

Alignment of the Massachusetts Guidelines for Preschool Learning Experiences With HighScope's Preschool Key Developmental Indicators

The following chart shows how items from the **Massachusetts Guidelines for Preschool Learning Experiences** (April 2003) correspond to items from HighScope's **Preschool Key Developmental Indicators (KDIs)** (March 2010).

The educational content of HighScope preschool programs is built around **58 Key Developmental Indicators (KDIs)**. The KDIs are early childhood milestones that guide teachers as they plan and assess learning experiences and interact with children to support learning. Each KDI is a statement that identifies an observable child behavior reflecting knowledge and skills in the areas of approaches to learning; social and emotional development; physical development and health; language, literacy, and communication; mathematics; creative arts; science and technology; and social studies.

Massachusetts Guidelines

Key Developmental Indicators

<i>English Language Arts</i>	
<p>Language</p> <ol style="list-style-type: none">1. Observe and use appropriate ways of interacting in a group (taking turns in talking; listening to peers; waiting until someone is finished; asking questions and waiting for an answer; gaining the floor in appropriate ways).2. Participate actively in discussions, listen to the ideas of others, and ask and answer relevant questions.3. Communicate personal experiences or interests.5. Listen to and use formal and informal language.	<p>D. Language, Literacy, and Communication 21. Comprehension: Children understand language.</p> <p>D. Language, Literacy, and Communication 21. Comprehension: Children understand language.</p> <p>D. Language, Literacy, and Communication 22. Speaking: Children express themselves using language.</p> <p>D. Language, Literacy, and Communication 21. Comprehension: Children understand language. 22. Speaking: Children express themselves using language. 23. Vocabulary: Children understand and use a variety of words and phrases.</p>
<p>Reading and Literature</p> <ol style="list-style-type: none">6. Listen to a wide variety of age appropriate literature read aloud.7. Develop familiarity with the forms of alphabet letters, awareness of print, and letter forms.8. Listen to, identify, and manipulate language sounds to develop auditory discrimination and phonemic awareness.9. Link letters with sounds in play activities.10. Engage actively in read-aloud activities by asking questions, offering ideas, predicting or retelling important parts of a story or informational book.11. Listen to several books by the same author or using the same illustrator.	<p>D. Language, Literacy, and Communication 26. Reading: Children read for pleasure and information.</p> <p>D. Language, Literacy, and Communication 25. Alphabetic knowledge: Children identify letter names and their sounds. 27. Concepts about print: Children demonstrate knowledge about environmental print.</p> <p>D. Language, Literacy, and Communication 24. Phonological awareness: Children identify distinct sounds in spoken language.</p> <p>D. Language, Literacy, and Communication 25. Alphabetic knowledge: Children identify letter names and their sounds.</p> <p>D. Language, Literacy, and Communication 26. Reading: Children read for pleasure and information.</p> <p>D. Language, Literacy, and Communication 26. Reading: Children read for pleasure and information.</p>

Massachusetts Guidelines

Key Developmental Indicators

13. Relate themes and information in books to personal experiences.

14. Recognize and supply rhythm and rhyme in poetry.

15. Listen to, recognize, and use a broad vocabulary of sensory words.

A. Approaches to Learning

6. **Reflection:** Children reflect on their experiences.

D. Language, Literacy, and Communication

24. **Phonological awareness:** Children identify distinct sounds in spoken language.

D. Language, Literacy, and Communication

23. **Vocabulary:** Children understand and use a variety of words and phrases.

Composition

16. Use their own words or illustrations to describe their experiences, tell imaginative stories, or communicate information about a topic of interest.

18. Use emergent writing skills to make letters in many settings and for many purposes.

20. Generate questions and gather information to answer their questions in various ways.

D. Language, Literacy, and Communication

21. **Comprehension:** Children understand language.

22. **Speaking:** Children express themselves using language.

D. Language, Literacy, and Communication

29. **Writing:** Children write for many different purposes.

A. Approaches to Learning

5. **Use of resources:** Children gather information and formulate ideas about their world.

Mathematics

Number Sense

1. Listen to and say the names of numbers in meaningful contexts.

2. Connect many kinds/quantities of concrete objects and actions to numbers.

3. Use positional language and ordinal numbers (first, second, third) in everyday activities.

4. Use concrete objects to solve simple addition and subtraction problems using comparative language (more than, fewer than, same number of).

5. Observe and manipulate concrete examples of whole and half.

E. Mathematics

31. **Number words and symbols:** Children recognize and use number words and symbols.

32. **Counting:** Children count things.

E. Mathematics

32. **Counting:** Children count things.

E. Mathematics

31. **Number words and symbols:** Children recognize and use number words and symbols.

E. Mathematics

32. **Counting:** Children count things.

E. Mathematics

33. **Part-whole relationships:** Children combine and separate quantities of objects.

Massachusetts Guidelines

Key Developmental Indicators

<p>Patterns & Relations</p> <p>7. Explore and describe a wide variety of concrete objects by their attributes.</p> <p>8. Sort, categorize, or classify objects by more than one attribute.</p> <p>9. Recognize, describe, reproduce, extend, create, and compare repeating patterns of concrete materials.</p>	<p>E. Mathematics 35. Spatial awareness: Children recognize spatial relationships among people and objects. 36. Measuring: Children measure to describe, compare, and order things.</p> <p>G. Science and Technology 46. Classifying: Children classify materials, actions, people, and events.</p> <p>G. Science and Technology 46. Classifying: Children classify materials, actions, people, and events.</p> <p>E. Mathematics 38. Patterns: Children identify, describe, copy, complete, and create patterns.</p>
<p>Shapes & Spatial Sense</p> <p>10. Investigate and identify materials of various shapes, using appropriate language.</p> <p>11. Explore and identify space, direction, movement, relative position, and size using body movement and concrete objects.</p> <p>12. Listen to and use comparative words to describe the relationships of objects to one another.</p>	<p>E. Mathematics 34. Shapes: Children identify, name, and describe shapes.</p> <p>E. Mathematics 35. Spatial awareness: Children recognize spatial relationships among people and objects.</p> <p>E. Mathematics 34. Shapes: Children identify, name, and describe shapes.</p>
<p>Measurement</p> <p>13. Use estimation in meaningful ways and follow up by verifying the accuracy of estimations.</p> <p>14. Use nonstandard units to measure length, weight, and amount of content in familiar objects.</p>	<p>E. Mathematics 36. Measuring: Children measure to describe, compare, and order things.</p> <p>E. Mathematics 37. Unit: Children understand and use the concept of unit.</p>
<p>Data Collection & Analysis</p> <p>15. Organize and draw conclusions from facts they have collected.</p>	<p>E. Mathematics 39. Data analysis: Children use information about quantity to draw conclusions, make decisions, and solve problems.</p>

Massachusetts Guidelines

Key Developmental Indicators

Science and Technology/Engineering	
<p>Inquiry Skills</p> <ol style="list-style-type: none">1. Ask and seek out answers to questions about objects and events with the assistance of interested adults. 2. Make predictions about changes in materials or objects based on past experience. 3. Identify and use simple tools appropriately to extend observations. 4. Record observations and share ideas through simple forms of representation such as drawings.	<p>G. Science and Technology</p> <p>45. Observing: Children observe the materials and processes in their environment.</p> <p>46. Classifying: Children classify materials, actions, people, and events.</p> <p>47. Experimenting: Children experiment to test their ideas.</p> <p>G. Science and Technology</p> <p>48. Predicting: Children predict what they expect will happen.</p> <p>G. Science and Technology</p> <p>52. Tools and technology: Children explore and use tools and technology.</p> <p>G. Science and Technology</p> <p>49. Drawing conclusions: Children draw conclusions based on their experiences and observations.</p> <p>50. Communicating ideas: Children communicate their ideas about the characteristics of things and how they work.</p>
<p>Earth and Space Sciences</p> <ol style="list-style-type: none">5. Compare and contrast natural materials such as water, rocks, soil, and living organisms using descriptive language. 6. Explore and discuss what air is or does (air takes up space inside bubbles and beach balls; air can move things; air can support things such as parachutes and kites). 7. Identify the characteristics of local weather based on first-hand observations. 8. Explore sunlight and shadows and describe the effects of the sun or sunlight.	<p>G. Science and Technology</p> <p>51. Natural and physical world: Children gather knowledge about the natural and physical world.</p> <p>G. Science and Technology</p> <p>51. Natural and physical world: Children gather knowledge about the natural and physical world.</p> <p>G. Science and Technology</p> <p>51. Natural and physical world: Children gather knowledge about the natural and physical world.</p> <p>G. Science and Technology</p> <p>51. Natural and physical world: Children gather knowledge about the natural and physical world.</p>

Massachusetts Guidelines

Key Developmental Indicators

9. Observe and describe or represent scientific phenomena meaningful to children's lives that have a repeating pattern (e.g., day and night).

G. Science and Technology

49. Drawing conclusions: Children draw conclusions based on their experiences and observations.

51. Natural and physical world: Children gather knowledge about the natural and physical world.

Life Sciences

10. Observe and identify the characteristics and needs of living things: humans, animals, and plants.

11. Investigate, describe, and compare the characteristics that differentiate living from non-living things.

12. Observe and describe plants, insects, and animals as they go through predictable life cycles.

13. Observe and describe ways in which many plants and animals closely resemble their parents in observed appearance.

14. Describe or represent living things that inhabited the earth years ago, as children express interest.

G. Science and Technology

51. Natural and physical world: Children gather knowledge about the natural and physical world.

G. Science and Technology

51. Natural and physical world: Children gather knowledge about the natural and physical world.

G. Science and Technology

51. Natural and physical world: Children gather knowledge about the natural and physical world.

G. Science and Technology

51. Natural and physical world: Children gather knowledge about the natural and physical world.

G. Science and Technology

51. Natural and physical world: Children gather knowledge about the natural and physical world.

Living Things & Their Environment

15. Use their senses of sight, hearing, touch, smell, and taste to explore their environment using sensory vocabulary.

16. Observe and describe seasonal changes in plants, animals and their personal lives.

17. Observe and describe how natural habitats provide for the basic needs of plants and animals with respect to shelter, food, water, air, and light.

G. Science and Technology

45. Observing: Children observe the materials and processes in their environment.

G. Science and Technology

51. Natural and physical world: Children gather knowledge about the natural and physical world.

G. Science and Technology

51. Natural and physical world: Children gather knowledge about the natural and physical world.

Massachusetts Guidelines

Key Developmental Indicators

<p>The Physical Sciences</p> <p>18. Manipulate a wide variety of familiar and unfamiliar objects to observe, describe, and compare their properties using appropriate language.</p> <p>19. Explore, describe, and compare the properties of liquids and solids found in children's daily environment.</p> <p>20. Investigate and describe or demonstrate various ways that objects can move.</p> <p>21. Explore and describe various actions that can change an object's motion such as pulling, pushing, twisting, rolling, and throwing.</p> <p>22. Experiment with a variety of objects to determine when the objects can stand and ways that objects can be balanced.</p>	<p>G. Science and Technology 46. Classifying: Children classify materials, actions, people, and events. 51. Natural and physical world: Children gather knowledge about the natural and physical world.</p> <p>G. Science and Technology 51. Natural and physical world: Children gather knowledge about the natural and physical world.</p> <p>G. Science and Technology 51. Natural and physical world: Children gather knowledge about the natural and physical world.</p> <p>G. Science and Technology 51. Natural and physical world: Children gather knowledge about the natural and physical world.</p> <p>G. Science and Technology 51. Natural and physical world: Children gather knowledge about the natural and physical world.</p>
<p>Technology & Engineering</p> <p>24. Demonstrate and explain the safe and proper use of tools and materials.</p> <p>25. Explore and identify simple machines such as ramps, gears, wheels, pulleys, and levers through play experiences.</p> <p>26. Observe and describe ways that animals, birds, and insects use various parts of their bodies to accomplish certain tasks and compare them to ways people would accomplish a similar task.</p>	<p>G. Science and Technology 52. Tools and technology: Children explore and use tools and technology.</p> <p>G. Science and Technology 51. Natural and physical world: Children gather knowledge about the natural and physical world.</p> <p>G. Science and Technology 51. Natural and physical world: Children gather knowledge about the natural and physical world.</p>
<p>History and Social Science</p> <p>1. Discuss and identify the order of daily routines.</p>	<p>B. Social and Emotional Development 11. Community: Children participate in the community of the classroom.</p>

Massachusetts Guidelines

Key Developmental Indicators

2. Discuss and use vocabulary related to time in relevant activities.

3. Identify and describe cause and effect as they relate to personal experiences and age-appropriate stories.

4. Engage in activities that build understanding of words for location and direction.

5. Construct and describe simple maps of their immediate neighborhood.

6. Discuss examples of rules, fairness, personal responsibilities, and authority in their own experiences and in stories read to them.

8. Discuss classroom responsibilities in daily activities.

9. Discuss roles and responsibilities of family or community members who promote the welfare and safety of children and adults.

10. Observe and discuss the various kinds of work people do outside and inside their homes.

11. Observe, discuss, and dramatize basic economic concepts such as buying and selling, producing, and consuming.

12. Observe some U.S. national holidays and discuss how and why we celebrate them.

E. Mathematics

36. Measuring: Children measure to describe, compare, and order things.

G. Science and Technology

49. Drawing conclusions: Children draw conclusions based on their experiences and observations.

E. Mathematics

35. Spatial awareness: Children recognize spatial relationships among people and objects.

H. Social Studies

56. Geography: Children recognize and interpret features and locations in their environment.

H. Social Studies

56. Geography: Children recognize and interpret features and locations in their environment.

B. Social and Emotional Development

11. Community: Children participate in the community of the classroom.

H. Social Studies

55. Decision making: Children participate in making classroom decisions.

B. Social and Emotional Development

11. Community: Children participate in the community of the classroom.

H. Social Studies

54. Community roles: Children recognize that people have different roles and functions in the community.

H. Social Studies

54. Community roles: Children recognize that people have different roles and functions in the community.

H. Social Studies

54. Community roles: Children recognize that people have different roles and functions in the community.

H. Social Studies

53. Diversity: Children understand that people have diverse characteristics, interests, and abilities.

Massachusetts Guidelines

Key Developmental Indicators

<i>Health Education</i>	
<p>Physical Development</p> <ol style="list-style-type: none">1. Listen to and use appropriate language describing the names and functions of parts of the human body.2. Build body awareness, strength, and coordination through locomotion activities.3. Build awareness of directionality and position in space.4. Build awareness of directionality and position in space.5. Use both sides of the body to strengthen bilateral coordination.6. Alternate the left and right sides of the body and cross the midline of the body.7. Build upper body strength and stability to gain controlled movement of shoulders.8. Strengthen hand grasp and flexibility.9. Use thumb/forefinger in pincer grasp.10. Use a variety of tools and materials to build grasp-and-release skill.11. Build finger dexterity.12. Use eye-hand coordination, visual perception and tracking, and visual motor skills in play activities.	<p>C. Physical Development and Health 18. Body awareness: Children know about their bodies and how to navigate them in space.</p> <p>C. Physical Development and Health 16. Gross-motor skills: Children demonstrate strength, flexibility, balance, and timing in using their large muscles.</p> <p>E. Mathematics 35. Spatial awareness: Children recognize spatial relationships among people and objects.</p> <p>C. Physical Development and Health 16. Gross-motor skills: Children demonstrate strength, flexibility, balance, and timing in using their large muscles.</p> <p>C. Physical Development and Health 16. Gross-motor skills: Children demonstrate strength, flexibility, balance, and timing in using their large muscles.</p> <p>C. Physical Development and Health 16. Gross-motor skills: Children demonstrate strength, flexibility, balance, and timing in using their large muscles.</p> <p>C. Physical Development and Health 17. Fine-motor skills: Children demonstrate dexterity and hand-eye coordination in using their small muscles.</p> <p>C. Physical Development and Health 17. Fine-motor skills: Children demonstrate dexterity and hand-eye coordination in using their small muscles.</p> <p>C. Physical Development and Health 17. Fine-motor skills: Children demonstrate dexterity and hand-eye coordination in using their small muscles.</p> <p>C. Physical Development and Health 17. Fine-motor skills: Children demonstrate dexterity and hand-eye coordination in using their small muscles.</p> <p>C. Physical Development and Health 17. Fine-motor skills: Children demonstrate dexterity and hand-eye coordination in using their small muscles.</p>

Massachusetts Guidelines

Key Developmental Indicators

<p>13. Discuss nutritious meals and snacks and the difference between junk food and healthy food.</p> <p>14. Practice personal hygiene and safety measures.</p> <p>15. Discuss gender and growth in age-appropriate ways.</p>	<p>C. Physical Development and Health 20. Healthy behavior: Children engage in healthy practices.</p> <p>C. Physical Development and Health 19. Personal care: Children carry out personal care routines on their own. 20. Healthy behavior: Children engage in healthy practices.</p> <p>B. Social and Emotional Development 7. Self-identity: Children have a positive self-identity.</p>
<p>Social & Emotional Health</p> <p>16. Recognize and describe or represent emotions such as happiness, surprise, anger, fear, sadness.</p> <p>17. Talk about ways to solve or prevent problems and discuss situations that illustrate that actions have consequences.</p> <p>18. Talk about how people can be helpful/hurtful to one another.</p> <p>19. Practice independence and self-help skills.</p> <p>20. Describe members of their family and discuss what parents do for their children to keep them safe and healthy.</p>	<p>B. Social and Emotional Development 9. Emotions: Children recognize, label, and regulate their feelings.</p> <p>B. Social and Emotional Development 15. Conflict resolution: Children resolve social conflicts.</p> <p>B. Social and Emotional Development 14. Moral development: Children develop an internal sense of right and wrong.</p> <p>C. Physical Development and Health 19. Personal care: Children carry out personal care routines on their own.</p> <p>H. Social Studies 53. Diversity: Children understand that people have diverse characteristics, interests, and abilities.</p>
<p>Safety & Health Care</p> <p>21. Discuss strategies to prevent injury and illness, control the spread of disease, and promote cleanliness.</p> <p>26. Talk about what to do when someone gets hurt and the rules for universal precautions (do not touch body fluids; wash hands after touching body fluids).</p> <p>29. Talk about some basic ways they can keep their environment clean or take care of it.</p>	<p>C. Physical Development and Health 19. Personal care: Children carry out personal care routines on their own. 20. Healthy behavior: Children engage in healthy practices.</p> <p>C. Physical Development and Health 20. Healthy behavior: Children engage in healthy practices.</p> <p>H. Social Studies 58. Ecology: Children understand the importance of taking care of their environment.</p>

Massachusetts Guidelines

Key Developmental Indicators

<i>The Arts</i>	
<p>Movement & Dance</p> <ol style="list-style-type: none">1. Explore activities and vocabulary related to movement, balance, strength, and flexibility.2. Respond to a variety of musical rhythms through body movement.3. Participate in simple sequences of movements and dance to various kinds of music.4. Express themselves freely through movement.5. Use props to explore space and movement.6. Act out ways that movement and dance can show feelings or convey meaning.	<p>F. Creative Arts 42. Movement: Children express and represent what they observe, think, imagine, and feel through movement.</p> <p>F. Creative Arts 42. Movement: Children express and represent what they observe, think, imagine, and feel through movement.</p> <p>F. Creative Arts 42. Movement: Children express and represent what they observe, think, imagine, and feel through movement.</p> <p>F. Creative Arts 42. Movement: Children express and represent what they observe, think, imagine, and feel through movement.</p> <p>F. Creative Arts 42. Movement: Children express and represent what they observe, think, imagine, and feel through movement.</p> <p>F. Creative Arts 42. Movement: Children express and represent what they observe, think, imagine, and feel through movement.</p>
<p>Music</p> <ol style="list-style-type: none">8. Sing a variety of songs within children's vocal range, independently and with others.9. Sing expressively.10. Sing songs with repetitive phrases and rhythmic patterns.11. Listen to various kinds of instrumental music and explore a variety of melody and rhythmic instruments.	<p>F. Creative Arts 41. Music: Children express and represent what they observe, think, imagine, and feel through music.</p> <p>F. Creative Arts 41. Music: Children express and represent what they observe, think, imagine, and feel through music.</p> <p>F. Creative Arts 41. Music: Children express and represent what they observe, think, imagine, and feel through music.</p> <p>F. Creative Arts 41. Music: Children express and represent what they observe, think, imagine, and feel through music.</p>

Massachusetts Guidelines

Key Developmental Indicators

<p>12. Play instruments using different beats, tempos, dynamics, and interpretation.</p> <p>13. Listen to, imitate, and improvise sounds, patterns, or songs.</p>	<p>F. Creative Arts 41. Music: Children express and represent what they observe, think, imagine, and feel through music.</p> <p>F. Creative Arts 41. Music: Children express and represent what they observe, think, imagine, and feel through music.</p>
<p>Theatre Arts</p> <p>15. Use dramatic play, costumes, and props to pretend to be someone else.</p> <p>16. Create characters through physical movement, gesture, sound, speech, and facial expressions.</p> <p>17. Create scenarios, props, and settings for dramatizations and dramatic play.</p>	<p>F. Creative Arts 43. Pretend play: Children express and represent what they observe, think, imagine, and feel through pretend play.</p> <p>F. Creative Arts 43. Pretend play: Children express and represent what they observe, think, imagine, and feel through pretend play.</p> <p>F. Creative Arts 43. Pretend play: Children express and represent what they observe, think, imagine, and feel through pretend play.</p>
<p>Visual Arts</p> <p>18. Explore a variety of age-appropriate materials and media to create two- and three-dimensional artwork.</p> <p>19. Observe the safe and appropriate use and care of art materials.</p> <p>20. Explore and experiment with wet and dry media in a variety of colors including black and white.</p> <p>21. Explore how color can convey mood and emotion.</p> <p>22. Explore various types of lines in artwork and in nature.</p>	<p>F. Creative Arts 40. Art: Children express and represent what they observe, think, imagine, and feel through two- and three-dimensional art.</p> <p>F. Creative Arts 40. Art: Children express and represent what they observe, think, imagine, and feel through two- and three-dimensional art.</p> <p>F. Creative Arts 40. Art: Children express and represent what they observe, think, imagine, and feel through two- and three-dimensional art.</p> <p>F. Creative Arts 40. Art: Children express and represent what they observe, think, imagine, and feel through two- and three-dimensional art.</p>

Massachusetts Guidelines

Key Developmental Indicators

23. Experiment with the use of texture in artwork.

24. Use basic shapes and forms of different sizes to create artwork.

25. Explore concepts of pattern and symmetry in the environment and artwork.

26. Create artwork from memory or imagination.

27. Choose artwork for display in the classroom, school or community or for a personal book, class book or portfolio, and explain why they chose it.

F. Creative Arts

40. Art: Children express and represent what they observe, think, imagine, and feel through two- and three-dimensional art.

F. Creative Arts

40. Art: Children express and represent what they observe, think, imagine, and feel through two- and three-dimensional art.

F. Creative Arts

40. Art: Children express and represent what they observe, think, imagine, and feel through two- and three-dimensional art.

F. Creative Arts

40. Art: Children express and represent what they observe, think, imagine, and feel through two- and three-dimensional art.

F. Creative Arts

44. Appreciating the arts: Children appreciate the creative arts.