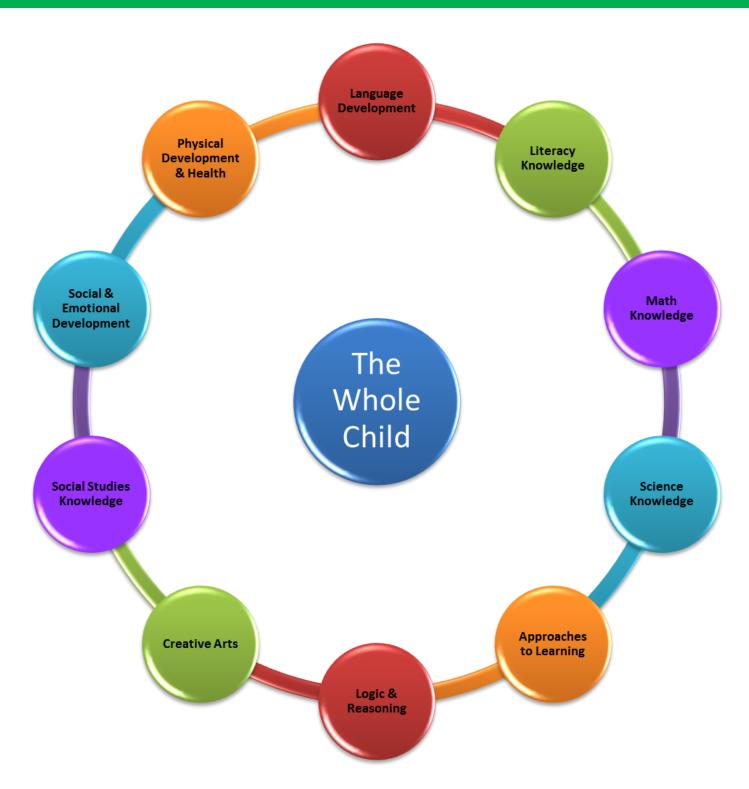
## Section 3: Developmental Areas & Learning Indicators



# How the Gee Whiz Curriculum Addresses All Developmental Areas

### The Whole Child



The experiences and activities included in the Gee Whiz curriculum address 10 developmental areas through an integrated approach. On the next few pages, you will find a description of each area along with how you may see this development exhibited in your children. Specific Learning Indicators addressed in each area can be found on pages 35-36.

### Language Development

#### **Language Development**

Program Symbol = 5



Language is something we all use every day and it encompasses many different things including:

- Listening
- Speaking (verbal communication)
- Nonverbal Communication

Toddlers are great at nonverbal communication (e.g., pointing to a cracker they want). As children grow, they learn to use verbal communication and, at the same time, develop stronger listening skills.

As a teacher, you can help to build language skills by modeling language and engaging children in conversations throughout the day.

The program will help you in both of these areas by providing guidance for questions to ask and tips to help you model language. In addition, stories, rhymes, and songs are an integral part of the program...all fun ways to promote language development with all children every day.



#### What Does Language Development Look Like? (Birth - age 4)

#### **Listening:**

- A baby turns toward you when you talk and THEN...
- Listens to music and THEN...
- Listens to songs, rhymes and short stories and THEN...
- Can follow a one-step direction and THEN...
- Can listen to, and then follow, 2-3 step directions.

#### **Speaking:**

- A baby cries in different ways when he/she needs different things and THEN...
- Says one word and THEN...
- Uses 2-4 word sentences and THEN...
- Can name many familiar things and THEN...
- Uses language to describe objects, people and events accurately.

#### Nonverbal:

- A baby reaches up to let you know that he/she wants to be picked up and THEN...
- Points to something he/she wants and THEN...
- Uses simple gestures such as waving goodbye or blowing kisses to interact with others and THEN...
- Gives you a hug in the morning and THEN...
- Comforts a friend that is upset by giving him/her a hug.

### Literacy Knowledge



### Literacy Knowledge Program Symbol =

Literacy knowledge is simply what children know about books, print, and writing. This area encompasses:

- Phonological Awareness
- Appreciation for Books
- Alphabet Knowledge
- Concepts about Print
- Beginning Writing

Even very young children can develop an appreciation for books. Reading to children from a very young age is a great way to promote development in this area.

As children get older, they will naturally develop a curiosity about how the spoken word can be written down in print. This leads to an awareness of concepts about print and alphabet knowledge.

The program includes experiences to help very young children develop a love for books and stories while inviting older children to dictate or write to express ideas.

#### What Does Literacy Knowledge Look Like? (Birth - age 4)

#### **Phonological Awareness:**

- A baby turns his/her head toward you when you sing and THEN...
- Tries to imitate the sounds you make and THEN...
- Identifies common sounds in the environment and THEN
- Enjoys reciting a rhyme and THEN...
- Can identify when two words rhyme.

#### **Appreciation for Books:**

- An infant enjoys looking at a book for a very short period of time and THEN...
- Helps turn the pages in a book while you read and THEN...
- Sits and listens to longer stories and THEN...
- Handles books with care and THEN...
- Retells stories in his/her own words and may even create his/her own books.

#### Alphabet Knowledge:

- An infant, toddler or two-year old listens while you sing the ABC song and THEN...
- Begins to recognize and name letters and THEN...
- Recognizes and names all of the letters of the alphabet (upper and lowercase).

#### **Concepts about Print:**

- An infant, toddler or two-year old shows an interest in books and THEN...
- Recognizes logos and understand that they are symbols and THEN...
- Understands what a letter, word and sentence are.

#### **Beginning Writing:**

- An infant tries to make marks using a crayon or marker and THEN...
- Scribbles and THEN...
- Holds a crayon or marker the correct way and THEN...
- Understands that writing is a way for people to share information and THEN...
- Incorporates writing into dramatic play and other activities.

### Math Knowledge

### Math Knowledge Program Symbol =

Math knowledge encompasses:

- Number Concepts & Operations
- Cardinality
- Geometry and Spatial Concepts
- Positional Concepts
- Patterns
- Estimation
- Measurement (includes graphing)

In today's world, a strong mathematical foundation is crucial for future success. From identifying numerals to being able to count "how many," a strong base of math knowledge is very important to young children.

The program recognizes the importance of a strong foundation in this area and incorporates experiences that involve math in a meaningful way. For instance, children may build towers with blocks and measure them with a yardstick. Then they may count to discover how many blocks were used to make their towers. Older children can then graph to compare and contrast their towers.

### What Does Math Knowledge Look Like? (Birth - age 4)

#### **Number Concepts & Operations:**

- An infant listens while you count during a group game and THEN...
- Imitates counting and THEN...
- Counts to 5 and beyond by him/herself and THEN...
- Groups items based on common characteristics and THEN...
- Compares two groups to see which has more and which has less and THEN...
- Names numerals (up to 10) and THEN...
- Counts up to 20 and THEN...
- Begins to understand that a group can be divided into parts and THEN...
- May be able to count to 100

#### **Geometry & Spatial Concepts:**

- An infant or toddler explores shapes when playing with blocks and THEN...
- Uses positional words (e.g., over, under, between, etc.) in conversation and THEN...
- Identifies basic shapes (circle, square, triangle) and THEN...
- Identifies 3-dimenstional shapes (e.g., sphere, cube, cylinder).

#### **Patterns:**

- A two or three-year old copies a simple pattern and THEN...
- Extends a simple pattern and THEN...
- Creates new patterns.

#### Measurement (including graphing):

- An older two-year old or three-year old understands that things can be measured to find their height, weight, length an THEN...
- Measures using nonstandard and then standard methods and THEN...
- Understands that a graph represents data and THEN...
- Begins to designs own graphs and charts.



### Science Knowledge

### Science Knowledge Program Symbol =

Science knowledge encompasses:

- Exploring and Thinking Like a Scientist
- Observation Skills
- Knowledge about the World (Natural/Physical)

Science. We do not realize it but science is all around us! The area of science knowledge defines what children know about their natural and physical world and how they go about finding out more about it.

In today's world, science knowledge is very important. The program engages children in science by challenging them to explore new concepts and to approach common ones in a new way. For instance, during a unit on backyard animals, the children may discover new animals and learn their names. At the same time, they may be invited to take existing knowledge and apply it in a new way. For instance, the children may already know that birds make nests but they may take that knowledge deeper by making their own nests using mud, sticks, and grass. Also, a STEM (science, technology, engineering, math) focus is built into each unit as well.





### What Science Knowledge Look Like? (Birth - age 4)

#### **Exploring & Thinking Like a Scientist:**

- An infant responds to his/her environment and shows preferences for familiar things and people and THEN...
- Explores cause and effect in a simple way (e.g., shaking a rattle) and THEN...
- Asks questions to gain information and THEN...
- Participates in simple experiments and THEN...
- Makes and tests hypotheses.

#### **Observation Skills:**

- An infant or toddler use observation to learn and THEN...
- Uses simple tools to observe (e.g., magnifier or binoculars) and THEN...
- Compares and contrasts when experimenting and exploring.

#### **Knowledge about the World (Natural/Physical):**

- Infants, toddlers and two-year olds use senses to gain information about their world and THEN...
- Can identify how living and nonliving things are the same and how they are different and THEN...
- Analyzes data in order to make conclusions and THEN...
- Uses books and computers to gain information about the natural world that is not easily experienced first-hand.

### Logic & Reasoning



### Logic & Reasoning Program Symbol = ?

Logic and reasoning are critical areas of development for future success in school and life. This area encompasses:

- Problem-Solving
- Reasoning
- Using Symbols to Represent

The ability to problem-solve and reason are skills that most of us use on a daily basis. Children should be provided with a variety of activities and experiences that challenge them to use these skills on a daily basis.

In the program, you will find many activities where children are invited to solve problems and practice reasoning skills. For instance, when given an assortment of boxes, pillows, and blankets, children may be challenged to use these materials to make their own obstacle course.

#### What Does Logic & Reasoning Look Like? (Birth - age 4)

#### **Problem-Solving:**

- An infant or toddler uses nonverbal methods to show he/she has a problem and THEN...
- Asks questions and THEN...
- Makes and tests possible solutions and THEN...
- Solves problems by using many strategies.

#### Reasoning:

- An infant, toddler or two-year old is curious about how things work and THEN...
- Answers questions that require reasoning and THEN...
- Uses reasoning when coming to conclusions.

#### **Using Symbols to Represent:**

- An older two-year old or three-year old uses toys or other materials to represent other things (e.g., a block for a telephone, a bucket for a drum) and THEN...
- Adds a variety of props into his/her dramatic play



### Approaches to Learning

#### **Approaches to Learning**

Program Symbol = 🙂



#### This area includes:

- Curiosity and Desire to Learn
- Persistence
- Cooperation

Don't we all want our children to have a love for learning? Absolutely! This area addresses how children approach learning new things. Are they curious? Do they want to learn? Do they stick with a tough task?

Providing experiences that are aligned to each child's developmental level is critical for success in this area. When activities are "on target" and interesting, children cannot help being engaged and excited about learning!

Our goal in the program is to provide children with opportunities to learn new things in a way that is engaging and fun! From working together to keep a beach ball on a sheet (like a parachute) to cooking a special snack to share, the program is packed with activities that promote this area of development.





#### What Does Approaches to Learning **Look Like?** (Birth - age 4)

#### **Curiosity and Desire to Learn:**

- An infant or toddler shows interest (brief) in new things and THEN...
- Tries new things when helped by an adult and
- Shows excitement when new activities or concepts are presented and THEN...
- Tries new things independently.

#### Persistence:

- An toddler starts to play with a toy for a longer period of time and THÉN...
- Repeats activities in order to get better at them and THEN...
- Strives to reach goals independently and THEN...
- Follows through on plans that will help him/her reach a personal goal.

#### **Cooperation:**

- An infant or toddler watches others and THEN...
- Interacts with others for short periods of time and
- Participates in parallel play (side-by-side) and
- Participates in cooperative play with other children and adults.

### Social Studies Knowledge



#### **Social Studies Knowledge**

Program Symbol =



Social studies knowledge addresses what children know about their families, community, and world. This area encompasses:

- Knowledge of Family & Community
- Cultural Difference (People & Places)
- Caring for the Environment
- Learning from the Past

Children's understanding of their world begins in their homes and community. It then extends outward to their cities, states, countries, and world.

In the program, you will find activities and experiences for young children to explore their own families and communities as well as cultural events and celebrations specific to their own families. This is an area of the program you will want to customize and expand upon based on the children and families in your group.

#### **What Does Social Studies Knowledge Look Like?** (Birth - age 4)

#### **Knowledge of Family & Community:**

- A toddler points to pictures of family members and THEN...
- Talks about family members and THEN...
- Talks about family events and activities and
- Explores common community helpers and THEN...
- Pretends to be a common community helpers during dramatic play.

#### **Cultural Difference (People & Places):**

- A three or four-year old compares his/her own family to other families and THEN...
- Is able to describe family traditions and THEN...
- Compares and contrasts people living in other countries with their own.

#### **Caring for the Environment:**

- A toddler or two-year old puts a used paper cup in the trash can and THEN
- Learns that some things can be recycled and puts these items in the recycling bin and THEN...
- Turns off water when brushing teeth in order to save water and THEN...
- Helps care for living things both inside and out.



### Social & Emotional Development

#### **Social & Emotional Development**

Program Symbol =



This area includes:

- Social Interactions & Relationships
- Self-Concept
- Emotions & Self-Regulation
- Character Education

Getting along with others, feeling good about yourself, and knowing how to express wants and needs appropriately all fall under the area of social and emotional development. While probably one of the least "taught" areas of development, most would argue it is probably THE most important.

Young children need to learn in an environment where they feel secure enough to try new activities. In addition, they thrive in an environment where teachers are actively involved in their learning...asking questions, engaging them in conversation, and planning experiences designed to meet their needs and interests.

The program's design provides you with the tools you need to structure the environment for success, thus building each child's self-concept. The group experiences are a wonderful tool for promoting self-regulation skills and cooperation. The program's flexible design invites you to adapt and modify the activities to meet the individual needs and interests of the children you care for to make them "just right!"





### What Social & Emotional Development Look Like? (Birth - age 4)

#### **Social Interactions & Relationships:**

- An infant coos and smiles at others and THEN...
- Demonstrates separation anxiety when familiar adults are not present and THEN...
- Understands the meaning of "no" and THEN...
- Begins to interact with others during play and THEN...
- Follows simple rules during group experiences and THEN...
- Shows empathy for others and THEN...
- Works with others to solve social problems.

#### **Self-Concept:**

- An infant or toddler points to things he/she wants and THEN...
- Says things like, "I can do it myself!" in order to be more independent and THEN...
- Displays confidence and takes pride in accomplishments and THEN...
- Shares information about self and culture with pride.

#### **Emotions & Self-Regulation:**

- An infant or toddlers uses nonverbal methods (e.g., facial expressions and movements) to express emotions and THEN
- Uses facial expressions and body language to display many different feelings and emotions and THEN...
- Increasingly uses words to express feelings and emotions and THEN...
- Shows more and more self-control, especially when frustrated or upset.

### **Creative Arts**

#### **Creative Arts**

#### Program Symbol =

Creative arts encompasses:

- Music & Dance
- Fine Arts
- Dramatic Play

Children love art! From painting to dressing up, the creative arts are an area that can be used as springboard for learning in many other areas.

In the program, you will find an abundance of creative art activities children can enjoy in their own way. Art projects are openended, focusing on the process instead of the product. Numerous songs are incorporated into the activities that invite children to sing and dance. Dramatic play experiences invite children to work together and use their imaginations as they build language and social skills.





#### What Does Creative Arts Development Look Like? (Birth - age 4)

#### Music & Dance/Movement:

- An infant turns his/her head toward music and THEN...
- Shakes rattles to make music and THEN...
- Attempts to sing along with songs and THEN...
- Uses a variety of items to make music, including instruments and THEN..
- Expresses feelings and emotions through music and movement.

#### **Fine Arts:**

- An infant tries to make marks with crayons or markers and THEN...
- Scribbles and THEN...
- Begins to make recognizable drawings and THEN...
- Draws more detailed drawings that include recognizable shapes, figures, etc. and THEN...
- Is able to describe his/her art to others.

#### **Dramatic Play:**

- An infant or toddler watches others as they participate in dramatic play and THEN...
- Participates in dramatic play when led by an adult and THEN
- Interacts with other children during dramatic play and THEN...
- Assigns and assumes roles when participating in dramatic play with other children.

### Physical Development & Health



#### **Physical Development & Health**

Program Symbol =



The Physical Development & Health area includes:

- Gross Motor Skills
- Fine Motor Skills
- Knowledge and Practice of Healthy Habits

From kicking a ball to grasping a rattle, children work on developing motor skills every day. The area of physical development and health encompasses skills such as these and much, much more.

Young children need opportunities to practice and master both fine and gross motor skills on a daily basis. As with any new skill, practice makes perfect! Young children enjoy using their hands to explore and moving their bodies to play. Experiences such as these develop both their fine and gross motor skills in natural ways that are also fun!

The program includes a variety of experiences that invite children to use motor skills, both gross and fine, in fun and engaging ways. From tossing balls into a clothesbasket to picking up cotton balls with kitchen tongs, activities included in the program use common, everyday items to help children develop motor skills. Plus, you will find, healthy habits, such as washing hands and eating healthy foods, integrated into the program in meaningful ways.

With the problem of childhood obesity plaguing too many young children, it is critical to get them "movin' and shakin!" The program provides numerous songs and action rhymes designed specifically to get children active. In addition, an assortment of outdoor experiences are part of the program and promote the importance of daily exercise.

### What Does Physical Development & Health Look Like? (Birth - age 4)

#### **Gross Motor Skills:**

- An infant moves with the help of an adult and THEN...
- Crawls and THEN...
- Walks with help and THEN...
- Walks independently and THEN...
- Plays with a large ball and THEN...
- Climbs up a short ladder and THEN..
- Attempts to kick a ball and THEN...
- Pedals a tricycle and steers and THEN...
- Demonstrates increasing coordination and THEN...
- Walks forward and backward and THEN...
- Climbs up stairs, ramps, ladders, etc. easily without adult support and THEN...
- Rides and pedals with control and THEN...
- Kicks and throws a ball with control.

#### **Fine Motor Skills:**

- An infant grasps a rattle or other toy with entire hand (palmar grasp) and THEN...
- Uses fingers and thumb to manipulate things and THEN...
- Connects things (e.g., blocks) that go together with occasional assistance and THEN...
- Manipulates toys and other items with increasing control and THEN...
- Draws and writes simple pictures, shapes and words, including own name.

#### **Knowledge and Practice of Healthy Habits:**

- An infant or toddler participates willingly in daily hygiene routines such as diapering and washing hands and THEN...
- Begins to complete self-help tasks such as washing hands with some assistance and THEN...
- Washes hands on own and THEN...
- Begins potty training and THEN...
- Attempts to use a facial tissue when needed and THEN...
- Uses potty on own and THEN...
- Understands the importance of eating healthy foods and getting enough rest.