Participant Guide What is the Study of Child Development?	
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Why learn about child development?

A solid understanding of milestones and developmental pathways across each domain of children's development can benefit child care providers in several ways. The National Association for the Education of Young Children, in their Position Statement principles that should guide early childhood professional practice, explain,

> *"Knowledge of how children within a given age span typically develop and learn provides a general framework to guide teachers in preparing the learning environment, considering curriculum, designing learning experiences, and teaching and interacting with children. Also important for educators to know are the sequences in which children gain specific concepts, skills, and abilities, building on prior development and learning…. Familiarity with known learning sequences should inform curriculum development and teaching practice."*
>
> Developmentally Appropriate Practice in Early Childhood Programs Serving Children Birth to Age 8, NAEYC Position Statement (2009)

Dig a bit deeper, and there are five benefits that child care professionals gain when they take the time and effort to learn about the typical growth and development of children.

Benefit 1:
Knowledge of child development and learning provides the best foundation for planning for a group of children.

Knowledge of child development is the first of three types of knowledge child care providers need in their work with children. The other two are: knowledge of individual children; and knowledge of family, community, and culture from which the child comes. Knowing what is typical at a certain age is the best place to start when experiences and environments are planned for that age of children. Plans based on typical child development and learning meet the needs of the majority of children, but the provider then makes changes to accommodate individual children who may be ahead or behind.

Benefit 2:
Knowledge of child development and learning provides the best starting point for planning for a new child.

It's also the best place to start when a provider enrolls a new child about whom little is known. Until the provider can observe and assess the child herself, it's helpful to start by assuming the child will benefit from experiences and environments planned for typically developing children of his or her age.

Benefit 3: Knowledge of child development and learning helps to plan next steps for supporting children's progress.

Knowledge of the sequence of knowledge or skill development in any given area helps providers set achievable, appropriate learning goals for children. It also helps providers plan activities and experiences that challenge children just enough to progress without frustrating them with a challenge that is too far beyond their abilities.

> For example, the provider observes that a baby is getting up on his hands and knees and rocking. If she knows the progression of skills, the provider knows that the next skill the baby will try is crawling. This means the provider can encourage the baby in a variety of ways to move forward when the baby is on all fours.

Benefit 4: Knowledge of child development and learning enables providers to create curriculum and environment that aligns to state standards/guidelines for early childhood programs.

Many child care programs must base their curriculum and practice on state standards or guidelines for early childhood learning and development. Regardless of the specific standards developed by a state or organization, all are based on the same "body of knowledge"—the research foundation—of how young children grow and learn.

Standards can be an excellent source of developmental progressions and milestones for all areas of child development. When providers are required to "align to the state standards," it simply means that the experiences, activities and environment that they plan are based on what is known about typical child development. To find your state's Early Learning standards/guidelines, visit the Office of Child Care Technical Assistance Network. https://childcareta.acf.hhs.gov/resource/state-early-learning-guidelines

Benefit 5: Knowledge of child development and learning helps providers feel confident that their professional practice has a solid basis that aligns with the larger child care professional community.

The foundation of high quality caregiving and teaching is knowledge about how most children grow and learn that has been gathered by many trained observers (i.e., researchers) who have observed many children.

Child care providers who continually expand their own knowledge of child development and learning, and apply that knowledge when they plan and make decisions in their program, can feel confident about their practice. They also have a solid foundation when they explain their decisions and practices to parents and colleagues; a foundation that goes beyond personal opinion or feelings.

Milestone Moments

Milestones Matter!

Look inside for milestones to watch for in your child and tips for how you can help your child learn and grow from birth to age 5.

Learn the Signs.
Act Early.

www.cdc.gov/Milestones
1-800-CDC-INFO   (1-800-232-4636)

These developmental milestones show what most children (75% or more) can do by each age. Subject matter experts selected these milestones based on available data and expert consensus.

Special acknowledgments to the subject matter experts and others who contributed to the review of data and selection of developmental milestones for inclusion in this material, especially Paul H. Lipkin, MD, Michelle M. Macias, MD, Julie F. Pajek, PhD, Judith S. Shaw, EdD, MPH, RN, Karnesha Slaughter, MPH, Jane K. Squires, PhD, Toni M. Whitaker, MD, Lisa D. Wiggins, PhD, and Jennifer M. Zubler, MD.

Download CDC's free Milestone Tracker app
App Store   Google Play

American Academy of Pediatrics
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Milestone Moments

The checklists that follow have milestones to look for when your child is:

How your child plays, learns, speaks, acts, and moves offers important clues about your child's development. Developmental milestones are things most children can do by a certain age.

Check the milestones your child has reached by each age.

Take this booklet with you and talk to your child's doctor at every well-child visit about the milestones your child has reached and what to expect next.

For more information, go to **www.cdc.gov/Milestones** or try **CDC's FREE *Milestone Tracker* app**!

Download CDC's free *Milestone Tracker* app

Download on the App Store

GET IT ON Google Play

What most babies do by month 2

Milestones matter! How your baby plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your baby has reached by 2 months.

Social/Emotional Milestones

- ☐ Calms down when spoken to or picked up
- ☐ Looks at your face
- ☐ Seems happy to see you when you walk up to her
- ☐ Smiles when you talk to or smile at her

Language/Communication Milestones

- ☐ Makes sounds other than crying
- ☐ Reacts to loud sounds

Cognitive Milestones
(learning, thinking, problem-solving)

- ☐ Watches you as you move
- ☐ Looks at a toy for several seconds

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR...

- ■ What are some things you and your baby do together?
- ■ What are some things your baby likes to do?
- ■ Is there anything your baby does or does not do that concerns you?

Take this with you and talk with your baby's doctor at every well-child visit about the milestones your baby has reached and what to expect next.

Movement/Physical Development Milestones

☐ Holds head up when on tummy
☐ Moves both arms and both legs
☐ Opens hands briefly

You know your baby best

Don't wait. If your baby is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

■ Has your baby lost any skills he/she once had?
■ Does your baby have any special healthcare needs or was he/she born prematurely?

2 Month Milestones

How to Help Your Baby Learn and Grow

As your baby's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Respond positively to your baby. Act excited, smile, and talk to him when he makes sounds. This teaches him to take turns "talking" back and forth in conversation.

- Talk, read, and sing to your baby to help her develop and understand language.

- Spend time cuddling and holding your baby. This will help him feel safe and cared for. You will not spoil your baby by holding or responding to him.

- Being responsive to your baby helps him learn and grow. Limiting your screen time when you are with your baby helps you be responsive.

- Take care of yourself. Parenting can be hard work! It's easier to enjoy your new baby when you feel good yourself.

- Learn to notice and respond to your baby's signals to know what she's feeling and needs. You will feel good and your baby will feel safe and loved. For example, is she trying to "play" with you by making sounds and looking at you, or is she turning her head away, yawning, or becoming fussy because she needs a break?

- Lay your baby on his tummy when he is awake and put toys at eye level in front of him. This will help him practice lifting his head up. Do not leave your baby alone. If he seems sleepy, place him on his back in a safe sleep area (firm mattress with no blankets, pillows, bumper pads, or toys).

- Feed only breast milk or formula to your baby. Babies are not ready for other foods, water or other drinks for about the first 6 months of life.

Talk with your baby's doctor and teachers if you have questions or for more ideas on how to help your baby's development.

- Learn when your baby is hungry by looking for signs. Watch for signs of hunger, such as putting hands to mouth, turning head toward breast/bottle, or smacking/licking lips.

- Look for signs your baby is full, such as closing her mouth or turning her head away from the breast/bottle. If your baby is not hungry, it's ok to stop feeding.

- Do not shake your baby or allow anyone else to—ever! You can damage his brain or even cause his death. Put your baby in a safe place and walk away if you're getting upset when he is crying. Check on him every 5–10 minutes. Infant crying is often worse in the first few months of life, but it gets better!

- Have routines for sleeping and feeding. This will help your baby begin to learn what to expect.

2 Month Tips & Activities

What most babies do by month 4

Milestones matter! How your baby plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your baby has reached by 4 months.

Social/Emotional Milestones

☐ Smiles on his own to get your attention

☐ Chuckles (not yet a full laugh) when you try to make her laugh

☐ Looks at you, moves, or makes sounds to get or keep your attention

Language/Communication   Milestones

☐ Makes sounds like "oooo", "aahh" (cooing)

☐ Makes sounds back when you talk to him

☐ Turns head towards the sound of your voice

Cognitive Milestones
(learning, thinking, problem-solving)

☐ If hungry, opens mouth when she sees breast or bottle

☐ Looks at his hands with interest

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR…

- What are some things you and your baby do together?
- What are some things your baby likes to do?
- Is there anything your baby does or does not do that concerns you?

Take this with you and talk with your baby's doctor at every well-child visit about the milestones your baby has reached and what to expect next.

Movement/Physical Development Milestones

- ☐ Holds head steady without support when you are holding her
- ☐ Holds a toy when you put it in his hand
- ☐ Uses her arm to swing at toys
- ☐ Brings hands to mouth
- ☐ Pushes up onto elbows/forearms when on tummy

You know your baby best

Don't wait. If your baby is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

- ■ Has your baby lost any skills he/she once had?
- ■ Does your baby have any special healthcare needs or was he/she born prematurely?

How to Help Your Baby Learn and Grow

As your baby's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Respond positively to your baby. Act excited, smile, and talk to him when he makes sounds. This teaches him to take turns "talking" back and forth in conversation.

- Provide safe opportunities for your baby to reach for toys, kick at toys and explore what is around her. For example, put her on a blanket with safe toys.

- Allow your baby to put safe things in his mouth to explore them. This is how babies learn. For example, let him see, hear, and touch things that are not sharp, hot, or small enough to choke on.

- Talk, read, and sing to your baby. This will help her learn to speak and understand words later.

- Limit screen time (TV, phones, tablets, etc.) to video calling with loved ones. Screen time is not recommended for children younger than 2 years of age. Babies learn by talking, playing, and interacting with others.

- Feed only breast milk or formula to your baby. Babies are not ready for other foods, water or other drinks for about the first 6 months of life.

- Give your baby safe toys to play with that are easy to hold, like rattles or cloth books with colorful pictures for her age.

- Let your baby have time to move and interact with people and objects throughout the day. Try not to keep your baby in swings, strollers, or bouncy seats for too long.

- Set steady routines for sleeping and feeding.

Talk with your baby's doctor and teachers if you have questions or for more ideas on how to help your baby's development.

- Lay your baby on her back and show her a bright-colored toy. Move the toy slowly from left to right and up and down to see if she watches how the toy moves.

- Sing and talk to your baby as you help her "exercise" (move her body) for a few minutes. Gently bend and move her arms and legs up and down.

What most babies do by month 6

Milestones matter! How your baby plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your baby has reached by 6 months.

Social/Emotional Milestones

☐ Knows familiar people
☐ Likes to look at himself in a mirror
☐ Laughs

Language/Communication   Milestones

☐ Takes turns making sounds with you
☐ Blows "raspberries" (sticks tongue out and blows)
☐ Makes squealing noises

Cognitive Milestones
(learning, thinking, problem-solving)

☐ Puts things in her mouth to explore them
☐ Reaches to grab a toy he wants
☐ Closes lips to show she doesn't want more food

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR...

- What are some things you and your baby do together?
- What are some things your baby likes to do?
- Is there anything your baby does or does not do that concerns you?

Take this with you and talk with your baby's doctor at every well-child visit about the milestones your baby has reached and what to expect next.

Movement/Physical Development Milestones

☐ Rolls from tummy to back
☐ Pushes up with straight arms when on tummy
☐ Leans on hands to support himself when sitting)

You know your baby best

Don't wait. If your baby is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

- Has your baby lost any skills he/she once had?
- Does your baby have any special healthcare needs or was he/she born prematurely?

6 Month Milestones

How to Help Your Baby Learn and Grow

As your baby's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Use "back and forth" play with your baby. When your baby smiles, you smile; when he makes sounds, you copy them. This helps him learn to be social.

- "Read" to your baby every day by looking at colorful pictures in magazines or books and talk about them. Respond to her when she babbles and "reads" too. For example, if she makes sounds, say "Yes, that's the doggy!"

- Point out new things to your baby and name them. For example, when on a walk, point out cars, trees, and animals.

- Sing to your baby and play music. This will help his brain develop.

- Limit screen time (TV, tablets, phones, etc.) to video calling with loved ones. Screen time is not recommended for children younger than 2 years of age. Babies learn by talking, playing, and interacting with others.

- When your baby looks at something, point to it and talk about it.

- Put your baby on her tummy or back and put toys just out of reach.

- Encourage her to roll over to reach the toys.

- Learn to read your baby's moods. If he's happy, keep doing what you are doing. If he's upset, take a break and comfort your baby.

- Talk with your baby's doctor about when to start solid foods and what foods are choking risks. Breast milk or formula is still the most important source of "food" for your baby.

Talk with your baby's doctor and teachers if you have questions or for more ideas on how to help your baby's development.

- Learn when your baby is hungry or full. Pointing to foods, opening his mouth to a spoon, or getting excited when seeing food are signs that he is hungry. Others, like pushing food away, closing his mouth, or turning his head away from food tells you that he's had enough.

- Help your baby learn she can calm down. Talk softly, hold, rock, or sing to her, or let her suck on her fingers or a pacifier. You may offer a favorite toy or stuffed animal while you hold or rock her.

- Hold your baby up while she sits. Let her look around and give her toys to look at while she learns to balance herself.

6 Month Tips & Activities

What most babies do by month 9*

Milestones matter! How your baby plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your baby has reached by 9 months.

Social/Emotional Milestones

☐ Is shy, clingy, or fearful around strangers
☐ Shows several facial expressions, like happy, sad, angry, and surprised
☐ Looks when you call her name
☐ Reacts when you leave (looks, reaches for you, or cries)
☐ Smiles or laughs when you play peek-a-boo

Language/Communication Milestones

☐ Makes different sounds like "mamamama" and "babababa"
☐ Lifts arms up to be picked up

Cognitive Milestones
(learning, thinking, problem-solving)

☐ Looks for objects when dropped out of sight (like his spoon or toy)
☐ Bangs two things together

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR...	■ What are some things you and your baby do together?
	■ What are some things your baby likes to do?
	■ Is there anything your baby does or does not do that concerns you?

Take this with you and talk with your baby's doctor at every well-child visit about the milestones your baby has reached and what to expect next.

Movement/Physical Development Milestones

- ☐ Gets to a sitting position by herself
- ☐ Moves things from one hand to her other hand
- ☐ Uses fingers to "rake" food towards himself
- ☐ Sits without support

You know your baby best

Don't wait. If your baby is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

* It's time for developmental screening!
At 9 months, your baby is due for general developmental screening, as recommended for all children by the American Academy of Pediatrics. Ask the doctor about your baby's developmental screening.

- ■ Has your baby lost any skills he/she once had?
- ■ Does your baby have any special healthcare needs or was he/she born prematurely?

9 Month Milestones

How to Help Your Baby Learn and Grow

As your baby's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Repeat your baby's sounds and say simple words using those sounds. For example, if your baby says "bababa," repeat "bababa," then say "book."

- Place toys on the ground or on a play mat a little out of reach and encourage your baby to crawl, scoot, or roll to get them. Celebrate when she reaches them.

- Teach your baby to wave "bye-bye" or shake his head "no." For example, wave and say "bye-bye" when you are leaving. You can also teach simple baby sign language to help your baby tell you what he wants before he can use words.

- Play games, such as peek-a-boo. You can cover your head with a cloth and see if your baby pulls it off.

- Play with your baby by dumping blocks from a container and putting them back in together.

- Play games with your baby, such as my turn, your turn. Try this by passing a toy back and forth.

- "Read" to your baby. Reading can be talking about pictures. For example, while looking at books or magazines, name the pictures as you point to them.

- Limit screen time (TV, tablets, phones, etc.) to video calling with loved ones. Screen time is not recommended for children younger than 2 years of age. Babies learn by talking, playing, and interacting with others.

Talk with your baby's doctor and teachers if you have questions or for more ideas on how to help your baby's development.

- Find out about choking risks and safe foods to feed your baby. Let him practice feeding himself with his fingers and using a cup with a small amount of water. Sit next to your baby and enjoy mealtime together. Expect spills. Learning is messy and fun!

- Ask for behaviors that you want. For example, instead of saying "don't stand," say "time to sit."

- Help your baby get used to foods with different tastes and textures. Foods can be smooth, mashed, or finely chopped. Your baby might not like every food on the first try. Give her a chance to try foods again and again.

- Say a quick and cheerful goodbye instead of sneaking away so your baby knows you are leaving, even if he cries. He will learn to calm himself and what to expect. Let him know when you return by saying "Daddy's back!"

9 Month Tips & Activities

What most babies do by month 12

Milestones matter! How your baby plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your baby has reached by 12 months.

Social/Emotional Milestones

☐ Plays games with you, like pat-a-cake

Language/Communication   Milestones

☐ Waves "bye-bye"
☐ Calls a parent "mama" or "dada" or another special name
☐ Understands "no" (pauses briefly or stops when you say it)

Cognitive Milestones
(learning, thinking, problem-solving)

☐ Puts something in a container, like a block in a cup
☐ Looks for things he sees you hide, like a toy under a blanket

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR...

- What are some things you and your baby do together?
- What are some things your baby likes to do?
- Is there anything your baby does or does not do that concerns you?

www.cdc.gov/Milestones | 1-800-CDC-INFO (1-800-232-4636)

Take this with you and talk with your baby's doctor at every well-child visit about the milestones your baby has reached and what to expect next.

Movement/Physical Development Milestones

- ☐ Pulls up to stand
- ☐ Walks, holding on to furniture
- ☐ Drinks from a cup without a lid, as you hold it
- ☐ Picks things up between thumb and pointer finger, like small bits of food

You know your baby best

Don't wait. If your baby is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

- ■ Has your baby lost any skills he/she once had?
- ■ Does your baby have any special healthcare needs or was he/she born prematurely?

12 Month Milestones

How to Help Your Baby Learn and Grow

As your baby's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Teach your baby "wanted behaviors." Show her what to do and use positive words or give her hugs and kisses when she does it. For example, if she pulls your pet's tail, teach her how to pet gently and give her a hug when she does it.

- Talk or sing to your baby about what you're doing. For example, "Mommy is washing your hands" or sing, "This is the way we wash our hands."

- Build on what your baby tries to say. If he says "ta," say "Yes, a truck," or if he says "truck," say "Yes, that's a big, blue truck."

- Redirect your baby quickly and consistently by giving her a toy or moving her if she is getting into things you don't want her to get into. Save "no" for behaviors that are dangerous. When you say "no," say it firmly. Do not spank, yell, or give her long explanations.

- Give your baby safe places to explore. Baby-proof your home. For example, move sharp or breakable things out of reach. Lock away medicines, chemicals, and cleaning products. Save the Poison Help Line number, 800-222-1222, in all phones.

- Respond with words when your baby points. Babies point to ask for things. For example, say "You want the cup? Here is the cup. It's your cup." If he tries to say "cup," celebrate his attempt.

- Point to interesting things you see, such as a truck, bus, or animals. This will help your baby pay attention to what others are "showing" him through pointing.

- Limit screen time (TV, tablets, phones, etc.) to video calling with loved ones. Screen time is not recommended for children younger than 2 years of age. Babies learn by talking, playing, and interacting with others.

www.cdc.gov/Milestones | 1-800-CDC-INFO (1-800-232-4636)

Talk with your baby's doctor and teachers if you have questions or for more ideas on how to help your baby's development.

- Give your baby water, breast milk, or plain milk. You don't need to give your baby juice, but if you do, give 4 ounces or less a day of 100% fruit juice. Do not give your baby other sugary beverages, such as fruit drinks, soda, sports drinks, or flavored milks.

- Help your baby get used to foods with different tastes and textures. Foods can be smooth, mashed, or finely chopped. Your baby might not like every food on the first try. Give your baby a chance to try foods again and again.

- Give your baby time to get to know a new caregiver. Bring a favorite toy, stuffed animal, or blanket to help comfort your baby.

- Give your baby pots and pans or a small musical instrument like a drum or cymbals. Encourage your baby to make noise.

12 Month Tips & Activities

What most children do by month 15

Milestones matter! How your child plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your child has reached by 15 months.

Social/Emotional Milestones

- ☐ Copies other children while playing, like taking toys out of a container when another child does
- ☐ Shows you an object she likes
- ☐ Claps when excited
- ☐ Hugs stuffed doll or other toy
- ☐ Shows you affection (hugs, cuddles, or kisses you)

Language/Communication   Milestones

- ☐ Tries to say one or two words besides "mama" or "dada," like "ba" for ball or "da" for dog
- ☐ Looks at a familiar object when you name it
- ☐ Follows directions given with both a gesture and words. For example, he gives you a toy when you hold out your hand and say, "Give me the toy."
- ☐ Points to ask for something or to get help

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR...

- ■ What are some things you and your child do together?
- ■ What are some things your child likes to do?
- ■ Is there anything your child does or does not do that concerns you?

Take this with you and talk with your child's doctor at every well-child visit about the milestones your child has reached and what to expect next.

Cognitive Milestones
(learning, thinking, problem-solving)

- ☐ Tries to use things the right way, like a phone, cup, or book
- ☐ Stacks at least two small objects, like blocks

Movement/Physical Development Milestones

- ☐ Takes a few steps on his own
- ☐ Uses fingers to feed herself some food

You know your child best

Don't wait. If your child is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

- ▪ Has your child lost any skills he/she once had?
- ▪ Does your child have any special healthcare needs or was he/she born prematurely?

15 Month Milestones

How to Help Your Child Learn and Grow

As your child's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- RHelp your child learn to speak. A child's early words are not complete. Repeat and add to what he says. He may say "ba" for ball and you can say "Ball, yes, that's a ball."

- Tell your child the names of objects when he points to them and wait a few seconds to see if he makes any sounds before handing it to him. If he does make a sound, acknowledge him, and repeat the name of the object. "Yes! Cup."

- Find ways to let your child help with everyday activities. Let her get her shoes to go outside, put the snacks in the bag for the park, or put the socks in the basket.

- Have steady routines for sleeping and feeding. Create a calm, quiet bedtime for your child. Put on his pajamas, brush his teeth, and read 1 or 2 books to him. Children between 1 and 2 years of age need 11 to 14 hours of sleep a day (including naps). Consistent sleep times make it easier!

- Show your child different things, such as a hat. Ask him, "What do you do with a hat? You put it on your head." Put it on your head and then give it to him to see if he copies you. Do this with other objects, such as a book or a cup.

- Sing songs with gestures, such as "Wheels on the Bus." See if your child tries to do some of the actions.

- Say what you think your child is feeling (for example, sad, mad, frustrated, happy). Use your words, facial expressions, and voice to show what you think she is feeling. For example, say "You are frustrated because we can't go outside, but you can't hit. Let's go look for an indoor game."

Talk with your child's doctor and teachers if you have questions or for more ideas on how to help your child's development.

- Expect tantrums. They are normal at this age and are more likely if your child is tired or hungry. Tantrums should become shorter and happen less as he gets older. You can try a distraction, but it is ok to let him have the tantrum without doing anything. Give him some time to calm down and move on.

- Teach your child "wanted behaviors." Show her what to do and use positive words or give her hugs and kisses when she does it. For example, if she pulls your pet's tail, teach her how to pet gently. Give her a hug when she does it.

- Limit screen time (TV, tablets, phones, etc.) to video calling with loved ones. Screen time is not recommended for children younger than 2 years of age. Children learn by talking, playing, and interacting with others.

- Encourage your child to play with blocks. You can stack the blocks and she can knock them down.

- Let your child use a cup without a lid for drinking and practice eating with a spoon. Learning to eat and drink is messy but fun!

15 Month Tips & Activities

What most children do by month 18[*]

Milestones matter! How your child plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your child has reached by 18 months.

Social/Emotional Milestones

☐ Moves away from you, but looks to make sure you are close by

☐ Points to show you something interesting

☐ Puts hands out for you to wash them

☐ Looks at a few pages in a book with you

☐ Helps you dress him by pushing arm through sleeve or lifting up foot

Language/Communication   Milestones

☐ Tries to say three or more words besides "mama" or "dada"

☐ Follows one-step directions without any gestures, like giving you the toy when you say, "Give it to me."

Cognitive Milestones (learning, thinking, problem-solving)

☐ Copies you doing chores, like sweeping with a broom

☐ Plays with toys in a simple way, like pushing a toy car

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR...

- What are some things you and your child do together?
- What are some things your child likes to do?
- Is there anything your child does or does not do that concerns you?

Take this with you and talk with your child's doctor at every well-child visit about the milestones your child has reached and what to expect next.

Movement/Physical Development Milestones

☐ Walks without holding on to anyone or anything

☐ Scribbles

☐ Drinks from a cup without a lid and may spill sometimes

☐ Feeds herself with her fingers

☐ Tries to use a spoon

☐ Climbs on and off a couch or chair without help

You know your child best

Don't wait. If your child is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

* It's time for developmental screening!
At 18 months, your child is due for general developmental screening and an autism screening, as recommended for all children by the American Academy of Pediatrics. Ask the doctor about your child's developmental screening.

■ Has your child lost any skills he/she once had?

■ Does your child have any special healthcare needs or was he/she born prematurely?

18 Month Milestones

How to Help Your Child Learn and Grow

As your child's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Use positive words and give more attention to behaviors you want to see ("wanted behaviors"). For example, "Look how nicely you put the toy away." Give less attention to those you don't want to see.

- Encourage "pretend" play. Give your child a spoon so she can pretend to feed her stuffed animal. Take turns pretending.

- Help your child learn about others' feelings and about positive ways to react. For example, when he sees a child who is sad, say "He looks sad. Let's bring him a teddy."

- Ask simple questions to help your child think about what's around her. For example, ask her, "What is that?"

- Let your child use a cup without a lid for drinking and practice eating with a spoon. Learning to eat and drink is messy but fun!

- Give simple choices. Let your child choose between two things. For example, when dressing, ask him if he wants to wear the red or blue shirt.

- Have steady routines for sleeping and eating. For example, sit at the table with your child when she's eating meals and snacks. This helps set mealtime routines for your family.

- Limit screen time (TV, tablets, phones, etc.) to video calling with loved ones. Screen time is not recommended for children younger than 2 years of age. Children learn by talking, playing, and interacting with others. Limit your own screen time when you are with your child so you are able to respond to her words and actions.

- Ask your child's doctor and/or teachers if your child is ready for toilet training. Most children are not successful at toilet training until 2 to 3 years old. If he is not ready, it can cause stress and setbacks, which can cause training to take longer.

Talk with your child's doctor and teachers if you have questions or for more ideas on how to help your child's development.

- Expect tantrums. They are normal at this age and should become shorter and happen less often as your child gets older. You can try distractions, but it's ok to ignore the tantrum. Give him some time to calm down and move on.

- Talk with your child by facing her and getting down to her eye level when possible. This helps your child "see" what you're saying through your eyes and face, not just your words.

- Start to teach your child the names for body parts by pointing them out and saying things like "Here's your nose, here's my nose," while pointing to her nose and your own.

18 Month Tips & Activities

What most children do by age 2[*]

Milestones matter! How your child plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your child has reached by age 2.

Social/Emotional Milestones

☐ Notices when others are hurt or upset, like pausing or looking sad when someone is crying

☐ Looks at your face to see how to react in a new situation

Language/Communication   Milestones

☐ Points to things in a book when you ask, like "Where is the bear?"

☐ Says at least two words together, like "More milk."

☐ Points to at least two body parts when you ask him to show you

☐ Uses more gestures than just waving and pointing, like blowing a kiss or nodding yes

Cognitive Milestones
(learning, thinking, problem-solving)

☐ Holds something in one hand while using the other hand; for example, holding a container and taking the lid off

☐ Tries to use switches, knobs, or buttons on a toy

☐ Plays with more than one toy at the same time, like putting toy food on a toy plate

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR…

- What are some things you and your child do together?
- What are some things your child likes to do?
- Is there anything your child does or does not do that concerns you?

Take this with you and talk with your child's doctor at every well-child visit about the milestones your child has reached and what to expect next.

Movement/Physical Development Milestones

- ☐ Kicks a ball
- ☐ Runs
- ☐ Walks (not climbs) up a few stairs with or without help
- ☐ Eats with a spoon

You know your child best

Don't wait. If your child is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

* It's time for developmental screening!

At 2 years, your child is due for an autism screening, as recommended for all children by the American Academy of Pediatrics. Ask the doctor about your child's developmental screening.

- ■ Has your child lost any skills he/she once had?
- ■ Does your child have any special healthcare needs or was he/she born prematurely?

How to Help Your Child Learn and Grow

As your child's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Help your child learn how words sound, even if he can't say them clearly yet. For example, if your child says, "or nana," say "You want more banana."

- Watch your child closely during playdates. Children this age play next to each other, but do not know how to share and solve problems. Show your child how to deal with conflicts by helping her share, take turns, and use words when possible.

- Have your child help you get ready for mealtime, by letting him carry things to the table, such as plastic cups or napkins. Thank your child for helping.

- Give your child balls to kick, roll, and throw.

- Give toys that teach your child how to make things work and how to solve problems. For example, give her toys where she can push a button and something happens.

- Let your child play dress up with grown-up clothes, such as shoes, hats, and shirts. This helps him begin to pretend play.

- Allow your child to eat as much or as little as she wants at each meal. Toddlers don't always eat the same amount or type of food each day. Your job is to offer her healthy foods and it's your child's job to decide if and how much she needs to eat.

- Have steady routines for sleeping and feeding. Create a calm, quiet bedtime for your child. Put on his pajamas, brush his teeth, and read 1 or 2 books to him. Children this age need 11 to 14 hours of sleep a day (including naps). Consistent sleep times make it easier.

Talk with your child's doctor and teachers if you have questions or for more ideas on how to help your child's development.

- Ask your child's doctor and/or teachers about toilet training to know if your child is ready to start. Most children are not able to toilet train until 2 to 3 years old. Starting too early can cause stress and setbacks, which can cause training to take longer.

- Use positive words when your child is being a good helper. Let him help with simple chores, such as putting toys or laundry in a basket.

- Play with your child outside, by playing "ready, set, go." For example, pull your child back in a swing. Say "Ready, set….", then wait and say "Go" when you push the swing.

- Let your child create simple art projects with you. Give your child crayons or put some finger paint on paper and let her explore by spreading it around and making dots. Hang it on the wall or refrigerator so your child can see it.

2 Year Tips & Activities

What most children do by month 30*

Milestones matter! How your child plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your child has reached by 30 months.

Social/Emotional Milestones

☐ Plays next to other children and sometimes plays with them

☐ Shows you what she can do by saying, "Look at me!"

☐ Follows simple routines when told, like helping to pick up toys when you say, "It's clean-up time."

Language/Communication   Milestones

☐ Says about 50 words

☐ Says two or more words, with one action word, like "Doggie run"

☐ Names things in a book when you point and ask, "What is this?"

☐ Says words like "I," "me," or "we"

Cognitive Milestones (learning, thinking, problem-solving)

☐ Uses things to pretend, like feeding a block to a doll as if it were food

☐ Shows simple problem-solving skills, like standing on a small stool to reach something

☐ Follows two-step instructions like "Put the toy down and close the door."

☐ Shows he knows at least one color, like pointing to a red crayon when you ask, "Which one is red?"

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR…	■ What are some things you and your child do together?
	■ What are some things your child likes to do?
	■ Is there anything your child does or does not do that concerns you?

Take this with you and talk with your child's doctor at every well-child visit about the milestones your child has reached and what to expect next.

Movement/Physical Development Milestones

☐ Uses hands to twist things, like turning doorknobs or unscrewing lids

☐ Takes some clothes off by himself, like loose pants or an open jacket

☐ Jumps off the ground with both feet

☐ Turns book pages, one at a time, when you read to her

You know your child best

Don't wait. If your child is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

* **It's time for developmental screening!**
At 30 months, your child is due for general developmental screening as recommended for all children by the American Academy of Pediatrics. Ask the doctor about your child's developmental screening.

■ Has your child lost any skills he/she once had?
■ Does your child have any special healthcare needs or was he/she born prematurely?

30 Month Milestones

How to Help Your Child Learn and Grow

As your child's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Encourage "free play," where your child can follow her interests, try new things, and use things in new ways.

- Use positive words and give more attention to behaviors you want to see ("wanted behaviors"), than to those you don't want to see. For example, say "I like how you gave Jordan the toy."

- Give your child food choices that are simple and healthy. Let him choose what to eat for a snack or what to wear. Limit choices to two or three.

- Ask your child simple questions about books and stories. Ask questions, such as "Who?" "What?" and "Where?"

- Help your child learn how to play with other children. Show him how by helping him share, take turns, and use his "words."

- Let your child "draw" with crayons on paper, shaving cream on a tray, or chalk on a sidewalk. If you draw a straight line, see if she will copy you. When she gets good at lines, show her how to draw a circle.

- Let your child play with other children, such as at a park or library. Ask about local play groups and pre-school programs. Playing with others helps him learn the value of sharing and friendship.

- Eat family meals together as much as you can. Give the same meal to everyone. Enjoy each other's company and avoid screen time (TV, tablets, and phones, etc.) during meals.

- Limit screen time (TV, tablets, phones, etc.) to no more than 1 hour per day of a children's program with an adult present. Children learn by talking, playing, and interacting with others.

Talk with your child's doctor and teachers if you have questions or for more ideas on how to help your child's development.

- Use words to describe things to your child, such as big/small, fast/slow, on/off, and in/out.

- Help your child do simple puzzles with shapes, colors, or animals. Name each piece when your child puts it in place.

- Play with your child outside. For example, take your child to the park to climb on equipment and run in safe areas.

- Allow your child to eat as much or as little as she wants at each meal. Your job is to offer her healthy foods and it's your child's job to decide if and how much she wants to eat.

30 Month Tips & Activities

What most children do by age 3

Milestones matter! How your child plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your child has reached by age 3.

Social/Emotional Milestones

☐ Calms down within 10 minutes after you leave her, like at a childcare drop off

☐ Notices other children and joins them to play

Language/Communication   Milestones

☐ Talks with you in conversation using at least two back-and-forth exchanges

☐ Asks "who," "what," "where," or "why" questions, like "Where is mommy/daddy?"

☐ Says what action is happening in a picture or book when asked, like "running," "eating," or "playing"

☐ Says first name, when asked

☐ Talks well enough for others to understand, most of the time

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR...

- What are some things you and your child do together?
- What are some things your child likes to do?
- Is there anything your child does or does not do that concerns you?

Take this with you and talk with your child's doctor at every well-child visit about the milestones your child has reached and what to expect next.

Cognitive Milestones (learning, thinking, problem-solving)

☐ Draws a circle, when you show him how
☐ Avoids touching hot objects, like a stove, when you warn her

Movement/Physical Development Milestones

☐ Strings items together, like large beads or macaroni
☐ Puts on some clothes by himself, like loose pants or a jacket
☐ Uses a fork

You know your child best

Don't wait. If your child is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

- Has your child lost any skills he/she once had?
- Does your child have any special healthcare needs or was he/she born prematurely?

How to Help Your Child Learn and Grow

As your child's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Encourage your child to solve her own problems with your support. Ask questions to help her understand the problem. Help her think of solutions, try one out, and try more if needed.

- Talk about your child's emotions and give him words to help him explain how he's feeling. Help your child manage stressful feelings by teaching him to take deep breaths, hug a favorite toy, or go to a quiet, safe place when he is upset.

- Set a few simple and clear rules that your child can follow, such as use gentle hands when playing. If he breaks a rule, show him what to do instead. Later, if your child follows the rule, recognize and congratulate him.

- Read with your child. Ask questions, such as "What is happening in the picture?" and/or "What do you think will happen next?" When she gives you an answer, ask for more details.

- Play counting games. Count body parts, stairs, and other things you use or see every day. Children this age are starting to learn about numbers and counting.

- Help your child develop his language skills by speaking to him in longer sentences than his, using real words. Repeat what he says, for example, "need nana," and then show how to use more "grown-up" words by saying, "I want a banana."

- Let your child help with making meals. Give him simple tasks, such as washing fruits and vegetables or stirring.

- Give your child instructions with 2 or 3 steps. For example, "Go to your room and get your shoes and coat."

Talk with your child's doctor and teachers if you have questions or for more ideas on how to help your child's development.

- Limit screen time (TV, tablets, phones, etc.) to no more than 1 hour per day of a children's program with an adult present. Don't put any screens in your child's bedroom. Children learn by talking, playing, and interacting with others.

- Teach your child simple songs and rhymes, such as "Itsy Bitsy Spider" or "Twinkle, Twinkle, Little Star."

- Give your child an "activity box" with paper, crayons, and coloring books. Color and draw lines and shapes with your child.

- Encourage your child to play with other children. This helps him learn the value of friendship and how to get along with others.

3 Year Tips & Activities

What most children do by age 4

Milestones matter! How your child plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your child has reached by age 4.

Social/Emotional Milestones

- ☐ Pretends to be something else during play (teacher, superhero, dog)
- ☐ Asks to go play with children if none are around, like "Can I play with Alex?"
- ☐ Comforts others who are hurt or sad, like hugging a crying friend
- ☐ Avoids danger, like not jumping from tall heights at the playground
- ☐ Likes to be a "helper"
- ☐ Changes behavior based on where she is (place of worship, library, playground)

Language/Communication Milestones

- ☐ Says sentences with four or more words
- ☐ Says some words from a song, story, or nursery rhyme
- ☐ Talks about at least one thing that happened during his day, like "I played soccer."
- ☐ Answers simple questions like "What is a coat for?" or "What is a crayon for?"

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR…

- What are some things you and your child do together?
- What are some things your child likes to do?
- Is there anything your child does or does not do that concerns you?

Take this with you and talk with your child's doctor at every well-child visit about the milestones your child has reached and what to expect next.

Cognitive Milestones
(learning, thinking, problem-solving)

☐ Names a few colors of items
☐ Tells what comes next in a well-known story
☐ Draws a person with three or more body parts

Movement/Physical Development Milestones

☐ Catches a large ball most of the time
☐ Serves himself food or pours water, with adult supervision
☐ Unbuttons some buttons
☐ Holds crayon or pencil between fingers and thumb (not a fist)

You know your child best

Don't wait. If your child is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

- Has your child lost any skills he/she once had?
- Does your child have any special healthcare needs or was he/she born prematurely?

4 Year Milestones

How to Help Your Child Learn and Grow

As your child's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Help your child be ready for new places and meeting new people. For example, you can read stories or role play (pretend play) to help him be comfortable.

- Read with your child. Ask him what's happening in the story and what he thinks might happen next.

- Help your child learn about colors, shapes, and sizes. For example, ask the color, shapes, and size of things she sees during the day.

- Encourage your child to use "his words" to ask for things and solve problems but show him how. He may not know the words he needs. For example, help your child say, "Can I have a turn?" instead of taking something from someone.

- Help your child learn about others' feelings, and about positive ways to react. For example, when he sees a child who is sad, say "He looks sad. Let's bring him a teddy."

- Use positive words and give attention to behaviors you want to see ("wanted behaviors"). For example, say "You're sharing that toy so nicely!" Give less attention to those you don't want to see.

- Tell your child in a simple way why she can't do something you don't want her to do ("unwanted behavior"). Give her a choice of what she can do instead. For example, "You can't jump on the bed. Do you want to go outside and play or put on some music and dance?"

- Let your child play with other children, such as at a park or library. Ask about local play groups and pre-school programs. Playing with others helps you child learn the value of sharing and friendship.

Talk with your child's doctor and teachers if you have questions or for more ideas on how to help your child's development.

- Eat meals with your child when possible. Let her see you enjoying healthy foods, such as fruits, vegetables, and whole grains, and drinking milk or water.

- Create a calm, quiet bedtime routine. Avoid any screen time (TV, phone, tablet, etc.) for 1 to 2 hours before bed and don't put any screens in your child's bedroom. Children this age need 10 to 13 hours of sleep a day (including naps). Consistent sleep times make it easier!

- Give your child toys or things that encourage his imagination, such as dress-up clothes, pots and pans to pretend cook, or blocks to build with. Join him in pretend play, such as eating the pretend food he cooks.

- Take time to answer your child's "why" questions. If you don't know the answer, say "I don't know," or help your child find the answer in a book, on the Internet, or from another adult.

4 Year Tips & Activities

What most children do by age 5

Milestones matter! How your child plays, learns, speaks, acts, and moves offers important clues about his or her development. Check the milestones your child has reached by age 5.

Social/Emotional Milestones

☐ Follows rules or takes turns when playing games with other children

☐ Sings, dances, or acts for you

☐ Does simple chores at home, like matching socks or clearing the table after eating

Language/Communication Milestones

☐ Tells a story she heard or made up with at least two events. For example, a cat was stuck in a tree and a firefighter saved it

☐ Answers simple questions about a book or story after you read or tell it to him

☐ Keeps a conversation going with more than three back-and-forth exchanges

☐ Uses or recognizes simple rhymes (bat-cat, ball-tall)

Cognitive Milestones (learning, thinking, problem-solving)

☐ Counts to 10

☐ Names some numbers between 1 and 5 when you point to them

OTHER IMPORTANT THINGS TO SHARE WITH THE DOCTOR…

- What are some things you and your child do together?
- What are some things your child likes to do?
- Is there anything your child does or does not do that concerns you?

www.cdc.gov/Milestones | 1-800-CDC-INFO (1-800-232-4636)

Take this with you and talk with your child's doctor at every well-child visit about the milestones your child has reached and what to expect next.

☐ Uses words about time, like "yesterday," "tomorrow," "morning," or "night"
☐ Pays attention for 5 to 10 minutes during activities. For example, during story time or making arts and crafts (screen time does not count)
☐ Writes some letters in her name
☐ Names some letters when you point to them

Movement/Physical Development Milestones

☐ Buttons some buttons
☐ Hops on one foot

You know your child best

Don't wait. If your child is not meeting one or more milestones, has lost skills he or she once had, or you have other concerns, act early. **Visit page 51 for the steps to take.**

■ Has your child lost any skills he/she once had?
■ Does your child have any special healthcare needs or was he/she born prematurely?

5 Year Milestones

How to Help Your Child Learn and Grow

As your child's first teacher, you can help his or her learning and brain development. Try these simple tips and activities in a safe way.

- Your child might start to "talk back" in order to feel independent and test what happens. Limit the attention you give to the negative words. Find alternative activities for her to do that allow her to take the lead and be independent. Make a point of noticing good behavior. "You stayed calm when I told you it's bedtime."

- Ask your child what she is playing. Help her expand her answers by asking "Why?" and "How?" For example, say "That's a nice bridge you're building. Why did you put it there?"

- Play with toys that encourage your child to put things together, such as puzzles and building blocks.

- Use words to help your child begin to understand time. For example, sing songs about the days of the week and let him know what day it is. Use words about time, such as today, tomorrow, and yesterday.

- Let your child do things for himself, even if he doesn't do it perfectly. For example, let him make his bed, button his shirt, or pour water into a cup. Celebrate when he does it and try not to "fix" anything you don't have to.

- Talk about and label your child's and your own feelings. Read books and talk about the feelings characters have and why they have them.

- Play rhyming games. For example, say "What rhymes with cat?"

- Teach your child to follow rules in games. For example, play simple board games, card games, or Simon Says.

- Create a spot in your home for your child to go to when he's upset. Stay nearby so your child knows he is safe and can come to you for help calming as needed.

Talk with your child's doctor and teachers if you have questions or for more ideas on how to help your child's development.

- Set limits for screen time (TV, tablets, phones, etc.) for your child, to no more than 1 hour per day. Make a media use plan for your family.

- Eat meals with your child and enjoy family time talking together. Give the same meal to everyone. Avoid screen time (TV, tablets, phones, etc.) during mealtime. Let your child help prepare the healthy foods and enjoy them together.

- Encourage your child to "read" by looking at the pictures and telling the story.

- Play games that help with memory and attention. For example, play card games, Tic Tac Toe, I Spy, or Hot and Cold.

5 Year Tips & Activities

Concerned About Your Child's Development?

If your child is missing milestones or you have concerns about the way your child plays, learns, speaks, acts, or moves, here's how to get help:

1. **Make an appointment with your child's doctor, teacher, or another trusted provider.** Tell them you want to talk about your child's development.

2. **Share your child's milestone checklist and any concerns,** even if your child is meeting the milestones. Checklists can be helpful, but they don't cover everything. Help your child's doctor understand your concerns by sharing information from teachers and other providers, or giving examples like:

   "I am worried about how he is speaking. He doesn't say much all day, he stopped saying some words, and he hasn't learned any new ones."

3. **Ask about developmental screening.** Screening is a way to get more information about a child's development, usually by having a parent answer a list of questions about the child. It's recommended for all children at different ages and any time there's a concern. It can be done by doctors and others, like childcare providers or home visitors.

4. If after screening there are still concerns, **ask if your child needs to see a specialist AND ask for help getting connected to services to help support your child.**

You know your child best. Don't wait. Acting early can make a real difference. Your child's doctor, teacher, and others can help.

www.cdc.gov/Milestones | 1-800-CDC-INFO (1-800-232-4636)

Important Tips:

- If you feel unsure or have more questions after your visit, it's okay to continue talking with doctors, teachers, and other providers about your child's development.

- If you have been given a referral or phone number to call about your child's development, call right away. If you have trouble getting an appointment, let the doctor or person who gave you the referral know.

- If you have been told to "wait and see" but you feel uneasy about that advice, it's okay to talk with another provider to get a second opinion or to call your state's early intervention program.

You do not need a doctor's referral to call your local program for a free evaluation to find out if your child can get free or low-cost services to help.

If your child is younger than age 3:

Call your state's early intervention program and say:

"I have concerns about my child's development and I would like to have my child evaluated to find out if he/she is eligible for early intervention services."

Find the phone number at **www.cdc.gov/FindEI**

If your child is age 3 or older:

Call the local public elementary school, ask to speak with the person in charge of special education, and say:

"I have concerns about my child's development and would like to have my child evaluated through the school system for preschool special education services."

My Child's Developmental Tracker

Child's Name _____   **Birth Date** _____

Milestone Checklist Age	Child's Height	Child's Weight	Who did you share your child's milestone checklist with? (doctor, childcare provider, other)	Is screening needed? (recommended at specific ages AND any time there are concerns)	
				Yes	No
2 months					
4 months					
6 months					
9 months*				*developmental screening recommended for all children	
12 months					
15 months					
18 months*				*developmental + autism screening recommended for all children	
24 months*				*autism screening recommended for all children	
30 months*				*developmental screening recommended for all children	
3 years					
4 years					
5 years					

MY CHILD'S PROVIDERS

Doctor: _____

Child Care Provider/Teacher: _____

Home Visitor: _____

Other: _____

Ask about developmental screening any time you have a concern about your child's development. Developmental screening is recommended for all children at ages 9-, 18-, and 30-months. Autism screening is recommended at ages 18- and 24-months.

Your provider can complete this section.

Screening Date	Screening Tool Used	Who did the screening? (doctor, childcare provider, other)	Screening Results		Any next steps? (referrals for further evaluation,return visit, other?)
			No Referral	Referral	

Early Intervention: _____

Family Support: _____

Medical Specialist: _____

Other: _____

Questions for My Child's Doctor

9 Months

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12 Months

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15 Months

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Questions for My Child's Doctor

18 Months

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2 Years

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30 Months

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3 Years

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4 Years

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5 Years

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CENTER FOR INCLUSIVE CHILD CARE

Tip Sheets
Developmental Concerns: When to Refer Children

Learning takes place throughout our lives, beginning at birth. Children learn and grow physically, socially, and cognitively. These areas of growth and children's general health are important when monitoring overall development.

While the majority of children develop on a similar path, there are indicators that a child may not be moving along the expected path of development.

Typical Milestones

Birth to 8 Months
- Will show preference for the face, smell, and sound of a familiar person
- Will smile and make eye contact as social interaction
- May observe own hand, grasp own hand
- Reaches for and grabs toys
- Babbles
- Smiles at self in mirror
- Sits with support

12 Months to 18 Months
- Uses a few gestures, one after another, to get needs met (giving, showing, reaching, pointing, waving)
- Feeds self with finger foods
- Knocks two blocks together
- Turns to person speaking when name is called
- Plays social games—Peek-A-Boo; Patty Cake
- Stands alone, takes steps, and/or walks with one hand held

18 Months to 3 Years
- Enjoys being read to
- Follows simple commands without gestures
- Points to simple body parts
- Begins to use pronouns, such as mine
- Speaks in two to three-word sentences
- Shows increased fearfulness (darkness, monsters, etc.)
- Expresses emotions with increasing control

Red Flags
- No big smiles by 6 months
- No back-and-forth sharing by 9 months
- No babbling by 12 months
- No back-and-forth gestures by 12 months
- No words by 16 months
- No two-word, meaningful phrases by 24 months
- Any loss of speech, babbling, or social skills at any age

Concerning Behaviors
- Little or no eye contact
  No response to name
- Unusual motor behaviors or motor planning
- Rigidity or getting stuck on certain activities
- Over or under-reactive sensory input
- Over-arousal and regulatory issues

Observation and Documentation

Through careful observation and recording of all children in child care programs, you can identify early developmental concerns about a child and make referrals for screening or assessment

recommendations to the parent. When observing and documenting:

- Choose a format that works for you.
- Observe the child involved in a variety of activities.
- Observe the child over an extended period of time.
- Record the time of day, day of week, and the activity the child is engaged in during the observation.

Sharing Information with Parents

Families and staff experience a range of emotions when they first suspect that a child may have a developmental concern. When sharing your observation and documentation with parents:

- Choose a private place to talk.
- Have documentation that is objective.
- Consider cultural differences.
- Be respectful.
- Have referral resources ready to share.
- Do not diagnose.

CENTER FOR INCLUSIVE CHILD CARE

Hojas de consejos
Problemas de desarrollo: Cuándo remitir los niños

El aprendizaje tiene lugar a lo largo de nuestras vidas, comenzando desde el nacimiento. Los niños aprenden y crecen físicamente, socialmente y cognitivamente. Estas áreas de crecimiento y salud general de los niños son importantes cuando se monitorea el desarrollo general.

Si bien la mayoría de los niños se desarrollan en un camino similar, debemos ser conscientes de los indicadores o señales clave de que un niño puede no moverse por el camino esperado de desarrollo.

Hitos típicos

Nacimiento a 8 meses
- Mostrará preferencia por la cara, el olor y el sonido de una persona familiar
- Sonreirá y hará contacto visual como interacción social
- Puede observar su propia mano, agarrar su propia mano
- Alcanza y agarra juguetes
- Balbucea
- Sonríe a sí mismo en el espejo
- Se sienta con ayuda

12 meses a 18 meses
Utiliza algunos gestos, uno tras otro, para satisfacer las necesidades (dar, mostrar, alcanzar, señalar, agitar)

- Se alimenta con comida para picar
- Golpea dos bloques juntos

- Se dirige hacia la persona que habla cuando se llama su nombre
- Juega juegos sociales: cu-cu; tortillitas
- Se está parado solo, da pasos y / o camina con una mano agarrada

18 meses a 3 años
- Le gusta que le lean
- Sigue comandos simples sin gestos
- Señala partes del cuerpo simples
- Comienza a usar pronombres, como el mío
- Habla en oraciones de dos a tres palabras
- Muestra mayor temor (oscuridad, monstruos, etc.)
- Expresa emociones con control creciente

Señales de alarma

- Sin grandes sonrisas a los 6 meses
- No compartir recíproco a los 9 meses
- Sin balbuceos a los 12 meses
- Sin gestos recíprocos a los 12 meses
- Sin palabras a los 16 meses
- No hay frases significativas de dos palabras a los 24 meses
- Cualquier pérdida del habla, balbuceo o habilidades sociales a cualquier edad

Comportamientos preocupantes

- Poco o ningún contacto visual
- Sin respuesta al nombre
- Comportamientos motores inusuales o planificación motora
- Rigidez o quedarse atascado en ciertas actividades
- Percepción sensorial sobre o subreactiva

- Agitación excesiva y problemas reguladores

Observación y documentación

A través de la observación cuidadosa y el registro de todos los niños en los programas de cuidado infantil, puede identificar los problemas tempranos sobre el desarrollo de un niño y hacer derivaciones para las recomendaciones de evaluación o valoración a los padres. Al observar y documentar:

- Elija un formato que es conveniente para usted.
- Observe al niño involucrado en una variedad de actividades.
- Observe al niño durante un período prolongado de tiempo.
- Registre la hora del día, el día de la semana y la actividad que realiza el niño durante la observación.

Compartir información con los padres

Las familias y el personal experimentan una variedad de emociones cuando sospechan por primera vez que un niño puede tener problemas de desarrollo. Cuando comparta su observación y documentación con los padres:

- Elige un lugar privado para hablar.
- Tenga documentación que es objetiva.
- Considere las diferencias culturales.
- Sea respetuoso.
- Tenga los recursos de referencia listos para compartir.
- No diagnosticar.

help me CONNECT

Connect Families with their Local Communities

Help Me Connect is an online service navigator that helps providers connect pregnant individuals and families with young children (birth-8 years old) with services in their community.

When young families thrive, we all do.

·· Find Families Services and Resources ··

Healthy Development and Screening

Parenting programs and Identify concerns early

Developmental and Behavior Concerns

Services for early intervention, special education, and mental health

Disability Services and Resources

Community and family support for children with disabilities

Early Learning and Child Care

Education and child care programs

Family Well-Being and Mental Health

Support the whole family's safety, physical health and mental health

American Indian Families

Resources and supports for American Indians

Caregiving and Community Support

Resources for homeless, immigrants, refugees, teen parents, and other family situations

Dental Care

Find and access affordable dental care

Basic Needs

Help with food, housing, and transportation

Legal Services

Low-cost or free legal services and information

Peacetime Emergency Resources

Support during crises

How to use

1. **Visit:** helpmeconnectmn.org
2. **Select:** A category to see list of services
3. **Enter:** An address to find services nearby
4. **Create:** Favorites for future use
5. **Contact:** HelpMeConnect@state.mn.us for more information

MINNESOTA

Early Childhood Indicators of Progress

Minnesota's Early Learning Standards: Birth to Kindergarten

January 2017

MINNESOTA

651-431-3809

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Early Childhood Indicators of Progress

Minnesota's Early Learning Standards

Introduction

The early childhood years (from birth to the start of kindergarten) are an important time of rapid growth and learning. Children's brains are developing more quickly at this time than at any other. They are exploring what they can do with their bodies and creating relationships with loved ones. They are investigating how the world works and their place in that world. Because of this complex and rapid development in young children, a shared set of expectations of what young children can know and do is necessary to build successful early childhood education programs and supports. In Minnesota, this set of shared expectations is called the *Early Childhood Indicators of Progress: Minnesota's Early Learning Standards* (ECIPs). The areas of learning or domains covered by the ECIPs include physical and movement development; language, literacy and communications; cognitive; mathematics; science; social systems; approaches to learning; the arts; and social and emotional development.

The first years of life are critical for later outcomes. 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 building a foundation for later academic and social competence. By defining the desired content and outcomes of young children's education, early learning standards can lead to greater opportunities for positive development and learning in these early years (NAEYC & NAECS/SDE 2002, 2).

How children learn in the early years

Every moment for a young child is a learning moment. Every interaction and experience gives them information, increases their understanding, and provides them with foundational skills that they will use for the rest of their lives.

> "We now know that rich and engaging early learning experiences and nurturing, responsive relationships with parents and caregivers are as important to a young child's developing mind as nutritious meals and good health care are to their developing bodies." (Council of Chief State School Officers 2010, 3)

When nurtured and guided, children flourish. They thrive in supportive relationships and grow in confidence. Through hands-on interactions with objects and people, they begin to figure out how the world works.

> "We must ensure that all students enter school physically healthy, with key language and literacy skills as well as the social and emotional capacity to approach learning - and life - with confidence, curiosity and enthusiasm." (Council of Chief State School Officers 2010, 1)

Play, Exploration and Active Learning

The most effective curricular approaches in early childhood are based on young children as active learners emphasizing play, exploration, and constructive learning more so than didactic, teacher-led, passive learning experiences. The ECIPs support play, exploration, and active learning for children from birth through kindergarten entry.

> "…a preponderance of research has shown that there is a false dichotomy between more rigorous academic learning and play…Students are more likely to learn important academic skills and content through play than by having teacher-directed instruction outside of a playful context, as with, for instance, the filling out of a worksheet." (Lieberman and Cook 2016, 9)

For infants and toddlers, play and exploration are rooted in strong attachments to family members as well as teachers and providers. The young, non-mobile infant observes and explores the adults who care for him, touching, listening, looking, and taking in all that is around him. He also explores his own body, figuring out what he can do with his hands, his arms, his torso, and his toes. As older infants begin to crawl and walk, they are able to interact more with the physical environment and explore their surroundings, still needing the base of support provided by familiar and trusted adults. Toddlers are even more active as they play and explore with a greater range of motion and physical capabilities. Their increasing communication skills and growing independence allow them to be more adventurous and always more able to explore with a solid base of adult support. Effective teachers and providers

structure the environment with safety in mind and offer intriguing objects appropriate for the age group. They interact with children as they play and explore, giving descriptions that increase vocabulary, engaging in longer conversations as children's language usage increases, and encouraging curiosity and problem solving. Carefully planned experiences and toys increase the opportunity for children to learn.

Effective teachers and providers of infants and toddlers use the ECIPs to plan appropriate play experiences. They observe children at play and during routines, and refer back to the standards to identify what skills and knowledge the child is demonstrating and what he or she is ready to do next. Based on their observations and reflections related to the ECIPs, they offer more play experiences and observe again. The ongoing planning/observation/reflection cycle is at the heart of best practices.

For preschoolers, play and exploration are the most meaningful ways for children to acquire skills and knowledge as well as to practice skills and refine understanding of new concepts. Rather than view play as nonacademic, effective teachers and providers of preschoolers recognize that high quality play experiences present many learning opportunities that have long-lasting effects for children. Research has found greater academic achievement in the primary grades for children who engaged in child-initiated, productive play in the preschool years (Copple and Bredekamp 2009). Links have been made between play and the development of basic literacy skills, creative problem-solving, prosocial behavior, self-regulation, and executive function. Young children's

Children are such curious creatures. They explore, question and wonder, and by doing so, learn…For too many children, curiosity fades. Curiosity dimmed is a future denied. Our potential — emotional, social, and cognitive — is expressed through the quantity and quality of our experiences. And the less-curious child will make fewer new friends, join fewer social groups, read fewer books, and take fewer hikes. The less-curious child is harder to teach because he is harder to inspire, enthuse, and motivate. (Perry 2001, 1)

engagement in high quality play supports their curiosity as they experiment and hypothesize. Play provides strong motivation for learning and multiple opportunities for practice and skill development.

Teachers and providers who work with preschoolers plan for play experiences with learning in mind. Using the indicators in the ECIPs to plan, they can scaffold learning by individualizing play activities and carefully choosing materials, offering ideas, and interacting with children.

Purposes for Early Learning Standards

The ECIPs were developed and revised so that Minnesota's children are served by teachers and providers with a shared set of expectations. The ECIPs are based on the most recent research and demonstrate a continuum of learning that includes expectations for all children. They are a framework that fulfills multiple purposes:

1� **Provide a resource** for early childhood professionals as they work with young children and their families across the state.

2� **Support** quality improvement initiatives in early childhood care and education.

3� **Align** across the full educational spectrum from birth through secondary levels.

The ECIPs as a Resource

The ECIPs offer research-based information about expectations for children's capabilities at different ages and across varying domains of development. They provide a progression of learning so that teachers and providers in Minnesota have a common framework and vocabulary by which they can plan curriculum that is developmentally appropriate for children of different ages, that is attentive to the individual needs of children, and that is culturally relevant for children's varying life experiences. The continuum of learning in the ECIPs and the alignment to kindergarten standards helps teachers talk with parents and families about generally accepted expectations, their child's progress, and individualized planning for next steps.

The ECIPs as a Support to Quality Improvement Initiatives

As a framework for accountability, the ECIPs are designed to inform curricula design and assessment selection. While not an assessment tool, the ECIPs serve as the foundation for the authentic assessment processes.

The Alignment of the ECIPs

The ECIPs align with the Minnesota K-12 Academic Standards and with the Common Core State Standards Initiative for Kindergarten through Twelfth Grade (CCSS) for English Language Arts. They reflect the child development knowledge that defines the foundational skills necessary to build toward the Minnesota K-12 Academic Standards and the CCSS expectations.

Background of the ECIPs Revision

The preschool version of the ECIPs was initially developed in 2000, and revised in 2005; the infant and toddler version was developed in 2007. These were revised and expanded into a single continuum of expectations in the 2016 version of the ECIPs.

The revision process of the ECIPs used committees composed of professionals from school districts, Head Start and child care, including diverse content specialists, teachers, providers, coaches, faculty, trainers and administrators, convened to address specific domains. Proposed indicators were reviewed by additional content experts. Finally, the standards were reviewed for plain language to ensure the standards are as clear as possible.

The 2016 revision includes the following changes:

- The infant and toddler and preschool versions are combined into one set of standards for birth to kindergarten entrance.

- The display of the standards was revised.

- The age ranges were increased to make the ECIPs more helpful in planning.

- The primary audience was clarified to be teachers and providers in early childhood programs.

Guiding Principles for ECIPs Development

The ECIPs revision is based on the following guiding principles. The ECIPs:

☐ **Recognize that young children are:**

- Competent and capable of positive developmental outcomes and deserve high expectations.

- Individuals who develop at different rates and will vary in their progress within learning domains.

- Best understood and supported within the context of their family, culture and community.

- In a rapid period of brain development and need nurturing environments with appropriate interaction and encouragement to take full advantage of this growth period.

- Active learners who learn best in environments where they can construct their knowledge and practice their skills in a variety of ways, with teachers and providers who respect and respond to their needs.

> **"For optimal development and learning of all children, individuals who work with children must respect, value, and support the culture, values, beliefs, and languages of each home and promote the meaningful, relevant, and active participation of families." (Division for Early Childhood 2010, 1)**

☐ **Support equity and excellence for all children in the state of Minnesota.**

High-quality early childhood education supports the optimal development of each and every child regardless of income, ability, race, culture, or special needs. The ECIP promote equity and excellence so that every child has access to teachers and providers whose expectations are the same for each and every child. These expectations are the foundation on which teachers and providers build the supports for individual children while working toward generally accepted expectations for all. The ECIP are written in a way so that teachers and providers can plan experiences that reflect the families' cultures, interests and perspectives. This is necessary so that children are then better able to focus, interact, play and learn.

☐ **Describe observable behaviors.**

The ECIP are written in language that allows for consistent understanding and implementation by teachers and providers. Because the indicators are formatted across a continuum of age groups, the standards make it possible for children to demonstrate an outcome through a variety of culturally appropriate ways and with a variety of materials. This helps teachers and providers use authentic assessment practices based on ongoing observation and documentation. In addition, the language of the ECIP allows for flexibility as teachers and providers work closely with a child's family to learn more about how the child is developing in his or her family, neighborhood, religious sect or ethnic group.

☐ **Demonstrate a continuum of learning from birth to kindergarten entrance.**

Whenever appropriate, they have consistent domains across ages and components. In this way, teachers and providers can refer to the continuum in the ECIPs as they observe what the child can do, have a general idea of what to expect next, and identify ways to support each child's learning and development.

While young children's development follows a predictable sequence, development is not uniform. Each child's pattern and pace of development varies. There may be strengths in certain domains and opportunities in others. Sometimes children have an identified delay or disability that requires adaptations and accommodations. The continuum in the ECIPs helps teachers and providers address individual differences among children in their program.

☐ **Demonstrate a continuum of learning from birth to kindergarten entrance.**

Learning is strongest when integrated across domains or broad areas of growth and development. Development in one domain influences development in other domains. For example, children with a strong self-concept and expanding oral language skills may engage in more successful social interactions with peers and adults. The ECIPs address this interrelatedness in the inclusion of some similar indicators across different domains. As teachers and providers observe children's performance related to the ECIPs, they recognize children's strengths, build upon them, and maximize connections across domains.

What the ECIPs Are and What they Are Not

The ECIPs demonstrate a **continuum of increasingly complex learning** for children from birth to kindergarten entrance. They address the development and learning of ALL children, including typically developing children, dual language learners, children with disabilities, and children with high needs.

They are not an all-inclusive resource about children's development. The standards reflect a selection of **important developmental expectations** that highlight the learning and skills children need in order to be prepared for kindergarten and to continue as life-long learners.

There are appropriate and inappropriate uses of the ECIPs. They are not intended to be used as a curriculum or an assessment tool. However, they should be used to **inform curricular decisions** and to correlate with authentic assessment procedures and content.

The ECIP are not to be used to determine children's eligibility for various programs or services or to deny children access to programs or services.

Opportunities for Children

- Children and families will experience consistent expectations for the child's development regardless of the early childhood program the child attends.

- All children will have access to challenging content and the supports they need to learn that content.

- Children will experience a coherent progression of learning expectations throughout early childhood, aligned to those in kindergarten and the primary grades.

How to Read the New ECIPs

The organization of the domains is designed to be easy-to-understand and aid in planning for individuals and small groups of children. The ECIP are now displayed as an age continuum within each domain and include the following elements:

- **DOMAINS** are major areas of development.

- **COMPONENTS** are specific areas of learning within each domain.

- **SUBCOMPONENTS** are consistent strands within a component across the full age-range continuum.

- **INDICATORS** are expectations for observable outcomes for the child at specific ages. For quick reference, indicators are now numbered within the domain and subcomponent.

- **INDICATOR NUMBERS** identify the location of an indicator within the domain, component and subcomponent.

The learning domains included in the ECIP are:

1. Social and Emotional Development

2. Approaches to Learning

3. Language, Literacy and Communications

4. Creativity and the Arts

5. Cognitive Development: Mathematics, Science and Social Systems

6. Physical and Movement Development

There are five age ranges identified, one for each year of a child's life from birth to kindergarten entry. The age ranges in the new ECIPs are:

- 0-1 year

- 1-2 years

- 2-3 years

- 3-4 years

- 4-5, K-readiness

Note: In the Language, Literacy and Communications domain, the first two age ranges are slightly different that in the other domains. This is because of the large amount of research that highlighted these age ranges as important in language development.

Remember, children's development is highly variable. Children will not always demonstrate indicators identified for their chronological age. They may show some behaviors identified for younger children or may demonstrate some skills and knowledge beyond their present age. The ECIPs are formatted in a continuum across different age ranges so that teachers and providers can identify where each child is performing and easily see what the next expectation is in the continuum. They can also see the indicator(s) in a previous age range, which can guide teachers to plan for missed or needed experiences and adapt curricula accordingly.

How Different Groups Can Use the Standards

The primary audience of The Minnesota Early Childhood Indicators of Progress (ECIP) is teachers and providers in early childhood care and education programs that serve children from birth to kindergarten entrance. The settings for these programs may include school districts, child care, community preschools and Head Starts. Administrators, directors, principals, educational leaders, policy makers, community members, and other stakeholders will use the ECIPs when planning for or assessing the effectiveness of current policies and resources related to the optimal development of young children.

Communication with families should include discussion of the ECIP so parents have the information they need to support their children's learning and development. Potential uses of the ECIP by different groups are described more fully below.

Families

Family engagement is an essential component of successful implementation of the early learning standards. Families of young children in Minnesota better understand their children's development and communicate more fully when teachers and providers share this framework with them. The standards create a common vocabulary for the families and the staff so that communication flows easily. As they work in partnership with teachers and providers, families see high quality early childhood practices in action.

Teachers and Providers

The ECIPs should be used frequently as a tool to assist in meeting the individual needs of all children. Teachers and providers will use the ECIPs in three primary ways:

1. To guide planning for learning experiences and effective caregiving and teaching strategies.

2. To provide direction for authentic assessment of young children.

3. To support family engagement.

In addition, teachers and providers will be impacted by the ways that the ECIPs influence program standards and evaluation. Plans for staff training and development sessions, as well as higher education coursework in Minnesota will integrate the ECIPs into all areas of best practices for those working with young children.

Curriculum Planning

When planning for curricular approaches for infants, toddlers, and preschoolers, teachers and providers can turn to the ECIPs to identify the concepts, knowledge, and skills appropriate for children at different ages. Teachers and providers use the broad developmental trajectories identified in the ECIPs to plan for individual children and determine the best ways to support each child's continued growth. In addition, by considering the diverse cultural backgrounds of the children and their families, teachers ensure that the curricular approaches are culturally inclusive as they plan activities and experiences.

The ECIPs support strong communication among all professionals within and across early childhood programs when everyone uses the common vocabulary of the ECIPs.

Authentic Assessment

The ECIPs provide direction for teachers and providers when using authentic assessment procedures to monitor young children's progress. Assessment tools aligned with the ECIPs should be selected to ensure standards, curricula, assessments and teaching strategies create a coherent experience for the children and enable teachers and providers to impact children's learning and growth. Teachers and providers can engage in criterion-referenced, observational assessment that is authentic, grounded in the everyday practice of observation, documentation, and collection of work samples.

Staff Training and Development

Higher education coursework and ongoing staff training and development are important ways to further the professionalism of teachers and providers in early childhood education programs. The ECIPs will be integrated into these learning experiences for teachers and providers, offering a framework of child development expectations and developmentally appropriate practices. Higher education coursework and staff development sessions increase familiarity with the ECIPs as well as address the implications of the standards for curriculum and assessment.

How the ECIPs Relate to Program Standards and Program Evaluation

Program standards and the ECIPs share the same goal: to improve outcomes for young children. The ECIPs are a framework that supports high quality programming for young children, within any set of program standards. Programs may be accountable to the Head Start Program Performance Standards or to accreditation processes such as those established by the National Association for the Education of Young Children (NAEYC) and the National Association of Family Child Care (NAFCC). In fact, these program standards create the conditions for successful implementation of the ECIP by creating high quality learning environments for young children.

Conclusion

The ECIPs are a solid foundation for the Minnesota early childhood care and education programs that offer services for young children and their families. The indicators in the ECIPs clarify expectations for all children's development while supporting teachers and providers in offering the highest quality services for young children and their families. Improved programs, teacher interactions and individualized planning result in better outcomes for young children.

The ECIPs are the basis for pedagogy, curriculum, child assessment, teacher preparation curricula, and evaluation in Minnesota. We hope that teachers and providers use the standards to communicate with parents and family members so that, together, they make a difference in the lives of children. In addition, community members and policymakers will use the standards to make neighborhoods and cities robust places for children and families to thrive. The goal of these united efforts to implement the Minnesota Early Indicators of Progress fully is to support each child to grow, develop and learn while reaching his or her full potential.

"My friends and I decided to build a house on the floor at our preschool. We had some small wooden blocks, some magnetic blocks, and some Legos that we stacked up to make walls. Lydia said, "We need a roof." I said, "Good idea, Lydia! We could make it out of magnet blocks." She agreed and together with our friend, Kylee, we started laying the magnet blocks across the walls we had built. But the roof kept falling down. Kylee said, "I think our walls are too far apart." We all helped to move them closer and rebuild the roof for our house. It worked! We continued to build more rooms and put roofs on them for the next twenty minutes."

In the early years, children are learning so many things. Their brains are rapidly developing and multitudes of cognitive connections are being created. They're learning to use their bodies. They're learning the ins and outs of relationships and to express their feelings. Communicating with others and processing language is a big step. Skills and concepts are acquired rapidly during early childhood if children are given the opportunity to explore.

But most importantly, young children are learning how to learn and manage their learning. The domain of Approaches to Learning focuses on the very traits that children must develop so that they can be successful as learners in later schooling and throughout their lives:

- Curiosity

- Engagement

- Persistence

- Inventiveness

- Organizing information

There is research to support the importance of children's approaches to learning and success in school. One study found that children with higher levels of attentiveness, task persistence, eagerness to learn, learning independence, flexibility, and organization, generally did better in literacy and math at the end of the kindergarten school year and the beginning of their first-grade year. In addition, children who approach learning tasks or novel situations with these positive approaches to learning are better able to regulate their learning experiences, and more quickly acquire general knowledge and cognitive skills. (Conn-Power 2006, 2)

The expectations that are set out in the Approaches to Learning domain of the Minnesota Early Childhood Indicators of Progress (ECIPs) show the ways that children demonstrate these approaches at different ages. There is no alignment with the indicators in this domain with the Minnesota Academic Standards for Kindergarten because there is no similar domain in K-12 Standards. Instead, early childhood professionals can turn to other resources for kindergarten expectations.

The Approaches to Learning Domain includes four components:

- AL 1-2 Initiative and Curiosity - Showing an active interest in surroundings, people, and objects. Demonstrating an eagerness to learn.

- AL 3-6 Attentiveness, Engagement and Persistence - Focusing and maintaining attention, makes constructive choices, plans to achieve a goal.

- AL 7-9 Creativity - Demonstrating originality and inventiveness in a variety of ways. Appropriately expressing one's unique ideas.

- AL 10-13 Processing and Utilizing Information – Gathering, storing, and organizing information that is perceived through the senses in order to use or apply in new situations. Constructing and using knowledge.

The sub-components and indicators identified for the ages of birth through kindergarten entry address the specific expectations across the developmental spectrum.

- For infants, indicators focus on the ways that infants show interest in their environment, interact with others and objects for short periods of time, begin to manage frustration, begin to generalize experiences, and recognize cause and effect relationships.

- The indicators for toddlers include how they are beginning to examine the characteristics of objects, make some independent choices, handle transitions, seek out others to play and carry out play plans, pretend, and identify and communicate about problems.

- The indicators for preschoolers focus on how children show their eagerness to investigate new things, engage in play with peers for extended periods of time, persist, experiment with new ways to combine materials, and contribute relevant information to discussions.

The skills and concepts in the Approaches to Learning Domain are highly interrelated to children's development in other domains. Teachers and providers of young children must remain attentive to this important area so they build practice in these skills throughout the curriculum and children develop this important foundation.

Children's ability to stay focused, interested, and engaged in activities supports a range of positive outcomes, including cognitive, language, and social and emotional development. It allows children to acquire new knowledge, learn new skills, and set and achieve goals for themselves. Many early learning experts view approaches to learning as one of the most important domains of early childhood development. (Head Start 2015)

Resources:
Conn-Powers, Michael. 2006. All Children Ready for School: Approaches to Learning. Early Childhood Briefing Paper Series. Bloomington: Indiana Institute on Disability and Community.
Head Start. 2015. Approaches to Learning. https://eclkc.ohs.acf.hhs.gov/hslc/hs/sr/approach/elof/a2_learning.html

Domain: Approaches to Learning

Components AL1-2: Initiative and Curiosity

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
AL1 **Inquisitiveness** Child explores the environment and seeks interaction with people and objects; willingly tries new things	**AL1.1** Shows interest in the environment primarily through looking and listening **AL1.2** Responds to people by looking kicking legs, vocalizing, reaching **AL1.3** Demonstrates readiness for new experiences	**AL1.4** Uses senses to explore their environment **AL1.5** Seeks and taking pleasure in new skills	**AL1.6** Approaches new materials in the environment with interest	**AL1.7** Investigates and experiments with materials with enthusiasm **AL1.8** Tries different ways of combining materials **AL 1.9** Asks questions	**AL1.10** Scans environment and notices new objects, materials and activities right away. Asks about them **AL1.11** Eager to investigate new things and have new experiences
AL2 **Wonderment** Child expresses interest in novelty	**AL2.1** Vocalizes in response to a new person, toy or experience	**AL2.2** Bangs, moves, throws and dumps materials with pleasure	**AL2.3** Turns objects around, upside down and inside out to examine characteristics	**AL2.4** Verbally expresses interest when encountering novel objects or events	**AL2.5** Independently seeks out new experiences, objects, or materials for own enjoyment

Components AL3-6: Attentiveness, Engagement and Persistence

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
AL3 **Attending** Child focuses visual and auditory attention on relevant aspects of the environment	**AL3.1** Recognizes primary caregiver and familiar objects by touch, sight, sound, smell	**AL3.2** Stays focused on activities for a short period of time	**AL3.3** Maintains attention for longer periods of time	**AL3.4** Returns to an activity after an interruption **AL3.5** Engages in play with peers for extended period of time **AL3.6** Attends in a large group for short periods	**AL3.7** Attends in large group activities led by teacher for sustained periods **AL3.8** Participates in large group activities and discussions **AL3.9** Listens to others
AL4 **Self-direction** Child makes choices based upon own interests	**AL4.1** Shows preference for people, objects, and food	**AL4.2** Makes choices seeking occasional assistance from adult	**AL4.3** Makes choices independently	**AL4.4** Engages in self-initiated activities for sustained periods of time	**AL4.5** Creates a plan to achieve a goal and follows through to completion
AL5 **Diligence** Child is focused and productive	**AL5.1** Repeats actions intentionally to achieve goals	**AL5.2** Interacts with others, objects or activities for short periods of time	**AL5.3** Seeks assistance then persists to complete task	**AL5.4** Works at a task despite distractions	**AL5.6** Conscientiously attempts to complete assigned tasks
AL6 **Resilience** Child responds to challenge by adapting	**AL6.1** Calms self when frustrated	**AL6.2** When upset, can recover in a reasonable amount of time	**AL6.3** Handles transitions comfortably	**AL6.4** Copes with change, persists and moves ahead **AL6.5** Approaches new tasks with confidence	**AL6.6** Maintains a positive outlook in spite of challenges **AL6.7** Demonstrates ability to adjust to changes

Components AL7-9: Creativity

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
AL7 Immersion Child becomes absorbed in the process of exploration	**AL7.1** Looks and listens with intensity	**AL7.2** Explores environment with purpose	**AL7.3** Shows preference for certain activities, objects and materials through sustained involvement	**AL7.4** Repeatedly becomes engrossed in activities of own choosing. **AL7.5** Rarely shows boredom when engaged in preferred activities	**AL7.6** When interested in a topic seeks opportunities to learn more and satisfy own curiosity
AL8 Playfulness Child demonstrates a sense of humor and imagination in their play	**AL8.1** Smile, coos and laughs **AL8.2** Begins to be playful with familiar people and objects	**AL8.3** Explores and uses materials in new and unconventional ways **AL8.4** Observes others when they are laughing and smiles or laughs too	**AL8.5** Shows interest in other's play and seeks out others to play **AL8.6** Uses a variety of voice inflections and facial expressions in play; laughs	**AL8.7** Tries out various pretend roles **AL8.8** Experiments with new ways to combine materials when playing	**AL8.9** Approaches tasks with imagination and inventiveness
AL9 Production Child expresses ideas, thoughts and opinions and creates products that are unexpected, original and relevant	**AL9.1** Shows excitement and pleasure at making something happen (activates mobile by kicking foot, drops toy and hears a "bang")	**AL9.2** Wants to do things by self and has own way of doing thing **AL9.3** Begins to play with toys, objects and materials in new, ways.	**AL9.4** Begins to organize play and carry out own plans	**AL9.5** Engages in inventive social play **AL9.6** Engages in inventive play with materials **AL9.7** Tries out different ways to accomplish a task	**AL9.8** Becomes absorbed in the process of creating **AL9.9** Purposefully works to create unique products of own choosing

Components AL10-13: Processing and Utilizing Information

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
AL10 **Working Memory** Child stores and retrieves information in order to use it purposefully	**AL10.1** Demonstrates understanding of object permanence	**AL10.2** Uses some prior experiences to build new knowledge and solve problems **AL10.3** Anticipates familiar, daily events	**AL10.4** Able to remember and pretend a sequence of events **AL10.5** Recites simple songs, rhymes, a short sequence of letters, numbers, etc.	**AL10.6** Recalls and follows multi step directions of increasing complexity **AL10.7** Recites complete songs or rhymes	**AL10.8** Independently carries out all of the steps in daily routines such as putting toys away, preparing for lunch, etc **AL10.9** Participates in discussions about familiar topics and contributes relevant information
AL11 **Symbolic Representation** Child uses sounds, actions, objects and materials (paint, clay, blocks, etc.) to express their ideas and understanding as well as to make new connections	**AL11.1** Imitates actions or makes a sound to represent or stand for an object or event ("Arf" for dog)	**AL11.2** Acts out a sequence of related actions to recreate personal experiences (feeding teddy bear with a spoon, etc)	**AL11.3** Begins to use one object to stand for another in play (block as a telephone) **AL11.4** After exploring and experimenting with materials, labels their creation	**AL11.5** **Begins to intenti**onally plan how to use materials to express an idea(may have a story in mind when pretending **AL11.6** Notices written words represent objects, people or events and begins to use in play	**AL11.7** Plans and creates elaborate play plots, stories, block structures and art projects **AL11.8** Begins to use print as a tool to express thoughts, ideas and to intentionally communicate

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
AL12 **Cognitive Flexibility/ Reasoning** Child considers more than one possible outcome to a problem or situation; begins to create theories for why things happen; can recognize how one thing relates to or affects another thing	**AL12.1** Recognizes their actions can cause a specific response	**AL12.2** Notices similarities and differences **AL12.3** Anticipates what will happen next	**AL12.4** Makes inferences based on what is seen, heard, smelled, etc. **AL12.5** Considers possibilities for why something happened	**AL12.6** Predicts and hypothesizes what will happen next **AL12.7** Forms theories about why things happen	**AL12.8** Draws conclusions and can explain their thinking **AL12.9** Considers another point of view and will change opinion or idea when faced with new information **AL12.10** Collaborates with others to investigate a situation or problem
AL13 **Problem Solving** Child seeks and finds solutions to problems	**AL13.1** Notices and pays attention to things that seem amiss	**AL13.2** Examines objects that don't respond as usual; attempts to make object work as expected	**AL13.3** Communicates to others that there is a problem and request that they solve it	**AL13.4** Makes guesses about how a problem might be solved and with support is willing to follow through to a solution	**AL13.5** Independently attempts to solve problems **AL13.6** Explains the possible solution and the outcome **AL13.7** Evaluates the outcome of attempted solutions and makes revisions if necessary

"I am four-years-old and I like to make things. I make towers and buildings with blocks. I make snakes and balls with modeling dough. I make sounds and rhythms when I pound on a drum. I make up stories and act them out when I put on dress-up clothes or play with puppets. I really like to look at the pictures in books, to sing songs, to dance and move to music, and to paint and draw with different kinds of materials. Sometime I want to sing because I'm happy and sometimes I like to paint people that I'm thinking about. Sometimes I feel better when I'm I've pretended with my friend. At my preschool program, I have time to do these things and my teachers help me, encourage me, give me new ideas and things to work with, and join me in joyfully experiencing creativity in many ways."

"Every child is an artist. The problem is how to remain an artist when he grows up." -Pablo Picasso

Children's development related to creative expression in the arts begins in their very first days. They interact with their family members in loving care that may include the soothing sounds of lullabies and the rhythmic movements of being rocked and patted. As their visual capabilities develop, they see the colors and shapes in their home environment and in nature. As their mobility increases, they move their bodies and experiment with what their muscles can do to get places and to express themselves. And, as children are able to make use of various tools, they make marks on paper, engage their senses with finger paint and modeling dough, and explore and create with various toys and objects. Books, photographs, music and media surround young children and expose them to the creativity of others. The arts for the young child are an integral part of living in the world and figuring out one's own capabilities for self-expression.

The expectations that are set out in the Early Indicators of Childhood of Progress (ECIPs): Minnesota's Early Learning Standards recognize that in the early years, children are developing skills in the arts that allow them to explore a variety of ways to be creative and to express themselves. For this domain, the term "arts" is used to include all types of artistic expression that can be used in an early childhood classroom (painting, drawing, making to music, dancing, pretend play, photography, building, etc. In addition, exposure to a variety of experiences help children further their appreciation of the arts and set life-long patterns for enjoying the arts. The indicators in this domain are aligned with the Minnesota Kindergarten Academic Standards. The ECIPs provide guidance so that teachers and providers can know appropriate expectations for young learners and understand how best to support children in their development in the arts.

The Arts Domain includes three components:

- A1-2: Exploring the Arts

- A3-4: Using the Arts to Express Ideas and Emotions

- A5: Self-Expression in the Arts

The subcomponents and indicators identified for the ages of birth through kindergarten entry address the specific expectations across the developmental spectrum.

- For infants, indicators focus is on the ways that children begin to explore their senses, and their own preferences

- The indicators for toddlers include how they begin to explore art materials including finger paint, crayons, music, dancing and clay.

- The indicators for preschoolers focus on how children intentionally use the arts, develop the vocabulary to describe their own creations and begin to combine artistic elements.

Creative thinking and innovation are skills that are promoted in educational standards that lead to workforce readiness and academic success. Skills in the arts are seen as highly interrelated with development across domains. Teachers and providers can infuse arts experiences into all parts of their curricular planning for young children and bring about meaningful engagement. Arts experiences are motivating and allow children to learn in fun and interesting ways.

When students experience learning through creativity, they will be better prepared for meeting the challenges of society and participating in the workforce (NEA 2012). Embracing creativity as a 21st century skill by addressing academic and arts standards in one lesson can inspire, motivate, and engage children in the learning process and move them forward in their learning and in their future careers. (Hunter-Doniger 2016, 35)

The indicators in the ECIPs help teachers and providers, along with children's family members, understand the expectations for arts development that are appropriate for the youngest learners.

Resources:
Hunter-Doniger, Tracey. 2016. "Snapdragons and Math Using Creativity to Inspire, Motivate, and Engage." Young Children. 71, no. 3: 30-35.

Domain: The Arts

Components A1-2: Exploring the Arts

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
A1 Interest in Art: Child shows an interest in learning about different artistic experiences	**A1.1** Actively explores their environment (through song, music, movement etc) to enrich their senses	**A1.2** Begins to choose senses to explore	**A1.3** Investigates different art experiences	**A1.4** Select their own art experience during play	**A1.5** Integrates a variety of art experiences during play	
A2 Understanding Differences: Child can distinguish differences within each area of artistic expression	**A2.1** Notices differences	**A2.2** Show a preference for toys, people, experiences	**A2.3** Chooses a artistic expression of their choice	**A2.4** Uses art-related vocabulary when discussing different media (stage, easel, brush, etc.	**A2.5** Discuss differences among artistic expression	**K1.1.1.1 – K1.1.5.1** Identify the elements of dance, media arts, music, theater, visual arts **K1.2.5.1** Identify the tools, materials and techniques from a variety of two- and three-dimensional media such as drawing, printmaking, ceramics or sculpture

Components A3-4: Using the Arts to Express Ideas and Emotions

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
A3 Using Art: Child demonstrates interest and emotions in artistic expression	**A3.1** Responds to music by vocalizing, moving body, smiling or frowning at pictures, colors, shapes, etc.	**A3.2** Shows emotion when engages in artistic expression	**A3.3** Chooses to spend time in artistic expression with available materials (paint, crayons, dramatic play, music etc.) and shares ideas	**A3.4** Demonstrates their preference by combining artistic elements (color, sound, media etc.)	**A3.5** Elects to spend time in artistic expression with purpose and analyzes their work	**K2.1.2.2** Revise creative work based on feedback of others
A4 Patterns: Child understands patterns in artistic media	**A4.1** Imitates sounds, motions and gestures	**A4.2** Shows preference for familiar sounds, motions and gestures	**A4.3** Begins to duplicate artistic patterns	**A4.4** Extends their artistic patterns with sounds, music, motions, gestures and materials	**A4.5** Creates their own artistic patterns	**K1.1.3.1** Identify the elements of music including melody, rhythm, dynamics, tone color, texture, form and their related forms (and other standards in the strand Artistic Foundations)

Component A5: Self-Expression in the Arts

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
A5 Self-Expression: Child uses art for self-expression	**A5.1** Expresses emotions when exposed to the arts	**A5.2** Shows preference in a variety of the arts to express oneself	**A5.3** Shares feelings and ideas through the arts	**A5.4** Describes own feelings through artistic expression	**A5.5** Intentionally uses art for self-expression	**K3.1.2.1** Share and describe a personal media work

"Amaani, my family child care provider, talks and sings with me and the other children in her care every day. I am three-and-one-half years old and go to her home with my little baby brother and several other children of differing ages. My family speaks English only but I love to listen to the lilt in Amaani's voice when she talks with me in English and as she sings my baby brother to sleep with a song from her native Somalia. I hear different sounds and am learning some Somali words as well as some Spanish ones as my best friend, Gabriella, and her family speak that language. Amaani makes sure that we can all communicate with each other. My favorite times of the day are book times. Amaani has many different kinds of books and lets us look at them ourselves, reads them to us, and helps us understand the stories and learn new words. Sometimes we act stories out. Sometimes the story has a song that we sing or items that we can count. I really like the pictures in books about plants and animals and houses and big trucks. Amaani has markers and crayons that we can use to write and draw. I can make some of the letters in my name, Emily, but not perfectly. Amaani says that's okay. That I'm learning just right for a three-, almost four-year-old. Gabriella can make her "G" but my little brother just makes marks on the paper. But Gabriella and me know which name cards belong to us and to the other children. We like to pass them out. When we do it right, Amaani claps and smiles."

Language, literacy, and communication skills begin in the very first months of life and strong development of young children's skills and abilities depends on interactions with families, teachers, caregivers and friends. The expectations that are set out in the Minnesota Early Indicators of Child Progress (ECIPs) recognize that young children are developing foundational knowledge and skills that will lead to more rigorous academic study in the English Language Arts domain in the elementary school years. The alignment of the ECIPs with the Minnesota Academic Standards for Kindergarten is included and, as the kindergarten standards are revised, this alignment will be updated. The ECIPs provide guidance so that teachers and providers know appropriate expectations for young learners.

The Language, Literacy, and Communications domain includes four components:

1. Listening and Understanding; Receptive Language LLC 1-2
2. Communicating and Speaking; Expressive Language LLC 3-4
3. Emergent Reading LLC 5-13
4. Writing LLC 14

The subcomponents and indicators identified for the ages of birth through kindergarten entry address the specific expectations across the developmental spectrum.

- For infants, indicators focus more on the children's receptive language and beginning communication skills with loved ones and caregivers. Interactions with books and early phonological awareness are seen within the context of relationships with caregivers.

- As toddlers grow in their capabilities to express themselves in words and phrases, vocabulary in their home languages is emphasized, both from the receptive as well as the expressive mode. Phonological awareness is seen in the ways that children engage with word play, songs and rhymes. As caregivers provide opportunities to interact with books and story-reading experiences, they help build initial concepts of print and early comprehension. Toddlers make initial attempts at writing as they scribble and draw with various writing tools.

- Preschoolers show their rapidly expanding vocabulary in the ways they can respond to adult directions and engage in conversations. They express their wants and needs more clearly and in greater complexity as their understanding of grammar and syntax grows. They show enjoyment in being read to and may read the pictures or retell the stories in books they know well. They begin to make sense of letters and print as they play with reading and writing and engage in word play with the sounds of language as they develop phonological awareness.

The domain of Language, Literacy and Communications is foundational to children's development in all domains. Their development of oral language and the ability to communicate with others helps children function socially and in their daily lives. Their growing vocabulary includes the language of other domains. They incorporate mathematical and scientific terminology as they learn more about the world around them. They grow in understanding of roles and responsibilities as they engage in dramatic play and imitate family life.

Certainly reading and writing are important long-term goals in school experiences. The indicators in the ECIPs are designed to work toward those goals with the foundational skills appropriate for the youngest learners. It's important for teaches and providers to remember that literacy in the early years is built on the foundation of oral language.

"Early literacy is an emerging set of relationships between reading and writing. These relationships are situated in a broader communication network of speaking and listening, whose components work together to help the learner negotiate the world and make sense of experience (Thelen & Smith 1995; Lewis 2000; Siegler 2000). Young children need writing to help them learn about reading, they need reading to help them learn about writing; and they need oral language to help them learn about both." (Roskos, Christie, and Richgels 2004, 1)

Resource:

Roskos, Kathleen A., James F. Christie, and Donald J. Richgels. 2003. Essentials of Early Literacy Instruction. Young Children, Vol. 58, No. 2: 52-60.

Domain: Language, Literacy and Communications: Cognitive

Component L1: Listening and Understanding; Receptive Language

Subcomponent	Birth to 6 months	6-15 months	15-24 months	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
L1 **Language comprehension:** Child understands the meaning of words and phrases (receptive) and uses those words and phrases to communicate effectively (expressive)	**L1.1** Turns toward and focuses on nearby adult caregiver who is speaking **L1.2** Watches caregiver actions and gestures	**L1.3** Responds to nonverbal and verbal cues **L1.4** Responds to conversation, questions, and requests **L1.5** Responds to an object or action label such as ball or eat	**L1.6** Responds to increasingly complex sentences **L1.7** Responds to descriptive language about objects, actions, and concepts	**L1.8** Shows understanding of questions and statements about people, objects, ideas, and feelings **L1.9** Points to or places an object in/out, under/over and top/bottom when asked **L1.10** Notices when adults use unusual or uncommon words	**L1.11** Responds to direct questions and follows simple direction **L1.12** Points to or places objects before, after, above, and below based on verbal cues	**L1.13** Follows directions that involve two or more steps **L1.14** Responds to increasingly complex prepositional directions, such as beside, around and next to	**K 0.8.1.1.d** Follows basic oral direction **K 0.8.1.1.a** Follows agreed upon rules for discussions **K 0.8.1.1.d** Follows basic oral direction

Components L2-3: Communicating and Speaking; Expressive Language

Subcomponent	Birth to 6 months	6-15 months	15-24 months	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
L2 **Social conversation:** Child meaningfully engages in talk with others to express feelings, wants and ideas	**L2.1** Coos and gurgles, babbles, and imitates facial expressions to caregivers **L2.2** Begins a conversation through body movements	**L2.3** Uses sounds, gestures, or actions to communicate and express needs and wants **L2.4** Makes different sounds in response to objects, people, or activities	**L2.5** Uses real or made-up words or signs to express basic wants and needs **L2.6** Adds to or extends conversations with others	**L2.7** Uses sounds, signs, words, phrases for desires and interests **L2.8** Begins to ask "why" questions **L2.9** Starts conversations with others	**L2.10** Continues conversations with comments or questions	**L2.11** Negotiates, shares, plans, and solves problems with others **L2.12** **Asks and** answers questions to seek help or get information	**K 0.8.1.1.b** Continue a conversation through multiple exchanges **K 0.8.3.3** Ask and answer questions in order to seek help, get information, or clarify something that is not understood

Subcomponent	Birth to 6 months	6-15 months	15-24 months	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
L3 **Vocabulary and syntax:** Child understands word order and grammatical rules	**L3.1** Imitates and repeats pitch and duration of caregiver sounds	**L3.2** Uses a few words or word approximations to represent concepts **L3.3** Names a few objects and people **L3.4** Imitates animal and other environmental sounds	**L3.5** Constructs simple two-word sentences (object and action) **L3.6** Rapidly increases use and number of sounds and words	**L3.7** Uses increasingly complex and varied vocabulary and language **L3.8** Rapidly increases use of descriptive words such as giant, scary, silly **L3.9** Uses verbs such as have, had, or will in everyday conversation	**L3.10** Uses short sentences to shares information about experiences, people, places, and things **L3.11** Uses increasingly precise adverbs such as quietly, loudly, quickly **L3.12** Uses more new and precise words **L3.13** Correctly uses some past tense and irregular verbs (go, went, gone)	**L3.14** Uses sentences that express logical relationships between concepts **L3.15** Uses increasingly specific words to name objects and their features and functions **L3.16** Shares information about experiences, people, places, and things in sequence	**K 0.8.4.4** Describes familiar people places, things, and events and, with prompting and support, provide additional detail **K 0.10.4.4** Identifies new meanings for familiar words and apply them accurately **K 0.8.6.6** Speaks audibly and express thoughts, feelings, and ideas clearly, and responds to poems, rhymes and songs

Components L4-8: Emergent Reading

Subcomponent	Birth to 6 months	6-15 months	15-24 months	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
L4 **Motivation, engagement:** Child has an interest in and sustained attention for literacy acts	**L4.1** Likes to be read to and shown pictures	**L4.2** Makes sounds while looking at text or images **L4.3** Points to a few pictures in books and in response to adult questions **L4.4** Demonstrates interest and involvement with books and other print materials	**L4.5** Relates an object in a book or print to the real object **L4.6** Imitates reading	**L4.7** Shows interest in both pictures and text **L4.8** Asks for or picks out favorite texts **L4.9** Focuses on a book while listening to the reader	**L4.10** Shows persistence with longer and more complex narratives and informational text **L4.11** Offers a personal response to stories read aloud	**L4.12** Actively participates in reading activities with enjoyment and purpose **L4.13** Retells familiar stories using the book as a guide	**K 0.1.10.10** Actively participates in group reading activities with purpose and understanding including the appropriate selection of text for personal enjoyment, interest and academic tasks
L5 **Phonological awareness:** Child is able to hear and understand the discrete sounds that make up language	**L5.1** Looks at caregiver's lips and face when caregiver is speaking **L5.2** Pays attention to sounds in the environment and the spoken language from caregivers	**L5.3** Shows interest in songs, rhymes, chants, and stories **L5.4** Recognizes sounds used by speakers of child's home language	**L5.5** Imitates sounds heard in the environment **L5.6** Identifies sounds heard in the environment	**L5.7** Repeats different sounds in rhymes and familiar words **L5.8** Distinguishes between spoken language and environmental sounds **L5.9** Recalls previously heard words, songs, and rhymes	**L5.10** Shows interest in and associates sounds with words **L5.11** Playfully explores sounds, words, and language, including rhyme and alliteration	**L5.12** Identifies and continues sound patterns in words **L5.13** Plays with the sounds in spoken language, independent of meaning	**K 0.3.0. 0** Demonstrate understanding of spoken words, syllables, and sounds (phonemes)

Subcomponent	Birth to 6 months	6-15 months	15-24 months	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
L6 **Letter recognition:** Child recognizes the shapes of letters and recalls the names of letters	**L6.1** Recognizes familiar faces	**L6.2** Shows interest in familiar photos, pictures, and drawings	**L6.3** Recognizes familiar photos, pictures, drawings	**L6.4** Recognizes symbols, colors, and shapes	**L6.5** Points to and names some letters (especially in their own name)	**L6.6** Recognizes how features of a letter combine to make a specific letter **L6.7** Differentiates between letters and other symbols	**K 0.3.1.1.(d)** Recognize and name all upper and lower case letters of the alphabet
L7 **Concepts of print:** Child understands the fundamentals of print, such as orientation, organization, and features of print	**L7.1** Explores books by grasping and bringing to mouth to suck and chew	**L7.2** Attempts to hold board books with both hands **L7.3** Turns pages of board books	**L7.4** Turns book or text right side up	**L7.5** Identifies front and back of book **L7.6** Demonstrates understanding that print has meaning	**L7.7** Looks at books or shares them from front to back	**L7.8** Recognizes some parts of a book and conventions of print **L7.9** Knows that English print is left to right and top to bottom **L7.10** Points to words and attempts to read, or asks, "what does it say?"	**K 0.3.1.1 (a-d)** Demonstrates understanding of the organization and basic features of print

Subcomponent	Birth to 6 months	6-15 months	15-24 months	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
L8 **Comprehension of narrative text:** Child understands the events and order of events in a story		**L8.1** Pays attention to stories read out loud **L8.2** Points to or gestures toward characters during reading	**L8.3** Understands stories read or told **L8.4** Talks about, gestures, or points to characters and events during reading or storytelling **L8.5** Relates objects in stories to objects in the real world **L8.6** Talks about characters and events during reading	**L8.7** Asks and answers questions during story reading **L8.8** Acts out, draws, or describes parts of a story **L8.9** Can identify and describe basic information from the text	**L8.10** Retells important information from a story **L8.11** Tells simple stories and experiences about own life **L8.12** Responds to and uses vocabulary related to key concepts in the text	**L8.13** Predicts what will happen next in a story using words or drawings **L8.14** Retells a story using a variety of media, materials, and props **L8.15** Restates and describes the concepts from the text	**K 0.1.3.3** With prompting and support, identify characters, settings and major events in a story **K (0.1.2.2 0.2.1.1, 0.2.2.2, 0.2.1.1, 0.2.2.2, 0.2.3.3)** With prompting and support, retell familiar stories, including key details **K 0.1.1.1** With prompting and support ask and answer questions about key details in a text

Component L9: Writing

Subcomponent	Birth to 6 months	6-15 months	15-24 months	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
L9 Writing conventions: Child understands the forms and function of written language	**L9.1** Grasps and squeezes a toy or object **L9.2** Uses hands or feet to make a connection with objects or people	**L9.3** Coordinates eye and hand movements and has control over grasp	**L9.4** Uses small muscles to do simple tasks **L9.5** Attempts to use a variety of writing tools such as crayons and markers	**L9.6** Uses scribbles, shapes, or pictures to represent thoughts and ideas **L9.7** Demonstrates interest in writing as a way of communicating	**L9.8** Uses letter-like symbols to make letters or words **L9.9** Uses drawing to represent writing	**L9.10** Writes own name, and words about things that interest them **L9.11** Understands there are different purposes for writing, such as stories, lists, signs, etc. **L9.12** Uses invented spelling **L9.13** Uses words, pictures, letters, or letter-like symbols to communicate information and ideas, or compose original stories	**K 0.6.3.3** Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened

"We do math all day long in my PreK classroom at Lakeview Elementary School. As we arrive, we move a photo of ourselves from the Home column to the At School column. Then, at circle time, we count how many children are in each row. I like to count! Both at circle time and investigation stations, we sing counting songs and read counting books. One time, I counted all the connecting cubes it took to go from one end of the table to the other. My teacher, Kevin, helped me when I got to nineteen. I couldn't remember what came next. It's fun to build things with the different shapes in the block area. I tried to build a rainbow with only the rounded ones but they kept falling down. I figured out that I needed to stack some rectangles on the bottom to make it stand. At the manipulatives table, we have baskets to sort different things into and pattern cards to help us create colorful, geometric patterns. I like when we have measuring cups and pitchers at the water and sand table. Kevin gives me a challenge: How many little cups of water will fill the pitcher? He writes it down on a clipboard so we won't forget!"

Children's development of mathematical understanding begins in the very first months of life and continues to grow and expand as they interact with others and with the world around them. Babies begin to see patterns in the world in familiar caregiving routines and attend to objects and sounds relative to themselves. Toddlers begin to understand the words "one" and "more" and maneuver through their world with growing spatial understanding. Preschoolers begin to make sense of numbers as they play with counting. Their math understanding is directly related to their playful explorations of blocks, water, sand, puzzles, and games.

The expectations that are set out in the Minnesota Early Indicators of Child Progress (ECIPs) recognize that young children are developing the foundational knowledge and skills that will lead to more rigorous academic study in the Mathematics domain in the elementary school years. The alignment of the ECIPs with the Minnesota Academic Standards for Kindergarten is included and, as the kindergarten standards are revised, this alignment will be updated.

The Mathematics domain includes five components:

- Component M1-6 Number Knowledge

- Component M7 Measurement

- Component M8 Patterns

- Component M9-11 Geometry and Spatial Thinking

- Component M12-13 Data Analysis

The subcomponents and indicators identified for the ages of birth through kindergarten entry address the specific expectations across the developmental spectrum.

- For infants, indicators focus on the children's beginning understanding of patterns and predictability as they anticipate familiar routines, spatial awareness as they respond to objects and sounds relative to themselves, and recognition of similarities and differences among people and objects.

- Toddlers are growing in their mobility and independence in exploring the environment. Therefore, the indicators focus on the imitation of counting and early understanding of one-to-one correspondence, awareness of full and empty, following simple patterns, beginning awareness of shape and place in space, and matching and sorting.

- The growing language capabilities of preschoolers include their use of an ever-increasing vocabulary of mathematical terms to describe and make sense of their world. They recite numbers and count objects with one-to-one correspondence to higher quantities. Preschoolers identify geometric shapes and use the comparative language of measurement. Developing sorting strategies that grow in complexity and duplicating and creating patterns using various rules are skills best developed within the context of preschooler's play

While the terminology and concepts in the domain of mathematics are unique and explicit, they are interrelated with children's development in other domains as well. Mathematics is highly correlated with the domain of Language, Literacy, and Communications.

…research suggests there are rich connections between early literacy and early numeracy skill development that may help us think more broadly about children's early academic learning. Ultimately, we can use this information to create rich environments that support both early literacy and numeracy skill development." (Hojnoski 2014)

As children investigate mathematical concepts in hands-on experiences, they grow in their approaches to learning. They solve problems, think creatively, and apply concepts. Their social-emotional skills are enhanced as they develop greater confidence as learners and work collaboratively with others. Mathematics and science are linked easily in a rich, engaging early childhood environment where children experiment with water, sand, construction materials, and living things.

The indicators in the ECIPs are designed to work toward mathematics knowledge and skills; these goals are met most successfully as teachers and providers interact with children throughout each and every day. Children's interest and understanding of mathematics is best supported by showing the importance of mathematics in daily life.

Resource:
Hojnoski, Robin. August 11, 2014. What do the connections between early literacy and numeracy mean in preschool?
http://www.schoolreadinessblog.com/author/robin_hojnoski/

Domain: Mathematics - Cognitive

Components M1-6: Number Knowledge

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
M1 **Rote counting:** The child attends to sequences and use of number words, with or without items, sets, or numerals and without recognizing the link to quantity	**M1.1** Releases one item to reach for another **M1.2** Uses body language to indicate a desire for more	**M1.3** Imitates use of at least one number word **M1.4** Imitates counting	**M1.5** Recites number words but not necessarily in the correct order **M1.6** Recites number words correctly, up to 3 **M1.7** Names familiar numerals	**M1.8** Shows interest in counting or number oriented play, and notices numbers in the environment during free play **M1.9** Orders a few objects by size with assistance **M1.10** Recites number words in the correct sequence up to 10 **M1.11** Recognizes when others make errors in the number word sequence **M1.12** Points to objects while reciting number word sequence **M1.13** Begins to write number-like forms	**M1.14** Recites number word aloud, forward, up to at least 29 (allow for some mistakes), without objects **M1.15** Recites number words aloud, backward, down from at least 10 without objects **M1.16** Is able to name the next number word for numbers up to 9 **M1.17** Reads and writes numerals from 0 to 10, with some reversals possible	**K.1.1.3** Count, with and without objects, forward and backward to at least 20 **K.1.1.2** Read, write, and represent whole numbers from 0 to at least 31

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
M2 Meaningful Counting: The child uses counting to identify how many items are in a set, using one to one correspondence; uses number words to identify "how many"			**M2.1** Imitates one to one correspondence	**M2.2** Correctly uses 1:1 correspondence up to 4 items	**M2.3** Demonstrates and uses 1:1 correspondence with sets larger than four	
M3 Cardinality: The child associates each of one or more number words to a unique and exact quantity, and knows that the final number word used when counting out an item set represents the exact number of items in the set		**M3.1** Responds to request to give a small quantity items (one, two)	**M3.2** Gives 1 item correctly, upon request **M3.3** Gives 2 items or more upon request for 2, inconsistently	**M3.4** Gives exactly 4 consistently when asked	**M3.5** Gives 5 or more items correctly and consistently when asked	**K.1.2.1** Use objects and draw pictures to find the sums and differences of numbers between 0 and 10. **K.1.2.2** Compose and decompose numbers up to 10 with objects and pictures

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
M4 Ordinality: The child matches symbols (digits or numerals) to a position in a sequence			**M4.1** Identifies first or second item in a sequence, upon request	**M4.2** Uses terms like first; most; last; before, to refer to ordinal position	**M4.3** Recognizes that a number can be used to represent a position in a sequence	**K1.1.1** Recognize that a number can be used to represent how many objects are in a set or to represent the position of an object in a sequence
M5 Comparing numbers and quantities: The child uses organizing strategies to know how many objects they have	**M5.1** Grasps one object and reaches for another	**M5.2** Demonstrates understanding of some descriptive words, such as responding to questions **M5.3** Separates a few items into groups using own method such as color, size, etc. **M5.4** Nests smaller objects inside larger objects	**M5.5** Compares two sets of up to 4 objects accurately using terms like more/ less; a little/a lot	**M5.6** Uses terms like more/less; bigger/ smaller; a little bit/a lot; to refer to approximate quantities	**M5.7** Verbally estimates quantities without counting, although inconsistently and allowing for mistakes	

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
M6 **Relation and operations:** The child can create a set or subset based on a rule, can combine or separate sets, and recognize the amount of items in a set does not change when the set arrangement changes				**M6.1** Notices when the quantity of a set of up to 4 objects has increased or decreased	**M6.2** States the number that comes next or before up to 5 **M6.3** Understands that a quantity changes (increases or decreases) when a set of objects is added to/ subtracted from (respectively)	**M6.4** States the number that comes next or before up to 10 **M6.5** Understands that the quantity of a set of (more than 4) objects has been changed **M6.6** Without recounting, can add one more to a set, even when the set isn't visible after counting **M6.7** Demonstrates ability to combine and separate items within a small set without changing the total number in the set (up to 5) **M6.8** Uses simple physical strategies to combine or separate sets

Components M1-6: Number Knowledge

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
M7 **Measurement:** Child recognizes and makes comparisons of measurable attributes (length, height, width, area, volume, physical distance, time duration.)		**M7.1** Experiments with "full" and "empty" **M7.2** Orders a few objects by size with assistance	**M7.3** Brings objects closer together to compare them **M7.4** Imitates using an object to measure another object **M7.5** Identifies which of two small sets (less than 4) is more upon request **M7.6** Uses language to describe "full" and "empty"	**M7.7** Shows understanding of measurement terms (longer/ shorter, taller/ shorter, fullest, farthest, closest) **M7.8** Uses terms like more/less; a little bit; a lot; to refer to continuous properties like water, sand, height	**M7.9** Compares and orders more than two items in some way **M7.10** Uses comparison vocabulary (longer/ shorter, taller/ shorter, farthest/ closest)	**K.3.2.1** Use words to compare objects according to length, size, weight and position. **K.3.2.2** Order 2 or 3 objects using measurable attributes, such as length and weight.

Component M8: Patterns

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
M8 Repeating patterns: The child can identify create and describe sequences in objects, colors or numbers with sequences that increase, decrease or grow in complexity	**M8.1** Anticipates familiar routines	**M8.2** Carries out familiar routines **M8.3** Follows a familiar simple pattern (sound, body movement sequence like Patty Cake)	**M8.4** Follows an unfamiliar simple pattern (sound, body, color, size, movement)	**M8.5** Recognizes repeating patterns **M8.6** Copies existing pattern with same materials **M8.7** Extends a simple pattern with the same materials	**M8.8** Uses words or pictures to describe a simple pattern **M8.9** Applies a simple pattern rule to different materials or mode (sound, body, color, size, movement) **M8.10** Copies complex patterns with same materials **M8.11** Applies a complex pattern rule using different materials or mode (sound, body, color, size, movement)	**K.2.1.1** Identify, create, complete, and extend simple patterns using shape, color, size, growing or shrinking such as ABB, ABB, ABB or number, sounds and movements

Components M9-11: Geometry and Spatial Thinking

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
M9 **Knowledge and visualization of shapes:** The child recognizes shapes, can describe 2 dimensional (2D) and 3 dimensional (3D) shapes and manipulate shapes with purpose.		**M9.1** Shows interest in shapes	**M9.2** Begins to recognize 2 dimensional (2D) and 3 dimensional (3D) shapes such as circles, spheres, squares, and cubes, such as by sorting or puzzle pieces	**M9.3** Points to familiar 2D and 3D shapes (circle, spheres, squares, cubes, triangles) when asked, thereby showing recognition of shape names **M9.4** Recognizes geometric shapes in the environment	**M9.5** Begins to describe the features (attributes) that define 2D and #D shapes, including sides and corners **M9.6** Puts together (composes) and takes apart (decomposes) shapes **M9.7** Composes and decomposes shapes/ constructions with increasing complexity	**K.3.1.1** Recognize basic two- and spheres. and three-dimensional shapes such as squares, circles, triangles, rectangles, trapezoids, hexagons, cubes, cones, cylinders and sphere

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
M10 **Transformations and symmetry:** The child can locate and manipulate shapes in space	**M10.1** Attends and responds to moving objects and sounds, relative to themselves	**M10.2** Develops increasing ability to change positions and move body from place to place **M10.3** Demonstrates awareness of relationship between over and under, up and down, in and out	**M10.4** Adjusts position and movement of own body relative to objects **M10.5** Explores how objects fit together in space **M10.6** Rotates objects to fit through holes	**M10.7** Rotates, flips, or turns an object to fit once they realize object doesn't fit a defined space	**M10.8** Puts together (composes) and takes apart (decomposes) shapes to create new shapes **M10.9** Recognizes and creates shapes that have symmetry **M10.10** Shows awareness that an object needs to be rotated, flipped, or turned before trying to fit the object into a hole or puzzle	**K.3.1.3** Use basic shapes and spatial reasoning to model objects in the real world

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
M11 Location, spatial relationships and landmark use: The child recognizes where a person or object is in relation to other people of objects	**M11.1** **Shows preference for familiar toys**	**M11.2** Recognizes familiar objects from different vantage points	**M11.3** With verbal cues, uses simple maps to relate to real-world	**M11.4** Uses terms like near/far; under; below; front; middle; end **M11.5** Uses a simple map of a visible area to locate placement	**M11.6** Recognizes and describes position of objects in space with greater accuracy **M11.7** Draws a simple map **M11.8** Matches 2 dimensional (2D) map with surrounding 3 dimensional (3D) layout Include this: (involves transformation, scale, dimension, and orientation distance)	**K.3.1.3** Use basic shapes and spatial reasoning to model objects in the real-world

Component M12: Data Analysis

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 years	4-5, K-Readiness	K Alignment
M12 **Sorting:** The child recognizes that objects can be sorted by attributes	**M12.1** Recognizes differences among people and among different objects	**M12.2** Matches items based on attributes meaningful to the child	**M12.3** Explores sorting **M12.4** Imitates sorting	**M12.5** Sorts objects based on an observable attribute **12�6** Demonstrates understanding that attributes are measurable	**M12.7** Describes the attribute used for sorting or comparing **M12.8** While sorting, can make a shift to change the attribute being used to sort and describe the new sorting attribute	**K.3.1.2** Sort objects using characteristics such as shape, size, color and thickness

Components M13-14: Data Analysis

Subcomponent	0-1 years	1-2 years	2-3 years	3-4 year	4-5, K-Readiness	K Alignment
M13 Collects, classifies, and organizes information: The child collects, classifies and organizes data based on distinguishing characteristics.				**M13.1** Participates in simple data collection discussed by an adult or other child **M13.2** Collects information by one or more attribute	**M13.3** Participates as group member in the collection of data that is put on a chart or graph **M13.4** Sorts information by one or more attribute **M13.5** Independently collects data to put on a chart or graph	
M14 Describes data: The child can describe data by using data sets to solve problems or asking questions.				**M14.1** Identifies patterns, differences, or similarities of information collected **M14.2** Uses language to describe those patterns, differences or similarities of data	**M14.3** Uses language to compare data **M14.4** Uses data to answer questions and solve problems **M14.5** Discusses, compares and makes sense of collected data	

"I'm eight-months-old and I'm pushing myself up on my hands and knees and rocking myself back and forth. My care provider, Ellen, knows that I need many opportunities for tummy time in a space that is safe and inviting so that I can feel motivated to propel myself forward until I am crawling. She stays nearby encouraging me as I figure out how to use my body to move. I'm excited and happy as she claps and smiles and enthusiastically urges me on. She's been letting me hold items while she changes my diaper and dresses and undresses me, too. I like grasping the fresh diaper or holding on to a sock that I know I'll be wearing shortly. I can pick up some of my own food off of my tray if I concentrate on using my thumb and fingers together. When I get the food to my mouth, I clap my hands together just like Ellen does. When she holds me in her lap to read a book, she lets me turn the pages and point to my favorite pictures. When I squirm to get down, she helps me to stand for a minute or two with her hands in mine. I can feel the strength growing in my legs as I support myself. I'm learning to do so many things with my body!"

Early childhood is a time for incredible changes in children's physical development. In gross motor development, infants begin as non-mobile beings, and in a matter of months, most creep, crawl, stand, and walk. Toddlers develop balance and coordination as they run and jump and climb. Preschoolers refine their movements and learn to use their large muscles to move with purpose and intent, to catch and throw, and to coordinate as they climb and gallop. Children's use of the muscles of their hands and fingers (fine motor development) continues to develop as they learn to feed and dress themselves and using drawing, writing, and other tools.

With widespread concerns about obesity among children and more sedentary lifestyles in general, there is agreement that rigorous physical development is essential for children's overall health. Researchers are finding direct links between how active babies are and how their brain development is affected.

"In infancy, you can see the relationship between a baby's motor development and the resultant learning. As a baby moves from a lying to a sitting to a creeping and finally to a standing position, his perspective changes, as do his perceptions of the world and its possibilities. The more mobile he becomes, the more he increases his knowledge about himself and the people and things around him, acquiring information through his tactile (touch), kinesthetic (muscular), proprioceptive (body awareness), and vestibular (motion awareness) senses. With each new experience, new neural connections are made." (Pica 2010, 48)

The expectations that are set out in the Physical and Movement Development Domain of the Early Childhood Indicators of Child Progress (ECIPs) show the ways that children demonstrate physical capabilities at different ages. The indicators in this domain are written in such a way that teachers and providers can know appropriate expectations for young learners and understand how best to support children in their development related to physical development. There is no alignment with the indicators in this domain with the Minnesota Academic Standards for Kindergarten because there is no similar domain in K-12 Standards.

The Physical and Movement Development Domain includes two components:

- Component P1-4 Gross Motor

- Component P5-6 Fine Motor

The subcomponents and indicators identified for the ages of birth through kindergarten entry address the specific expectations across the developmental spectrum.

- For infants, indicators focus on the ways that children that young infants move both involuntarily and with purpose, how they begin to move through space, and how they reach and grasp and use their hands and fingers.

- The indicators for toddlers include how they are beginning to walk, climb, run, and jump, to roll, push, and throw balls, to use their hands and fingers to manipulate books, crayons, blocks, and other items, and to participate in dressing and personal hygiene.

- The indicators for preschoolers focus on how children show their increasing coordination and balance as they walk, run, climb, hop, jump, and gallop, kick, throw, catch, and bounce balls, and use their hands and fingers to manipulate puzzle pieces, to draw and write, and to put on articles of clothing.

The skills and concepts in the Physical and Movement Development Domain are interrelated with children's development in other domains. There are direct consequences to brain development for infants and ongoing connections to active movement and general health for all children. The physical health of a child is an important component for the optimal development of the whole child and impacts learning, social and emotional well-being, and realization of the child's full potential.

Working closely with children and their families to advocate for an active, healthy lifestyle leads to supports for the development of children's gross and fine motor skills in programs and at home.

"By showing children the natural connections between all areas of learning and development and the activities they do at school and at home, [early educators can help] young children see themselves as learners and movers. This requires mutual cooperation and support among teachers, families, and children. After all, it takes a whole village to raise a healthy child." (Schilling and McOmber 2006, 2)

Resources:
Pica, Rae. 2010. "Babies on the Move." Young Children. 65, no. 4: 48-50.
Schilling, Tammy and Kelly Anne McOmber. 2006. Beyond the Journal: Young Children on the Web. May. Washington, D.C.: NAEYC.

Domain: Physical and Movement Development

Components P1-4: Gross Motor

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
P1 **Early infancy - reflexive movements:** Child moves involuntarily: not purposefully initiating movement	**P1�1** Laying on back, kicks legs and waves arms **P1�2** Laying on tummy, holds head up				
P2 **Early infancy movement In and out of position:** Child moves voluntarily and purposefully	**P2�1** Rolls over: tummy to back/back to tummy **P2�2** Moves into/out of sitting				

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
P3 **Locomotion:** Childs moves their body through space from one place to another	**P3�1** Crawls by one of these methods: • On tummy using arms/legs (tummy/ commando) • Two straight arms and one bent leg (3-point), • Scoots instead of crawls: from a seated position by pushing forward with legs (bend & straighten)/arm assist **P3�2** Pulls to *stand* up against furniture **P3�3** Cruises along surfaces (e.g., low tables, chairs, shelves **P3�4** Walks with assistance	**P3�5** Crawls up a few stairs with adult observing **P3�6** Walks independently **P3�7** Runs freely	**P3�8** Crawls up 3 to 5 stairs **P3�9** Walks on some different surfaces **P3�10** Walks up and down a few stairs with adult support or holding handrail (step up on stair, then brings next foot *to* same stair) **P3�11** Runs in games and freely **P3�12** Climbs onto/off furniture **P3�13** Jumps with two feet *over* a line	**P3�14** Crawls under and around 3 or more objects in an obstacle course **P3�15** Walks along a wide (12" >) slightly raised straight pathway with assistance **P3�16** Walks up and down a few stairs with adult support or holding handrail using alternating feet (step up on stair one foot, then use other foot to go to the next stair) **P3�17** Climbs on play equipment **P3�18** Hops on one foot a few times **P3�19** Jumps *off* slightly elevated height with two feet **P3�20** Jumps with two feet *over* and *out of* spaces or objects on floor ("river" w rope or tape markers/ hula hoops)	**P3�21** Walks on a wide (12>) slightly raised pathway **P3�22** Walks up and down stairs holding handrail **P3�23** Jumps off variable heights using a one- foot lead or with two feet **P3�24** Gallops freely or in a game (one foot and a step-hop, other foot and a step- hop) **P3�25** Moves many times through an obstacle course: over, under and around

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
P4 **Object control:** Child can manipulate objects to propel or receive		**P4�1** Pushes and pulls toys while walking **P4�2** Throws small balls	**P4�3** Pushes medium size ball forward with foot **P4�4** Rolls a small ball to close target **P4�5** Throws a small ball close to target **P4�6** Pushes with legs while sitting on a scooter or balance bike	**P4�7** Kicks a medium-sized ball **P4�8** Throws a large playground ball using two hands **P4�9** Catches a large or medium ball by cradling in arms toward body **P4�10** Peddles a tricycle or riding toys	**P4�11** Kicks playground ball or small soccer ball to a close wide target **P4�12** Throws a small ball with some accuracy to a target or person **P4�13** Catches a large or medium-sized ball using two hands **P4�14** Bounces and catches a playground ball a few times using two hands **P4�15** Attempts to pump legs to swing on swing

Components P5-6: Fine Motor

| Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
P5 **Dexterity:** Child can coordinate and control movement of hands and fingers to grasp and manipulate objects	**P5�1** Reaches for toy, grasps it and releases **P5�2** Grasps small food objects using finger and thumb **P5�3** Transfers object from one hand to other hand	**P5�4** Grasps toys, objects to release into container **P5�5** Dumps out toys and objects from a container **P5�6** Turns pages of a board book **P5�7** Begins to grasp crayon to scribble **P5�8** Stacks a few blocks	**P5�9** Turns pages of a book **P5�10** Grasps a crayon to scribble **P5�11** Stacks 4 blocks	**P5�12** Grasps a simple puzzle piece and can place a few pieces in the puzzle **P5�13** Draws freely on paper **P5�14** Strings large beads	**P5�15** Grasps puzzle piece and can place 5-7 pieces in the puzzle **P5�16** Draws letters and/ or part of name with some reversals **P5�17** Draws stick people and some objects
P6 **Self Care:** Child participates in daily care routines for feeding, dressing and personal hygiene	**P6�1** Assists with dressing by lifting leg, arm, etc. **P6�2** Feeds self with hands **P6�3** Begins to drink from a cup	**P6�4** When being dressed or undressed, assists with some clothes **P6�5** Feeds self with hands and begins to use a child-size spoon **P6�6** Drinks from a cup **P6�7** Helps put away *a few* toys	**P6�8** Attempts to dress self for indoors with support (help with buttons and zippers) **P6�9** Helps put away toys **P6�10** May use the bathroom with assistance	**P6�11** Assists with putting shoes on and taking them off **P6�12** Assists with putting boots on and taking off **P6�13** Puts on coat and takes coat off with assistance	**P6�14** Dresses with near independence **P6�15** Puts shoes on the correct feet. May need help with ties and fasteners **P6�16** Puts boots on correct feet and takes boots off. May need help with ties and fasteners **P6�17** Puts coat on and takes off **P6�18** Uses the bathroom independently

"I am eleven months old and I am a scientist and an investigator. I use my senses to explore the world around me. Today, I want to get to those interesting and inviting toys on the shelf across the carpet so I crawl as fast as I can while my caregiver, Ernestine, sits nearby. I pull a basket from the bottom shelf and several different-sized balls and beanbags fall onto the floor. I sit and try to pick up the balls but every time I reach out for them, they roll away from me. I laugh and smile and bat at them, clapping as they roll even further away. Ernestine rolls them back towards me. I watch the motion of the colored plastic as it moves across the rug and try to predict where the ball will roll but I'm not always right. Then, I pick up a beanbag. The corduroy fabric is soft in my hand and I feel the bumpy texture of the beans inside. I shake the bag and hear the sound of the beans. Ernestine shakes a bag too, then, pulls down a drum from another shelf and shows me how to pound on it to make a sound. I pound on the drum with the beanbag still in my hand, alternating between pounding and shaking, and squeal with delight at the sounds I make."

From birth, children are scientists. They are driven by their innate curiosity. Babies use their senses to take in information about their world, whether it's the smell of their mother's skin, the pitch of their father's voice, the feel of a soft blanket, or the taste of breast milk. Children's development of scientific thinking and inquiry begins in the very first months of life and continues to grow and expand as they interact with others and with the world around them. The world of mobile infants and toddlers expands so that they can crawl and walk across fresh, green grass or splash in a puddle. They explore the properties of objects and materials as they manipulate toys to make sounds or put things together. Preschoolers take their investigations further. They notice differences and similarities in both the natural and physical world. They try to figure out how something works. And they begin to make predictions and give explanations.

The indicators in the Scientific Thinking domain that are set out in the Minnesota Early Indicators of Child Progress (ECIPs) reflect the new thinking in the science education field: that for young learners, scientific inquiry is more beneficial than occasional and unconnected science activities. Therefore, the focus for this domain is on scientific processes more than specific science content with the idea that this approach will lay the foundation for developing ways of thinking that support more rigorous academic study in the Scientific Thinking domain in the elementary school years. The ECIPs provide guidance so that teachers and providers can know appropriate expectations for young learners and understand how best to support children so that they have the necessary foundation for later learning.

The Scientific Thinking and Inquiry domain includes three components:
- Component STPS 1-2: Discover
- Component STPS 3-4: Act
- Component STPS 5-6: Integrate
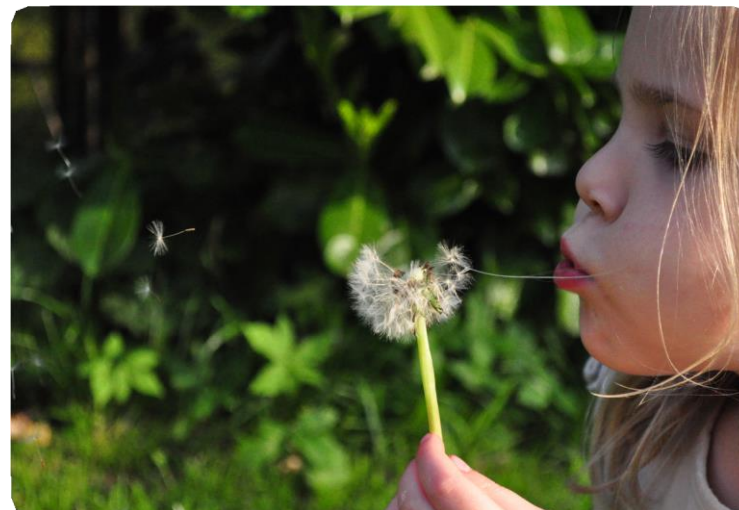
The sub-components and indicators identified for the ages of birth through kindergarten entry address the specific expectations across the developmental spectrum.

- For infants, indicators focus on how children observe and respond to external stimuli, show interest in exploring, and begin to recognize familiar items, people, and situations.

- For toddlers, the indicators reflect that they seek out items of interest, begin to use objects as tools, use simple strategies to carry out ideas, and build on past experiences.

- For preschoolers, the indicators show the ways they seek to gain knowledge and formulate questions, making plans and predictions, and verbally expressing their ideas and thoughts.

This broad view of the Scientific Thinking domain allows for ease of integration with other domains in the ECIPs. As children follow their curiosity in exploration, they build on their approaches to learning. As they discover new things, they are delighted and motivated to continue trying new things and learning more. Using the language of scientific inquiry, children's vocabulary is expanded. And, mathematical understanding of measurement and representation of quantity is often a part of scientific investigations.

Many in education are linking science and technology in what are called "STEM" initiatives. STEM stands for science, technology, engineering, and mathematics. Some researchers and public and private leaders relate the very future of our country to STEM:

"The nation's capacity to innovate and thrive in the modern workforce depends on foundation of math and science learning........A sustained, vibrant democracy is dependent upon this foundation in STEM." (Sneiderman 2013, 1)

In early childhood education, STEM is a way to integrate other domains with scientific thinking. Teachers and providers can tap into the natural curiosity of young explorers so that science experiences are filled with learning opportunities that integrate skills from multiple domains.

Resource:
Sneiderman, Joshua M. 2013. "Engaging Children in STEM Education Early!" Natural Start Alliance, December. North American Association for Environmental Education. http://naturalstart.org/feature-stories/engaging-children-stem-education-early

Domain: Scientific Thinking - Cognitive

Components ST1-2: Discover

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
ST1 **Observe and question:** Child demonstrates awareness and engagement with phenomena, materials, and environment	**ST1.1** Observes and responds to external stimuli **ST1.2** Indicates surprise, curiosity, or hesitancy when presented with unfamiliar items, people, situations	**ST1.3** Indicates interest by looking, pointing or verbalizing	**ST1.4** Asks questions readily	**ST1.5** Notices differences or similarities among materials, objects and phenomena **ST1.6** Uses experiences to stimulate questions	**ST1.7** Verbally identifies obvious differences and similarities **ST1.8** Expresses curiosity and/or formulates questions of complex concepts	**K1.1.2.1** Use observation to develop an accurate description of natural phenomena and compare one's observational and descriptive with those of others **K2.1.1.1** Sort objects in terms of color, size, shape and texture and communicate reasoning for the sorting system

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
ST2 **Investigate:** Child actively shows wonder by demonstrating curiosity of self, others and surroundings	**ST2.1** Explores people and objects using senses	**ST2.2** Seeks out and explores objects and items with apparent interest **ST2.3** Begins using objects as tools	**ST2.4** Engages with objects of interest – whether familiar or new- for extended periods of time **ST2.5** Explores properties of objects/ materials to gain understanding **ST2.6** Identifies and uses some tools for their intended purpose	**ST2.7** Seeks to gain additional knowledge in areas of interests **ST2.8** Explores with the intention of finding out something specific **ST2.9** Uses many tools as designed	**ST2.10** Starts with a useful, general approach to investigation even if details may be lacking **ST2.11** Uses discernment to inform exploration **ST2.12** Uses tools in new and novel ways	**K1.1.2.1** Use observation to develop an accurate description of natural phenomena and compare one's observational and descriptive with those of others **K4.1.1.1** Observed compare plants and animal

Components ST3-4: Act

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
ST3 Experiment: Child develops and completes a process based on a question, interest or anticipated outcome, adjusting as needed.	**ST3.1** Demonstrates recognition of familiar items, people, and situations **ST3.2** Persists in looking for missing object(s)	**ST3.3** Demonstrates willingness to try new things **ST3.4** Uses simple strategies to carry out ideas **ST3.5** Demonstrates ability to focus on one element of a situation **ST3.6** Persists in actions or attempts to affect environment or objects	**ST3.7** Approaches situations with intent to achieve a simple outcome **ST3.8** Uses a variety of strategies to carry out ideas **ST3.9** Demonstrates ability to focus on multiple elements of a situation **ST3.10** Demonstrates resilience in trial and error process	**ST3.11** Makes a simple plan in advance to see what will happen **ST3.12** Uses a greater variety of strategies to carry out ideas **ST3.13** Attempts to make a prediction of an expected outcome	**ST3.14** Makes a plan in advance with an intended outcome **ST3.15** Demonstrates awareness that different circumstances, materials and variables impact strategies and outcomes **ST3.16** Makes a prediction when prompted **ST3.17** Changes a plan or refines actions when outcome is not as expected	**K4.2.1.1** Observe a natural system or its model and identify living and nonliving components of the system

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
ST4 **Evaluate:** Child analyzes, examines, critiques, and synthesizes outcomes in order to draw conclusions	**ST4.1** Shows a preference for certain materials, people or situations **ST4.2** Indicates surprise when outcome is not as expected	**ST4.3** Associates objects that belong together **ST4.4** Asks "what happened?" or "where did it go?" as a result of an experiment	**ST4.5** Recognizes obvious differences among like objects **ST4.6** Makes guesses at possible explanations or conclusions	**ST4.7** Describes all parts of an outcome by comparing, sorting, classifying and/or organizing **ST4.8** Open to more than one solution or answer to a problem **ST4.9** Begins to rely on or expect evidence, things seen or experienced directly, as reasons for results obtained	**ST4.10** Offers critique of an experience based on examination of outcomes **ST4.11** Sees outcomes as the result of one's behavior or actions **ST4.12** Reflects upon evidence and draws reasonable conclusions using data gathered	**K1.1.2.1** Use observations to develop accurate descriptions of a natural phenomena and compare one's observations and descriptions with others **K3.2.2.2** Identify the sun as a source of heat and light **K3.2.2.1** Monitor daily and seasonal changes in weather and summarize changes

Understanding Components ST5-6: Integrate

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
ST5 Communicate: Child effectively verbalizes thinking and share thoughts, ideas, conclusions with self and others	**ST5.1** Vocalizes in response to stimuli or individual needs **ST5.2** Seeks out/initiates interactions from others in service of own needs	**ST5.3** Uses gestures, body language or a few words to express emotions related to an activity, person or experience **ST5.4** Invites others to observe actions and results	**ST5.5** Describes details associated with an experience such as materials, possible causes and effects **ST5.6** Listens to others ideas and points of view **ST5.7** Shares stories and related experiences with others unprompted **ST5.8** Scribbles or draws to show and/or share ideas	**ST5.9** Verbally expresses ideas/thought process **ST5.10** Seeks input from others regarding an experience **ST5.11** Verbalizes possible explanations for an outcome **ST5.12** Uses drawing, writing, models, or other creative expressions to present ideas	**ST5.13** Retells/describes own actions in process of experimenting **ST5.14** Talks with others about questions, actions, ideas, observations or results **ST5.15** Articulates and shares aloud explanations based on reasoning and evidence **ST5.16** Uses more detailed drawing, writing, models, or creative expressions to present ideas	**K1.1.2.1** Use observations to develop accurate descriptions of a natural phenomena and compare one's observations and descriptions with others **K2.1.1.1** Sort objects in terms of color, size, shape and texture and communicate reasoning for the sorting system

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
ST6 **Apply:** Child leverages and uses knowledge unprompted or in a new situation.	**ST6.1** Finds comfort in familiar people and objects	**ST6.2** Revisits and builds on past experiences	**ST6.3** Generalizes knowledge gained from one situation to another **ST6.4** Recognizes relevant attributes to inform the development of a rule	**ST6.5** Recalls and uses information in new/ different experiences **ST6.6** Generates new and more complex questions **ST6.7** Uses prior experience to identify details that may be relevant	**ST6.8** Compares findings to predictions or expected results **ST6.9** Identify what to look for, measure, or test to answer questions **ST6.10** Develops and applies rules **ST6.11** Determines approach to situation, problem or challenge based on previous experience	**K1.2.1.1** Sort objects into two groups: those that are found in nature and those that are human made **K2.1.1.1** Sort objects in terms of color, size, shape and texture and communicate reasoning for the sorting system

"I am two-and-one-quarter years old and I have strong feelings. Sometimes, I feel so overwhelmed with frustration that I throw things and strike out at others. Sometimes, I am frightened to try something new and want to hide in my mother's or caregiver's arms. Sometimes, I scream with delight and excitement. Sometimes, I don't want any help from anyone else. I want to do it myself. I'm so lucky that my teacher at my child care center is a calm influence and an understanding guide so I can get through some difficult moments. She talks quietly and kindly to me and describes what I'm feeling. She makes suggestions and helps me in just the right ways so I can be independent, express my emotions more appropriately, and learn to settle myself down. I like my friends and want to play with them."

The developmentally appropriate expectations of children described in the Social and Emotional domain are firmly based on a foundation of trust and attachment and are essential to a good experience in school and throughout life. As infants establish strong relationships with their primary caregivers, their skills grow and expand to include others in the world around them. When the care and routines of babies are consistent and predictable, they begin to express their needs and wants and learn to comfort themselves. Toddlers are ready to move away from caregivers and explore their world but also check in with caring adults to ensure that they have their support. As verbal skills develop, toddlers express needs, wants, and emotions. Preschoolers show greater independence, self-awareness, and interest in the feelings of others. They are learning ways to engage successfully and positively with their friends.

The expectations that are set out in the Minnesota Early Indicators of Child Progress (ECIPs) recognize that in the early years, children are developing social and emotional skills that will guide their behavior, affect their overall mental health, and impact their ability to succeed academically as they move on to later schooling. The indicators in this domain are not aligned with the Minnesota Academic Standards for Kindergarten. Instead, early childhood professionals can turn to other resources for kindergarten expectations. The ECIPs provide guidance so that teachers and providers can know appropriate expectations for young learners and understand how best to support children in social and emotional development.

The Social and Emotional Development Domain includes three components:

- Component SE 1-3: Self and Emotional Awareness

- Component SE 4-5: Self-Management

- Component SE 6-8: Social Understanding and Relationships

The sub-components and indicators identified for the ages of birth through kindergarten entry address the specific expectations across the developmental spectrum.

- For infants, indicators focus on the ways that children indicate their needs to their caregivers, respond to stimuli, learn to self-comfort, attend to the emotions of others and copy their actions, and show likes and dislikes.

- The indicators for toddlers include how they are beginning to attempt new challenges, use words to express needs and emotions, to follow simple routines, and to engage in parallel play with other children.

- The indicators for preschoolers focus on how children show confidence and self-direction, identify gender and self as part of a family, community, and culture, ability to make choices, verbal expression of needs and emotions, responses to changing behavioral expectations, and beginning to manage conflicts in social interactions.

Social and emotional skills are highly interrelated with children's development in other domains. In fact, all learning is based on the foundation of children's healthy social and emotional development. Perhaps one of the most important subcomponents in the early years is that of Self-Management, the regulation of both thoughts and feelings. Such management includes the ability to postpone acting on one's first impulse, which might be anger or aggression or not following the teacher's directions. For children to become successful learners in a classroom, they must begin to self-regulate.

"Children who cannot effectively regulate anxiety or discouragement tend to move away from, rather than engage in, challenging learning activities. Conversely, when children regulate uncomfortable emotions, they can relax and focus on learning cognitive skills. Similarly, children experience better emotional regulation when they replace thoughts like "I'm not good at this" with thoughts like "This is difficult, but I can do it if I keep trying." Regulating anxiety and thinking helps children persist in challenging activities, which increases their opportunities to practice the skills required for an activity." (Florez 2011, 47)

The indicators in the ECIPs help teachers and providers, along with children's family members, understand the expectations that are appropriate for the youngest learners. Since social and emotional development is so influential in a child's development in all areas, adults play an important role in shaping a child's future when they support the development of skills in this domain.

"When teachers deliberately teach self-regulation [and other social and emotional skills] as part of everyday experiences, they help children become actively engaged learners, laying the foundation for years of future success in school and life." (Florez 2011, 51)

Resource:
Florez, Ida Rose. 2011. "Developing Young Children's Self-Regulation through Everyday Experiences." Young Children: 66 (4). 47-51.

Domain: Social and Emotional Development

Components S1-3: Self and Emotional Awareness

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
S1 **Confidence:** Child demonstrates confidence "I am capable, I can experiment, I can make mistakes, and I can move on"	**S1.1** Independently prompts caregiver to meet basic needs **S1.2** Uses voice or body to show likes and dislikes	**S1.3** Independently attempts new challenges or activities that may or may not be successful **S1.4** Checks with and accepts support from adult or caregiver when necessary	**S1.5** Demonstrates or describes personal skills, likes, or dislikes **S1.6** Seeks help from adult to meet needs or solve problems **S1.7** Seeks out available social-emotional resources such as adults, peers or things for support	**S1.8** Demonstrates confidence in a range of abilities and expresses pride in accomplishments **S1.9** Consistently and effectively uses social/ emotional resources such as adults, peers or things for support	**S1.10** Demonstrates increasing confidence and inclination to express opinions and ideas **S1.11** Engages in increasingly independent and self-directed activities **S1.12** Tolerates constructive criticism and manages setbacks, seeking adult support when needed
S2 **Self Awareness:** Child demonstrates understanding and appreciation of uniqueness in own family, community, culture, and the world	**S2.1** Explores the world and environment around self and how things work	**S2.2** Demonstrates awareness of self as separate from others	**S2.3** Identifies self as part of the family, culture, community, or group **S2.4** Describes or labels self as a boy or girl	**S2.5** Demonstrates knowledge of family celebrations, traditions, and expectations	**S2.6** Shows increasingly accurate understanding of own strengths, preferences, limitations, and personal qualities

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
S3 **Emotions:** Child demonstrates understanding of own emotions, others' emotions, and awareness of emotions becoming reactions and behaviors	**S3.1** Expresses emotions through facial expressions, sounds, and gestures **S3.2** Notices and responds to emotions displayed by others	**S3.3** Expresses feelings, needs, and wants with nonverbal communication, vocalizations, and a few words **S3.4** Associates emotions with words and expressions	**S3.5** Recognizes and describes own emotions **S3.6** Shows some understanding of others' emotional expressions	**S3.7** Uses words to express emotions **S3.8** Recognizes and responds to others' emotional expression	**S3.9** Demonstrates or describes increasing understanding of cause and effect around own emotional reactions **S3.10** Exhibits growing ability to understand and anticipate others' emotional reactions to situations or behaviors

Components S4-5: Self-Management

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
S4 **Managing thinking:** Child manages attention and thoughts	**S4.1** Briefly pays attention to environmental stimuli **S4.2** Indicates a choice with physical or vocal response	**S4.3** Focuses attention on preferred items and experiences **S4.4** Expresses thoughts by responding to simple choices and limits verbally or nonverbally **S4.5** Anticipates and follows simple routines	**S4.6** Frequently pays attention to both familiar and new objects and experiences **S4.7** Chooses from a variety of options within the environment **S4.8** Responds to soothing or redirection when playing or learning does not go as expected	**S4.9** Attends for longer periods and persists through a broad range of adult-directed and child-initiated activities **S4.10** Makes self-directed choices from a greater variety of options **S4.11** Increasing ability to remember and follow simple two-step directions	**S4.12** Sustains attention and persistence with a task of interest for at least 5 minutes **S4.13** Talks through simple tasks and conflicts, seeking adult support as needed

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
S5 **Managing emotions and behaviors:** Child manages emotions, impulses, and behaviors with assistance from others and independently	**S5.1** Uses simple behaviors, objects, or movements to comfort and calm self with caregiver assistance **S5.2** Communicates needs or wants to adults using simple gestures, sign language, or sounds **S5.3** Uses sounds, sign language, or gestures to gain adult help to alleviate discomfort or distress **S5.4** Responds to adult efforts to calm or soothe **S5.5** Uses behaviors, objects, or movements to comfort self	**S5.6** Expands use of sign language, gestures, and a few words or phrases to communicate needs, wants, preferences, and discomforts to adults **S5.7** Actively seeks adult help using sounds, gestures, or some words when feeling strong emotions, either positive or negative **S5.8** Anticipates and actively avoids or ignores situations that cause discomfort **S5.9** Follows simple routines, expectations, and boundaries to help manage own emotions and behavior **S5.10** Tolerates brief delays in getting needs met	**S5.11** Uses a wide variety of self-comforting behaviors **S5.12** Communicates specific needs, wants, and discomfort to adults **S5.13** Anticipates the need for comfort and tries to prepare self for changes in routine **S5.14** Follows simple expectations to manage emotions and behaviors, but may require reminders or assistance, particularly during more intense feelings or circumstances **S5.15** Waits briefly to obtain something desired	**S5.16** Consistently calms self when feeling strong emotions or discomfort with only occasional adult guidance and assistance **S5.17** Independently expresses feelings, needs, opinions, and desires in appropriate ways **S5.18** Follows expectations established to manage feelings and behaviors with necessary reminders or assistance **S5.19** Demonstrates the ability to delay gratification for longer periods of time **S5.20** Demonstrates understanding of rules, roles, jobs, and relationships in families and the community	**5�21** Increasingly expresses feelings, needs, opinions and desires verbally **5�22** Shows increasing understanding of changing expectations for behavior and emotional expression in different settings (e.g., home, school, grocery store) **5�23** Shows increasing ability to manage challenging feelings and behaviors, with necessary reminders or assistance **5�24** Shows increasing ability to stop and think before acting

Components S6-8: Social Understanding and Relationships

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
S6 **Social responsiveness:** Child notices and responds to others and their emotions	**S6.1** Shows interest or reacts to others' emotions **S6.2** Responds to others' emotional tone and actions	**S6.3** Imitates others' emotions and expressions **S6.4** Shows some individual response to others' emotional tone	**S6.5** Identifies others' basic emotional cues **S6.6** Shows concern for others through efforts to help or comfort	**S6.7** Shows understanding, empathy, and compassion for others through words or gestures **S6.8** Labels others' emotions	**S6.9** Appropriately labels increasingly complex emotions in others (e.g., pride, embarrassment, jealousy) **S6.10** Responds appropriately to others' emotions **S6.11** Shows increasing understanding and appreciation of the perspectives of peers
S7 **Building relationships:** Child establishes and sustains relationships with others	**S7.1** Shows a preference for a trusted adult **S7.2** Notices or responds to others	**S7.3** Shows preferences for one or more adults or children **S7.4** Shows some awareness or caution with unfamiliar adults **S7.5** Uses trusted adult(s) as a base from which to explore	**S7.6** Seeks out familiar adults and children for conversation and play **S7.7** Manages routine separations with decreasing amount of distress	**S7.8** Shares information and participates in activities with adults and peers	**S7.9** Builds friendships through play, learning activities and conversation with peers **S7.10** Uses trusted adults for support in diverse settings (e.g., classroom, outside) when in need of assistance

| Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness
S8 **Social skills:** Child responds to and interact with others in a meaningful way	**S8.1** Notices others and chooses similar materials or copies actions	**S8.2** Play with others in a parallel manner **S8.3** Recognizes similarities and differences between self and others	**S8.4** Enters play groups using various strategies **S8.5** eeks a preferred playmate **S8.6** Shows flexibility in roles during play	**S8.7** Initiates, joins, and sustains cooperative play and conversations with others **S8.8** Shows concern, respect, care, and appreciation for others and the environment **S8.9** Actively helps solve problems with others **S8.10** Takes turns	**S8.11** Shows increasing ability to initiate and engage in positive interactions with peers and adults **S8.12** Solves problems with others most of the time, appropriately using support of adults and peers as needed

"I'm four years old and my friends and I love to play in the dramatic play area at our preschool program. This is where we try out various adult roles that we have observed people take on in our families, schools, and communities. We pretend to care for babies and raise children. We incorporate the cultural traditions and values of our own families as we pretend to interact with loved ones engaged in daily life. We also try out different jobs and careers in our pretend play. We may act as the cashier in the grocery store, the doctor or nurse in the hospital, the police officer or firefighter in the neighborhood or the server in the restaurant. This kind of play is lots of fun. And, as we play we're learning about our own identities, our families, our communities and our society. We're using different languages and ways of doing things that we see in our families' lives. We're learning more about economics and the environment and how people are similar and different. Sometimes, we take field trips and attend special events. Family members share information so we learn about different cultures and family experiences. We also work hard to learn to get along, solve problems, and celebrate our differences and commonalities. From all of these opportunities, we learn new vocabulary and form ideas about how we live and work together."

Children are surrounded and deeply influenced by the values of their family and first caregivers. From the very beginning of their lives, children are learning about themselves and how to relate to others. Their family members also live and work in a neighborhood, a broader community, and a national society. As children establish their identity, the choices they make and how they function in society are shaped. As they learn to share and take turns and care for each other and the environment, they participate in the foundational concepts of a democratic society. The expectations that are set out in the Social Systems domain of the Minnesota Early Childhood Indicators of Progress (ECIPs) are the building blocks for creating future neighbors, volunteers, workers, taxpayers, voters, and responsible citizens.

The indicators in this domain are written so that teachers can know appropriate expectations for young learners in their development related to Social Systems. They are aligned with the Minnesota Academic Standards in Social Science for Kindergarten.

The Social Systems Domain includes five components:

- Components SS1-2: Community, People and Relationships
- Components SS3-4: Change over Time
- Components SS 5-6: Environment
- Components SS6-7: Economics
- Component SS8: Technology
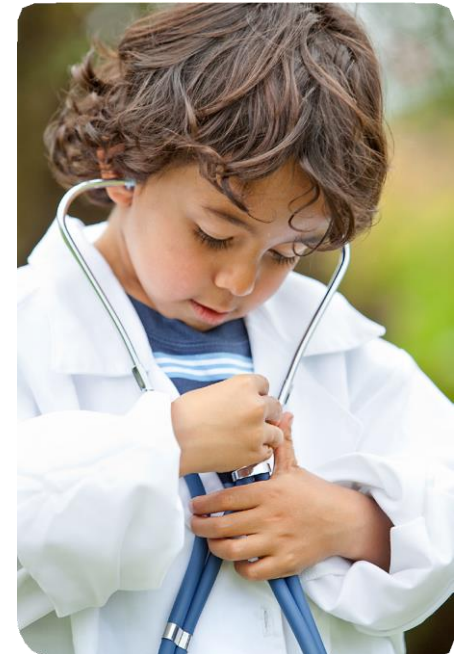
The sub-components and indicators identified for the ages of birth through kindergarten entry address the specific expectations across the developmental spectrum.

- For infants, indicators focus on the ways that children make their needs and wants known, relate to others, begin to notice the sequence of routines, and recognize familiar people, toys, and objects.

- The indicators for toddlers include how they are beginning to notice similarities and differences in people and themselves, show understanding of expectations and routines, participate in self care, engage in pretend play, and help put away toys.

- The indicators for preschoolers focus on their developing understanding of their identity and of belonging in different groups, are learning to follow rules and routines, to show interest in family culture and participate in turn-taking and negotiation.

The skills and concepts in the Social Systems domain are interrelated with children's development in other domains and many overlap with those in social and emotional development. The understanding of past and future, of economic concepts, and of caring for the environment relate specifically to the cognitive domains in the ECIPs.

While young children are not suited to memorizing historical facts and learning about the ins and outs of governmental agencies, there are important ways develop understanding of social systems. The ECIPs guide teachers and providers in supporting this important domain in ways that are just right for young children and just right for the greater society.

> "Social studies as content and process is a vibrant and vital part of early childhood curricula. Social studies at the center of early childhood curricula offers the hope that the focus of education will be on the development of effective, efficient, ethical children who will approach their world nonsimplistically and thoughtfully. (Mindes 2005, 7)

Resource:
Mindes, Gayle. 2005. "Social Studies in Today's Early Childhood Curricula." Beyond the Journal. Young Children on the Web. Washington, D.C.: NAEYC. http://www.naeyc.org/files/yc/file/200509/MindesBTJ905.pdf

Domain: Social Systems: Cognitive

Components SS1-2: Community, People and Relationships

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
SS1 **Self-identity in the community:** Understands the different ways people form their identity	**SS1.1** Shows a preference for familiar adults **SS1.2** Expresses feeling and emotions through gestures, facial expressions and sounds	**SS1.3** Demonstrates preference for favorite toys, clothing and activities	**SS1.4** Begins to explore the physical characteristics that make an individual unique **SS1.5** Asks questions about similarities and differences in other people in the community	**SS1.6** Describes their role(s) within the family and familiar environment **SS1.7** Identifies similarities and differences in people	**SS1.8** Identifies self as a part of the family, spiritual group, culture, community, and/or other group to which the family belongs. **SS1.9** Demonstrates an understanding that families vary **SS1.10** Identifies some family traditions and customs	

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
SS2 **Civics:** Child understands what it means to be a member of a community	**SS2.1** Makes wants and needs known SS2.2 Shows interest in stories and songs	**SS2.3** Develops an expectation and understanding of routines within a familiar environment **SS2.4** Shows interest in other children and objects	**SS2.5** Demonstrates an understanding of the expectations in a familiar environment	**SS2.6** Describes different roles of people in the community **SS2.7** With modeling and support, follows classroom rules and routines	**SS2.8** Practices the ways groups make choices and decisions with support **SS2.9** Demonstrates an understanding of rules and why they are important **SS2.10** Participates in a variety of roles in the early childhood environment **SS2.11** Demonstrates awareness of familiar jobs and what's needed to perform them	**K1.1.1** **Demon**strate civic skills in a classroom that reflect an understanding of civic values **K1.4.7.1** Identify examples of rules in the school community and explain why they exist; describe incentives for following rules and consequences for breaking rules

Components SS3-4: Change over Time

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
SS3 **Personal history:** Child explores the concepts of past, present and future in relation to personally significant events	**S3.1** Participates in physical care routines	**S3.2** Notices sequence of a daily routine	**S3.3** Begins to use language about time **S3.4** Notices age and size differences between self and others **S3.5** Notices change in a daily routine	**S3.6** Uses language to recall events in time ("yesterday," "today", "tomorrow" "when I was a baby," "last time") **S3.7** Begins to see self placed in time between older and younger family members and friends **S3.8** Demonstrates an understanding of chronological order concepts in reference to a specific event **S3.9** Talks about recent family or friend events and their impact on self	**S3.10** Uses language to recall and anticipate events in time with increasing understanding and accuracy **S3.11** Compares self to older and younger family members and friends with specific examples **S3.12** Describes a chronological order in a series of familiar events **S3.13** Reflects on the impact of past, present and some future events on self and family	**K4.1.1.1** Use a variety of words to reference time in the past, present and the future; identify beginning, middle and end of historical stories

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
SS4 **Family narratives and traditions:** Child has an awareness and appreciation of family and cultural stories and traditions	**SS4.1** Recognizes familiar people and toys or objects			**SS4.2** Demonstrates curiosity about family and culture **SS4.3** Shares stories about family, culture and traditions	**SS4.4** Asks more questions about families and culture to build deeper understanding **SS4.5** Compares own cultural traditions with others to understand similarities and differences	**K4.2.4.1** Compare and contrast traditions in a family with those of other families, including those from diverse backgrounds

Components SS5-6: Environment

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
SS5 Conservation: Understands that some environmental resources are limited		**SS5.1** Helps to put away toys or throw out trash **SS5.2** Participates in self-care routines	**SS5.3** With modeling and support begins to explore conservation concepts such as reducing, reusing, and recycling	**SS5.4** Begins to practice responsible consumption and conservation of natural and physical resources	**SS5.5** With support, participates in community conservation activities (playground clean up, etc.)	**K1.1.1** Demonstrate civic skills in a classroom that reflect an understanding of civic values
SS6 Physical characteristics of community: Child can identify important physical features in their environment		**SS6.1** Begins pretend play with blocks, dolls and other toys	**SS6.2** Explores physical environments where people live, work and play	**SS6.3** Identifies and describes significant objects and places in familiar environments	**SS6.4** Begins to use geographical language to identify features of familiar environments (hills, rivers, etc.) **SS6.5** Uses tools to represent immediate environment	**K3.1.1.1** Describe spatial information depicted in simple drawings and pictures

Components SS7: Economics

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
SS7 Economic reasoning: Child begins to understand basic economic principles			**SS7.1** Participates in turn taking activities with support **SS7.2** Asks for needs to be met **SS7.3** Explores the exchange of goods	**SS7.4** Participates in turn taking with increasing independence **SS7.5** Describes basic needs for living things **SS7.6** Begins to understand the use of trade or money to obtain goods and services	**SS7.7** Negotiates and shares with other children during play **SS7.8** Begins to label individual needs and wants with support **SS7.9** Identifies goods and services that could meet a specific need or want	**K1.1** Demonstrates civic skills in a classroom that reflect an understanding of civic values **K2.1.1.1** Distinguishes between individual needs (conditions necessary to survive) and individual wants (conditions necessary to be happy) **K2.1.1.2** Identify goods or services that could satisfy a specific need or want

Components SS8: Technology

Subcomponent	0-1 year	1-2 years	2-3 years	3-4 years	4-5 years, K Readiness	K Alignment
SS8 **Digital citizenship:** The ability to choose and use some digital technology appropriately* *Follow all best practices and safety protocol for children using digital technology				**SS8.1** With support, explores all tools, including digital tools, to enhance learning	**SS8.2** Knows when, how and why to use a variety of tools to for learning, including digital technology **SS8.3** With support, engages in responsible use of all tools including digital technology	

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About a Child Activity

Write about a child you know well.

How old is the child?

What kind of things can this child do well? What things does he or she struggle with?

What does this child like to do? What does this child not like to do?

What words would you use to describe this child?

What is this childlike – friendly, shy, energetic, calm, excitable, outgoing, risk taking, cautious, etc.?

What is the child's family situation?

What language or languages does this child speak?

What cultural practices does this child participate in?

What foods does this child like? Not like?

NCTSN

The National Child
Traumatic Stress Network

What is Child Traumatic Stress?

What is child traumatic stress, how does it develop, and what are the symptoms? To answer these questions, we first have to understand what trauma is.

From a psychological perspective, trauma occurs when a child experiences an intense event that threatens or causes harm to his or her emotional and physical well-being.

Trauma can be the result of exposure to a natural disaster such as a hurricane or flood or to events such as war and terrorism. Witnessing or being the victim of violence, serious injury, or physical or sexual abuse can be traumatic. Accidents or medical procedures can result in trauma, too. Sadly, about one of every four children will experience a traumatic event before the age of 16.

When children have a traumatic experience, they react in both physiological and psychological ways. Their heart rate may increase, and they may begin to sweat, to feel agitated and hyperalert, to feel "butterflies" in their stomach, and to become emotionally upset. These reactions are distressing, but in fact they're normal — they're our bodies' way of protecting us and preparing us to confront danger. However, some children who have experienced a traumatic event will have longer lasting reactions that can interfere with their physical and emotional health.

Children who suffer from child traumatic stress are those children who have been exposed to one or more traumas over the course of their lives and develop reactions that persist and affect their daily lives after the traumatic events have ended. Traumatic reactions can include a variety of responses, including intense and ongoing emotional upset, depressive symptoms, anxiety, behavioral changes, difficulties with attention, academic difficulties, nightmares, physical symptoms such as difficulty sleeping and eating, and aches and pains, among others. Children who suffer from traumatic stress often have these types of symptoms when reminded in some way of the traumatic event. Although many of us may experience these reactions from time to time, when a child is experiencing child traumatic stress, they interfere with the child's daily life and ability to function and interact with others.

Although many of us may experience reactions to stress from time to time, when a child is experiencing child traumatic stress, these reactions interfere with his or her daily life and ability to function and interact with others.

Some of these children may develop ongoing symptoms that are diagnosed as post-traumatic stressdisorder (PTSD). When we talk about child traumatic stress, we're talking about the stress of anychild who's had a traumatic experience and is having difficulties moving forward with his or her life. When we talk about PTSD, we're talking about a disorder defined by the American Psychiatric Association as having specific symptoms: the child continues to re-experience the event through nightmares, flashbacks, or other

symptoms for more than a month after the original experience; the child has what we call avoidance or numbing symptoms—he or she won't think about the event, has memory lapses, or maybe feels numb in connection with the events—and the child has feelings of arousal, such as increased irritability, difficulty sleeping, or others. Every child diagnosed with PTSD is experiencing child traumatic stress, but not every child experiencing child traumatic stress has all the symptoms for a PTSD diagnosis.

And not every child who experiences a traumatic event will develop symptoms of child traumatic stress. Whether or not your child does depends on a range of factors. These include his or her history of previous trauma exposure, because children who have experienced prior traumas are more likely to develop symptoms after a recent event. They also include an individual child's mental and emotional strengths and weaknesses and what kind of support he or she has at home and elsewhere. In some instances, when two children encounter the same situation, one will develop ongoing difficulties and the other will not. Children are unique individuals, and it's unwise to make sweeping assumptions about whether they will or will not experience ongoing troubles following a traumatic event.
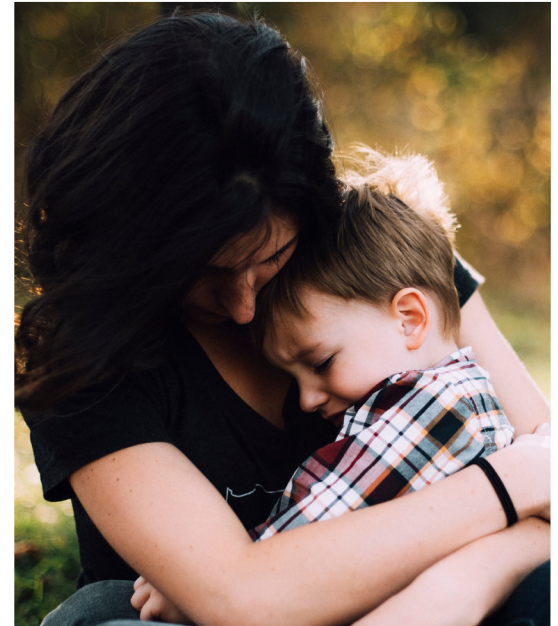
For children who do experience traumatic stress, there are a wide variety of potential consequences. In addition to causing the symptoms listed earlier, the experience can have a direct impact on the development of children's brains and bodies. Traumatic stress can interfere with children's ability to concentrate, learn, and perform in school. It can change how children view the world and their futures, and can lead to future employment problems. It can also take a tremendous toll on the entire family.

> *Not every child who experiences a traumatic event will develop symptoms of child traumatic stress. Whether or not your child does depends on a range of factors.*

The way that traumatic stress appears will vary from child to child and will depend on the child's age and developmental level. The good news is that over the past decade the mental health community has developed treatments that can help children suffering from traumatic stress. It's important to seek help from someone who has experience working with children and knows how to access resources in your community.

Although not every child will experience traumatic stress, it's unlikely that any of us are immune from exposure to trauma. To learn more about child traumatic stress, please visit the National Child Traumatic Stress Network website at www.NCTSN.org.

Promoting Self-Regulation in the First Five Years: A Practice Brief

Early childhood is a period of rapid brain development that paves the way for growth of self-regulation skills. This brief builds on reviews of the theoretical and intervention literature to provide early childhood leaders such as program administrators with guidelines for promoting self-regulation development in children aged birth through 5 years, both programmatically and through supportive environmental contexts. The brief is based on work conducted by the Duke Center for Child and Family Policy for the Administration for Children and Families (ACF), described in a series of four reports referenced throughout the brief, which can be accessed online at https://www.acf.hhs.gov/opre/research/project/toxic-stress-and-self-regulation-reports.

Self-Regulation: What is it and why is it important?

Self-regulation has a foundational role in promoting wellbeing across the lifespan, including physical, emotional, social, and economic health and educational achievement. Self-regulation can be defined as **the act of managing thoughts and feelings to enable goal-directed actions**. This means, for instance, finding ways to cope with strong feelings so they don't become overwhelming; learning to focus and shift attention; and successfully controlling behaviors required to get along with others and work towards goals. Supporting self-regulation development in early childhood is an investment in later success, because stronger self-regulation predicts better performance in school, better relationships with others, and fewer behavioral difficulties. Moreover, the ability to regulate thoughts, feelings, and actions helps children successfully negotiate many of the challenges they face, promoting resilience in the face of adversity (For more information, see Report 1: Foundations for Understanding Self-Regulation from an Applied Developmental Perspective, http://www.acf.hhs.gov/programs/opre/resource/self-regulation-and-toxic-stress-foundations-for-understanding-self-regulation-from-an-applied-developmental-perspective)

By proactively teaching and supporting self-regulation skills across settings, we can help children from all backgrounds enter kindergarten ready to learn.

Self-regulation is recognized as one of the key areas of early child development in the *Head Start Early Learning Outcomes Framework* (Administration for Children and Families, 2015: https://eclkc.ohs.acf.hhs.gov/hslc/hs/sr/approach/pdf/ohs-framework.pdf), where skills related to self-regulation are woven into both the Approaches to Learning and the Social/Emotional Development domains. The information in this brief and the referenced reports can be used to complement that of the Head Start Framework, providing an overview of child skills and caregiver practices that are key in the development self-regulation.

How does self-regulation develop?

As depicted in the figure, multiple layers of factors contribute to self-regulation, from biological predisposition to caregiver support and environmental context. While biology sets the stage for self-regulation readiness, more complex skills and motivation for self-regulation develop through interaction with caregivers and the broader environment over an extended period from birth through young adulthood (and beyond).


Factors Contributing to
Self-Regulation Enactment

In infancy, the brain is primed to create connections that support the beginnings of self-regulation. Across early childhood, brain-based capacity for self-regulation increases rapidly. Just like with literacy or math, however, this capacity will not be fully realized without support from the environment. For literacy, young children need exposure to print materials in the environment, combined with active instruction, support, and practice. Self-regulation is much the same: children learning self-regulation skills need structured environments, supportive relationships, and direct instruction and coaching in a progression of self-regulation skills.

Just as with literacy, there will be individual differences in development that require different levels of support. For instance, some children may be more temperamentally sensitive and thus more easily overwhelmed by sensory input. Other children may experience more stressors in their environments. Both of these situations can make it harder for children to self-regulate. Nevertheless, with intervention and support aligned with their level of need, children can effectively build skills to manage their thoughts, feelings, and behaviors. For more information on self-regulation development, visit Report 1 in this series: Foundations for Understanding Self-Regulation from an Applied Developmental Perspective, http://www.acf.hhs.gov/programs/opre/resource/self-regulation-and-toxic-stress-foundations-for-understanding-self-regulation-from-an-applied-developmental-perspective.

What are the benefits of focusing on self-regulation development in early childhood?

Humans learn more quickly during their first few years than at any other time in their lives. Experiences, particularly those with significant others like caregivers and siblings, literally "wire the brain's architecture", laying the foundation for what is to come (see Harvard's Center on the Developing Child for more information: http://developingchild.harvard.edu/science/key-concepts/brain-architecture/). Intentional work by adults to promote self-regulation capacity early in the lives of children can help them to develop critical skills like attentional control, problem-solving, and coping strategies for managing distressing environmental or emotional experiences. Capitalizing on the developmental readiness of the earliest years, approaches that systematically combine interventions with supportive caregivers and environments can proactively foster self-regulation skills and help children enter kindergarten ready to learn.
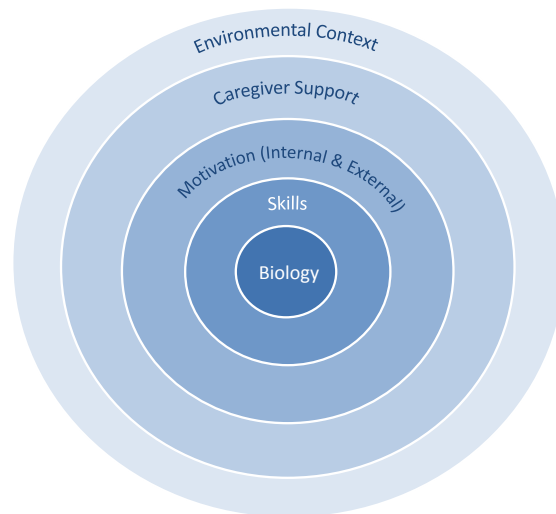
This is not to say that early childhood is the only opportunity for self-regulation intervention—indeed, self-regulation continues developing at least through young adulthood, if not across the lifespan. However, laying the foundation early may prevent childhood struggles, avoiding later need for more intensive interventions, and thus may prove more cost-effective in the long run.

How important are parents and other caregivers in the development of self-regulation?

There is a well-established link between parenting and the development of self-regulation in childhood, summarized in Report 2: A Review of Ecological, Biological, and Developmental Studies of Self-Regulation and Stress, http://www.acf.hhs.gov/opre/resource/self-regulation-and-toxic-stress-a-review-of-ecological-biological-and-developmental-studies-of-self-regulation-and-stress. As indicated by almost 50 studies identified in a comprehensive literature review, parental warmth, responsiveness, and sensitivity support self-regulation development and may buffer the effects of other stressors in the family and environment. Parents are not the only caregivers shaping the lives of young children, however. Child care providers, preschool teachers, extended family members, and other adults who spend significant time caring for children can be instrumental in supporting their development of self-regulation.

During the first years of life, caregivers are particularly central to development. Young children are dependent upon their caregivers to create a safe, nurturing, and appropriately stimulating environment so they can learn about the world around them. There are three broad categories of support that caregivers can provide to young children to help them develop the foundational self-regulatory skills that they will need to get the best start in life. **Together, these describe the supportive process of "co-regulation" between adults and children**:

- **Provide a warm, responsive relationship** where children feel respected as individuals, comforted and supported in times of stress, and confident that they will be cared for no matter what. This positive relationship will promote self-efficacy and allow children to feel secure enough to practice new skills and learn from mistakes.

- **Structure the environment** to make self-regulation manageable, providing a buffer against environmental stressors. This means creating an environment that is physically and emotionally safe for children to explore and learn at their level of development without serious risk to their wellbeing. Consistent, predictable routines and expectations likewise promote a sense of security by providing clear goals for behavior regulation.

- **Teach and coach self-regulation skills** through modeling, instruction, opportunities for practice, prompts for skill enactment, and reinforcement of successive approximations. Like a coach on a sports team, caregivers should first instruct children in skills, and then provide needed supports, or scaffolding, for self-regulation enactment in the moment.

How to Co-Regulate

Provide Warm, Responsive Relationship

Structure the Environment

Teach/Coach Self-Regulation Skills
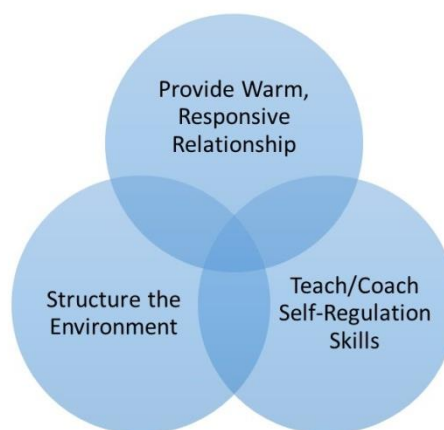
Co-regulation will look different at different ages as children's capacity for self-regulation grows, but remains a critical component of self-regulation across development. Caregiver capacity for co-regulation will depend, in large part, on that caregiver's *own* self-regulation skills. Young children are incredibly sensitive to the emotions and behaviors of adults. Adults who are themselves feeling overly stressed may have a harder time calming a young child and, thus, may actually increase that child's agitation, which in turn makes it harder to soothe them. Caregivers who focus on improving their own coping and calm-down skills will build their own self-regulation, provide a more calming influence to children in their care, and be better able to teach these same skills to children as they grow.

What does self-regulation look like during early childhood?

Self-regulation skills and capacity change considerably over the first five years of life, based in part on cognitive and motor skill development. Here are examples of self-regulation skills that children might be ready for, by developmental age group.

In **infancy**:
- Shifting attention or averting gaze when overwhelmed
- Self-soothing by sucking fingers or a pacifier to reduce distress

In **toddlerhood**:
- Focusing attention for short periods
- Adjusting behavior to achieve goals
- Beginning to label feelings
- Briefly delaying gratification
- Turning to adults for help with strong feelings

In **preschool-aged** children:
- Recognizing a growing array of feelings in self and others
- Identifying solutions to simple problems
- With support, using strategies like deep breaths and self-talk to calm down
- Focusing attention and persisting on difficult tasks for increased lengths of time
- Perspective-taking and early empathy

What does effective co-regulation look like during early childhood?

Just as child self-regulation skills change as they grow and develop, so do their needs for co-regulation support from their caregivers.

*Caregiver capacity for co-regulation depends on the caregiver's **own** self-regulation skills.*

In **infancy**, babies require adults to manage a large portion of their regulatory needs, from feeding to temperature control to management of environmental stimuli. Infants react physically to the sensory information around them, with little capacity to change their experience. They need adults who are sensitive to their cues, responsive to their needs, and able to provide a soothing presence in times of distress.

Toddlers are beginning to build motor and language skills that allow them to control some aspects of their environment, like moving away from a loud noise or asking for something to eat. They continue to have strong emotions that far outweigh these emerging skills, however. In this developmental period, caregivers can begin to purposely teach and model skills like waiting (i.e., brief delay of gratification) and using simple words to communicate feelings and needs. Adults are still largely responsible for structuring a safe and manageable environment, as well as for providing comfort and reassurance when toddlers are upset.

During the **preschool years**, children experience rapid growth in areas of the brain associated with self-regulation, which makes them developmentally much more prepared to learn and use self-regulation skills. Likewise, growing language skills during the preschool years allow children to use words in managing their thoughts and feelings and asking for help. This is the perfect time for caregivers to actively teach and coach skills like emotion identification, problem-solving, perspective-taking, and calm-down strategies. Children will need considerable repetition, prompting, and practice in using these new skills. Caregiver modeling of these skills is also important, as children watch adults closely to learn how they should behave. Co-regulation in this stage will include teaching and communicating clear rules and expectations and using consistent natural or logical consequences provided firmly but calmly. As in earlier developmental periods, preschool children continue to need structured, predictable environments and warm, responsive caregivers that provide them a supportive context in which to practice new skills.

Self-Regulation Interventions: What is the evidence of effectiveness in early childhood?

There are many interventions available that address some or all components of self-regulation development. Based on a review of studied preventive interventions between 1989 and 2013, 102 studies were that evaluated interventions targeting self-regulation development in early childhood. Across these studies, there are two approaches most commonly used to promote self-regulation, either alone or in combination: teaching caregivers how to co-regulate, and providing children with age-appropriate skills instruction. Both of these approaches have strong evidence of effectiveness. The best approach to use may vary by age group, setting, or child and family risk status. Findings for infants/toddlers and preschool-aged children are summarized below. For information on the methodology or detailed findings of this review, see Report 3: A Comprehensive Review of Self-Regulation Interventions from Birth through Young Adulthood, http://www.acf.hhs.gov/opre/resource/self-regulation-and-toxic-stress-report-3.

There are two primary approaches to self-regulation intervention used either alone or in combination:
1. *Teaching caregivers how to co-regulate*
2. *Directly teaching children age-appropriate self-regulation skills*

Infants and Toddlers

There are relatively few programs for the **infant/toddler** age group that explicitly address self-regulation development as a goal of intervention. Those that exist typically target caregiver co-regulation, are delivered by clinicians or other clinically-trained staff, and often focus on at-risk families. Typical intervention length is 6 to 12 sessions, and most are delivered through home visits. Caregiver interventions often focus on attachment/relationship building, sensitivity to child cues, and (for toddlers) age-appropriate behavior management strategies like redirection. In addition, many caregiver interventions target the caregiver's own

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capacity to self-regulate, both to support caregiver coping and calm-down skills and to help caregivers learn how to co-regulate.

There is considerable variability in the effects of self-regulation interventions on infants and toddlers, with some interventions showing large positive effects and some finding no significant change in child self-regulation-related outcomes. The most common area that improves with intervention is child attachment, arguably the most critical outcome for this age group due to its long-term impact on self-esteem and interpersonal relationship success. More than a third of the studies also found substantial effects for child behavior regulation, such as cooperation and rule-following.

More consistent effects are evident for caregivers, in keeping with the focus on co-regulation in this age group. These caregiver gains may pay off in improved child self-regulation as children grow. More specifically, results for caregivers show medium to large effects in the following areas:

- Increased warmth and responsivity to infants and toddlers, with improved ability to read child cues
- Changes in attitudes and beliefs, such as parenting self-efficacy and age-appropriate developmental expectations
- Improved parenting skills such as positive behavior management (for toddlers), supervision, and communication with their child

Preschool-aged Children

Studies of self-regulation interventions are far more numerous for children in the preschool age range than for infants/toddlers. Most are delivered universally within a preschool setting, and about half are taught by classroom teachers. Interventions for this age group typically target child skill-building directly, using explicit teaching and coaching of self-regulation skills over an extended period of time (typically 30 or more lessons). More than half also target parent co-regulation, and one quarter seek to build teacher co-regulation skills including positive behavioral management and classroom climate.

Interventions for preschool children show more consistent effects on self-regulation skills than do studies of infants/toddlers, including significant improvement in child stress levels and regulation of emotions, thoughts, and behaviors. Some studies also show that self-regulation changes lead to improvements in functioning more broadly in areas such as interpersonal skills, language, and learning. These functional outcomes are less directly related to intervention targets, and therefore show more variability of effects than do core self-regulation outcomes.

Interventions for caregivers, though utilized in only 59% of studies, demonstrate substantial gains for both parents and teachers. Similar to infant/toddler programs, parents of preschoolers show medium effects in the following areas:

- Improved co-regulation, including warmth and responsivity as well as skill coaching and support
- Changes in attitudes and beliefs, such as parenting self-efficacy, attitudes about parenting, and parenting satisfaction
- Improved parenting skills such as positive behavior management, supervision, and communication

Interventions targeting teachers produce medium to large improvements in classroom climate: after intervention, teachers have classrooms that are rated as more welcoming, supportive, and positive.

What are the key considerations for promoting early childhood self-regulation in practice?

Given the foundational nature of self-regulation for functioning across domains, careful consideration of systematic regulatory skill-building in early childhood has the potential for broad long-term benefits. Based on a theoretical model and review of the intervention literature, suggestions for early childhood leaders to implement preventive self-regulation education, intervention, and environmental scaffolding are as follows:

1. **As a low-intensity support for all parents and guardians, provide easily-accessible information about self-regulation development and caregiver co-regulation.** Though parents experiencing significant stress and adversity will likely require more intensive support (see recommendation 2), parent education can proactively promote caregiver attention to self-regulation and co-regulation. In addition, information provided universally across a whole community can contribute to shared language, knowledge, and norms for positive, supportive parenting. Self-regulation and co-regulation information could be provided to parents as tip sheets, informal discussion, and/or more formal informational seminars available in locations already frequented by parents, such as: primary care/well visits, child care centers, children's museums, and other family-friendly settings. Key components of early childhood co-regulation to promote include:
    a. Interacting in warm, responsive ways
    b. Recognizing and responding to child cues
    c. Providing physical and emotional comfort when child is distressed
    d. Modifying the child's environment to decrease demands and stress
    e. Providing consistent routines and structure
    f. Modeling self-calming strategies
    g. Teaching rules, redirecting, and using effective, positive behavior management strategies that are age-appropriate
    h. For preschool children: intentional modeling, monitoring, and coaching of specific, targeted self-regulation skills such as identifying and expressing emotion, calming down, waiting, and solving problems

    Resources and informational materials on these topics may be already available through well-established parenting programs such as Triple P, Parents as Teachers, or Incredible Years, as well as through the US Department of Education: https://www2.ed.gov/about/inits/ed/earlylearning/talk-read-sing/feelings-families.pdf

2. **For parents experiencing high levels of stress or adversity, deliver interventions with demonstrated effects on parental self-regulation and co-regulation.** In families with risk factors, including teen parents, poverty, and mental health or substance use concerns, targeted interventions show promise for impacting both parent and child outcomes. Given variability in outcomes, programs should be selected carefully. For a list of interventions that have been studied with children 0-5, see pages 3-23

of the Report 3 appendix: Effect Size Outcomes by Intervention and Developmental Groups, http://www.acf.hhs.gov/sites/default/files/opre/appendix_c_final_b508.pdf.

3. **For child care providers, preschool teachers, and home visiting professionals, provide training in co-regulation**. This training would help caregivers to understand their role in supporting self-regulation, both through the structure and content of their interactions with children. Teacher-directed training has the potential to impact a large number of children, supporting self-regulation skill-building as a protective factor for children who are experiencing stress in other areas of their lives. Training for teachers would address topics including:
   a. Building a positive relationship with each student
   b. Structuring the environment to reduce regulatory demands and avoid over-stimulation
   c. Proactively structuring the day to provide a predictable routine and prevent common behavior problems
   d. Teaching rules, redirecting, and using effective, positive discipline strategies that are age-appropriate
   e. Instructing, monitoring, and coaching specific, age-appropriate self-regulation skills
   f. Incorporating activities to practice self-regulation skills

   Resources and informational materials on these topics may be already available through well-established programs for early childhood teachers such as Incredible Years or the Pyramid Model, as well as through the US Department of Education: https://www2.ed.gov/about/inits/ed/earlylearning/talk-read-sing/feelings-teachers.pdf

4. **Identify ways to support child care staff in their own self-regulation capacity**. Caregivers will only be effective at co-regulation if they can successfully self-regulate. Staff supports may include mindfulness instruction, reflective supervision, and opportunities for personal "time outs" when needed.

5. **For preschool-aged children, deliver well-evaluated child skills curricula that have been shown to enhance regulation**. Direct skills instruction and coaching in areas such as emotion identification, problem solving, and anger management during preschool will lay the foundation for school readiness and social-emotional success. Implementation of such curricula by early childhood education teachers can be supported by technical assistance providers or mental health consultants to ensure fidelity and effectiveness. Again, for a list of interventions that have been studied with children 0-5, see pages 3-23 of the Report 3 appendix: Effect Size Outcomes by Intervention and Developmental Groups, http://www.acf.hhs.gov/sites/default/files/opre/appendix_c_final_b508.pdf.

6. **For children with significant existing self-regulation challenges, provide more intensive support and intervention from a mental health consultant or behavioral specialist**. Caregivers for these children will also benefit from instruction and coaching on providing consistent types of support in the classroom and at home.

Summary

Self-regulation plays a fundamental role in wellbeing, and the first five years of life are foundational in building skills that can last a lifetime. Comprehensive interventions and environmental supports using a self-regulation framework can produce broad, substantive changes in both child self-regulation and caregiver co-regulation skills. Applied systematically and proactively, this self-regulation support can promote a solid foundation in skills needed for social, emotional, behavioral, and academic success during the school years. Such early investment is expected to pay large dividends in self-regulation capacity and outcomes across the lifespan. Moreover, because stronger self-regulation predicts higher income, better financial planning, lower rates of substance use and violence, and decreased long-term health costs, self-regulation investment can help us to build healthier communities for our families.

For more information on how self-regulation interventions could be applied in programs supported by ACF, visit Report 4: Implications for Programs and Practice, http://www.acf.hhs.gov/opre/resource/self-regulation-and-toxic-stress-implications-for-programs-and-practice.