts in Education.

12-22-10

Date Approved

12-22-10

Date Approved

12-22-10

Date Approved

Charles R. May

Graduate Faculty Reader

Jill Uhlenberg

Graduate Faculty Reader

Jill Uhlenberg

Head, Department of Curriculum and Instruction

Abstract

In 2006, early learning standards were written in Iowa for children from birth to five years of age; however, very few opportunities were designed to inform early childhood personnel of the existence of Iowa's early learning standards, and how they were reflected in early childhood programming. In 2008, a grant from the Iowa Department of Management was awarded to Tammy Bormann of Early Learning and Caring Resources to write a training series for early childhood personnel based on the *Iowa Early Learning Standards*; *Welcome to the Iowa Early Learning Standards*. In 2010, Tammy worked with Child Care Resource and Referral of Central Iowa to design and offer a *Train-the-Trainer* workshop to provide training to instructors, who contract with Child Care Resource and Referral, on how to instruct the series. This project includes the outline for that Train-the-Trainer. *Welcome to the Iowa Early Learning Standards* and the Train-the-Trainer workshop were guided by three underlying questions: (1) What are early learning standards?, (2) What is contained in the *Iowa Early Learning Standards*?, and (3) What is effective professional development?

TABLE OF CONTENTS

Chapter I		1
	Introduction	1
	Rationale for Project	1
	Importance of Project	2
	Purpose of the Project	3
	Terminology	4
Chapter II		8
	Methodology	8
	Procedures	8
	Literature Review	9
	What are early learning standards?	10
	What is contained in the Iowa Early Learning Standards?	13
	What is effective professional development?	15
	Summary	18
Chapt	Chapter III	
	The Project	20
	Welcome to the Iowa Early Learning Standards Train the Trainer	20
	After the Workshop	32
Chapter IV		34
	Conclusions and Recommendations	34
	Personal Insights	34
	Research Opportunities	35
	Value to Colleagues	35

	Recommendations	36
Refere	ences	37
	Appendix A - Iowa Early Learning Standards	40
	Appendix B - Train-the-Trainer Agenda	88
	Appendix C - Train-the-Trainer Evaluation	90

.

Chapter I

Introduction

The historical background for developing this project began in April 2002 when President George Bush introduced his *Good Start Grow Smart Initiative* to encourage states to develop early learning guidelines, also known as early learning standards, for three to five year old children (Child Care Bureau, 2007). Early learning standards (ELS) address what young children should be learning in quality early childhood settings and discuss what early childhood personnel should be doing to guide the learning process more effectively (Early Childhood Education Assessment Consortium, 2003).

In 2006, early childhood professionals in Iowa wrote early learning standards to address not only the learning needs of three to five year old children within our state, but the needs of infants and toddlers as well. The *Iowa Early Learning Standards (IELS)* are intended to serve as a guide to learning within various early childhood environments resulting in high quality early childhood programs. The *IELS* can also assist parents in understanding what skills and experiences their children need to be successful when entering school-age programs. In addition, professional development opportunities focused on the *IELS* can be designed for early childhood personnel who work in a variety of settings (Iowa Department of Education, 2006).

Rationale for the Project

Early Learning Guidelines for Infants and Toddlers: Recommendations for States (Zero to Three Policy Center, 2008) documented professional development options for early childhood personnel to build an understanding of the ELS in states and to state how standards can be implemented in early childhood programs through professional development activities; however, Iowa did not form any professional development initiatives to focus on their standards.

Nevertheless, professional development must be addressed as professional development is

necessary for all early childhood personnel, no matter how experienced they are (National Association for the Education of Young Children, 1993). Professional development, when focused on early care and education, allows teachers to build their knowledge of children and to create quality learning experiences, as well as develop the skills needed for implementation of quality programs (National Institute of Child Health and Development Early Child Care Research Network, 2001). The National Professional Development Center on Inclusion (NPDCI) defined professional development as ". . .facilitated teaching and learning experiences that are transactional and designed to support the acquisition of professional knowledge, skills, and dispositions, as well as the application of this knowledge in practice" (2008, p. 3).

Importance of Project

The majority of a child's early years are spent in some form of child care setting. Almost 70% of children under the age of six in Iowa need child care (National Association of Child Care Resource and Referral Agencies, 2005). For children to have the best child care experiences, it is important for early childhood personnel to understand quality care and know how to implement quality into their programs. Professional development allows personnel to build their understanding of quality care and to develop skills necessary to implement quality early childhood programs (National Institute of Child Health and Development Early Child Care Research Network, 2001).

"Early learning standards articulate expectations for children's development and learning, and as a consequence, have the capacity to influence the nature of early learning programs and the content of children's daily experiences within the programs" (Scott-Little, Kagan, & Frelow, 2005, p. 44). Thus, it is critical for early childhood personnel to understand early learning standards and to realize the need to support them within their programs. To build this

understanding and the skills necessary to implement our ELS, Iowa's early childhood personnel need professional development experiences that focus on the *Iowa Early Learning Standards*.

One of the important changes that has occurred in early childhood in the last three years has been the revision of the developmentally appropriate practices (DAP) program. This revision resulted from a study of DAP by a select committee of the National Association for the Education of Young Children (NAEYC). This revision has made early childhood personnel more accountable for the way they teach young children. Because of this revision, more professional development about the standards is needed.

Purpose of the Project

In 2008, funding was awarded to me by the Iowa Department of Management to design a training series focused on the *Iowa Early Learning Standards*. The series is known as *Welcome to the Iowa Early Learning Standards*. The series is directed towards anyone working in the field of early childhood, but especially to center and family child care providers and preschool teachers, also known as early childhood personnel. *Welcome to the Iowa Early Learning Standards* is composed of eight, 2.5 hour modules designed for weekly class sessions. The project was completed in February of 2010, but funds were not available at that time to disseminate the series throughout the state.

In April of 2010, Cathy Wheatcraft from Child Care Resource and Referral of Central Iowa contacted me about designing a Train-the-Trainer session for *Welcome to the Iowa Early Learning Standards*. This session would be used to train instructors who contract with Resource and Referral to deliver the series and would, ultimately, disseminate the series statewide. The purpose of this project was to design the Train-the-Trainer session for instructors who contract

with Child Care Resource and Referral (CCR&R) to educate early childhood personnel about Iowa's early learning standards and to learn how the standards are used in their programs.

There were three underlying questions that guided the writing of *Welcome to the Iowa*Early Learning Standards, and subsequently, were supported in the design of the Train-theTrainer session, as well as serving as the research questions for this project. These questions included the following: (1) What are early learning standards?, (2) What is contained in the *Iowa*Early Learning Standards?, and (3) What is effective professional development?

Terminology

- Area In the Iowa Early Learning Standards (Iowa Department of Education, 2006), there are six developmental or content areas: physical well-being and motor development; approaches to learning; social and emotional development; communication, language, and literacy; mathematics and science; and creative arts.
- Benchmarks—Descriptions of skills that can be observed and documented to show a child's performance (Early Childhood Education Assessment Consortium, 2003).
- Caregiving Supports Examples of caregiver skills to support each standard of the Iowa

 Early Learning Standards. These skills include interactions, implementing daily routines,
 and setting up of the environment (Iowa Department of Education, 2006).
- Developmentally Appropriate Practice (DAP) Developmentally appropriate practice provides a framework of guidelines which determine best practice in the care and education of children birth to eight years of age. Developmentally appropriate practice is grounded in research on how young children develop and learn. DAP describes an approach in early childhood that guides teachers in making daily decisions about their teaching practices

- and program settings, based on their knowledge of child development (Bredekamp & Copple, 2009).
- Early Childhood- Includes children from birth to age eight (Bredekamp & Copple, 2009).
- Early Childhood Personnel This includes those who work with young children in center and family-based settings, as well as preschool personnel.
- Early Learning Standards (ELS) Statements describing expectations for the learning and development of young children across the areas of physical, cognitive (general knowledge of the world), social, emotional, and language development as well as children's approaches to learning (Early Childhood Education Assessment Consortium, 2003).
- Instructor This person contracts with Child Care Resource and Referral (CCR&R) to teach training series approved by the Department of Human Services and CCR&R to early childhood personnel.
- Iowa Early Learning Standards (IELS) Developed to serve as a guide to learning within a variety of early childhood environments serving birth to preschool-aged children (Iowa Department of Education, 2006). There are 46 standards which are used with the following six content areas: physical well-being and development, math and science, language and literacy, creative arts, approaches to learning, and social and emotional development. There are 22 standards for infants and 24 for preschoolers.
- National Association for the Education of Young Children (NAEYC) The world's largest organization dedicated to early childhood, founded in 1926 (Bredekamp & Copple, 2009); NAEYC determines what is considered developmentally appropriate in early childhood education.

- Professional Development "Professional development is facilitated teaching and learning experiences that are transactional and designed to support the acquisition of professional knowledge, skills, and dispositions as well as the application of this knowledge in practice" (National Professional Development Center on Inclusion, 2008, p. 3).
- Rationale Written information in the *Iowa Early Learning Standards* that details the research supporting each learning standard (Iowa Department of Education, 2006).
- Standards Define what teachers should teach, what students should learn, and what should be assessed (Scott-Little et al., 2005).
- Train-the-Trainer Train the trainer workshops are used by Child Care Resource and Referral in Iowa to train those who train or instruct others. Attendees to the workshop are trained on an early childhood training series, such as Welcome to the Iowa Early Learning Standards, which has been written for early childhood personnel. The workshop includes examples of activities included in the series, so instructors get a first hand introduction to the topics in which they will be training early childhood personnel. Train the trainer workshops bring together early childhood instructors who contract with Child Care Resource and Referral to offer training series. The workshop equips them and sends them back to train early childhood personnel in their area of the state (personal communication, 2010).
- Welcome to the Iowa Early Learning Standards This is an eight-week training series focused on the IELS. Each session is 2.5 hours long. The session titles include the following: (1) Welcome to the Iowa Early Learning Standards; (2) How Children Learn and the Iowa Early Learning Standards; (3) Developmentally Appropriate Practice and the Iowa Early Learning Standards; (4) Routines, Relationships and the Iowa Early Learning Standards;

- (5) Play and the *Iowa Early Learning Standards*; (6) Curriculum and the *Iowa Early Learning Standards*; (7) Assessment and the *Iowa Early Learning Standards*; (8) Families and the *Iowa Early Learning Standards*. The training series was written by Tammy Bormann and funded by the Iowa Department of Management.
- Young Children According to the National Association for the Education of Young Children (NAEYC), the ages of young children span the human life from birth to age eight (Bredekamp & Copple, 2009).

Chapter II

Methodology

In 2006, early learning standards were written in Iowa for children from birth to five years of age; however, very few opportunities were designed to inform early childhood personnel of the existence of Iowa's early learning standards, and how they were reflected in early childhood programming. In 2008, a grant from the Iowa Department of Management was awarded to me to write a training series based on the *Iowa Early Learning Standards* for early childhood personnel.

I have been an Early Childhood Instructor for 10 years with Child Care Resource and Referral and six years with Des Moines Area Community College. These experiences have allowed me not only the opportunity to instruct, but also to design training for class sessions. I used my knowledge of adult learners to design the training series. This series was completed in February 2010. It is composed of eight training sessions, 2.5 hours each session, designed to meet weekly.

In June of 2010, a Train-the-Trainer program was offered for instructors who contract with Child Care Resource and Referral in Iowa. Over 35 Instructors attended. Some will start teaching *Welcome to the Iowa Early Learning Standards* in the fall of 2010. The writing of the series provided the background information necessary for the design of the Train-the-Trainer session and is discussed throughout this paper.

Procedures

To assist in writing *Welcome to the Iowa Early Learning Standards*, I started reading and becoming familiar with the *Iowa Early Learning Standards* (Iowa Department of Education, 2006). I decided I needed to know more about early learning standards, (ELS) and why they

were developed in order the series to be successful. To build this understanding, I explored the topic of early learning standards online, through UNI Rod Library, and from sources I found referenced within relevant articles. Because early learning standards were a new topic in early childhood, I found a limited number of research-based and peer-reviewed articles discussing early learning standards using these sources.

In addition, I have been training early childhood personnel on developmentally appropriate practices in early childhood since 2001. My bachelor's degree is in early childhood education and after working with young children for several years, I decided to instruct adults who provided the learning and care for young children. Initially, I contacted my local Child Care Resource and Referral office. This contact allowed me to attend train-the-trainer programs in their current series, which not only built my understanding of the series they offered, but also taught me to use teaching strategies with adults, as well. These experiences, as well as relationships I had built with early childhood professionals in my community, led me to teaching early childhood students at Des Moines Area Community College. These experiences of instructing adults became very useful to the design of the series and the Train-the-Trainer project. I also found and used information about the topic of effective professional development online and within the references of articles located online. In addition, the UNI Rod Library provided me with articles that I was not able to access online.

Literature Review

To build this project the following questions needed answered: (1) What are early learning standards?, (2) What is contained in the *Iowa Early Learning Standards*?, and (3) What is effective professional development? The literature review focuses on answering these three questions.

What are early learning standards? Early learning standards define what children should know and be able to do before entering kindergarten (Scott-Little, Lesko, Martella, & Milburn, 2007). They were developed in response to the *Good Start Grow Smart Initiative* put into place by President George Bush in 2002 (Child Care Bureau, 2007). As of 2007, there were 49 states with early learning standards for three to five year old children and 14 states had standards for infants and toddlers (Scott-Little et al., 2007).

In 2003, Scott-Little, Kagan, and Frelow wanted to find out which states had early learning standards in place, to learn how the standards were developed, and how the standards were being used in early childhood programs. Consequently, these authors completed a descriptive study and gathered data by contacting representatives from three different groups in each state: Early Childhood Specialists in the Department of Education, president of each state Association for the Education of Young Children, and chief child care administrators in state-led child care agencies. The study used letters, telephone interviews, and written summaries of the information gained from telephone interviews, which were returned to state contacts to verify and add any changes to the summaries of the telephone interviews. They also asked each group to send copies of the early learning standards for their state along with supplemental materials which supported the implementation of the standards.

Scott-Little, Kagan, and Frelow conducted a quantitative analysis to count the number of early learning standards that exhibited specific characteristics the researchers chose to examine, and they rated the standards on different scales they developed to describe the nature of the standards. The qualitative methods analyzed responses to the telephone interview questions.

They looked for patterns, themes, and categories within the early learning standards obtained from the states. The study revealed that many states had developed early learning standards

supporting a variety of children's learning domains which included physical development, social and emotional development, math, science, creative arts, language and communication, approaches to learning, cognition and general knowledge, and social studies (Scott-Little et al., 2003).

In 2005, Neuman and Roskos completed a content analysis of 43 states regarding the structure of ELS documents. They identified five different descriptive levels that states used to define a standard. These indicators included the following: domain, skill area, an indicator to describe a general skill, an indicator to describe a specific skill, and an example of teacher/caregiving supports. Three primary sources were used within states to determine the developmental domains of their early learning standards: The National Education Goals Panel, the Head Start Outcomes Framework, and states' K-12 subject area standards. The National Education Goals Panel determined five developmental domains of children: (1) physical well-being and motor development, (2) social and emotional development, (3) cognition and general knowledge, (4) approaches to learning, and (5) language and communication. The Head Start Child Outcomes Framework extended these domains to include literacy, mathematics, science, and creative arts (Neuman & Roskos, 2005).

Neuman and Roskos requested standards in three content areas – language, literacy, and mathematics. Forty-three states responded. They found that early learning standards vary widely across states in their organization, structure, resources and audience. They discovered that standards reflected their own unique character and constituency, which resulted from the early childhood expertise and groups involved in the development of the standards (Neuman & Roskos, 2005).

In 2006, Scott-Little, Kagan, and Frelow conducted a study focused specifically on the developmental domains included within early learning standards. They collected documents of early learning standards which were published or in development from state-level organizations. In addition, they used the internet to locate early learning documents which were publicly available.

Scott-Little, Kagan, and Frelow developed a list of knowledge and abilities described within the five learning domains of young children (Neuman & Roskos, 2005) to analyze each document: (1) physical well-being and motor development; (2) social and emotional development; (3) approaches toward learning; (4) language and communication development; and (5) cognition and general knowledge. Their content analysis determined that language, cognitive, and physical domains were emphasized the most within the ELS documents (Scott-Little et al., 2006).

In 2007, Scott-Little, Lesko, Martella, and Milburn conducted a follow-up study to the 2003 study to determine which states had early learning standards. As in the other studies, they contacted state specialists in early childhood. They determined, as of 2007, that 49 states had documents of early learning standards; whereas, in the 2003 study only 27 states had standards. The study also reviewed how states disseminated standards to early childhood personnel. They discovered that most states had only mailed the documents to personnel or posted their standards on the internet.

Because early learning standards have only come of age in the last ten years, it is too early to determine if they will help promote learning and quality practices in early childhood; however, the following quote from NAEYC's position statement on ELS cited the potential benefit of standards:

Young children have an innate desire to learn. That desire can be supported or undermined by early experiences. High quality early childhood education can promote intellectual, language, physical, social and emotional development, creating school readiness and bulding a foundation for later academic and social competence. By defining the desired content and outcomes of young children's education, ELS can lead to greater opportunities for positive development and learning in the early years. (National Association for the Education of Young Children [NAEYC], & National Association of Early Childhood Specialists in State Departments of Education [NAECS/SDE], 2002, p. 1)

In addition, standards help define expectations for what to teach in early childhood programs and focus attention on critical components of child development. As a result, a young child's education can be improved as teachers understand what children need to learn (Scott-Little et al., 2003).

What is contained in the Iowa Early Learning Standards? Due to the Good Start Grow Smart Initiative in 2002, the Iowa Department of Human Services was required to write early learning guidelines in order to continue to receive federal dollars. The Iowa Department of Education was interested in a joint partnership on the development, and actually became the lead agency to orchestrate the work. The George Bush Administration only required that guidelines were to be written for preschool and were to focus on cognitive, math, and literacy skills (Child Care Bureau, 2007); however, much flexibility was given to states regarding what developmental domains were covered.

Early discussions by stakeholders in Iowa included a desire to develop guidelines, which became standards for Iowa, from a comprehensive perspective. This meant that although Iowa was only required to write standards for preschoolers, infants and toddlers were also included. Susan Hegland of Iowa State University was hired to compile the research and to write the document, based upon the writing committee's work. She used over 65 articles to provide a sound research base which was grounded in theory of early childhood development.

In writing the *Iowa Early Learning Standards*, Hegland used a domain/content area, a skill area, a description of the research to support the skill area (rationale), as well as indicators or benchmarks to describe specific skills, and caregiving supports. The *Iowa Early Learning Standards* include the following six developmental domains: (1) physical well-being and motor development; (2) approaches to learning; (3) social and emotional development; (4) mathematics and science; (5) creative arts; and (6) communication, language, and literacy (Iowa Department of Education, 2006).

The standards for physical well-being and motor development focus on safe and healthy living practices. This involves engaging in play, developing large motor skills, and developing fine motor skills.

The standards for approaches to learning focus on children using curiosity and initiative to explore. Children also learn to choose and persist in activities, and to demonstrate strategies for problem solving and reasoning.

The social and emotional standards reflect children building a positive sense of self and forming the ability to express emotions in appropriate ways. Children also need to build positive relationships with caregivers and peers. In addition, they are expected to initiate and respond to interactions with peers, and demonstrate a sense of belonging within their family, school, and community.

The content area for language and literacy include standards that are focused on understanding and using language. In addition, children need to engage in early reading and writing experiences.

The math and science standards reflect building understanding about counting and numbers, understanding patterns, and spatial relationships. Children will learn to describe and predict, use strategies to solve problems, and to understand comparison and measurement.

The standards for creative arts will help children to focus on exploring two and three dimensional materials, such as crayons, markers, paint, playdough, and clay. In addition, creative arts includes participation in music and movement and engaging in dramatic play (Iowa Department of Education, 2006).

Contained in the six content areas are 46 standards representing infant, toddler, and preschool development; 22 for infants and toddlers and 24 for preschoolers. These standards appear as 12 skill areas; 1-6 represent the six learning domains for infants and toddlers and 7-12 represent the same six learning domains, but for preschoolers. Within each standard, there are benchmarks that define the specific skills addressed in the standard. Each standard also has a written rationale detailing the research supporting the standard. Caregiving supports are also written to provide concrete examples of how adults can implement each standard (Iowa Department of Education, 2006). These 46 standards are included in Appendix A.

What is effective professional development? Professional development is necessary for all early childhood professionals, no matter how experienced they are (NAEYC, 1993). Specialized knowledge and professional development are the cornerstones of high quality early childhood education programs (Shonkoff & Phillips, 2000). Professional development focused on early care and education allows teachers to build their knowledge of children and quality learning

experiences, as well as to develop skills needed for implementation of quality programs (National Institute of Child Health and Development Early Child Care Research Network, 2001).

Professional development is defined as the number of experiences that support education, training, and development for early childhood personnel. Thus, these experiences serve as the foundation for early childhood personnel to work with young children and their families (Sheridan, Edwards, Marvin, & Knoche, 2009). In Iowa, these experiences can take many forms, such as conferences, workshops, training series, college courses, coaching, and web-based experiences. Child Care Resource and Referral offers face-to-face workshops and training series for early childhood personnel.

Several sources cited components of effective professional development; however, finding research-based articles on the components of effective professional development was difficult. I did find one study to support the design of this project. It was the most commonly cited study on effective professional development and was conducted in 2001 with a sample of over 1000 math and science teachers (Garet, Porter, Desimone, Birman, & Yoon, 2001). From this study, the authors determined three core and three structural features defining effective professional development. These components were determined relevant in a subsequent study involving 454 science teachers in 2007 (Penuel, Fishman, Yamaguchi, & Gallagher).

The three structural features of effective professional development define the context for professional development activities. These structures include the form, duration, and collective participation of the activity (Garet et al., 2001).

Form included the type of professional development; such as workshops, training series, or a college course. Professional development that occurs over a period of time, the duration, is more likely to provide opportunities for discussion and allow personnel to try new skills and

receive feedback about their experiences. Collective participation included personnel working in the same grade or subject area and used active learning based on prior learning experiences (Garet et al., 2001).

Welcome to the Iowa Early Learning Standards is a training series (form) written for personnel working with young children (collective participation). It was designed to occur over a period of eight weeks (duration) to allow for several opportunities for discussion, application of knowledge in their early childhood programs, and participation in activities to build their knowledge of the Iowa Early Learning Standards.

The Train-the-Trainer session for *Welcome to the Iowa Early Learning Standards* was written for Early Childhood Instructors (collective participation) to teach early childhood personnel about the Iowa Early Learning Standards. Because of funding, it was written as a one-day session (form); however, participants were encouraged to make contact with me prior to, during, and after teaching the series to ask questions or seek further clarification on activities (duration).

The three core features of professional development were processes that occurred during professional development. They included content focus, active learning, and coherence (Garet et al., 2001).

To focus on content meant to target a specific subject area. This was necessary to build understanding. Professional development that was focused on content gave personnel opportunities for active learning, which was more likely to produce increased knowledge and skills. Duration influenced active learning, which included meaningful discussion, planning activities, and practice of skills. Coherence builds on what is already known among early childhood personnel. Activities are built upon these prior experiences and involve discussion

among participants (Garet et al., 2001). Thus, content focus, active learning, and coherence are needed for professional development to be successful.

Welcome to the Iowa Early Learning Standards focuses on building the understanding of early childhood personnel regarding the Iowa Early Learning Standards (content focus). The series includes a variety of opportunities for active learning such as large group discussion, small group work on topics related to the Iowa Early Learning Standards, and homework assignments to allow for application of knowledge (active learning). Within each session, participants have the opportunity to build their current understanding of young children (coherence).

The Train-the-Trainer session was designed to educate Early Childhood Instructors on the *Welcome to the Iowa Early Learning Standards* training series and how to present it to early childhood personnel (content focus). Instructors participated in the same types of experiences they would use to train early childhood personnel on the *Iowa Early Learning Standards*; those experiences included both large group discussion and small group activities (active learning). Instructors were also able to explore each of the eight modules of the training series to build their knowledge of the series, as well as a variety of teaching strategies (coherence).

Summary

Early learning standards describe the expectations for the learning and development of young children across the development areas of physical, cognitive, social, emotional, and language development, including children's approaches to learning (Early Childhood Education Assessment Consortium, 2003). Professional development focused on child development and early education allows teachers to build their knowledge of children and quality learning experiences. It also provides the skills needed for implementation of these experiences (NICHD Early Child Care Research Network, 2001).

For children to have the best child care experiences, their caregivers must understand quality care and learning experiences. Ongoing training is necessary for improving the quality of care young children receive (Munton, Mooney, & Rowland, 1996). Welcome to the Iowa Early Learning Standards provides a professional development opportunity that can build the knowledge of early childhood personnel. It was written with the six core components of professional development, described above, in mind. This Train-the-Trainer project will disseminate the series throughout the state providing easier access to professional development. The next chapter provides the details for implementing the Train-the-Trainer project.

Chapter III

The Project

The focus of this project was to design a one day Train-the-Trainer workshop based on the training series, *Welcome to the Iowa Early Learning Standards*. The workshop occurred on June 26, 2010, at United Way of Central Iowa. It was designed to introduce early childhood instructors to the eight-week series (see Appendix B for the agenda).

To be an instructor for this training series, participants were required to have a two or four year degree in early childhood education. This knowledge was necessary to understand the topics related to the *Iowa Early Learning Standards*. In addition, participants had to be an approved instructor with Child Care Resource and Referral which determines they have the knowledge and skills necessary to be an early childhood instructor.

Tables were arranged in small groups. Approximately 40 participants received a copy of the scripted training series and the *Iowa Early Learning Standards* (Iowa Department of Education, 2006). As a result of attending the workshop, the instructors will contract with Child Care Resource and Referral to instruct the series in their region.

Welcome to the Iowa Early Learning Standards Train the Trainer Workshop
Welcome and Introductions - 15 minutes. Welcome to the Iowa Early Learning
Standards. My name is Tammy Bormann and I am looking forward to being your Instructor today. My degree is in early childhood and I have had many experiences to build my knowledge of children. I have worked with children in an early childhood special education preschool classroom and in my family child care business. Currently, I am a consultant and mentor in local infant/toddler center-based classrooms. I am an instructor for Child Care Resource and Referral and Des Moines Area Community College. I am also an author of some of the local training

series, such as *Welcome to Child Care*. (I will also provide housekeeping information: location of bathrooms, cell phones turned off or to vibrate, and class start and end time). For the success of this series, it is important that we respect each other's thoughts and my right as the instructor to keep our activities on task.

You are here to learn about the training series, *Welcome to the Iowa Early Learning Standards*. This series was written to assist early childhood teachers and caregivers in preschool, family, and center-based programs in understanding the *Iowa Early Learning Standards*, and how they are reflected in their programs. After attending today, you will be able to teach the eight week series in coordination with your local Child Care Resource and Referral agency.

As an Instructor, your role is to educate early childhood personnel on the *Iowa Early Learning Standards* and how to reflect the standards within their early childhood programs. It is critical for you to be knowledgeable of the *IELS*, and developmentally appropriate practice as determined by the National Association for the Education of Young Children, and the skills/equipment necessary to make the standards work in all types of early childhood programs.

History of the IELS – 10 minutes – The following information is included within the first section of your binder. Early learning standards (ELS) describe expectations for the learning and development of young children across the developmental areas of physical, cognitive (general knowledge of the world) social, emotional, and language development, including children's approaches to learning (Early Childhood Education Assessment Consortium, 2003). In 2006, early childhood experts in Iowa wrote early learning standards to address the learning needs of birth to five year old children within our state. They were written in response to the 2002 Good Start, Grow Smart Initiative introduced by President Bush in which states were encouraged to develop early learning guidelines or standards. The IELS were written to guide expectations,

program planning, curriculum planning, and the implementation of instructional activities within early childhood programs (Iowa Department of Education, 2006).

The *IELS* guide curriculum decisions on which teachers and caregivers should focus as they plan learning experiences for children. The *IELS* can also be used by caregivers, teachers, and parents to build an understanding of appropriate learning experiences for young children and what is necessary for a child to know prior to entering kindergarten. They are based on developmentally appropriate practice within the field of early childhood. We'll learn more about the *IELS* in our first activity for the day.

Introduction of the Series – 10 minutes – As an instructor, you have a copy of the Iowa Early Learning Standards and the curriculum designed to educate caregivers on the IELS. The IELS curriculum was written with the support of a grant from the Department of Management. The series includes eight training modules or sessions focused on the IELS and how to support them within a variety of early childhood programs. Each module is 2.5 hours long. Module topics include the following:

- Module 1 Welcome to the *Iowa Early Learning Standards*
- Module 2 How Children Learn and the *Iowa Early Learning Standards*
- Module 3 Developmentally Appropriate Practice and the *Iowa Early Learning*Standards
- Module 4 Routines, Relationships, and the *Iowa Early Learning Standards*
- Module 5 Play and the *Iowa Early Learning Standards*
- Module 6 Curriculum and the *Iowa Early Learning Standards*
- Module 7 Assessment and the *Iowa Early Learning Standards*
- Module 8 Families and the *Iowa Early Learning Standards*

You will be responsible for gathering other materials necessary to model the implementation of *IELS* within your training sessions. These materials are defined in each training module; you also have a list of all materials needed in the beginning of your binder. If you have questions or need assistance in gathering materials, please speak with your Child Care Resource and Referral Regional Training Coordinator.

Your binder is divided into the eight training modules. Each module has the script for the module and handouts that will be used by the participants.

Activity – Exploring Iowa's Early Learning Standards – 40 minutes. Let's start exploring the Iowa Early Learning Standards. With your table partners, I want you to explore the Iowa Early Learning Standards. As you explore the standards, choose three things to share that you discovered during your exploration. For example, the standards focus on six content areas. I'll let you discover what those content areas are. Also, choose a spokesperson for your group. (Allow for group work; 10-15 minutes. Choose a group to start sharing. Write on chart paper what the groups discovered. As I go to each table, I will ask if there is anything different they would like to add to the list. I will provide more information as necessary using the notes below; 10-15 minutes.) You will find my additional comments within Module 1, starting on page 15.

Six Content or Developmental Areas – The *Iowa Early Learning Standards* focus on six content or developmental areas for infants, toddlers and preschoolers: physical well-being/motor development, approaches to learning, social/emotional development, communication/language/literacy, mathematics/science, and creative arts. We will define these later.

Standards – There are 46 learning standards; 22 for infants and toddlers and 24 for preschoolers. The standards define each content area and are statements that describe

expectations for the learning and development of young children (ECEA Consortium, 2003). The standards describe the understandings acquired by infants, toddlers, and preschoolers that lead to successful interactions with people and objects within their home, care, and school environments (Iowa Department of Education, 2006).

Benchmarks – Benchmarks are specific descriptions of a skill that can be supported through written observations of a child's performance or behavior and samples of children's work (Early Childhood Education Assessment Consortium, 2003). Examples of benchmarks are included within each learning standard.

Rationale – The rationale describes the research supporting each early learning standard.

The standards and benchmarks are based on research and theory in child development and early education.

Caregiving Supports – Each standard includes examples of caregiving supports needed from parents, teachers, and child care providers. Caregiving supports and interactions are needed for young children to develop the understanding and skills they need (Iowa Department of Education, 2006).

The Role of Play – Play is a key component to implementing the *Iowa Early Learning*Standards. Through play, children express their ideas and understandings as they practice skills in each content area of the early learning standards.

Child-initiated play experiences give young children the opportunity to explore and practice motor, cognitive, communication, and social skills. Children who have been given opportunities to explore and play with materials are more likely to be better at problem solving with those same materials later than children who have not had similar play experiences. (Iowa Department of Education, 2006, p. 4)

Diversity – Caregivers and teachers must work to implement family-centered practices reflecting the values and goals of each family. It is important to create an environment that welcomes all children and families and encourages them to participate in daily routines and activities (Iowa Department of Education, 2006).

Children with Special Needs – The *IELS* are designed to identify goals, benchmarks, and caregiving supports for every child. Both the benchmarks and the caregiving supports may need to be adapted to meet the needs of each child. As children develop and attempt new skills, caregivers and teachers provide and adapt opportunities and support to facilitate interactions with peers, opportunities for new activities, routines to help children practice and learn skills, activities and materials to encourage independent participation, the assistance needed to be successful within activities, encouragement for each child, and room arrangements that provide easy access to materials.

Assessment – The *IELS* are intended to guide expectations, program planning, curriculum planning, and the implementation of activities. They are not designed to be used as a readiness checklist, for labeling or diagnosing children, to exclude children from programs, or to evaluate teachers and caregivers. However, the standards may be useful in helping teachers and caregivers to decide what to assess.

Activity - 12 Principles of Learning - 65 minutes. To be effective in implementing early learning standards, it is important for teachers and caregivers of young children to be knowledgeable of child development and how children learn. The National Association for the Education of Young Children, NAEYC, has defined 12 principles of child development and learning to help early educators build their understanding of children (Bredekamp & Copple, 2009).

Find Handout 2-1 in the Module 2 section of your binder. You will be assigned to a group to study one of the twelve principles. At your tables, you have construction paper and markers. Read through the principle assigned to you and choose the key sentences or phrases that define your principle. You will use these underlined phrases to define your principle when sharing with the large group. After underlining your key phrases, make a poster using pictures as much as possible to define your principle of learning. For instance, one of the principles is focused on play. So you might draw a picture of children playing. When you are finished tape your picture on a wall close to you. Then, each group will share the definition of the principle on which they focused and the picture they drew to represent it. (Allow for work; 10-15 minutes. Allow for each group to share the definition of their principle and the picture they made to represent it; 45 minutes. I will encourage them to use the words they underlined to describe their principle and picture.)

Each of these twelve principles is interrelated and influences adults as they make decisions about the practices within their programs (Bredekamp & Copple, 2009). To make decisions regarding children's learning, it is necessary for early childhood practitioners to think about the developmental areas of children and the needs of each child, including their social and cultural backgrounds, to design appropriate activities, routines, interactions, and curriculum. Learning and development occur when these experiences build on what a child already knows and is capable of doing and include experiences that encourage children to stretch their skills to further their knowledge and development (Bredekamp & Copple, 2009).

The National Association for the Education of Young Children used these principles of learning to determine *developmentally appropriate practices*, also known as DAP, for young children. DAP Specialists defined the materials, equipment, skills, and strategies necessary for

providing quality early learning experiences for children. NAEYC defined developmentally appropriate practice in their book, *Developmentally Appropriate Practice in Early Childhood Programs* (Bredekamp & Copple, 2009). Effective teachers and caregivers use their knowledge of children and developmentally appropriate practice to guide their early childhood programs. The *IELS* are based on developmentally appropriate practice. (30 Minute Lunch Break).

Exploring the IELS Modules – 105 minutes - The rest of our time together is going to allow you to explore one of the modules in a small group. During your time, you will do the following: (1) read through the activities of the module assigned to your group, (2) choose one activity to describe to the group, and (3) discuss what you like about the module. Then, choose a spokesperson who will share what you like about the module and provide a description of the activity you chose. I will give you 20-30 minutes to explore your module. (Allow for 20-30 minutes to work)

Because of our time limit, I will give each group up to 10 minutes to share their module. Give a brief description of the activity you chose to share with us and any thoughts on what you liked about the module. I will follow-up your thoughts with a brief description of each module and its objectives. (Allow for each group to share for 10 minutes. Add the following notes after each group shares.)

Module 1 – As a result of this training module, participants will build their understanding of the terminology used in Iowa's early learning standards, also known as *IELS*, and the content areas and standards of *IELS*. The two main activities in this module allow participants the opportunity to explore the six content areas of the *Iowa Early Learning Standards* and the standards within each of these content areas. In small groups, they will initially define a content area. You will add to their understanding by reading direct sections within the content areas of

Module 4 - As a result of this training module, participants will build their understanding of the value of routines and relationships for children's learning and the social and emotional standards included in the *IELS*. The main goal of this module is for participants to recognize the learning that occurs within every event of their program. Participants will create a web to represent the early learning standards reflected within an event or routine of the day assigned to them. These events include eating, toileting, greeting and departure, handwashing, cleaning up, and napping. When finished, participants will recognize the standards that are reflected within the routines of the day. Another focus of this module is relationships. Participants will learn about the importance of building a relationship with each child and building a sense of community in their classroom. They will participate in a small group activity that will allow them to relate the value of relationships to the social and emotional standards included in the *IELS*.

Module 5 - As a result of this training module, participants will build their understanding of the role of play in learning and how the *IELS* can be recognized in play. In this module, participants will learn how the environment in their programs supports learning. They will make a poster that has each of the six content areas listed. Each participant will choose a learning space from their classroom, such as blocks, library, or dramatic play. They will then list the learning that occurs within that learning space in each of the content areas of their poster. They can, then, find the specific standards that match the learning skills listed. This poster will assist them in talking with parents about the *Iowa Early Learning Standards*.

Module 6 - As a result of this training module, participants will build their understanding of designing activities for young children that represent the *IELS* and teaching strategies used to support learning within the curriculum. In this module, the content areas of creative arts,

language and literacy, and math and science are defined. The main activity provides examples of inappropriate methods of art and literacy in the classroom. Participants take on the role of a child and reflect on how they feel in each experience. Appropriate methods for learning are then discussed to build understanding about focusing on the process within art experiences and making reading an interactive experience. Discussing appropriate, as well as inappropriate methods encourages participants to reflect on their current teaching practices with young children and changes they can make to improve learning.

In exploring math and science, participants are able to find appropriate materials in early childhood supply catalogs. They, then, will choose one material and share how they would use it in the classroom, and the standard that will be reflected in the experience.

Module 7 - As a result of this training module, participants will build their understanding of observational assessment as a tool to understand children, support learning and use observations for planning. In this module, participants will practice writing factual observations of children. They will also learn how to use their observations to plan experiences for children.

Module 8 - As a result of this training module, participants will build their understanding of strategies for successfully working with families and building families' understanding of learning and the *IELS*. While this module focuses on working with families, it also includes an activity that will review all the information learned throughout the series. Participants will design a newsletter for parents focused on the topics discussed within the series; early learning standards, developmentally appropriate practice, how children learn, the importance of play, and planning for children. In addition, participants will also reflect on learning in the home setting and how it reflects early learning standards.

Homework and evaluation – Participants will be encouraged to complete homework following each session. This homework is discussed in the opening activity of the next session. Participants' reflections and participation in these activities will allow you to evaluate how well you described the information included within each module. In addition, participants will complete an evaluation after each module. Upon completion of the series, you can read these anonymous evaluations and use the writings of the participants to reflect on your teaching style and methods to prepare for teaching the series in the future. It was decided to turn in the evaluation at the end of the series to save on copy costs. You may find it useful to do an informal evaluation with participants throughout the series to reflect on your teaching style and the experience of the participants. One way you can do this is to have each table write on a piece of scrap paper things that went well during the session and things that can be improved.

Closing - 15 minutes. Today, we have learned about the Iowa Early Learning Standards and the training curriculum designed to assist early childhood personnel in understanding the standards. Early learning standards describe expectations for children's development and learning. For children to have the best early childhood experiences, it is important for their caregivers to understand children and how to support their needs in developmentally appropriate ways. The IELS are based on developmentally appropriate practice. Learning how to recognize the IELS within a program builds understanding of children's learning needs and in turn, can assist in helping families understand the learning that takes place while the children are in your participants' programs. In addition, the IELS can be instrumental in modifying curriculum to meet children's learning needs.

The majority of a child's early years are spent in a variety of early childhood programs (National Association of Child Care Resource and Referral Agencies, 2005). Thus, it is critical

for their teachers and caregivers to understand children's learning and development needs.

Building your understanding of the *Iowa Early Learning Standards* and developmentally appropriate practice will assist you in instructing others on how to recognize the *IELS* in their programs.

Before you leave, I need you to fill out the evaluation for today. As you teach the series, your participants will fill out an evaluation to help us in determining the success of the series. This evaluation can be placed in the front of their binders and completed after each training module. They can turn it in at the end of the series. Thank you for your participation today. Work with your CCR&R Regional Training Coordinator for scheduling this series in your area, as well as for assistance in gathering materials necessary for instruction.

After the Workshop

Upon returning to their regions, participants can contact their local Child Care Resource and Referral to start scheduling the series for early childhood personnel. Participants were also encouraged to start collecting the materials necessary for teaching the series and to start reading the script provided to them.

At the end of the workshop, participants completed evaluations (see Appendix C). 31 evaluations were returned; there were 39 in attendance. 21 of the 31 evaluations scored that their needs were met throughout the session. Participants were very excited about the series and appreciated the script format. One participant commented on her evaluation, "This training was presented very well. Easy to follow. I am excited to get started" (personal communication, 2010). Another stated, "The book is very well written and user-friendly! Well thought out activities that address great adult learning techniques" (personal communication, 2010). The remaining handouts scored 3s, needs met, and 2s, needs somewhat met (see Appendix C). The 2s scored

were related to participants feeling confident in presenting the series. As one participant wrote, "The '2' scores are just because I need to take the time with the materials on my own to work through them and get more comfortable" (personal communication, 2010).

My personal evaluation of the training is that it went very well. It was very exciting to see my work come to fruition. The only thing I would change is that a two-day session would have provided us more opportunity to learn about each module and the adult learning methods included; however, it was not possible because we did not have the funding.

Chapter IV

Conclusions and Recommendations

For children to have the best child care and preschool experiences, their caregivers and teachers must understand quality care and learning experiences. The *Iowa Early Learning Standards* were written to support these quality experiences. Professional development focused on child development and early education allows teachers to build their knowledge of children and quality learning experiences (NICHD Early Child Care Research Network, 2001).

Early childhood personnel in Iowa are supported through professional development opportunities based on young children's learning. This project supports their learning and will also disseminate the *Iowa Early Learning Standards*, which were developed with the learning needs of young children in mind.

Personal Insights

In researching the terms for this project, I was able to build my own understanding of early learning standards; why they were developed, how they reflect the development of children, and how they are supported in early childhood programs. In addition, I was able to explore the concept of professional development and support the six components suggested by Garet, Porter, Desimone, Birman, and Yoon (2001) while writing *Welcome to the Iowa Early Learning Standards*.

Now, having knowledge of the *Iowa Early Learning Standards*, I can use the information in other classes I teach for early childhood personnel. When I am working with or observing early childhood personnel in their classrooms, I can also help them reflect on how the *IELS* are supported in their classrooms currently and what can be done to incorporate more standards, with the ultimate goal of improving their classrooms and skills with children.

Becoming familiar with research and the methods for finding resources has also been very enlightening for me. I have built a better understanding of the purpose for research and why it is important to reflect on current findings related to early childhood.

Research Opportunities

Because early learning standards for Iowa were just written in 2006, they have not been used long enough to determine their value and effectiveness. Research could be done in the future to see how early childhood personnel are using the standards and if they are effective in supporting young children's learning. This would also support the state in continuing to receive federal funds for early childhood education.

The evaluation included with the workshop will provide insight into the effectiveness of the training series. This will allow the state to know if the series is effective. As consultants with Child Care Resource and Referral provide consultation, they can observe for evidence of the *IELS* in programs they serve.

In addition, the standards have recently been aligned with the *Iowa Core Curriculum*. As the training series is disseminated, research could be conducted to see how school readiness has been affected through programs implementing the standards.

Value to Colleagues

Professional development has value for anyone in the field of early childhood. The *Iowa*Early Learning Standards have not been a focus of professional development activities. Because the standards reflect the development of young children and support their learning, this workshop will prove valuable to the early childhood instructors who instruct early childhood personnel in their work with young children. When early childhood personnel attend the series, they can build their understanding of children and can implement what is necessary for their learning. This will

result in children receiving high quality early childhood experiences, which are essential for the success of children as they enter school.

Recommendations

In order for future documents on early learning and education to fully impact children, opportunities need to be readily accessible for early childhood personnel to learn about the printed information and how it impacts their programs. When information is not disseminated in a variety of ways, it can lead to misinterpretation of the material resulting in time, money, and energy being wasted. In addition, it can lead to children not being given the best opportunities for learning.

It is important for all early childhood personnel, parents, and communities to continue advocating for the dollars which support early childhood personnel through the many roles of resource and referral agencies, including the design and implementation of professional development opportunities. Educating caregivers results in a higher quality of care for the children they serve, leaving a lasting impact on our society.

References

- Bormann, T. (2010). Welcome to the Iowa Early Learning Standards. Unpublished. Des Moines, IA: Child Care Resource and Referral of Central Iowa.
- Bredekamp, S., & Copple, C. (2009). *Developmentally appropriate practice in early childhood*programs (3rd ed.). Washington, DC: National Association for the Education of Young

 Children.
- Child Care Bureau. (2007). A guide to good start, grow smart in child care. Washington, DC: Author.
- Early Childhood Education Assessment Consortium. (2003). The words we use: A glossary of terms for early childhood education standards and assessment. Retrieved February 20, 2008, from http://www.ccsso.org/ECEAglossary
- Garet, M., Porter, A., Desimone, L., Birman, B., & Yoon, K. S. (2001). What makes professional development effective: Results from a national sample of teachers. American Educational Research Journal, 38(3), 915-945.
- Hegland, S. (2006). *Iowa Early Learning Standards*. Des Moines, IA: Iowa Department of Education.
- Iowa Department of Education. (2006). *Iowa Early Learning Standards*. Des Moines, IA:

 Author.
- Munton, A. G., Mooney, A., & Rowland, L. (1996). Helping providers to improve quality of day-care provision: Theories of education and learning. *Early Child Development and Care*, 118, 15-25.
- National Association for the Education of Young Children. (1993). A conceptual framework for early childhood professional development. Washington, D.C.: Author.

- National Association for the Education of Young Children. (2009). *Developmentally appropriate* practice. Retrieved May 15, 2009, from www.naeyc.org/dap
- National Association for the Education of Young Children (NAEYC), & National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE). (2002).

 **Early learning standards: Creating the conditions for success. Retrieved March 2, 2008, from http://www.naeyc.org
- National Association of Child Care Resource and Referral Agencies. (2005). *Number of children under 6 potentially requiring child care*. Retrieved March 4, 2008, from http://www.naccrra.org/randd/ data/StateDemo.pdf
- National Professional Development Center on Inclusion. (2008). What do we mean by professional development in the early childhood field? Retrieved February 14, 2009, from http://www.fpg.unc.edu/-npdci
- Neuman, S., & Roskos, K. (2005). The state of state pre-kindergarten standards. *Early Childhood Research Quarterly*, 20, 125-145.
- National Institute for Child Health and Development Early Child Care Research Network. (2001). A new guide for evaluating child care quality. *Zero to Three*, *21*, 40-47.
- Peneul, W. R., Fishman, B., Yamaguchi, R., & Gallagher, L. P. (2007). What makes professional development effective? Strategies that foster curriculum implementation.

 American Educational Research Journal, 44(4), 921-958.
- Scott-Little, C., Kagan, S. L., & Frelow, V. S. (2003). Creating the conditions for success with early learning standards: Results from a national study of state-level standards for children's learning prior to kindergarten. *Early Childhood Research & Practice*, 5(2).

 Retrieved from http://ecrp.uiuc.edu/v5n2/little.html

- Scott-Little, C., Kagan, S. L., & Frelow, V. S. (2005). *Inside the content: The breadth*and depth of early learning standards. Greensboro, NC: The Regional Educational

 Laboratory at SERVE.
- Scott-Little, C., Kagan, S. L., & Frelow, V. S. (2006). Conceptualization of readiness and the content of early learning standards: The intersection of policy and research.

 Early Childhood Research Quarterly, 21(3), 153-173.
- Scott-Little, C., Lesko, J., Martella, J., & Milburn, P. (2007). Early learning standards:

 Results from a national survey to document trends in state-level policies and practices.

 Early Childhood Research & Practice. Retrieved March 5, 2008, from

 http://ecrp.uiuc.edu/v9n1/little.html
- Sheridan, S. M., Edwards, C. P., Marvin, C. A., & Knoche, L. (2009). Professional development in early childhood programs: Process issues and research needs. *Early Education and Development*, 20(3), 377-401.
- Shonkoff, J. P., & Phillips, D. A. (2000). From neurons to neighborhoods: The science of early childhood. Washington, D.C.: National Academy Press.
- Zero To Three Policy Center. (2008). Early learning guidelines for infants and toddlers:

 Recommendations for states. Retrieved February 15, 2008, from

 http://www.zerotothree.org

APPENDIX A

Iowa Early Learning Standards

2006

Iowa Department of Education Iowa Department of Human Services

INFANT and TODDLER Standards

Area 1 Physical Well-Being and Motor Development

1.1 Healthy and Safe Living

Standard

Infants and toddlers participate in healthy and safe living practices.

Rationale

Infants and toddlers need nutritious foods to sustain the growth, activity, and functioning of their bodies, including their brains. Severe, long-lasting malnutrition can cause long-term harm to both physical and mental development (Galler and Ross, 1993). However, the most common nutritional problems in the United States are obesity and iron-deficiency anemia (Lozoff, Klein, and Nelson, et. al., 1998; Woodruff, 1978). In order for children to make healthy nutrition choices, including both types and amounts of food, caregivers need to provide adequate supplies of nutritious foods while limiting access to sweetened or highly processed foods and beverages (Davis, 1928). Caregivers also serve as models of healthy eating at both snack and meal times.

Research in several countries has shown that rates of Sudden Infant Death Syndrome (SIDS) decline dramatically when infants are placed on their back to sleep (National Institute for Child Health and Development, NICHD, 2005). Accordingly, since 1994, the NICHD has been promoting a Back to Sleep campaign to urge parents and caregivers to place infants on their backs to sleep until the child can roll from back to stomach unaided.

Accidents, or unintentional injuries, are the leading cause of death for infants and toddlers from 1 to 3 years of age and the fourth leading cause of death for infants and toddlers below one year of age (National Safety Council, 1996). The injury rate is higher for boys than for girls. Because young exploring children lack the judgment to avoid dangerous situations, caregivers have the responsibility to provide safe routines and environments, including removing dangerous substances, such as medicines and cleaning products; dangerous objects, such as guns, thumbtacks, and scissors; and small objects, such as buttons, raisins, balloons, or peanuts (Karns, 2004).

Benchmarks

The infant:

- 1. sleeps on the back until he/she can roll from back to stomach.
- takes in fluids from the breast or bottle, progressing to solid foods and drinking from a cup.

The toddler:

- participates in healthy self-care routines, such as washing hands and brushing teeth, with assistance from a familiar caregiver.
- 4. eats healthy foods at the table with other children or caregivers.
- participates in safe behaviors regarding the environment, such as around stairs or hot surfaces.

Area 1 Physical Well-Being and Motor Development

1.2 Play and Senses

Standard

Infants and toddlers engage in play to learn.

Rationale

Infants and toddlers learn through play (Sroufe, 1977, p. 93): "Play is learning and learning is play." For infants, play is voluntary and self-motivating. Through play, infants and toddlers typically build understanding and skills in cognitive, communication, motor, social, and emotional development. Piaget (1971) argued that play allows infants and toddlers to build their understanding of how things work, including their own bodies, and allows them to test their understandings. Infants and toddlers need sufficient time, space, and materials to self-select and explore toys, objects, and activities. Caregivers also foster play by responding to infants' and toddlers' play initiatives.

Benchmarks

- uses sights, smells, sounds, textures, and tastes to explore and experience activities and materials.
- 2. chooses and participates in a variety of play activities.
- 3. imitates behaviors in play.

Area 1 Physical Well-Being and Motor Development

1.3 Large Motor Development

Standard

Infants and toddlers develop large motor skills.

Rationale

Infants and toddlers move for exploration and fun; they use movement to get to both people and toys. They typically make significant gains in balance, strength, coordination, and locomotion during the first 30 months. These advances in their motor skills also affect their cognitive, social, and emotional development. For example, although infants can distinguish between shallow and high drop-offs, they show no fear of heights until they can crawl on their own (Bertanthal and Campos, 1990). Complex motor skills, such as learning to walk up a slope, require the development of visual perception, physical strength, coordination, and balance gained through their previous motor experiences (Adolph, 1997). To help infants and toddlers develop large motor skills, caregivers provide physical environments that are both safe and challenging to explore.

Benchmarks

The infant:

- shows increasing balance, strength, and coordination in activities such as sitting and standing.
- shows increasing control in large motor skills such as reaching, rolling over, crawling, standing, and walking.

The toddler:

- shows increasing control in motor skills such as catching a ball, throwing a ball underhand, kicking a ball, and jumping.
- shows increasing balance in activities such as running, climbing stairs, and moving a riding toy using his/her feet.

Area 1 Physical Well-Being and Motor Development

1.4 Fine Motor Development

Infants and toddlers develop fine motor skills.

Rationale

Standard

With the development of fine motor skills, the infant gains self-help skills such as eating. Fine motor skills affect the development of self, cognitive, and social skills (Smitsman, 2004). For example, after learning to reach, grasp, and pick up an object, the infant can use an object to learn its properties, such as whether it is hard, soft, sweet, or cold. Similarly, when the infant learns to bring the hands together, the infant can take part in social activities such as clapping. These games, in turn, promote additional caregiver-infant interactions. As with large motor skills, maturation, visual perception skills, and experience affect the development of fine motor skills (Smitsman, 2004).

Benchmarks

The infant:

 uses hand-eye coordination to perform self-help and fine motor tasks, such as eating food, picking up objects, placing objects, and transferring objects from hand to hand.

The toddler:

uses hand-eye coordination to perform self-help and fine motor tasks such as eating with a fork or spoon, completing simple puzzles, stacking blocks, dressing self with assistance, scribbling with crayons or markers.

Area 2 Approaches to Learning

2.1 Curiosity and Learning

Standard

Infants and toddlers express curiosity and initiative in exploring the environment and learning new skills.

Rationale

Infants show interest in exploring their environment, often choosing new toys over familiar toys (Thompson, 2001). As part of their exploring, infants typically put anything into their mouths. After repeated exposure to the same toys, infants and toddlers typically explore new ways of using these materials (Piaget, 1952). Toddlers may explore objects vigorously, occasionally breaking objects.

The infant gains interest in exploring objects through activities that are different from those that lead to exploring people (Wachs and Combs, 1995). Infants who have spent a lot of time with caregivers who name, show, and demonstrate objects typically spend more time playing with caregivers and objects together. However, these infants spend less time exploring objects on their own. In contrast, infants in environments with lots of interesting objects to explore typically spend more time exploring those objects. In order to build infants' and toddlers' curiosity, interest, and initiative in exploring new experiences, caregivers should regularly observe children. This information should then guide the caregivers in providing infants and toddlers with space, time, and materials to explore, as well as opportunities to play jointly with caregivers and objects.

Benchmarks

- 1. shows interest in people, objects, and events.
- 2. chooses, explores, and manipulates a variety of objects or toys.

Area 2 Approaches to Learning

2.2 Engagement and Persistence

Standard

Infants and toddlers purposefully choose, engage, and persist in experiences and activities.

Rationale

Infants and toddlers usually show pleasure when they are successful at manipulating their environment and at overcoming barriers to reach a goal. Therefore, White (1959) argued that infants and toddlers are motivated to explore their surroundings, to overcome obstacles, and to master their environment. Toddlers differ in their interest in engaging and persisting in activities as a result of differences in temperament and in the styles of caregiving that they have received (Stipek and Greene, 2001). For example, toddlers show more persistence in activities when caregivers promptly respond to their requests for help (Lutkenhaus, 1984). Caregivers foster young children's engagement and persistence by providing sufficient interesting materials for young children to use and time for them to explore these materials as long as they are interested. Caregivers may need to provide physical adaptations to enable each child to engage and persist in the exploration of materials.

Benchmarks

- holds attention of familiar caregiver, for example, through eye contact or vocalizations.
- 2. repeats a newly learned activity.
- 3. engages and persists towards a goal with an activity, toy, or object.

Area 2 Approaches to Learning

2.3 Problem Solving

Standard

Infants and toddlers demonstrate strategies for reasoning and problem solving.

Rationale

Infants show the beginning of problem solving when they use a series of actions to reach a goal—for example, pulling a string to reach an attached toy (Piaget, 1952). Infants will imitate the problem-solving behaviors shown by others if the behaviors are within their abilities (Meltzoff, 1988). Toddlers deliberately vary their actions, observing the effects of each change in trial and error. Following active experimentation with materials, infants and toddlers will think through trial-and-error solutions with similar materials (Uzgiris and Hunt, 1975). Caregivers help young children develop reasoning and problem-solving skills by making problem-solving opportunities available with a wide variety of materials, by encouraging infants and toddlers to experiment with solutions, by not intervening too quickly to solve problems for them, and by helping them notice the results of their experiments (Piaget, 1980).

Benchmarks

- uses an object, action, or caregiver as a means to a goal, such as pulling a string to reach a toy or pushing a button to hear a sound.
- 2. uses trial-and-error to find a solution to a problem.
- 3. imitates a caregiver action to solve a problem.

3.1 *Self*

Standard

Infants and toddlers display a positive sense of self.

Rationale

Infants and toddlers learn that they can make things happen and begin to initiate activities. Meltzoff (1990) showed that infants usually prefer caregivers who imitate their activities, and when caregivers imitate infants, the infants realize that they can make things happen. During the second year, most toddlers learn to recognize images of themselves; they also demand the right to make some independent choices and to refuse some activities (Bullock and Lutkenhaus, 1990). They usually learn to choose activities that they can do successfully, but they rely heavily on caregiver reactions to their actions (Stipek, Gralinski, and Kopp, 1990). Caregivers foster the development of self by imitating infants and by respecting their choices (Bronson, 2000). Toddlers develop self awareness and self-understanding based upon the evaluations of others, especially those caregivers to whom the child is attached emotionally (Thompson, 2001). Caregivers need to accommodate each child's distinct blend of personality characteristics, interests, and abilities.

Benchmarks

- 1. explores his/her own body.
- shows awareness of self (for example, by responding to own image in mirror)
- 3. shows preferences for toys and activities.
- 4. expresses enjoyment (for example, after succeeding in an activity).

3.2 Self-Regulation

Standard

Infants and toddlers show increasing awareness of and ability to express emotions in socially and culturally appropriate ways.

Rationale

From birth, infants and toddlers show individual differences in the ability to self-regulate. Self-regulation is one component of temperament (Thomas, Chess, and Birch, 1970). Temperament refers to individual styles of behavior, for example, how active children are, how easily they accept new things or adapt to changes, and their general mood. Children's temperaments are present from birth. Self-regulation refers to infants' abilities to respond in an organized, effective way to events in their world and to become aware of their emotions in order to help them understand what they need and want and how to get it in socially acceptable ways. Infants and toddlers who receive sensitive and responsive care from caregivers are more likely to develop secure attachments to those caregivers. These children are better able to control and effectively express their emotions (Thompson, 1998).

Toddlers usually make great gains in the ability to regulate their behavior. Self-regulation increases as they see themselves causing changes and can focus on the results of those actions (Bullock and Lutkenhaus, 1988). Young children typically show early self-regulation skills that lead to a desired goal or a desired activity (Thompson, 2001). As a result of the evaluations of others, toddlers usually add emotional responses that show guilt, embarrassment, pride, and shame (Thompson, 2001). Caregivers provide the physical contact, sensitive social stimulation, and responsiveness needed to foster early self-regulation (Bronson, 2000). To build children's self-regulation, caregivers also recognize each infant's or toddler's individual temperament and adjust their responses to best fit each child's temperament.

Benchmarks

- indicates need for assistance by actions such as crying, gesturing, vocalizing, using words, or approaching familiar caregivers.
- comforts him or herself when distressed or tired by actions such as sucking, stroking a blanket, or hugging a toy.
- responds to emotions expressed by others (for example, by comforting another child or crying in response to the cries of others).
- shows increasing ability to recognize own feelings, control behavior, and follow simple rules and limits.

3.3 Relationships with Caregivers

Standard

Infants and toddlers develop and maintain positive relationships with significant caregivers.

Rationale

Over the first year of life, infants become attached to a few consistent, responsive, sensitive caregivers. In new situations, or with new caregivers, infants prefer to be close to these familiar caregivers to whom they are attached, sometimes seeking physical contact with them. This attachment helps infants regulate their emotions, learn to interact with objects and people in their environment, and become aware of themselves as people (Thompson, 1998). Although infants usually establish an attachment relationship with one person, they can become attached to several individuals, including parents, grandparents, older siblings, and caregivers who are consistent, sensitive, and responsive. The infant typically uses this secure attachment to familiar caregivers as a base to explore the environment, while returning occasionally to re-establish physical or visual contact with the familiar person (Ainsworth, Blehar, Waters, and Wall, 1978). Caregivers support the development of infants' secure relationships by providing the child with frequent contact with familiar caregivers who are caring, sensitive to the infant's signals, and cooperate to help the infant reach his/her goals (Ainsworth, Blehar, Waters, and Wall, 1978).

Benchmarks

- distinguishes between familiar and unfamiliar caregivers (for example, is comforted by the sight of the parent or the sound of the parent's voice).
- 2. accepts assistance and comfort from familiar caregivers.
- seeks and maintains contact with familiar caregivers (for example, through looking at the caregiver, hearing his/her voice, or touching the caregiver).
- 4. shows discomfort at separations from familiar caregivers.
- 5. seeks help from familiar caregivers in uncertain situations.

3.4 Relationships with Children

Standard

Infants and toddlers respond to and initiate interactions with other children.

Rationale

Interactions between infants during the first year are usually simple and brief. Infants often make eye contact with other infants and typically show distress when they see the distress of another infant. Later, they typically exchange smiles and vocalizations with other infants. Toddlers typically will imitate another infant's actions and begin some reciprocal play (Lamb, Bornstein, and Teti, 2002). However, most toddlers show very limited ability to take turns or share materials.

Toddler friendships usually develop among peers who engage in positive interactions with each other. However, as many as 50 percent of the peer interactions among toddlers involve conflicts, which typically involve possession of objects (Coie and Dodge, 1998). In preventing a peer from taking a toy, toddlers usually find verbal responses such as "NO!" more effective than physical resistance such as holding on to the toy. During the toddler years, aggressive conflicts do not usually decrease, but toddlers typically increase their use of speech and attempts to resolve conflicts without fighting (Coie and Dodge, 1998). Caregivers help children develop peer relationships by providing supervised opportunities for infants and toddlers to interact in an environment with adequate space and materials to minimize conflicts (Eckerman and Peterman, 2004).

Benchmarks

- responds through gestures and vocalizations during interactions with other children.
- initiates interactions with other children through gestures, vocalizations, and/or body contact.
- accepts help from familiar caregivers in interactions with other children.

3.5 Sense of Community

Standard

Infants and toddlers demonstrate a sense of comfort within their family, program, community, and culture.

Rationale

Infants and toddlers who have warm, nurturant relationships with their parents and caregivers usually develop better social skills than those with poor relationships (Belsky and Cassidy, 1995; Howes and Hamilton, 1993). Infants and toddlers typically engage in cooperative, pretend play with peers around familiar activities and routines, such as housekeeping. However, infants and toddlers show little evidence of awareness of membership in a group. Caregivers can help children develop a sense of community by providing repeated opportunities to interact with other children and caregivers in familiar settings. Building a sense of community involves respecting and reflecting each child's home culture.

Benchmarks

- 1. shows enjoyment at being in a familiar setting or group.
- chooses and participates in familiar activities, including songs and stories from the home culture.

Area 4 Communication, Language, and Literacy

4.1 Language Understanding and Use

Standard

Infants and toddlers understand and use communication and language for a variety of purposes.

Rationale

Infants respond to caregiver vocalizations from birth (Lock, 2004). Through interaction with caring and nurturing caregivers, infants and toddlers acquire both listening and speaking vocabulary. Young infants typically make sounds and take turns in "conversations" with caregivers (Lock, 2004). Older infants use gestures, such as pointing or reaching up, as part of communication (Camaioni, 2004). Infants typically develop some listening vocabulary before their first birthday. Most infants move from one-word to two-word to three-word phrases; however, some toddlers begin talking in sentence-length phrases (Camaioni, 2004). Language use influences and is influenced by cognitive development (Shonkoff and Phillips, 2000). When caregivers speak more during routine activities such as diaper changing, dressing, or feeding, infants and toddlers develop larger vocabularies (Hoff-Ginsberg, 1991). Caregivers influence the types, use, and rate of learning language, especially in conversations that focus on activities and objects that interest the infant instead of on necessary tasks and activities (Hart and Risley, 1995). Communication patterns vary, however, between cultures (Rogoff, Mistry, Goncu, Mosier, 1993).

Caregivers monitor and respond to signs of early hearing problems in infants and toddlers because hearing problems can limit language, cognitive, social, and emotional development. Children with any degree of hearing impairment benefit from early intervention services by staff trained and qualified to work with these children and their families (Farran, 2000). Caregivers use sign language and adaptive communication devices to foster the development of communication skills in children with hearing impairments and/or communication delays.

Benchmarks

The infant or toddler:

- responds to the vocalizations and communications of familiar caregivers.
- 2. uses vocalizations and gestures to gain attention from others.
- 3. increases both listening and speaking vocabulary.

- 4. uses simple sentences to communicate.
- 5. participates in conversations.

Area 4 Communication, Language, and Literacy

4.2 Early Literacy

Standard

Children engage in early reading activities.

Rationale

Infants and toddlers develop literacy skills through their verbal interactions and shared book experiences with caregivers who have been warm and responsive to them (Bus, Belsky, van Ijvendoorn, and Crnic, 1995). Young children who notice differences and similarities in sounds typically show better later reading skills (Whitehurst and Lonigan, 2001). Early awareness of rhymes (for example, through exposure to nursery rhymes) influences the development of phoneme (sound) awareness and later reading skills (Bryant, MacLean, Bradley, and Crossland, 1990). Two-year-olds with more complex sentences and more accurate pronunciation skills usually show fewer difficulties later when they learn to read (Scarborough, 1991). Caregivers who talk with toddlers about events and objects that are not present (decontextualized language) help build children's later reading skills (Dickinson and Tabors, 2001). When caregivers talk with children during their play as well as during their daily routines, children are more likely to build the vocabulary they need for later reading (Hart and Risley, 1999). Caregivers who share discussions involving books with toddlers help build toddlers' language skills, which influence their later reading skills (Whitehurst and Lonigan, 1998).

Benchmarks

The infant or toddler:

- 1. explores or shows interest in books by picking them up, mouthing them, carrying them, or going through pages.
- 2. focuses on a book or the reader when hearing stories read.
- 3. points to or gazes at pictures in books.
- 4. responds to or engages in rhymes with the caregiver.

- 5. points to pictures or names items in books on request.
- 6. labels or talks about objects, events, or people in books.
- 7. enjoys and repeats rhymes.

Area 4 Communication, Language, and Literacy

4.3 Early Writing

Standard

Infants and toddlers engage in early writing activities.

Rationale

Infants and toddlers' writing skills reflect their development in cognition, such as using symbols to stand for objects, communication, and their fine motor development (Dyson, 2001). Infants and toddlers develop skills in using writing instruments as they use a variety of tools, such as spoons, hairbrushes, and toy hammers (McCarty, Clifton, and Pollard, 2001). Infants and toddlers use hand-held tools in a variety of ways (Greer and Lockman, 1998). Toddlers use writing in a pictographic way where writing conveys meaning through pictures. Scribble-like markings that they label as writing usually have meaning only to themselves (Whitehurst and Lonigan, 2001). Caregivers help young children develop writing skills by providing them opportunities to use a variety of tools, such as spoons, markers, or brushes, while allowing them to hold the tool in the manner most comfortable to them. Caregivers individualize strategies to encourage the use of tools by all children.

Benchmarks

The infant or toddler:

1. grasps a variety of objects for eating and play in his/her environment, with and without handles, such as blocks, spoons, markers, etc.

- uses a variety of writing tools or other manipulative objects (such as markers, bristle blocks, stringing beads, pegboards, pencils, crayons, paint brush, spoons, etc.).
- 3. scribbles spontaneously.

Area 5 Mathematics and Science

5.1 Comparison and Number

Standard

Infants and toddlers show increasing understanding of comparisons and amount, including use of numbers and counting.

Rationale

Young infants show awareness of small quantity differences (Starkey, Spelke, and Gelman, 1983). Infants and toddlers build their understanding of numbers as they manipulate sets of five and fewer objects (Mix, Huttenlocher, and Levine, 2002). Young children learn number skills as they work with small groups of objects in meaningful, routine tasks. Through counting rhymes, they learn that numerals have a constant sequence. In counting activities, they practice tagging numerals to objects in one-to-one correspondence. Through repeated experiences counting small groups of objects, they learn that the last number in the counting sequence represents the total quantity rather than the name of the last object (Gelman and Gallistel, 1978). Caregivers help children understand numbers and amount by providing many opportunities for children to explore and count small groups of objects and to hear and repeat familiar counting rhymes.

Comparison involves finding a relationship between two things or two groups of things. We know from their behaviors that infants and toddlers are continually comparing objects—mentally grouping objects that are similar in shape, quantity, size, texture, etc. (Thompson, 2001). Comparisons provide the basis for the development of measurement concepts and skills in older infants and toddlers. Caregivers who attach a verbal label to an object or comparison of focus for infants or toddlers (big/small, heavy/light, hot/cold), help children build vocabulary and understanding (Camaioni, 2004).

Working with both two- and three-dimensional shapes provides the basis for geometry (National Council of Teachers of Mathematics, 2000). Infants and toddlers learn to sort or group three-dimensional shapes based on their uses (Rosch, Mervis, Gray, Johnson, and Boyes-Braem, 1976). Infants and toddlers note and use shape differences before they have labels for shapes; for example, they separate objects into those that will roll and those that will not roll. Caregivers help children learn about shapes through providing a variety of toys and materials for young children to explore, compare, and classify, including puzzles and sorting canisters. Caregivers also help children understand shapes by labeling shapes that children are exploring and by using words that suggest comparisons, such as bigger, smaller.

Benchmarks

The infant:

 begins to notice characteristics of objects such as size, color, shape, or quantity.

The toddler also:

2. matches and sorts objects by size, color, shape, or quantity.

Area 5 Mathematics and Science

5.2 Patterns

Standard

Infants and toddlers understand patterns.

Rationale

Patterning involves making or finding regular sequence in sounds, sights, or motor activities. Infants notice and remember patterns that they see or hear. Infants visually group objects that are close together (Baillargeon, 1987). They recall and anticipate familiar sequences of events and use these memories to predict events and respond accordingly. Infants learn the patterns of daily routines, eating, or diaper changing. Recognizing, predicting, and repeating patterns is a basic standard in mathematics education, as infants and toddlers "recognize, extend, and create a wide variety of patterns" (NCTM, 2000). Seriating involves ordering objects in a regular order or pattern.

Toys, such as nesting cubes and stacking rings, help infants and toddlers explore and practice pattern-making. Sorting objects into groups of similar objects also involves recognizing patterns. Toddlers may group objects on the basis of visual characteristics (shape or color) or on the basis of themes and sequences of events. Some cultures and some infants and toddlers prefer to group on the basis of themes (functional uses: spoon with bowl) rather than using visual characteristics (spoon and fork). With practice and development, infants and toddlers come to recognize, create, and extend more complex patterns. Caregivers help children become aware of patterns by providing ordered materials for them to explore and by pointing out patterned sequences in events and materials.

Benchmarks

The infant:

- ${f 1.}$ demonstrates expectations for familiar sequences of events. The toddler also:
 - 2. shows recognition of sequences in events or objects.
 - 3. repeats actions in sequence, such as finger-plays.

Area 5 Mathematics and Science

5.3 Shapes and Spatial Relationships

Standard Infants and toddlers show increasing understanding of spatial relationships.

Rationale Young infants begin to note spatial relationships. The development of binocular vision (seeing with two eyes) at about four months of age (in most children) helps this skill (Slater, 2004). They usually reach for closer objects rather than ones that are further away. Infants and toddlers distinguish shallow surfaces from deep ones and avoid deep steps when they see them

(Gibson and Walk, 1960).

Benchmarks :

The infant:

- 1. takes objects apart.
- 2. fills and empties containers.

- 3. takes objects apart and attempts to put them together.
- 4. shows awareness of his/her own body space.

Area 5 Mathematics and Science

5.4 Scientific Reasoning

Standard

Infants and toddlers observe, describe, and predict the world around them.

Rationale

Through daily experiences and routines, young infants learn about cause and effect, that is, that some events lead to others (Spelke, et al., 1994). They show surprise when events occur that don't follow expected sequences. For example, four-month-old infants show surprise when a toy train disappears into a tunnel without emerging on the other side (Baillargeon, 1987). This expectation is the beginning of object permanence; however, actually retrieving an object that disappears in an unusual location requires motor control of reaching, which develops later. Infants typically observe the results of their actions and sometimes repeat them, showing surprise if the results are not the same as before. Toddlers deliberately vary their actions, watching what happens each time (Piaget, 1971). Caregivers promote the development of scientific reasoning by providing young children with safe environments and responsive materials to explore (Wachs and Combs, 1995).

Benchmarks

- 1. explores and manipulates natural materials such as water and sand.
- shows understanding of object permanence (that people exist when they cannot be seen and objects exist even when hidden under a blanket) by looking for people and objects that have disappeared.
- notices their own individual needs (for example, hunger, thirst).
- 4. begins to notice and label objects and events in the environment.

Area 6 Creative Arts

6.1 Art

Standard

Infants and toddlers explore art through a variety of safe two- and three-dimensional media.

Rationale

Infants and toddlers approach each new media—clay, paint, crayons—through exploration (Lowenfeld and Brittain, 1987). Through scribbling, infants and toddlers learn what the material can do. Infants and toddlers explore media through using tools, such as pencils or brushes, or through direct manipulation, using their hands to explore clay, playdough, or fingerpaint. Through repeated exposure to each medium, infants and toddlers gain control and begin to intentionally plan and direct their use of the media (Lowenfeld and Brittain, 1987). Infants' and toddlers' art is affected by the development of small motor skills, cognition, and perception, as well as by their experience with the specific medium or materials (Seefeldt, 1999). Caregivers help young children develop art skills by providing repeated opportunities to explore both new and familiar media such as playdough, crayons, and paint. Caregivers individualize strategies to enable each child to acquire skills in manipulating art media.

Benchmarks

The infant:

- 1. gazes at a picture, photo, or mirror images.
- 2. with supervision, experiments with a variety of art materials.
- 3. engages in experiences that support creative expression.

The toddler also:

chooses various materials, such as playdough, crayons, water, markers, and paint, to explore and create art.

Area 6 Creative Arts

6.2 Music, Rhythm, and Movement

Standard

Infants and toddlers participate in a variety of rhythm, music, and movement experiences.

Rationale

Infants are sensitive to musical sounds and patterns even before birth. Young infants move their bodies rhythmically to music and respond to the patterns in songs (Trehub, Schellenberg, and Hill, 1997). Simple rhythmic songs with repeated phrases, rhymes, and refrains help infants and toddlers learn language patterns, including sound (phoneme) patterns (Carlton, 2000). Moving to music helps infants and toddlers develop large muscle control and dexterity (Weikart, 1998). Caregivers help children develop skills in music and movement by providing repeated opportunities for young children to sing, to chant, and to move to new and familiar songs and music.

Benchmarks

The infant or toddler:

- 1. experiments with a variety of sound-making objects.
- 2. explores moving rhythmically.
- enjoys exploring ways of interacting with others through touch and motion.

- 4. sings simple songs and finger-plays.
- 5. shows interest in songs, tones, rhythms, voices, and music.

Area 6 Creative Arts

6.3 Dramatic Play

Standard

Infants and toddlers engage in dramatic play experiences.

Rationale

Most infants develop the ability to imitate what they see and then imitate what they recall. They typically learn to let one object stand for another and act out sequences of actions that they have observed, as well as new patterns they have planned. Later, they usually act out sequences of actions involving objects (Sluss, 2005). Occasionally, these play sequences may involve other infants and toddlers as well. These actions help them develop motor, cognitive, social, emotional, and communication skills (Weiser, 1991). Some infants and toddlers prefer to use real-life props and objects in their play and use objects to substitute for props, such as using a block on a plate to represent a piece of cake (Wolf and Grollman, 1982). These infants and toddlers are often interested in designs and in visual-spatial relationships. Other infants and toddlers typically focus on objects, people, and events that are not present; their play involves more fantasy and make-believe.

Benchmarks

The infant or toddler:

- 1. imitates the sound, facial expression, or gesture of another person.
- imitates the actions and sounds of people, animals, and objects in the environment.

The toddler also:

3. engages in pretend play.

PRESCHOOL Standards

Area 7 Physical Well-Being and Motor Development

7.1 Healthy and Safe Living

Standard

Children understand healthy and safe living practices.

Rationale

Children's physical well-being provides the foundation for their ability to learn. Young children are beginning to establish life-long eating habits that can help prevent disease, obesity, and other health problems (U. S. Department of Health and Human Services, 1996). Healthy eating provides needed nourishment for children's brains and for their physical activities. Accidents are the chief cause of death in young children (Maternal and Child Health Bureau, 2003). Appropriate levels of risk encourage exploration without undermining children's safety. Even very young children can begin to learn about personal safety.

Benchmarks

The child:

- 1. begins to recognize and select healthy foods.
- 2. follows healthy self-care routines (brushing teeth and washing hands).
- demonstrates safe behaviors regarding environment (stranger, tornado, fire, traffic), substances (drugs, poisons), and objects (guns, knives, scissors).

Area 7 Physical Well-Being and Motor Development

7.2 Play and Senses

Standard

Children engage in play to learn.

Rationale

According to Bruner (1985, p. 905): "Playful, negotiatory, flexible, mindful interaction early on may become a model later for what you do when you encounter problems. Having played around in fact, and with good effects, you may now feel encouraged to play around in your own head." Numerous research studies link daily physical activity to health at all ages (U. S. Department of Health and Human Services, 1996). Current recommendations are for children to have several hours of unstructured movement each day (National Association for Sports and Physical Education, 2003). Children develop physical fitness (i.e., strength, flexibility, and endurance) from a variety of child-initiated and caregiver-directed activities.

Benchmarks

The child:

- participates in a variety of indoor and outdoor play activities that increase strength, endurance, and flexibility.
- uses sights, smells, sounds, textures, and tastes to discriminate between, explore, and experience activities and materials.

Area 7 Physical Well-Being and Motor Development

7.3 Large Motor Development

Standard Children develop large motor skills.

Rationale

Development of large motor skills (running, jumping, throwing, catching, balancing, climbing) is influenced both by maturation and experience (Cratty, 1970). While young children are learning motor skills, they typically show a variety of ways of performing the skill. With experience, children are able to perform skills more consistently. By five years of age, children show more integrated skills, such as the use of arms to aid jumping or a shift in weight to aid throwing.

Benchmarks

The child:

- 1. shows control and balance in locomotor skills, such as walking, running, jumping hopping, marching, galloping, and skipping.
- shows abilities to coordinate movements with balls, such as throwing, kicking, catching, and bouncing.

Area 7 Physical Well-Being and Motor Development

7.4 Fine Motor Development

Standard

Children develop fine motor skills.

Rationale

Fine (small) motor skills require the child to manipulate objects with accurate, controlled, precise movements. With practice, children also become skilled in self-care skills, such as buttoning, snapping, and zipping. Through manipulating small objects, such as stringing beads, young children gain fine muscle control needed for using tools (Cratty, 1970). With experience, young children gain skills in using tools such as eating utensils, crayons, and brushes. Initial scribbles become letter-like forms as children watch caregivers model writing (Iowa Department of Education, 2001). These skills provide the basis for handwriting and other fine-motor skills needed for success in daily life and in school.

Benchmarks

- uses hand-eye coordination to perform self-help and fine-motor tasks with a variety of manipulative materials.
- shows increased skills in using scissors and writing tools for various learning activities.

Area 8 Approaches to Learning

8.1 Curiosity and Initiative

Standard

Children express curiosity, interest, and initiative in exploring the environment, engaging in experiences, and learning new skills.

Rationale

Erikson (1950) represented the internal conflict of initiative versus guilt as central to the preschool years. Initiative—trying activities—is a key part of the development of competence. When the child has lots of failures, especially those the child sees as his/her "fault," the child is less likely to try new activities and to learn new skills. Children who hesitate and avoid new experiences often have experienced repeated failures (Smiley and Dweck, 1994). Children are more likely to initiate and explore activities when they see that the results depend on their actions (Bandura, 1997). Caregivers influence this development by making such activities available for children and encouraging them to try activities at which they are likely, with effort, to be successful (Kopp, 1991). Children are more likely to repeat activities when caregivers give them encouragement and feedback that links their effort to results (Skinner, 1995).

Benchmarks

- explores and experiences activities and ideas with eagerness, flexibility, imagination, independence, and inventiveness.
- chooses to explore a variety of activities and experiences with a willingness to try new challenges.

Area 8 Approaches to Learning

8.2 Engagement and Persistence

Standard

Children purposefully choose and persist in experiences and activities.

Rationale

Children who believe that success depends on their efforts, and that they are capable of being successful, are more likely to persist (Bandura, 1997). Young children who have been given some autonomy are more likely to complete tasks (Grolnick, 1984). Play provides an appropriate setting for learning about engagement, persistence, and risk-taking. Without concerns for how their work will be evaluated, children are able to experiment and explore. Caregivers encourage persistence by guiding children to tasks where their effort is likely to achieve success, by giving only the minimum help necessary to complete the task, and by giving children specific feedback that their success was due to their own efforts (Skinner, 1995).

Benchmarks

- persists in and completes a variety of both caregiver-directed and self-initiated tasks, activities, projects, and experiences.
- 2. maintains concentration on a task

Area 8 Approaches to Learning

8.3 Problem Solving

Standard	Children demonstrate strategies for reasoning and problem solving.
Rationale	Problem solving is natural for young children, for whom so much of the world is new. Problem solving is learned through daily living experiences involving issues important to the child. At the same time, children who repeatedly experience failures and criticism are less likely to attempt new problems (Smiley and Dweck, 1994).
Benchmarks	The child:

- shows interest in and finds a variety of solutions to questions, tasks, or problems.
- recognizes and solves problems through active exploration, including trial and error, and through interactions and discussions with peers and caregivers.

9.1 Self

Standard

Children express a positive awareness of self in terms of specific abilities, characteristics, and preferences.

Rationale

Young children typically overestimate their own abilities. At the same time, they equate effort and ability. They assume that failure represents both a lack of effort and ability (Nicholls, 1978). After repeated failures, some young children have already acquired learned helplessness, a belief that they cannot succeed in anything that they try. Learned helplessness (Dweck and Smiley, 1980) affects later subsequent learning. Therefore, it is essential to help young children see themselves as capable learners and to develop resilience.

Benchmarks

- 1. expresses sense of self in terms of specific abilities.
- 2. expresses needs, wants, and feelings in socially appropriate ways.
- shows increasing confidence and independence in a variety of tasks and routines, expresses pride in accomplishments.

9.2 Self-Regulation

Standard

Children show increasing ability to regulate their behavior and express their emotions in appropriate ways.

Rationale

Young children learn to regulate their behavior under the guidance of caregivers (Shonkoff and Phillips, 2000). The expression of emotion in young children is linked to what they like and want, as well as to what they do not like and do not want (Wellman and Wooley, 1990). With the help of caregivers, they learn to express their emotions in words and actions that are socially appropriate. Culture influences how emotions develop and how they are displayed in boys and girls (Kitayama and Markus, 1994). Very young children show empathy when they display concern over the emotional expressions of peers. During early childhood, young children learn that everyone has emotions and that they can learn how to tell how others are feeling by observing their expressions of emotions (Hyson, 2003). They also learn that emotions occur in response to different situations and that emotions can be expressed in different ways. While young children's understanding of emotions may be restricted to "mad, sad, glad" at first, they gradually develop more differentiated understandings of emotions such as fear, surprise, disappointment, etc. Through caregiver modeling and feedback, young children learn how and when to express emotions (Thompson, 1991). Young children who are preferred as playmates tend to be those who recognize the emotions of others and who show their own emotions (Saarni, Mumme, and Campos, 1997).

Benchmarks

- shows increasing capacity to monitor own behavior, following and contributing to classroom procedures.
- uses materials purposefully, safely, and respectfully.
- begins to accept consequences of own actions.
- 4. manages transitions and changes to routines.
- states feelings, needs, and opinions in difficult situations without harming self, others, or property.

9.3 Relationships with Caregivers

Children relate positively to caregivers who work with them.

Rationale

Standard

Young children's school success requires trusting relationships with familiar caregivers (Howes and Ritchie, 2002; Hyson, 2003). After developing close, affectionate relationships with their parent(s), children also develop close, affectionate relationships with other familiar and sensitive caregivers who have been nurturing and supportive to them (Sroufe, Fox, and Pancake, 1983). These bonds, referred to as attachment, form the basis for developing reciprocal social relationships with other caregivers and with peers (Thompson, 1998). To feel psychologically safe and free from anxiety, children must feel safe and comfortable with their caregivers.

Benchmarks

- 1. interacts comfortably with a range of familiar caregivers.
- accepts guidance, comfort, and directions from a range of familiar caregivers.
- 3. shows trust in familiar caregivers.
- 4. seeks help as needed from familiar caregivers.

9.4 Peer Interactions

Standard

Children develop the ability to interact with peers respectfully and to form positive peer relationships.

Rationale

Improvements in social skills and reduction in aggression are linked to increases in communication, perspective-taking, memory skills, and self-regulation (Coie and Dodge, 1997). Young children behave more positively and engage in more positive social exchanges with friends than with non-friends (Gottman, 1983). Children who become friends initiate contact, sustain interactions, and resolve conflicts better than do children who do not become friends (Gottman, 1983). In contrast, poor peer relationships predict later peer rejection (Coie and Dodge, 1997). Poor peer relationships and peer rejection are associated with later problems in school and life, including social isolation, aggression, loneliness, social dissatisfaction, and low self-worth (Hymel, Rubin, Rowden, and LeMare, 1990), as well as low academic performance, school avoidance, truancy, and delinquency (Ladd, 1990; Parker and Asher, 1987). Physical aggression decreases in most children during the preschool years. In contrast, verbal aggression tends to increase, at least until four years of age (Cairns, 1979).

Benchmarks

- 1. sustains interactions with peers.
- 2. develops friendships with other peers.
- 3. negotiates with others to resolve disagreements.
- 4. takes turns with others.

9.5 Awareness of Community

Standard

Children have an increasing awareness of belonging to a tamily, community, culture, and program.

Rationale

All children live in some group or community. In order to function as a member of a community, children must learn to communicate, participate, and interact with other members of the group. This socialization process begins with the family and continues as the child moves in and out of social groups throughout life. Becoming a member of the group involves a series of changes, as the child negotiates his/her role in the group and resolves conflicts with other members of the group (Bugental and Goodnow, 1998).

Benchmarks

- shows that he/she values others within the classroom/program, family, and community.
- shows early understanding of the concepts of justice, fairness, individual rights, and the welfare of the community and its members.
- 3. shows responsibility as a member of a community.
- shows acceptance of persons from different cultures and ethnic groups.

Area 10 Communication, Language, and Literacy

10.1 Language Understanding and Use

Standard

Children understand and use communication and language for a variety of purposes.

Rationale

Children understand and use communication and language for a variety of purposes. Communication occurs through both verbal and nonverbal means. Although most children move from non-verbal to verbal communication, some children need non-verbal communication aids, such as signing and writing boards. Vocabulary growth is rapid during the preschool years but varies widely among children of different cultural and economic backgrounds (Hart and Risley, 1995). At the same time, children increase their use and understanding of sentences with greater length and complexity. They also become increasingly able to use language appropriately and effectively in a variety of social contexts (Snow, Griffins, and Burns, 1998). During this development, caregivers help children become able to use language to discuss past events and absent objects. This skill, this decontextualized language, is linked to the development of reading (Neuman and Dickinson, 2001). Conversations that analyze the storyback-and-forth exchanges between caregivers and children during book reading—help children increase their vocabulary (Dickinson and Sprague, 2001). Dialogic storytelling (when the child is coached to become the story teller and to link the story to the child's life) also appears to increase the child's vocabulary.

Benchmarks

- shows a steady increase in listening and speaking vocabulary.
- initiates, listens, and responds appropriately in conversations with peers and caregivers.
- speaks in sentences of increasing length and grammatical complexity.
- follows simple oral directions that involve several actions.
- 5. asks and answers a variety of question types.

Area 10 Communication, Language, and Literacy

10.2 Early Literacy

Standard

Children engage in early reading experiences.

Rationale

Early, or emergent, literacy skills build on the child's language understanding and use. As young children develop language skills, they acquire the ability to think about language, talk about it, analyze its parts, and judge correct and incorrect forms. This thinking about language is referred to as metalinguistic ability and is related to early reading skills. Additional predictors of early reading include alphabet knowledge, phonological awareness, and emergent writing (Whitehurst and Lonigan, 2001). Phonological processing involves the sensitivity to, manipulation of, and use of sounds in word and requires understanding of the sounds of language. Phonological awareness includes recognizing and producing rhymes, segmenting words into syllables, and identifying words with the same beginning, middle, or ending sounds. Phonological awareness skills in preschool children are highly predictive of success in early reading skills (Cunningham, 1990; Whitehurst and Lonigan, 2001). In contrast, interventions that focus on teaching letter names do not appear to increase reading skills (Adams, 1990).

Benchmarks

- shows an interest and enjoyment in listening to books and attempts to read familiar books.
- displays book handling knowledge (turning the book right side up, using left to right sweep, turning one page at a time, recognizing familiar books by cover).
- 3. shows an awareness of environmental print.
- identifies some alphabet letters by their shapes, especially those in his/her own name.
- recognizes the printed form of his/her name in a variety of contexts.
- demonstrates comprehension of a book.
- demonstrates awareness that language is made up of words, parts of words, and sounds in words.

Area 10 Communication, Language, and Literacy

10.3 Early Writing

Standard

Children engage in early writing experiences.

Rationale

Young children attempt to write through scribbling, drawing, and through pictographs that may only have meaning to the child. Children may use letters, numbers, and letter-like forms in their writing attempts. Young children may use characteristics of the object in their early writing efforts. For example, the word horse may be bigger than the word dog. Young children may also use letters to represent syllables. The use of invented spellings, in which the child may use unusual representations (the first and last sounds to represent a word: BT for boat), is strongly related to reading and spelling skills in the early grades (Whitehurst and Lonigan, 2001).

Benchmarks

- attempts to communicate with others using scribbles, shapes, pictures, and/or letters to write.
- experiments with a variety of writing tools (pencils, crayons, brushes, chalk) and materials.
- 3. tells others about intended meaning of drawings and writing.

11.1 Comparison and Number

Standard

Children understand amount, including use of numbers and counting.

Rationale

During the preschool years, children construct basic understandings of numbers and amount or "how many." These understandings may differ from the understandings of older children and caregivers. Children initially build their understanding of amount through their hands-on actions with concrete objects. Children learn to count with understanding when they match the counting sequence, one-to-one, with a group of objects (National Council of Teachers of Mathematics, NCTM, 2000). After repeated experiences with small quantities of objects, they construct an understanding of discrete numbers. When caregivers help children link their understandings of objects with conventional numerals (2, 3), children advance their understanding to deal with larger quantities (Mix, Huttenlocher, and Levine, 2002). Counting from the first number, and counting on from one number to another, provides the basis for later skills in formal addition (Fuson and Fuson, 1992).

Benchmarks

- shows recognition and naming of numerals (1, 2, 3).
- 2. counts objects, matching numbers one-to-one with objects.
- 3. uses language such as more or less to compare quantities.

11.2 Patterns

Standard

Children understand patterns.

Rationale

Mathematics is the language and science of patterns (Copley, 1999). Patterns involve part-whole relationships, including the relationships among parts. Children learn patterns involving numbers, shapes, measuring, and data analysis (Copley, 2000). Recognizing patterns helps children organize their world and facilitate problem solving. Working with patterns and recognizing patterns helps children see relationships make predictions. Pattern recognition is an important precursor to algebraic understanding (NCTM, 2000). Seriation, or organizing into a sequence, is one pattern. Children learn the ordinal numbers (first, second, third, ... last) to describe the members of a sequence of objects or events.

Benchmarks

- shows skills in recognizing and creating some patterns.
- 2. predicts what comes next in a pattern.

11.3 Shapes and Spatial Relationships

Standard

Children understand shapes and spatial relationships.

Rationale

Spatial relationships involve ideas related to position (on, under, next to), direction, and distance (near, far, next to, close to) of objects in space. Recognizing shapes is the beginning of geometric understanding. Children construct their understanding of space from actively manipulating their own spatial environment (Clements and Battista, 1992). The understanding of shapes requires children to actively manipulate shapes and to explore the characteristics and parts of shapes, rather than simply seeing and naming them (Clements, 2003). Children's concepts of shape may differ from mathematical concepts (children may limit triangles to only equilateral triangles, or not classify squares as rectangles). Caregiver instruction is needed to help children progress from recognizing shapes to understanding the characteristics of shapes. Spatial visualization involves seeing an object from different perspectives and both building and changing mental representations of both two- and three-dimensional objects (Clements and Sarama, 2004). Through geometric modeling and spatial reasoning, children learn to describe their physical environment and to build problem-solving skills (NCTM, 2000).

Benchmarks

- demonstrates understanding of spatial words such as up, down, over, under, top, bottom, inside, outside, in front, and behind.
- 2. shows more recognition for some simple shapes.
- 3. notices similarities and differences among shapes.
- 4. notices how shapes fit together to form other shapes.

11.4 Scientific Reasoning

Standard

Children observe, describe, and predict the world around them.

Rationale

Learning science is an active process; science is inquiry-based (National Research Council, 1996). Young children need to acquire the tools of science, rather than scientific knowledge, which will change considerably by the time they reach adulthood. Science-process skills permit children to process new experiences through their senses. Children observe, compare, classify, measure, and communicate their observations of events and objects (Charlesworth and Lind, 1999). They explore earth science, physical science, and life science as they observe and manipulate concrete objects. They infer, drawing more meaning than what is visible, and predict future events. They describe those events and compare their predictions with their observations (Piaget, 1980).

Benchmarks

- shows curiosity about living and non-living things.
- 2. notices, describes, and predicts changes in the environment.
- 3. shows respect for living things.

11.5 Scientific Problem Solving

Standard

Children apply and adapt strategies to solve problems.

Rationale

Problem solving is finding a way to solve a problem that is not immediately evident or reachable. Problem solving is a basic characteristic of mathematical and scientific thinking as well as a major way to develop both mathematical and scientific knowledge (NCTM, 2000). Problem solving is learned through daily living experiences, including those involving science and math (NCTM, 2000). Children need time to think about problems; they need permission to make mistakes, and they need encouragement to try a variety of strategies (Charlesworth and Lind, 1999). Caregivers need to encourage children to ask questions.

Benchmarks

- 1. uses his/her senses and variety of strategies to solve problems.
- 2. invents strategies to figure out answers to problems.
- when unsuccessful at solving problems, experiments and adapts strategies.

11.6 Measurement

Standard

Children understand comparisons and measurement.

Rationale

Children organize their experiences through sorting and classifying. Learning language names helps children match and compare, possibly because the words help children focus their attention and note similarities (Sandhoffer and Smith, 1999). Making comparisons and noting similarities and differences provides a basis for making patterns and generalizations. Exploring graphs provides a basis for later understanding of data analysis and probability. Measurement, which provides a basis for comparison, provides one of the most widely used applications of mathematics (NCTM, 2000). Children begin to understand measurement by comparing the size of objects. Young children explore measurement concepts but do not master accurate measurement skills with standard units or comparative (transitive) measurement judgments. Children need direct, hands-on experiences with objects while they use language to describe relationships involving size.

Benchmarks

- 1. sorts, classifies, and puts objects in series, using a variety of properties.
- makes comparisons among several objects based on one or more attributes (length, size, weight) and using words such as shorter, taller, bigger, smaller, heavier, lighter.

Area 12 Creative Arts

12.1 Art

Standard

Children explore art through a variety of media.

Rationale

Through repeated experiences, young children gain skills in using a variety of media or materials for art, such as drawing materials, clay or dough, paint, and markers. Young children move from scribbling, exploring the properties of the media, to more representational efforts (Kellogg, 1967). Through the arts, children learn to communicate their ideas and experiences while they make choices, gain motor coordination, and explore the physical properties of media (Althouse, Johnson, and Mitchell, 2003). As children work through their plans to build a structure from blocks or paint a picture, they build their cognitive skills (Seefeldt, 1995).

Benchmarks

- uses a variety of two- and three-dimensional media (drawing materials, paint, clay, wood, markers) to create original works, form, and meaning.
- expresses ideas about own artwork and artwork of others, relating artwork to what is happening in the environment, life, classroom, etc.

Area 12 Creative Arts

12.2 Music, Rhythm, and Movement

Standard

Children participate in a variety of music and movement experiences.

Rationale

Aristotle is said to have asked, "What we must first seek to answer is whether music is to be placed in education or not, and what power it has... whether as education, play, or pastime" (Scripp, 2002). Although debate still continues on this issue, a large body of research supports that children learn in and through music. Musical activities such as singing, dancing or rhythmic movement, and playing or listening to music can be a catalyst to further education in a variety of areas, including spatial-temporal reasoning (Rauscher, Shaw, Levine, Wright, Dennis, and Newcomb, 1997). In addition, music can be a tool to promote social-emotional development, including self-regulation (Scripp, 2002).

Benchmarks

- participates in a variety of musical and rhythmic experiences, including singing, listening, and finger-plays.
- 2. notices differences in pitch, tempo, dynamics, and timbre.

Area 12 Creative Arts

12.3 Dramatic Play

Standard

Children engage in dramatic play experiences.

Rationale

Sociodramatic play (Howes, 1992) helps children learn to communicate, control and compromise, and explore intimacy and trust. In sociodramatic play, children assume different roles from their experiences and use their understandings to act out a variety of emotions and social relationships. Children who engage in dramatic play typically show more advanced skills in seeing the perspectives of others and in getting along with peers. (Garvey, 1990).

Benchmarks

- shows creativity and imagination to use materials and assume different roles in dramatic play situations.
- interacts with peers in dramatic play activities that become more extended and complex.

APPENDIX B

Train-the-Trainer Agenda

lowa Child Care Resource & Referral

Welcome to the Iowa Early Learning Standards - Train the Trainer June 26, 2010 - United Way Instructor - Tammy Bormann, Author of the IELS Series

Learning Objectives

- 1.Participants will understand that the Iowa Early Learning Standards were designed for all early childhood programs.
- 2.Participants will build their understanding of the Iowa Early Learning Standards through exploring the six content areas of the standards.
- 3.Participants will build their understanding of the 12 Principles of Child Development supported in the Iowa Early Learning Standards.
- 4.Participants will reflect on the value of daily routines, including play, and how they support the Iowa Early Learning Standards.
- 5.Participants will reflect on how they build a classroom community and how it relates to the social and emotional content areas of the Iowa Early Learning Standards.

8:30 -9:00am	Registration			
9:00 -9:15am	Welcome			
9:15 -9:30am	History of the IELS			
9:30 -9:45am	Introduction of the Series			
9:45 -10:30am	Activity – Exploring the IELS			
10:30 -10:45am	Break			
10:45am -12:00pm Activity - 12 Principles of Learning				
12:00 -12:30pm	Lunch			
12:30 -2:15pm	Activity – Exploring the Training Modules			
2:15 -2:30pm	Closing			

APPENDIX C

Train-the-Trainer Evaluation

lowa Child Care Resource & Referral

Welcome to the Iowa Early Learning Standards Train the Trainer EVALUATION June 26, 2010 – United Way Instructor – Tammy Bormann, Author of the IELS Series

Please rate the following activities/discussions included within the Train the Trainer session today; 1 = needs not met, 2 = needs somewhat met, and 3 = needs met. Circle the correct number that reflects how your training needs were met.

8:30 – 9:00am Registration The registration process went smoothly.		2	3
9:00 - 9:15am Welcome 9:15 - 9:30am History of the IELS 9:30 - 9:45am Introduction of the Series The introduction sessions belond by ild my understanding of the			
The introduction sessions helped build my understanding of the purpose of the Train the Trainer.	1	2	3
I understand my role as an Instructor.	1	2	3
I developed an understanding of the history of the Iowa Early Learning Standards.		2	3
9:45 - 10:30am Activity – Exploring the IELS I furthered my knowledge of the Iowa Early Learning Standards. I can use the knowledge from this activity to support discussion		2	3
within the series I instruct.	1	2	3
I feel confident in using this activity with future participants of the training series.		2	3
10:45am – 12:00pm Activity – 12 Principles of Learning I furthered my knowledge of NAEYC's 12 Principles of Learning. I can use the knowledge from this activity to support discussion		2	3
within the series I instruct.	1	2	3
I feel confident in using this activity with future participants of the training series.	1	2	3
12:00 – 12:30pm Lunch Lunch met my nutrition needs.	1	2	3
12:30 - 2:15pm Activity – Exploring the Training Modules This session was useful in learning about the modules contained in	1	2	2
the Iowa Early Learning Standards training series. I feel confident in presenting this training series.	1 1	2 2	3
		2	5
2:15 - 2:30pm Closing The training session ended on time.	1	2	3

Comments: