
Investigations:

A Project-Based Preschool
Curriculum



Preface

Investigations is a curriculum for children aged 18 months to 5 years. It was developed by blending ideas of some of the best thinkers in the field—Bodrova, Helm, Gandini, Katz, Leong, Meisels, Thelen, and Vygotsky—with current research, including studies conducted by faculty at Eastern Connecticut State University. The curriculum integrates some elements of other approaches to planning and teaching—the *Project Approach*, *Tools of the Mind*, *High Scope*, and *Reggio Emilia-Inspired Programs*. However, it is completely unique in its methods, content, and comprehensive approach to promoting children’s development.

The curriculum is organized around clearly-articulated performance standards—observable measures of thinking, learning, and behavior—and content standards—areas of knowledge that children will acquire. These outcomes are drawn from national and state organizations and represent the best thinking about what children should know and be able to do prior to entering public school.

The curriculum includes *five pillars of teaching and learning*. These are innovative, research-based strategies that are woven through every experience of the school day. The pillars underlie learning and teaching at group times, play times, transitions, and even lunch and snack. Supported by these pillars, are five *platforms*—distinct learning blocks, such as group time, free play in learning centers, and cooperative learning activities. Both pillars and platforms are described in the handbook. A rationale is given for each, based on research. Then guidelines for implementation are provided.

One of the most important components of the curriculum is its underlying philosophy. Research shows that positive outcomes for children are greatest when they attend classrooms where teachers believe in, adhere to, and reflect in all classroom activities, a coherent, consistent theory of learning and teaching. To understand the *Investigations Curriculum*, one must understand its philosophy.

INVESTIGATIONS CURRICULUM OVERVIEW

Underlying Assumptions

Based on its philosophy, teachers using the Investigations Curriculum assume the following:

- Preschool children actively make sense of the world, using prior knowledge, skills, and dispositions to construct an understanding of things that are of interest to them.
- Acquiring content knowledge is as important for preschool children as engaging in thinking and learning processes; the two cannot be teased apart.
- At a young age, children have a curiosity about and interest in the long ago, the far away, the puzzlements of nature, and other fascinating phenomena in the world.
- Young children can come to understand any phenomenon they have questions about, so long it can be assimilated into previous knowledge.
- Rich, novel content provokes questions, causes puzzlement, prompts exploration, and stretches children's thinking, in a way that tired, traditional topics cannot.
- All aspects of the physical environment help structure children's thinking about content knowledge in the disciplines.

- Preschool children co-construct knowledge with peers and teachers; they are more likely to operate within the Zone of Proximal Development when they interact with “expert others.”

Five Pillars
that Support all Learning Experiences

Five pillars of learning and teaching are woven through every classroom activity and experience of the Investigations Curriculum:

- Scaffolding children’s social participation, thinking, and language in play
- Purposeful balance in daily scheduling
- Evidence-based classroom arrangement
- Portfolio assessment
- Integrated Planning Webs

Five Platforms
for Daily Classroom Activities

- Play experiences in learning centers.
- Planned whole group experiences
- Teacher-guided outdoor play
- Intentional transitions
- Cooperative learning groups

Steps in Planning

- Select a topic for investigation
- Conduct informal research on the topic
- Web out topics on a *content* web
- Select content goals related to topics on the content web
- Select 4 or 5 performance standards (from CT SDE)
- Enter content goals and standards on a planning web or list; list out activities (and standards and assessments to which they're aligned).
- Transfer activities to weekly planning book.
- Collect, analyze, and organize assessment artifacts into child portfolios, organized by SDE standards.
- Plan next investigation, based on prior assessments.

Step 1: Select a Topic for Investigation

Teachers will:

- Select a topic--based on child, family, or teacher interest--that is meaningful, novel, and stretches children's thinking.
- **Example:** "Bridges," based on children's curiosity and knowledge of the Frog Bridge in Willimantic.

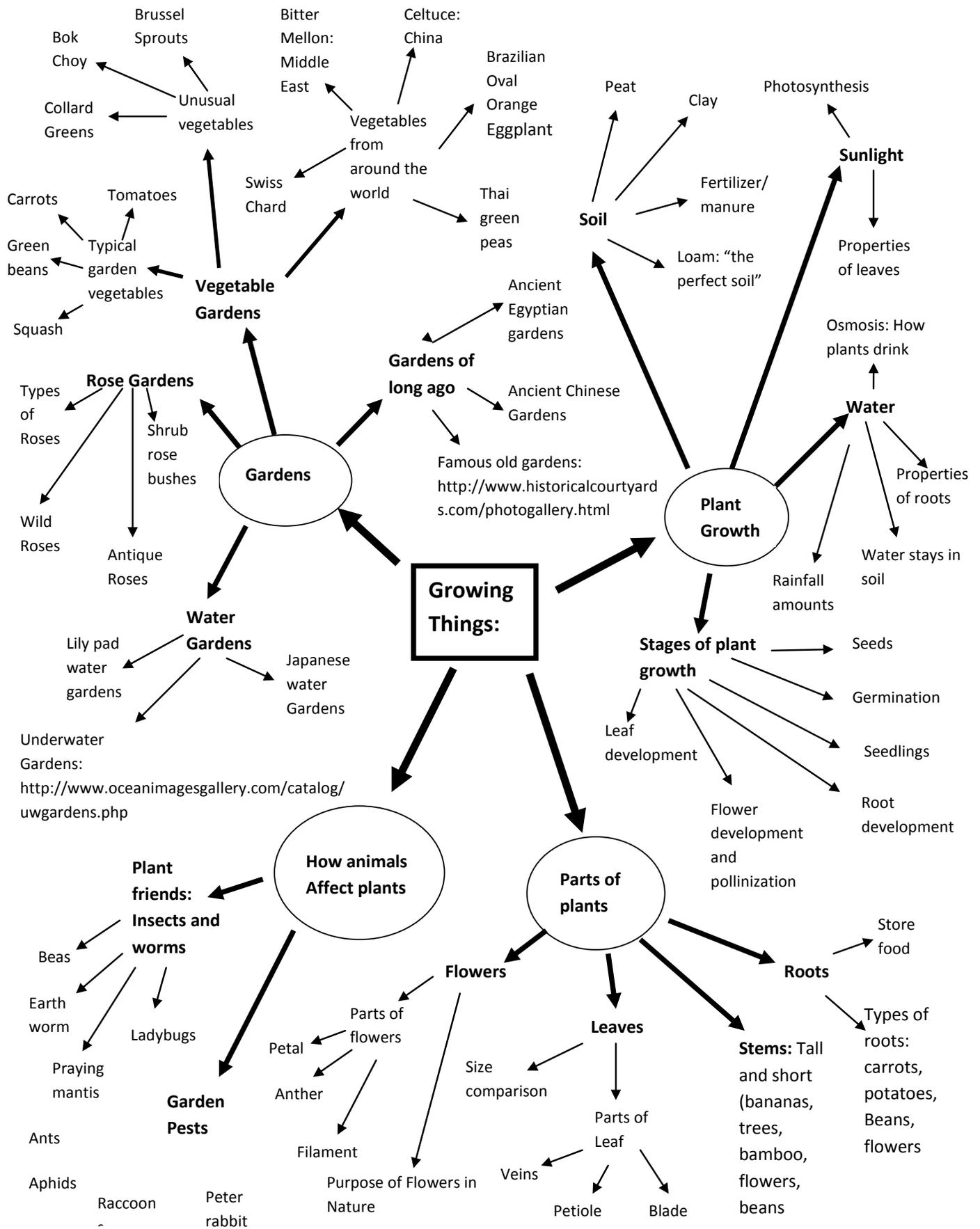
Step 2: Conduct Research on the Topic

Teacher will:

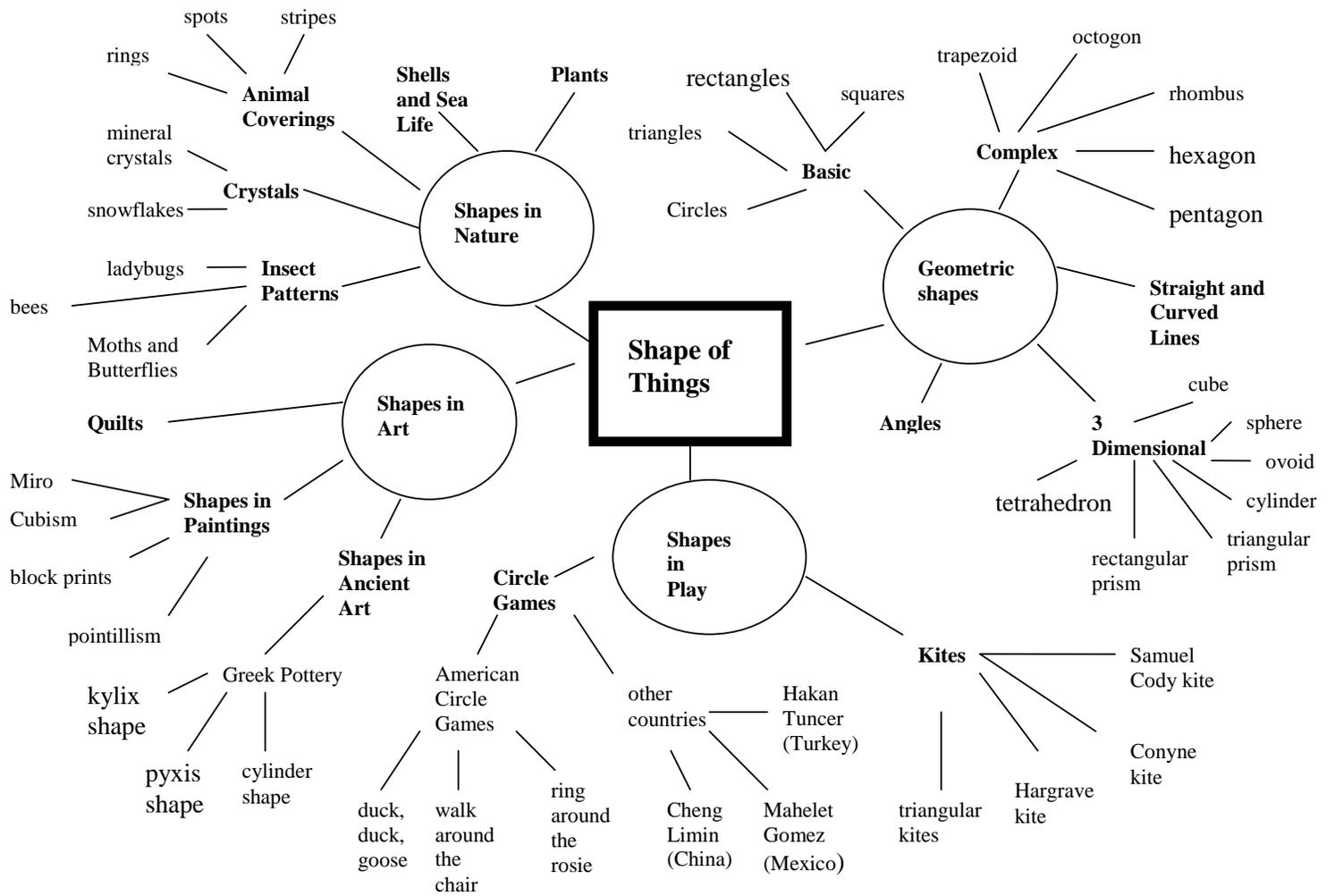
- Conduct their own research on the topic and gather specific information to include on a content web.

- **Example:** A teacher webs out different types of bridges: covered, suspension, arch, beam, truss, historical (Brooklyn, Golden Gate, etc.)

Step 3: Create a Content Web



Step 3: Create a Content Web



Step 4: Select Content Goals

- Teachers select several content goals for the investigation that reflect the information included on the content web. Content goals are related to the recommended standards of national organizations for each academic discipline.

Example: A teacher includes the following information on the content web: types of bridges around the world, what goes over and under bridges, bridges in literature. The teacher adds the content standard, “Understand that there are other places in the world that are far away; distinguish families, communities, and elements of daily life and culture in places other than where we live.” (Standards of the National Council for the Social Studies).

Step 5: Select Performance Standards

- Teachers will select 4 or 5 performance standards, based on the content goals and topics chosen, above, and the needs of individual children identified through assessment data.

Example: A teacher selects the following Connecticut State Department of Education Performance Standards: COG 3 (sorts objects), COG 5 (compares and orders objects and events), COG 10 (shows an understanding of stories), PHY2 (coordinates small muscles).

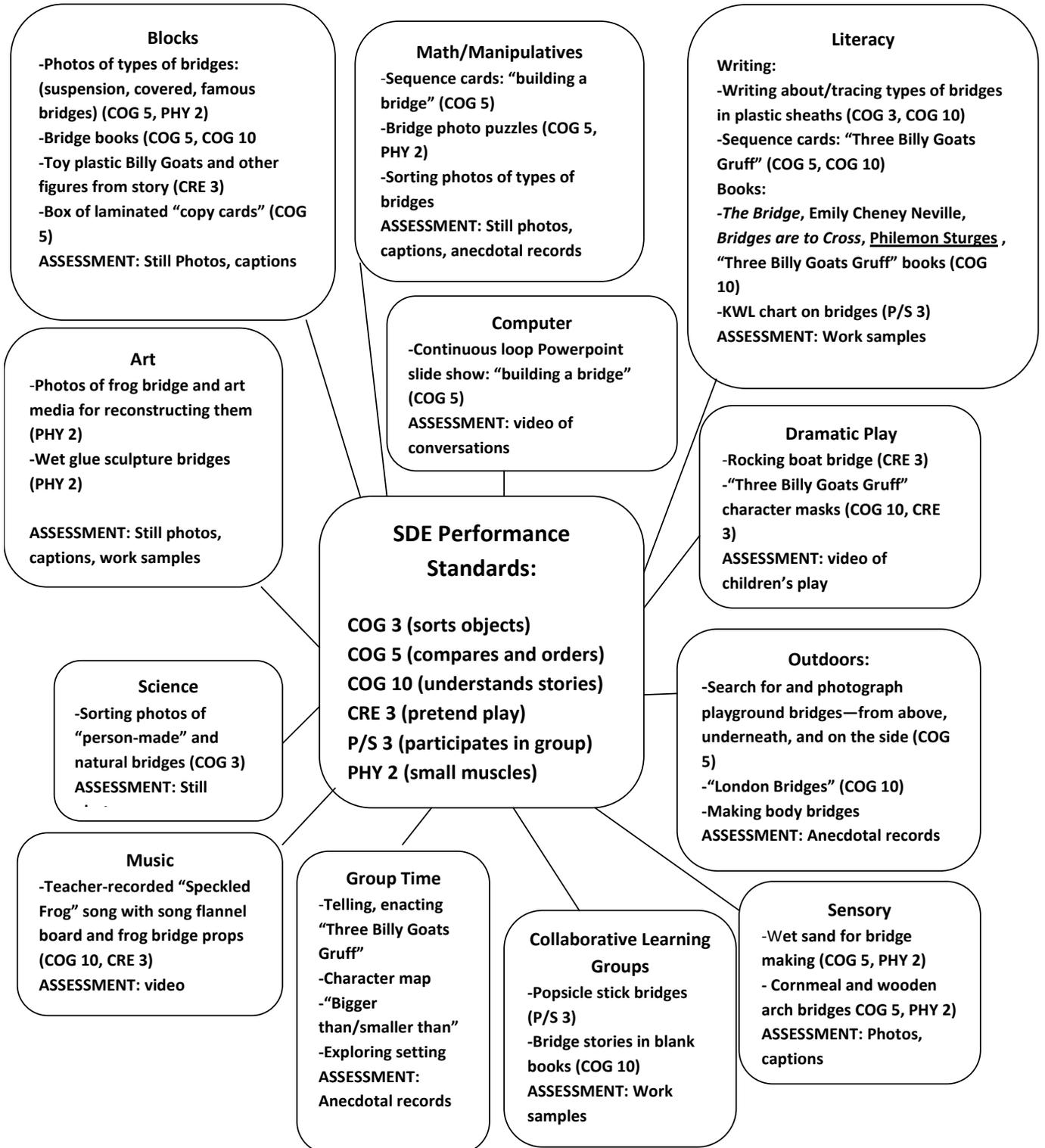
Step 6: Create a Planning Web or List with Activities for Children

- Teachers plan activities related to the topics, content goals, and performance standards they have selected. Activities are planned for each learning center, curricular platform, and all areas of the

curriculum (e.g., math, science, motor play). For each activity entered, **at least one performance standard is listed** in parentheses. Assessment methods are also listed for each curriculum area. Teachers will list these activities on a list or planning web:

Step 6: Create a Planning Web or List with Activities for Children

Investigation on “Bridges”



Step 7: Enter Activities on Weekly Planning Sheet

- Teachers enter many activities from the planning web or list into a weekly planning book. These entries include in parentheses the performance standards that each activity addresses. On the second week of the investigation, they add more activities from the web or list. They carry out many of the activities on the web over course of the investigation.
- **Example:** A teacher selects an activity for a “Growing Things” investigation that appears under *Science* on a planning list. The activity is written onto the weekly planning form: “Release earthworms into the garden. Have children predict where worms will go on a sunny day, then observe their movement toward shade (COG 1, Engages in Scientific Inquiry; S3: Living things have certain characteristics that distinguish them from nonliving things, including growth, movement, reproduction and response to stimuli.)”

Step 8: Assessment

- Teachers collect assessment artifacts on individual children as the investigation progresses. All artifacts are captioned. These are then entered into a hard copy or electronic portfolio, organized by the performance and content standards they address. Summary narratives and other child profiles are written twice a year, based on these artifacts, for each individual student.

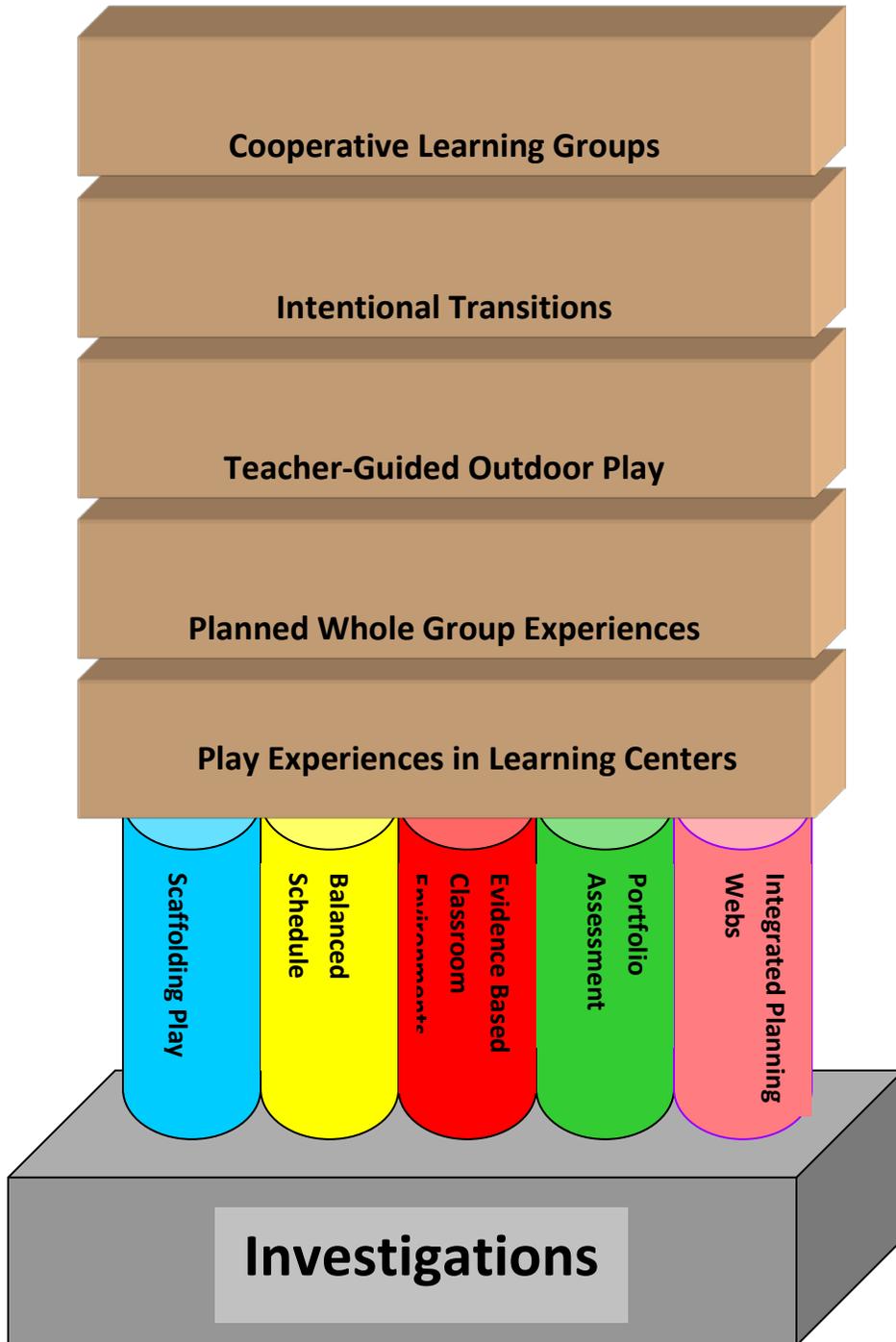
Example: A child is photographed intently observing ladybug eggs on the underside of garden leaves. The photo is captioned: “L. uses the senses of sight and touch to observe properties of ladybugs (S1) and makes a prediction, “I think they will eat our garden all up” (COG 1)”

Step 9: Review of Assessment Data for Subsequent Planning

- Teachers review individual child portfolios prior to planning the next investigation. They identify performance and content standards that need further support (for either an individual or the entire class). As they plan the next investigation, they address these standards on their planning webs/lists and as they design activities.

Example: A teacher notes that, for several children, artifacts show poor progress in writing to convey meaning (COG 14). As part of a new investigation on “Growing Things,” the teacher creates special scientific journals, with attached pens, for children to write in about the changes in plants over time.

Investigations: An Early Childhood Curriculum



Mission

The mission of the Margaret S. Wilson Child and Family Development Resource Center of Eastern Connecticut State University is to promote the social, emotional, cognitive, language, aesthetic, and physical development of young children of diverse backgrounds, to inspire, support, and educate their families, to provide a model program for future teachers and early childhood professionals, and to serve as a hub of innovative research and professional development.

Philosophy

We believe that

- All young children have potential and are competent, curious, and capable of asking and answering their own questions, taking intellectual risks, and co-constructing knowledge with teachers, parents and peers.
- Children acquire knowledge of the physical and social world when they are challenged to make sense of new objects, actions, events, and relationships, relying on their prior knowledge and lived experiences.
- Learning has a social purpose and is supported by social and emotional competencies and positive, nurturing relationships with peers and adults.
- Play is a primary mode of expression, a rich context for the construction of knowledge, and a fundamental right of all young children.
- Supporting, empowering, advocating for, and engaging families will facilitate the positive development of the whole child. Collaborative, equal-status family-teacher partnerships are the foundation of a culturally meaningful, family-centered curriculum.
- Teachers and family members must collaborate in the assessment of young children in order to acquire complete, accurate, and culturally-sensitive understandings of development and to make meaningful use of assessment data in planning and implementing curriculum.
- Together, teachers and families can create a sense of belonging and community in which children's emotions, spirits, and intellect can flourish in concert.
- Each child is unique and demonstrates a distinct pattern of learning, interaction, communication, and interest, which is nurtured by family, culture and community.

Connecticut State Department of Education
Preschool Performance Standards

Personal and Social Domain:

- P & S 1. Shows self-direction with range of materials
- P & S 2. Sustains attention to task or goal set out to accomplish
- P & S 3. Participates in teacher-led group activities
- P & S 4. Manages transitions, follows routines and rules
- P & S 5. Uses words to express emotions or feelings
- P & S 6. Shows empathy and caring for others
- P & S 7. Interacts cooperatively with peers
- P & S 8. Works to resolve conflicts
- P & S 9. Recognizes similarities and appreciates differences

Physical Domain:

- PHY 1. Uses coordinated large-muscle movements
- PHY 2. Uses coordinated small-muscle movements
- PHY 3. Cares for self independently

Cognitive Domain:

- COG 1. Engages in scientific inquiry
- COG 2. Uses a variety of strategies to solve problems
- COG 3. Sorts objects
- COG 4. Recognizes and makes patterns
- COG 5. Compares and orders objects and events

COG 6. Relates number to quantity

COG 7. Demonstrates spatial awareness

Cognitive Domain (Language and Literacy)

COG 8. Uses complex sentences and vocabulary to describe ideas and experiences

COG 9. Understands and participates in conversations

COG 10. Shows understanding of stories

COG 11. Displays knowledge of books and print

COG 12. Recognizes similar sounds in speech

COG 13. Identifies printed words

COG 14. Uses writing to convey meaning

Creative/Expressive Domain:

CRE 1. Builds and constructs to represent own ideas

CRE 2. Draws and paints to represent own ideas

CRE 3. Represents experiences and fantasies in pretend play

CRE 4. Sings and responds to music

Investigations Curriculum Content Standards

Science Standards (Adapted from the National Research Council)

Children will understand:

- S1: Some properties can be observed with the senses, and others can be discovered by using simple tools or tests.
- S2: Daily and seasonal weather conditions affect what we do, what we wear, and how we feel.
- S3: Living things have certain characteristics that distinguish them from nonliving things, including growth, movement, reproduction and response to stimuli.
- S4: Living things grow and change over time.
- S5: Plants need certain things to grow, such as sun and water.
- S6: Plants can be distinguished by many characteristics, including color, texture, size, shape of leaves, flowers, root systems, and where they live.
- S7: The earth and the sky are distinct spaces with different properties and objects within them.
- S5: Animals can be distinguished by many characteristics, including how they move, where they live, how and what they eat, and their body coverings.
- S6: Humans and animals use materials to build shelters, based on climate conditions and materials available in the environment.
- S7: Objects move at different speeds and following different paths; motion can be altered by different forces.

Mathematics Standards (Adapted from NCTM)

Children will:

- M1: Understand numbers, ways of representing numbers, and relationships among numbers.
- M2: Make reasonable estimates.
- M3: Understand and create patterns
- M4: Understand change in objects, including combining, dividing, and rotating shapes.
- M5: Understand attributes of two and three dimensional shapes, including sides and angles.
- M6: Understand relationships and positions of objects in space: “near to,” “under,” “over,” etc.
- M7: Use spatial memory to draw or create shapes.
- M8: Recognize and compare shapes in the environment.
- M9: Understand attributes for measuring objects: length, area, volume, weight, and time.
- M10: Understand how to compare, order, and sort objects, using these attributes.
- M11: Represent and interpret simple data with graphs, pictures, or concrete objects.
- M12: Understand the concept of likely and unlikely events and make predictions.

Social Studies Standards (adapted from National Council for the Social Studies)

Children will:

- SS1: Understand and distinguish long ago and the present.
- SS2: Understand that there are other places in the world that are far away; distinguish families, communities, and elements of daily life and culture in places other than where we live.
- SS3: Understand map space and browse, interpret, and construct simple maps.

SS4: Understand simple economic concepts, such as money and exchange; participate in make believe mini-economies.

SS5: Understand what families are and distinguish families of diverse membership and cultural background.

Oral Language (adapted from IRA/NAEYC, CT Content Standards and J. Schickedanz, 2004)

Children will:

OL1: Use gestures with and without speech to communicate.

OL2: Express feelings, needs, and ideas.

OL3: Participate in conversations with peers.

OL4: Use language to ask questions, seek help, explain things, give directions, and persuade peers.

OL5: Generate and maintain scripts in sociodramatic play.

OL6: Use or show understanding of new words encountered in books, learning experiences and conversations.

OL7: Ask for names of unfamiliar objects or asks the meaning of unfamiliar words.

OL8: Describe properties of objects and relationships among them.

OL9: Respond to peers and adults when spoken to; answer questions.

OL10: Attends to stories.

OL11: Take turns in conversations.

OL12: Recite interesting-sounding words from stories and engage in word play.

OL13: Think of a word that rhymes with one produced by an adult.

OL14: Think of a word that starts with the same sound as one an adult produces.

OL15: Identify the beginning sound of a word.

OL16: Understand and use increasingly complex sentences.

Literacy (adapted from IRA/NAEYC, CT Content Standards and J. Schickedanz—2004)

Children will:

L1: Ask what printed words say.

L2: Indicate meaning for marks, letter-like forms, and conventional letters they have created in play, art, and writing.

L3: Understand the meaning of environmental signs and symbols.

L4: Identify some letters in ones name and other print.

L5: Identify ones name and some other familiar words by sight.

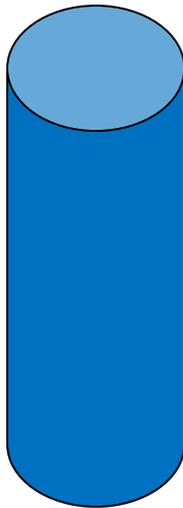
L6: Pretend to “read” aloud, using phrasing, intonation, and language of familiar books.

L7: Retell and reenact stories, accurately orders their events, and names and discusses their characters.

L8: Acquire new information from fiction and non-fiction books.

L9: Show preference for certain books and a positive disposition toward reading them.

L10: Choose to write with a variety of implements journal entries, stories, and other works and show a positive disposition toward writing.



**Pillar One:
Scaffolding Play**

Pillar 1: Scaffolding Play

Description: Teachers in the Investigations curriculum will use *scaffolding* as a major tool to promote development during learning center time. In scaffolding, teachers observe children’s play and give just the amount of help needed. If children need *much* help, teachers provide direct guidance. If *no* help is needed, teachers observe or move to another area of the classroom. The situation in which teachers can most promote development—called the *zone of proximal development*—is when children need *some* assistance and teachers use the following indirect methods of responding:

1. Questions: (“What are some other things we saw at the bakery that you could write in your journal?”)
2. Hints: (“These pieces have the penguin’s feet on them. Where would the feet pieces go on your puzzle?”)
3. Modeling: (“I’m so hungry. I think I’ll make myself some spaghetti. Let’s see, what should I add to make it spicy?”)
4. Suggestions: (“What if you added a little water to the sand?”)

Purposes of Scaffolding: All interactions with children’s play are intentional. Although teachers will support children’s play in many ways as they intervene, there are three primary purposes of scaffolding in the Investigations model:

1. Promote *peer interaction and communication* (“Samantha, you should tell Jamal and Hanna about what you’re painting,” or “They’re cooking dinner for a party, Shanelle. Why don’t you and I help them?”)
2. Promote *shared sustained thinking* (“What’s a different way we could sort the shells?” “How can you make the ball go farther?” “Which card matches this picture?” or “What’s happening on this page of the story?”)
3. *Build vocabulary/Recast and extend Utterances:* (“It says *straight*. Do you know what that means?” or, when a child says “Red paint,” the teachers restates, “Oh, you want more red paint. Let me get you some right away.”)

Implementation: In every play interaction, teachers will follow the OREO pattern: Observe-Respond-Exit-Observe. *Observe:* Teachers always watch briefly before intervening to determine how much and what type of help children need. (Some teachers will even say to themselves the kind of support a child needs, prior to intervening.) *Respond:* Teachers provide just the right amount and type of assistance, focusing, when appropriate, on the three purposes of scaffolding, above. *Exit:* Teachers rarely stay in a center or area for more than a few minutes after they have

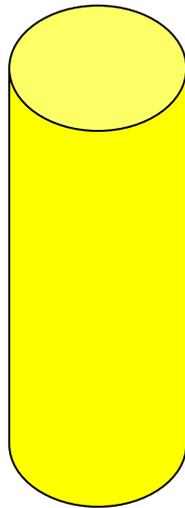
enriched children's activity. *Observe:* Teachers always watch to see if their intervention was successful.

**Pillar 1: Scaffolding Play
Fidelity Rubric**

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
1. All adults in the classroom are active in interacting with or observing children during free play time.	
2. All adults move in and out of children’s play activities, briefly supporting play then withdrawing.	
3. Adults provide support to children in play that matches the amount and type of assistance they need.	
4. Adults use direct guidance very rarely, and only when a child needs much support in play.	
5. Adults frequently observe (and assess) play activities, when children are engaged and in no need of support.	
6. Adults frequently interact using indirect strategies—questioning, hint-giving, modeling, or making suggestions—when children need only some help in play.	
7. Adults frequently intervene in children’s play when children need assistance interacting or conversing with peers.	
8. Adults frequently engage in “shared, sustained thinking” when children need assistance in thinking, problem solving, or learning new concepts.	
9. Adults frequently help children learn new words or extend/recast their statements, when children need support in communication or word meaning.	
10. Adults show that they pause and observe prior to every intervention in children’s play.	
11. Adults exit children’s play after they have given support, using methods that encourage children continue playing on their own.	
12. Adults show evidence that they observe or assess children’s on-going play, after they have exited a play area.	

Notes/Reflection:



Pillar Two:
Balanced Daily Schedule

Pillar 2: Balanced Daily Schedule

Description: Teachers will plan a daily schedule that integrates 5 elements supported by research: 1.) an equal balance of teacher-guided and child-guided activities, 2.) an active-quiet-active pattern of experiences, 3.) a planning session near the beginning of the day and a reflection session at its end, 4.) discussion, visual representation, and on-going review of the schedule (e.g., ordering of daily events) with children, 5.) a set of planned transition activities that connect segments of the day (addressed in Pillar 2.)

Exact time blocks and the order in which they are scheduled will vary to some degree from one classroom to another, based on the needs of children, individual teacher decision-making, special activities and events, and playground availability. However, all classrooms will include the following components:

- **Table Toy Play:** A quiet time at the beginning of the day for children to transition from home to school, when only table toys (e.g., puzzles, stringing beads, math games, and other cognitively-focused materials) are available. *Rationale:* This provides a quieter/”safer” arrival period in which children become adjusted to the school day. It also assures a time in the day when children play exclusively with problem-solving toys that are less often used during center time. (Approximately 20 minutes).
- **Group Time I: Planning and Initiation:** This group time session takes place early in the morning to allow children to engage in planning for the day and for teachers to prepare them for center time and cooperative learning groups and to prime them for thinking and learning related to the investigation that is underway. A purpose of this group time is to introduce new center activities and materials. This session includes specific, short, and quickly-paced activities, described under Platform 3: (Approximately 20 minutes. May be conducted as two, 10 minute sessions that are separated by morning snack.)
- **Learning Center Time:** An extended period of uninterrupted play in learning centers. Activities during this time block are exclusively child-chosen and -directed. The role of teachers during this time is to engage in scaffolding (addressed in Pillar 1)—including question-asking, provocations, modeling, hint-giving, observing and assessing. This time period may include snack as a center choice. *Rationale:* Research has demonstrated that child-initiated play in classrooms promotes language, general cognitive development, social competence, and creativity. Children need a long period of time to engage in play for it to be useful—in order to choose activities, plan with peers, set up play settings or materials, play, and cleanup before moving on. (At least 1 hour.)
- **Cooperative Learning Group:** This is a brief period in which intentionally-assigned small groups of children work in collaboration with a teacher on a short project, related to

the investigation or another topic of interest (addressed in Platform 4). **Rationale:** Cooperative learning groups have been found to enhance the learning of elementary school children, adolescents, and adults. Preliminary findings suggest the method works well with preschoolers, as well. A major goal of the Investigations Curriculum is to promote cooperation and the co-construction of knowledge with peers. (Approximately 10 to 20 minutes).

- **A.M. Outdoor/Motor Play:** Children will be provided with two extended periods of active motor play on the playground (except on days of very inclement weather). Activities in the Great Room, outdoor spaces at the back of the building, or organized walks may be substituted for outdoor free play. Children may choose their activities during these periods, although teachers will actively scaffold their play and will regularly bring novel motor equipment or curriculum materials outdoors to engage children in motor-grounded learning. **Rationale:** Active motor play has been found not only to promote physical health, but to promote brain organization. Motor activity prior to group or shared reading experiences has been found to increase attention among young children. (Approximately 45 minutes for each outdoor period).
- **Group Time II: Shared Reading/Storytelling:** In this group time, the teacher will read a book or tell a story (with or without flannel board figures) that is related to the investigation underway or one that is highly engaging to children. Books and stories will periodically be nonfiction. In most cases, books and stories will be repeated on three subsequent days during this group time. Each rereading/retelling will be planned with specific outcomes for content and literacy in mind, following guidelines presented in Platform 3. At least one additional literacy experience will also be planned for Group Time II. This may include poetry, songs, or finger plays accompanied by large print or activities that enhance children's understanding of individual letters and words. **Rationale:** Shared reading experiences, including teachers' scaffolding of language and literacy, promote children's understanding of stories and print. Storytelling has been found to enhance listening, language, and various cognitive abilities. (Approximately 10 to 15 minutes).
- **Lunch and Snack Times:** Lunch and snack times are considered important instructional components of the Investigations Curriculum. Although there are many opportunities to promote learning and development during these times, three outcomes are the primary focus: 1.) *language development:* Adults will be positioned at all tables and will engage children in active child-initiated and adult-initiated conversations. They will scaffold language, using the expansion strategy described under Pillar 1. All language teaching will be done in the context of natural, enjoyable conversations. 2.) *peer interaction:* Teachers will facilitate child-to-child interaction. A goal is to have children talk directly to peers, rather than through the teacher. 3.) *content knowledge related to the investigation:* During these periods adults will engage children in discussions about the investigations underway. Periodically, foods that are related to an investigation will be prepared by children at center time and discussed during snack and lunch (e.g., vegetables that have been grown in the garden). Teachers may choose to offer the a.m. snack as a center choice instead of a whole

group gathering. **Rationale:** Research has shown that children whose teachers plan lunch and snack time conversations and actively engage them with peers show increased language development. (Approximately 20 to 30 minutes, not counting transitions).

- **Nap Time:** Nap time will vary depending on individual children's needs. All children will rest for at least a half an hour. After this time, non-sleepers will be provided quiet toys or books to use in the classroom while waiting for peers to awake. As with other time blocks, the toys or books chosen should be selected intentionally, based on curriculum outcomes. Available adults should provide some scaffolding of children during this time period. This should be a meaningful and educational experience for children who do not nap, not a period for simply waiting for sleeping peers. (30 minutes to 2 hours). **Rationale:** Studies have found that preschools in Europe are more effective if every minute of the school day—including transitions, lunch, and nap—are intentional, outcome-based, and well-planned.
- **Group Time III: Music, Movement, and Group Games:** This is an afternoon group time that follows nap and snack. Teachers will plan musical and motor experiences that address specific outcomes and/or relate to an investigation underway. This might include songs and dances, finger plays and whole-body movement activities. Musical instruments may be used. Group games that promote cognitive development are also planned for at least two sessions a week. The emphasis of these will be on self-regulation, discussed under Platform 2. Periodically a book or story is included in this third group time. (Approximately 15 to 20 minutes) **Rationale:** All of these activities have been found to enhance children's cognitive development and language. Additionally, group games have been found to enhance perspective-taking and self-regulation.
- **Reflection on the Day:** This is a whole group session that may be conducted at the end of Group Time III or after the second p.m. outdoor play time. Its main purpose is to review and evaluate the events of the day. This will frequently include literacy—for example, a review of an experience chart that was used to list plans shared at the morning group time, a written recording of children's favorite (or most frustrating) activities of the day, or a list of problems or concerns individual children want to raise about classroom life. Teachers will periodically use photos, video, samples of children's accomplishments, or other visual supports to help children remember the events of the full day, including morning centers and cooperative learning. **Rationale:** A program that engages children to think about past events that have occurred in the classroom has been found to lead to lasting cognitive benefits. Such a review helps children to think about events, objects, and people that are not in the here-and-now (called "distancing" by psychologists).
- **P.M. Outdoor/Motor Play:** This afternoon play period includes all of the elements of the morning play session (see above). Teachers are just as active in scaffolding and providing interesting curriculum and motor materials for children in this afternoon session, as they are in the morning.

- **Final Center Time and Family Pick-Up:** A planned, purposeful center time will conclude each day. Centers will be as fully equipped as in the morning center time period. Scaffolding will be conducted by adults as in the previous center time (with the exception that the teacher associate periodically greet and chat with families as they pick up their children). This should be an engaging, educational experience for children, not simply a time to wait for family pick-up.

Pillar 2: Balanced Daily Schedule
Fidelity Rubric

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
13. The day is clearly balanced between active and quiet activities; children do not remain still for excessively long periods, nor do they engage in overly-long active play without a quiet break.	
14. Children engage in self-directed, free choice play for at least half of the day.	
15. A child-oriented daily schedule is posted for children to see; teachers refer to it regularly to help children understand the ordering of daily events.	
16. As children arrive they become fully engaged in “problem-solving” and other cognitively-oriented table toys until all have arrived.	
17. Children are involved in a whole-group planning session early in the day and a reflection session near its end.	
18. A name song or game is used in the initial group time to help children learn one another’s names.	
19. New materials or activities are introduced or activity “commercials” are given in a morning group to guide children in their play.	
20. The following four whole group sessions are held during the day: 1.) planning and initiation, 2.) shared reading/storytelling, 3.) music/movement/games, 4.) reflection time.	
21. At least one hour of indoor play in learning centers is provided.	
22. A cooperative learning group is provided during the day.	
23. A morning and an afternoon outdoor play period is provided.	
24. An adult engages each table of children in conversation during snack and lunch times; the following three outcomes are promoted during these periods: language development, 2.) peer interaction, and 3.) content knowledge related to the investigation.	
25. All transitions are smooth, and involve a <i>planned</i> activity or musical experience.	

Notes/Reflection:



**Pillar Three:
Evidence-Based Classroom
Environments**

Pillar 3:

Evidence-Based Classroom Environments

Description: Each classroom is designed differently, based on child needs and available space, but all Investigations classrooms meet basic design principles found in research to support development. Materials are also purposefully chosen, based on research findings. The following are basic elements common to all classrooms that follow the Investigations curriculum:

1. Classroom space is organized into clearly defined learning centers in which like play activities are performed. Both teachers and children can readily identify the activities to be conducted in each center (and those that should not) and every material has a specific center where it is put away after use.
2. Learning centers are visually partitioned, so that at least two sides of each are separated from other centers by dividers or bookshelves.
3. Centers are logically arranged so that compatible centers are together and away from incompatible ones. Most important is the careful separation of loud, active centers from quiet, reflective ones.
4. Messy centers—particularly the sensory table, art, and science are located near water.
5. Adequate pathways are created among centers, but large open spaces are broken up with shelves or equipment to prevent wide-open running.
6. Whole group gathering spaces, such as snack tables or group time spaces are interspersed throughout the learning centers. Such spaces always serve double duty as play centers.
7. Classroom décor in each center is related to the activity conducted there (e.g., photos of families reading together in the book area, children’s art work in the art center, letter posters in writing, math posters in math).
8. All classrooms have a getaway space, placed near quieter centers, in which one or two children can spend some time alone.
9. All classrooms include the following centers: dramatic play/music, blocks, reading, writing, science, art, sensory learning, math/manipulatives (these two can be combined or separated), and computers with at least two chairs at each.

Learning centers are equipped, based on the following research-based principles:

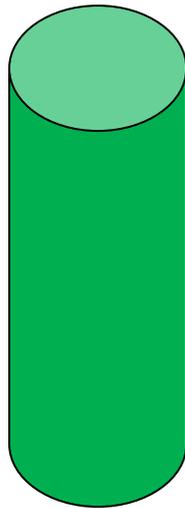
1. Every center includes at least 8 distinct choices of things for children to do. (Exceptions are the art center, where a larger collection of raw materials and media are always available, and blocks, where a larger collection of small and large blocks and ancillary materials are included. At least 3 choices of software are always available on each computer.
2. Materials are rotated in and out of the classroom, so there is always a balance of novel and familiar materials. At least 3 novel materials are include in learning centers on each week.
3. A balance of both open-ended and closed (problem solving) materials are included in the classroom, often within *each* center (e.g., drawing and writing journals in science, puppets in books, posters of block structures to copy in blocks, etc.)
4. A balance of social and more individual activities are included in centers, based on toy research.
5. Graded challenges are created in every center (e.g., a selection of more or less challenging activities, so that children of all abilities and ages can find materials that are meaningful to them).

Pillar 3: Evidenced-Based Classroom Environments
Fidelity Rubric

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
24. Centers are partitioned on two or three sides and contain like materials that show children the types of activities that are to be conducted there.	
23. Centers are logically arranged, with quiet areas away from louder, more active ones and messy spaces near water.	
24. Pathways among centers are wide enough to allow easy passage, but not so wide as to encourage running.	
25. Whole group gathering spaces for lunch or group time serve “double duty” as play and learning spaces during center time.	
26. A quiet, getaway space is included, which is warm and comforting and gives the child a feeling of being completely alone.	
27. The classroom contains centers for all major play and learning areas.	
28. Each center competes with each other center for children’s interest, so there is no crowding or waiting at “popular” areas.	
29. Every center draws at least some children to them during the observation, and engages them for a period of time.	
30. There are at least 8 choices of activities for children at most centers and a good balance of novel vs. familiar, open vs. closed, and social vs. individual materials.	
31. There are graded challenges at each center so children of diverse ages and abilities can all find something to do at their level.	

Notes/Reflection:



**Pillar Four:
Portfolio Assessment**

Pillar 4: Portfolio Assessment

Description: The Investigations Curriculum uses a portfolio assessment system to guide planning and measure child outcomes. Portfolio assessment has been found to be as powerful a predictor of later academic achievement as formal screenings and assessments for both typically developing children and those with special needs (Bagnato, 2005; Gallant, 2009; Meisels et al., 2001; Xue & Meisels, 2004). Portfolio assessment has the added advantage of being authentic—that is, assessments are embedded in children’s naturalistic activities and the daily curriculum.

In the Investigations Curriculum, a portfolio is developed for each child. Artifacts from a child’s classroom activities are entered into the portfolio. Each artifact must demonstrate a child’s competence on at least one of the performance standards or content standards. **At least three significant pieces of evidence for each child must be included each year—one early, one mid-way through, and one later in the year—that show abilities in *each* of the performance standards. In addition, evidence must be included for at least half of the content standards for each child.** A single portfolio entry may address a performance and content standard.

Portfolios are more than mere receptacles to hold children’s work. They are carefully organized around the performance and content standards. If the portfolio is a hardcopy document, it is organized with tabs to show which items demonstrate performance on which standards. If an electronic portfolio is used, links are created for each standard, so that with the single click of the mouse artifacts aligned with a particular standard are accessed. Once artifacts are collected, teachers will analyze them and use data on individual children to guide curriculum planning. In addition, twice a year teachers will write a summary statement for each child, indicating progress and areas in need of further development. These statements will be based *exclusively* on the evidence contained in children’s portfolios.

Steps in Portfolio Assessment:

1. **Creating a portfolio system:** Teachers will select a method of organized children’s artifacts into a portfolio. Although hardcopy binders are appropriate, many teachers will choose to develop electronic portfolios.
2. **Gathering artifacts:** During daily classroom activities, teachers will watch for opportunities to assess individual children’s performance. In most cases, teachers will plan specific activities to allow assessment of particular standards. For example, a teacher might conduct a sorting activity in a cooperative learning group to assess individual’s abilities under standards COG 3. In some instances, a child might demonstrate an ability in an unexpected area of development. The teacher can still gather a piece of evidence for that child—so long as it relates to a performance or content standard.

There are many types of evidence that a teacher might place in a child's portfolio. However, the following are the most common artifacts to be included:

Anecdotal Records: These are objective, detailed descriptions of children's behaviors and/or thinking at a particular moment in time. *These do not include analysis, only description.* Only later will teachers interpret what these records mean. Anecdotal records can be brief—a quick paragraph that captures behavior and language—or can go on for several pages. All children should have some anecdotal records included in their portfolios.

Photographs: Photographs that clearly show a child's performance on a particular performance or contents standard can be included. These should not be simple snapshots, but must show clearly a child's thinking and behavior. If two or more children are included in a photo, the teacher might place a separate copy of the photo in each child's portfolio.

Work Samples: These are samples of children's play and work that clearly demonstrate something about their performance on standards. These can include drawings, early writing, art work, or some other products. Three dimensional projects should be photographed. (This is not considered a photograph entry, as presented above, but a work sample, since it shows a child outcome, not a particular behavior.)

Video: Children's activities can be videotaped and edited for inclusion in a portfolio. These are the most powerful way to show learning and development. Once again, these are not mere shots of exciting classroom activities, but are purposeful recordings of a child's performance on a particular performance or content standard. For hardcopy portfolios, the video must be contained on a CD; in an electronic portfolio, it can be stored in the hard drive and hyperlinked to the standards.

Language Samples: Each child should have at least one entry in the portfolio that contains a rich language sample. This can be an audio recording, although video is more powerful. The recording should be drawn from children's natural classroom activities (since research shows that more advanced and less egocentric language occurs in play).

Outcomes of Formal Assessments: Any formal assessment conducted with a child should be included in the portfolio. This can include data from research studies or grant projects and outcomes of individual evaluations. Developmental checklists, used by an individual teacher or the center might be included. An example would be completed Child Observation forms or Profiles for the Connecticut State Department of Education Assessment Framework.

3. **Captioning:** *Every entry in a child's portfolio must have a caption.* A caption is a brief written statement that communicates two things: 1.) What is this artifact? (Who does the item assess? What is she/he doing? Where and when was it gathered?) 2.) What does this item show you about the child's performance on a particular standard? (Which performance standard is addressed in this item? What does the artifact show about the child's mastery of this standard?) Captions can be written quickly—at the time the artifact is gathered. Later they can be made more readable for parents and other staff.

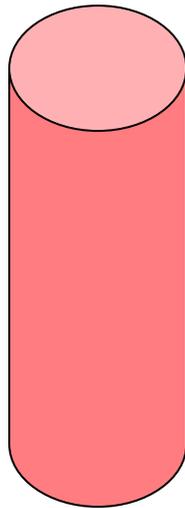
4. **Interpretation and Uses of Data:** Teachers will regularly review the data they have gathered on each child and interpret results. They will use this information in three ways: 1.) To identify specific performance or content standards that an *individual child* needs support in acquiring. This information can be used to write weekly plans for individual children. 2.) To identify performance or content standards that *the class as a whole* needs support in acquiring. This information can be used to complete weekly classroom plans or to plan investigations. 3.) To complete a in-depth summary statement for each child, twice a year, that discusses areas of progress and needed support and makes recommendations for future activities and intervention.

Pillar 4: Portfolio Assessment
Fidelity Rubric

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
32. Child portfolios contain artifacts for each child enrolled	
33. Portfolio entries are organized around the performance standards.	
34. A variety of types of artifacts are included: anecdotal records, work samples, photos, video, language samples, and results of formal assessments/evaluations.	
35. Each portfolio entry is captioned to indicate the specific performance and/or content standard that it measures.	
36. A summary narrative is written for each child, which interprets the portfolio data collected.	
37. There is evidence that portfolio data is used in planning for both individual children and the whole group.	

Notes/Reflection:



Pillar Five:
Integrated Planning Webs

Pillar 5: Integrated Planning Webs

Description: All components of the day—whole and small group, center and outdoor time, transitions, lunch, snack, and naptime—are planned. The planning process of the Investigations Curriculum is designed to be creative, flexible, and child- and family-centered, while at the same time assuring that program performance standards and content standards are consistently met. Based on the work of Katz, Gandini, Helm, and other scholars who have shaped and extended the “Project Approach,” the planning process follows specific steps for selecting and researching areas for children to investigate, choosing outcomes, inventing experiences to address these, and assessing children’s performance. A primary feature of the program is the use of planning webs to generate ideas for both content and activities.

Many investigations are planned by all staff and are conducted across all classrooms. This allows teachers to share ideas and pool resources around a particular topic. It also brings the entire center community—staff, children, and parents—together to learn about a new area of interest. The planning process is flexible enough to allow each individual classroom teacher to focus on sub-topics or to create distinct activities within an investigation that meet the unique needs of her/his students. Too, the pacing of an investigation can vary, from classroom to classroom, based on child and teacher interest. So, this is not a “cookie-cutter” curriculum, in which all classrooms engage in exactly the same experiences at the same times.

The planning process also allows individual teachers to plan separate investigations of interest to their particular class. These can be “side trips” integrated within a center-wide investigation (e.g., a teacher webs out an investigation on lady bugs, as part of a broader center-wide investigation on growing things). Individual classroom investigations can also be planned in between center-wide investigations.

Because of the complex nature of the planning process, all major investigations, whether classroom-specific or center-wide are planned at least two months prior to when they will be initiated.

Steps in the Investigation: Whether planned center-wide or for individual classroom, all investigations are planned following the steps below:

1. **Selecting a topic for investigation:** Teachers begin by choosing a topic for investigation that they believe will be intensely interesting to children and families. It may be based on teacher expertise or passions, the national standards of professional organizations, children’s questions, or family interests. At least two investigations a year will be based on a family survey of the topics they would like their children to explore.
2. **Conducting informal research:** Teacher knowledge is critical for a successful investigation. Prior to exploring a topic with children, teachers will conduct in-depth

research, identifying facts, concepts, and new words that might be woven into activities for children.

3. **Creating a content web:** Teachers will place ideas from their research onto a content web. This is a hierarchical web in which the main topic of investigation branches off into general sub-topics (e.g., “bees”), which branch off into more specific facts (e.g., “how bees fly” or “which bees make honey?”). (See examples in the “Overview” section of the handbook.)
4. **Selecting content goals:** Teachers will examine topics listed on their content web and individual assessment data on individual children and write two or three content goals for the investigation. Content goals relate to the information children will learn as they engage in activities and are aligned with the content standards of the Investigations Curriculum. An example: “Children will understand that living things grow and change over time” (S4).
5. **Selecting performance standards:** Examining the content web and reviewing previous assessment data on individual children, teachers will write 10 or more performance standards that will be addressed over the course of the investigation. An example: “Children will order objects and events” (Cog 5).
6. **Creating an activities list:** An activities list is written, on which teachers record ideas for classroom experiences related to the investigation and its content goals and related performance standards. A separate list is written for each area of the classroom (e.g., blocks), daily event (e.g., cooperative learning groups), or curriculum area (e.g., math). An example: Under “blocks” a teacher writes, “Designing gardens with blocks from photos of different kinds of gardens around the world.” **Following each activity, the teacher will indicate (in parentheses) the performance standard that it addresses.** At the end of each of these lists of activities, at least one method of assessment will be identified (e.g., “photos of block structures”). Activities lists may be written as webs (see an example in the “Overview” section of the handbook).
7. **Transferring activities to a weekly planning book:** Each teacher will choose activities from the activities list that they will implement each week. (Only some of the activities listed may be conducted in any one classroom on any given week.) The activities that will actually be taught (along with their associated performance standards) are entered into a weekly planning book.
8. **Collecting, analyzing, and organizing assessment artifacts into child portfolios:** Teachers will use the assessment methods they have planned on the activities list to gather evidence of individual children’s performance on the standards that are the focus of the investigation. These will be collected and organized by child and standard (see Pillar 4).

9. **Planning the next investigation, based on prior assessments:** Teachers will study assessment data, collected in step 8, and identify the needs of individual children. They will select specific content and performance outcomes that meet these needs. These will serve as the basis for planning the next investigation.

Pillar 5: Integrated Planning Webs
Fidelity Rubric

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
38. A content web is created for each investigation; it contains rich topics drawn from teacher research.	
39. An activities list or web is created; it directly relates to the topics generated on the content web.	
40. Each activity on the activities list is aligned to at least one performance standard.	
41. Each general area of the curriculum listed on the activities list has suggested methods of assessment.	
42. Several content standards, related to each investigation are listed on the activities list.	
43. Weekly planning sheets are completed; these are directly related to ideas on the activities list and include performance standards addressed by each activity.	
44. There is evidence that child assessment data from portfolios is used to plan new investigations and activities.	
45. Investigations that are planned are highly engaging, unique and challenging, and unconventional, so that they stretch children's thinking, rather than recycle worn preschool topics.	

Notes/Reflection:



**Platform One:
Play Experiences in Learning Centers**

Platform 1: Play Experiences in Learning Centers

Description: Investigations is a play-based curriculum. Decades of research on young children’s play support the integration of play activities in all classroom experiences. Countless studies confirm the relationships between play and social competence, language and literacy, self-regulation, creativity, and general cognitive development. In this curriculum, play is defined broadly to include any activity which is freely-chosen, child-initiated, self-regulated, intrinsically-motivated, and process-oriented. This includes several very important types of play that are emphasized in the curriculum: pretend play, construction play, games, motor play, art/music play, and playful exploration and problem-solving.

Indoor play occurs in two different time periods during the day, once in the morning and once in the afternoon. Play sessions run for at least one hour, since research has shown many children require this amount of time to make play choices, set up materials, negotiate roles and activities with peers, engage in play, itself, and clean up. Play occurs within purposefully designed learning centers that are arranged and equipped, based on research (see Pillar 3). Children’s play is supported by adults, following a specific scaffolding strategy to support **thinking and learning**, **peer interactions**, and **language and literacy** (see Pillar 1).

Types of Indoor Play in Learning Centers: Investigations classrooms provide opportunities for many different kinds of play. However, the curriculum emphasizes the following types of play during center time. Classroom arrangement, materials, and scaffolding are provided to assure that **each individual child regularly engages in each of these play categories:**

Pretend Play: All investigations classrooms will have a pretend play center that includes traditional “housekeeping” equipment, dolls, and other props. Periodically, the center will be transformed into a thematic play area related to an investigation—a pretend hospital, pizza restaurant, vet’s office, fire station, etc. At all times, this center will include the following types of props:

- Realistic and nonrealistic items (cardboard boxes, pipe cleaners, pizza “rounds” etc.)
- Props that represent diverse cultures and SES backgrounds
- A balance of male- and female-oriented props and clothes
- Environmental print (“closed/open” signs, books to read in the doctor’s office, etc.)
- Writing implements (markers, pretend grocery lists, order pads, blank check books, etc.)
- Investigation-related props

Pretend play can also be promoted during transitions (e.g., “Let’s all waddle like ducks”), group time (e.g., a pantomime game of “guess what I’m doing?”), or on the playground.

Construction Play: Investigations classrooms will have two areas where construction play occurs: a fully equipped block center with standard hardwood (Pratt) blocks, large hollow blocks, and replica play toys (toy cars, people, and animals) and a table or floor space where children can build with small table blocks, Legos, and other building toys. Blocks can also be placed on the playground or in the great room.

Games: Games are a predominant form of play in most cultures. Although some adults are concerned that games are too competitive for young children, research has shown that they can be among the most cooperative activities preschool children engage in. Games often require that children take turns and follow simple rules, for example. Games also afford opportunities for children to think about number, sorting and matching, and the content of an Investigation (e.g., a memory game about insects). Investigations classrooms will regularly include:

- board games (with color draw cards, spinners, or a die for movement)
- card games (for memory or other “making families” games)
- lotto games (with boards and cards)
- aiming and dice games (with scorekeeping).

Music Play: Music play is a form of singing and dancing that children perform spontaneously, without teacher direction. This is distinct from teacher-guided and whole group music and is a more common form of play in historically under-represented cultural groups—particularly in Latino families (Trawick-Smith, in press). In the Investigations Curriculum, children will be encouraged to engage in spontaneous music-making during free play by providing the following types of props or instruments:

- various musical instruments
- recorded music and dance props (scarves, shakers, etc.)
- a mirror to allow viewing one’s performances
- pretend microphones
- performance dress up clothing
- a tape recorder to record songs

Art Play: Art play is the spontaneous and independent use of art media to represent ideas. Distinct from teacher-planned art projects in which teachers encourage a certain end-product or select specific materials, art play involves self-guided expression. In art play, children “invent their own art projects.” Such play is found to provide unique developmental benefits that teacher-planned projects cannot. In the Investigations Curriculum an art center is used primarily to support art play. Multiple media are always available on open shelves; adults scaffold children’s activities, rather than over-directing with planned projects.

Playful Exploration/Problem-Solving: To be considered play, exploration and problem-solving must be freely-chosen, child-guided, and intrinsically motivated. Making puzzles, solving math tasks (ordering or categorizing objects), conducting scientific experiments, or measuring water at

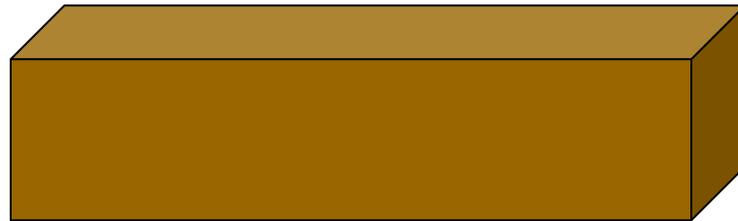
the water play table are examples. Although children maintain full control in these activities, teachers are encouraged to scaffold children's thinking and learning during this type of play. **Exploration and problem-solving are considered the very best contexts for scaffolding thinking and learning within the zone of proximal development.** (See Pillar 1).

**Platform 1:
Play Experiences in Learning Centers
Fidelity Rubric**

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
46. Children are given a full hour to play during center times.	
47. Children always make their own choices of activities and centers to play in during center times.	
48. Children always initiate and regulate their own play activities during center times; adults only respond with scaffolding.	
49. Children frequently engage in pretend play; a pretend play center includes a variety of different props and includes literacy materials.	
50. Children frequently build with large blocks and table blocks and small construction toys.	
51. Children play games, such as board games, card games, lotto, and aiming games with scorekeeping are included.	
52. Children engage in musical play; music play props are available.	
53. Children engage in artistic play; a wide variety of art materials are always available on shelves.	
54. Children frequently engage in problem solving and exploration during center time.	

Notes/Reflection:



**Platform Two:
Planned Whole Group Experiences**

Platform 2: Planned Whole Group Experiences

Description: Whole group experiences are critical for building a classroom community. They are particularly important for children of collectivist families and cultures and others who learn best in large group social interactions. The whole group experiences of the Investigations curriculum are intended to be brief, quickly-paced, and highly engaging, so that children are rarely asked to sit for long periods listening to others and are able to sing, move, and share ideas throughout. Children are more often encouraged to discuss ideas and ask questions informally and to respond to one another, than to listen passively as only one child performs a task or talks. All children are engaged at all times in active thinking and, in most cases, speaking and moving, as well. Most whole group sessions include 4 or 5 short, concise components that are conducted in quick-paced succession.

There are several distinct group time periods each day in the Investigations Curriculum. Each has a very different purpose, though all are guided by a set of principles of effective whole-group instruction, identified in the early childhood research: 1.) a structure that always includes a planned initiation and closure/send-off, 2.) advanced preparation of materials and group time space, so there is virtually no waiting for the experience to begin, 3.) classroom management techniques, such as quick pacing, systematic eye contact, active engagement of all children, and the use of visual displays, gestures to help children attend to activities, 4.) a regular routine of question-asking, hint-giving, explaining, defining, and responding briefly to children's comments in an authentic way.

Although group experiences are usually organized around teacher-planned activities and discussions related to the investigation underway, parents and other family members are encouraged to participate when they can, to listen or to share elements of family life and culture. Members of the community may also be invited to join group time discussions or give presentations.

The following are the whole group experiences of the Investigations Curriculum:

Planning and Initiation: This experience is conducted early in the morning, once all children have arrived. It includes the following planned activities:

- a. A **welcome song** or movement activity that is often focused on children's names.
Rationale: Research shows that knowing peers' names is associated with more positive social interactions and an ability to join play groups in progress.
- b. An **initiation activity** that introduces or reviews the investigation that is underway, announces special events that may occur, or in other ways provides an "advance organizer" for learning and play that will occur that day. The initiation will periodically include the

following: a KWL chart, a poem or brief story, a “riddle of the day” or other guessing games that enhance perspective taking and other areas of cognitive development, or a musical experience. Many of these will relate to the current investigation. **Rationale:** Initiation activities have been found to prime children for learning in a particular area and to promote the active construction of knowledge.

- c. A **planning session** in which children discuss what they plan to accomplish that day and who they might accomplish it with—including the learning center they will go to first. Several times a week these plans will be recorded by the teacher on an experience chart for later review. **Rationale:** A planning process has been found to be an important part of several curriculum models found to promote long-term cognitive development.
- d. A **cognitively-oriented send-off activity** that will smoothly transition children from group time to the next activity. This may include asking children to select and discuss the learning center where they will start the day. It may also include cognitive and language-rich challenges: “If you are *not* wearing brown shoes you can choose a center.” etc. (No longer than 20 minutes)

Shared Reading/Storytelling: The primary goal of this group experience is to enhance language and literacy. It includes the following activities:

- a. An engaging movement activity, song, chant, or name clapping activity (to promote syllable segmentation) will begin this second group experience.
- b. **Rich literacy experiences.** Shared Reading/Storytelling will include at least one reading or telling of a story, often related to the current investigation underway. (At least once a week, the teacher will tell a story, rather than read it, in a dramatic fashion, occasionally using flannel board pieces or other props.) Each story—whether read or told--will be re-told at least 3 different times—each time with a specific purpose in mind.

At least one reading or telling will focus on children’s understanding and enjoyment of the story as a whole. During this session, teachers will discuss and ask questions about events, characters, word meanings, and connections between the story and children’s personal lives. Oral responses to the story are emphasized. Another rereading or telling will emphasize at least one of the 5 predictors of reading competence: oral language, phonemic awareness, alphabet recognition, concepts of print, or early writing. In this session, the teacher may reread or retell only certain parts of the story that provide the best opportunities to acquire language and literacy (e.g., a predictable portion that includes rhyming words to enhance phonemic awareness or a place where an unfamiliar word is used).

At least one rereading or retelling will be conducted with few pauses, unless children have questions or comments. The book or flannel board and pieces will be placed in the literacy center during center time on each day it is read or told.

- c. At least **one additional literacy experience** will also be planned for this group experience. This may include poetry, songs, or finger plays accompanied by large print, or games that enhance children’s understanding of individual letters and words (e.g., “I spy” or “masking” letters and words).
- d. **A cognitively-challenging closure/send-off activity** will be conducted to transition children to the next activity. This can include pretend play activities (“Can you lumber over to the sink to wash your hands, like that big old bear in the story?”), a cognitive challenge (“If you have one brother in your family you can go wash your hands”), or a self-regulation activity (Ella Jenkins: “Well you walk and you walk and you walk and you STOP . . .”)

Music, Games, and Other Cultural Experiences: This group time will focus on music, movement, and games that enhance creative expression, problem solving, and cognitive development. The will often reflect the cultural traditions and histories of children’s families. Music may include dance and movement to world music, children’s songs related to the investigation underway, or playing of musical instruments. Some music experiences will be accompanied by simple musical notation or symbols—a precursor to reading music. Others will be song, with teachers pointing to print on a lyrics chart. Some songs will engage children in composition of lyrics or melody (e.g., “What could Aiken Drum’s arms be made of?”). Most of the musical experiences will be conducted by teachers using their own voices, without recorded music, to model singing. Group games will focus on self-regulation (e.g., sudden starts and stops, that require inhibition—Simon Says, the Freeze Game), perspective taking (“Button, Button, Whose got the Button,” “I’m thinking of something. . .” or “Warmer/Colder”), or general academic knowledge (e.g., Ella Jenkin’s quick clapping and counting song, Hap Palmer’s “Colors” song, or the name clapping game—“whose name am I clapping?”)

Reflection: This group time, conducted near the end of the day, may be held as a separate session or can be included as part of the Music/Games/Cultural experience, above. The focus is on guiding children in recalling, describing, and analyzing the activities and accomplishments of their day. Teachers will provide verbal and concrete cues to assist children in remembering significant events that occurred over the course of the day: photos or video of their activities, thought-provoking questions (e.g., “What frustrated you today?” or “What did you do today that took the longest?”), or a chart with children’s beginning-of-the-day plans for what they would accomplish. As an alternative to traditional show and tell, the teacher will periodically ask children to bring samples of what they accomplished during the day to share with peers in this session.

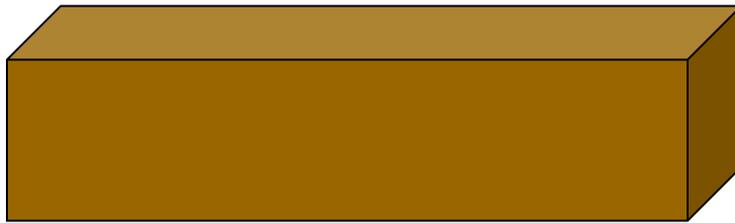
Fidelity Rubric: Teachers complete a fidelity rubric on group time four times a year—once for each type of group time, listed above--as they view video of their teaching, guided by the director of the program. The director will complete two independent fidelity checklist observations each year, as well.

Platform 2: Planned Whole Group Experiences
Fidelity Rubric

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
55. Group times are clearly planned; space and all materials to be used are prepared ahead of time.	
56. Group times are planned so there is no waiting for activities to begin.	
57. Group times are structured so that all children are involved at all times; there is minimal waiting while individual children talk or perform.	
58. Group times have an opening that effectively captures children's attention.	
59. Group times have a closure that includes a smooth, intentional transition to the next activity.	
60. Group times include short, quickly-paced activities that hold children's interest.	
61. Teachers use management techniques that keep individual children involved.	
62. Teachers use visual displays, gestures, and other physical cues to maintain attention.	
63. Teachers engage children in understanding content, through question-asking, conversing, responding, defining, and explaining.	
64. Teachers maintain an attention rate of 80% or higher during group times.	
65. The initial group time of the day includes a thoughtful planning session that includes teacher question asking and child language.	
66. The initial group time includes a name song or game to help children learn one another's names.-	
67. The second group time of the day includes planned shared reading and storytelling experiences that enhance literacy.	
68. The third group time includes games, including guessing games, and musical experiences that enhance musical development and an understanding of culture.	
69. A final group time on each day focuses on reflecting on the events of the day, with a connection back to the planning session in group time one.	
70. Group time includes musical experiences that involve adults singing in their own voices.	

Notes/Reflection:



**Platform Three:
Teacher-Guided Outdoor Play
Experiences**

Platform 3: Teacher-Guided Outdoor Play Experiences

Description: In the Investigations Curriculum, two outdoor play experiences are planned—one in the morning and one in the afternoon. The primary purpose of outdoor play is to promote physical and mental health. Physical activity to improve cardiovascular health and maintain a healthy body mass index and the emotional benefits related to exposure to the outdoor natural environment are important outcomes of the outdoor play program. Motor play activities and teacher interactions are planned so that all children engage in **active physical play for at least half of the time spent outdoors**. Quiet activities/spaces are also provided to allow children rest periods and/or moments of respite from active playground play.

Teachers are as playful and involved in outdoor play as they are for indoor center time. Beyond supervision and safety, they have as a primary goal to facilitate active play among all children on the playground. They will carefully monitor each child's activities and engage those who are passive or uninvolved in order to achieve this goal.

Outdoor Curriculum Experiences: The Investigations Curriculum is unique in its emphasis on several other purposes for outdoor play, beyond motor development and emotional well-being. Materials, activities, and interventions are planned to promote the child outcomes of the curriculum, across the domains. Teachers will bring indoor activities outside for children to use. Some are active motor experiences: bean bag aiming games, dropping and rolling games, and large hollow blocks. Quieter activities, such as easel painting or books and blankets are also included. **For each investigation, at least one outdoor activity, related to the topic under study, will be provided on the playground.** These activities—particularly the quieter ones—must not discourage children from spending at least half of outdoor time in active motor play. These activities serve to provide balance between active and quiet playground experiences.

Enhancing Executive Function: The outdoor play curriculum is based on the *dynamic systems theory*, which holds that motor action, brain organization, and cognitive processes are inter-related and develop as a unified system. From this perspective, active outdoor time is as fundamental to mental growth as is indoor time. Based on this theory, teachers will plan experiences and scaffold children's play activities on the playground to promote **executive function** (EF). EF is a cognitive system that originates in the prefrontal cortex of the brain and allows the developing child to control intellectual processes. EF is believed to be responsible for a variety of critical abilities that predict learning and performance in school. The following are processes, related to EF, that will be enhanced on the playground. An activity and related adult scaffolding will be planned for **at least one of these processes per week**. Sample playground activities and methods of scaffolding are suggested for each.

1. **Inhibitory Control:** This is an ability to resist acting in a certain way, even though there is a strong urge to do so. An example would be a child who resists an inclination to get up from group time and wash hands before it is time.

Sample Activity: A teacher invites children to play a game that requires the inhibition of movements: Simon says, “freeze and go” games, or red light-green light.

Scaffolding: A teacher uses a pretend stop light, with green, yellow, and red circles to stop, slow, and start children on riding toys as they pass by on the riding path.

2. **Cognitive Flexibility:** This is the ability to adapt your thinking to changes in the environment. It involves quickly shifting your attention and/or actions to accommodate a new problem or challenge.

Sample Activity: A teacher sets up an obstacle course that requires frequent changes in movement to traverse. For example, the child might need to run up, then down a hill, step into hoops, crawl through a tunnel, jump over a block wall, etc. “Go as fast as you can,” or timed activities encourage children to shift their actions (and thinking) more quickly.

Scaffolding: A teacher announces to no one in particular, “Riddly, riddly riddly ree, do what I do after me,” and performs a series of actions—e.g., pats head, knees, and toes. The teacher repeats until children join in. The teacher eventually includes motions that are very different from one another—jump, hold your head with both hands, and sit on the ground. The teacher increases the speed and the number of steps.

3. **Attention:** This is an ability to control your brain so it pays close attention to one thing, while ignoring irrelevant things.

Sample Activity: The teacher plans an “I’m thinking of something” game, where children have to wait as they hear clues—one at a time. The moment they guess the object, they run and touch it (e.g., “I’m thinking of something that has huge eyes, is green, and is enclosed in a fence.”)

Scaffolding: A teacher invites children to move in different ways as they play, using complex instructions: “Can you run so your arms don’t move? Can you run so only one arm moves?” “Can you stand so three parts of your body are touching the ground?” Or “Can you jump down, so you land on just one leg? On two legs and one arm?”

4. **Working Memory:** This is the ability to control what you will remember from all the distracting stimuli in the environment.

Sample Activity: A teacher plans a cumulative game, song, or dance in which each child in a group adds a new movement to the chain of movements already performed. Then the group enacts the entire chain in precisely the same order. (An active, playground “bear hunt” is another example.)

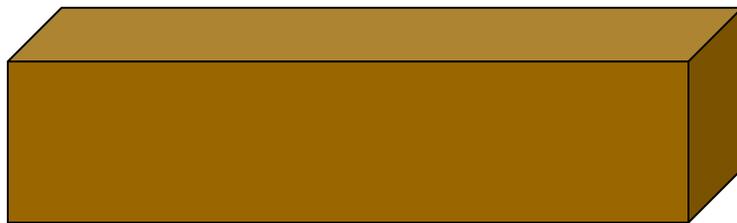
Scaffolding: A teacher challenges a group of children who are running on the playground to “remember all the places you ran.” Then the teacher asks, “Can you show me all the places you stopped?”

**Platform3: Outdoor Play
Fidelity Rubric**

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
71. All children are well-supervised on the playground; children’s play is safe and free of aggression and anti-social behavior.	
72. All adults are active in engaging children during outdoor time; “wanderers” or children in isolation from peers are involved quickly in activities by adults.	
73. Adults engage children in physical free play; all children spend at least half their time outdoors in active motor activity.	
74. Children have options for quiet activities outdoors; curriculum materials are provided on the playground.	
75. Some activities on the playground relate to the investigation that is currently underway.	
76. Some motor activities on the playground are planned and relate to performance standards.	
77. Adults engage children in games to promote inhibitory control.	
78. Adults engage children in games to promote cognitive flexibility.	
79. Adults engage children in games to promote attention.	
80. Adults engage children in games to promote working memory.	
81. Adults achieve a good balance between teacher-guided and child-guided motor play.	

Notes/Reflection:



**Platform Four:
Intentional Transitions**

Platform 4: Intentional Transitions

Description: Transitions are periods in the day when children move from one activity and/or space to another. These include times when children move from group to center time, indoors to outdoors, or when they are cleaning up after play or preparing for lunch or nap time. Transitions pose potential challenges, but also benefits. These can be times in the day when overactive, disruptive, oppositional, and even aggressive behaviors occur. They can also be periods in which children think, learn, collaborate, and regulate their own behavior. Some researchers believe that these may be among the most important times of the day for acquiring certain skills and knowledge. In the Investigations Curriculum, major transitions are *intentionally* planned—that is, designed, not just to smooth the passage from one part of the day to the next, but also to produce specific positive outcomes.

Teachers using the Investigations Curriculum will collect and share many different transition ideas, so that these stay fresh and maintain their effectiveness. There are limitless possibilities, but all transitions are carefully planned to meet one of the curriculum’s performance or content standards, and/or to ensure that movement from one activity to another is smooth.

The following are some outcomes that might be addressed in intentional transitions and several examples of each. The performance or content standard the each example promotes is listed in parentheses.

Outcome 1. General Cognitive Development: Some transitions should focus on general cognitive outcomes, related to performance standards. The following are examples:

Number: “Skyler, you’re going to start your day in the blocks? Let’s all count how many steps it takes him to get to the block area.” (Or: “Let’s all count the number of steps it takes us to get to our first center.”) (*Cog 6*)

Understanding/Measuring Time: “Do you think we will get our classroom cleaned up before or after the egg timer runs out of sand (or: the song on the CD player ends, we count to 20, etc.)?” (*Cog 5*)

Sorting: “Can you put the dramatic play toys away where they would go in a real house?” (dishes in the cupboard, clothes in the toy closet, etc.) or “Can you put the art materials (blocks, etc.) that are alike on the same shelves?” (*Cog 3*)

Comparing: Children are each given a card with a symbol, letter, sketch of a child playing, or photo related to the investigation underway (e.g., different types of gardens) “I want you to find the same picture on your card in one of our centers. That’s where you’ll start playing today.” (*Cog 5*)

Quantifying: “Can you put out enough napkins so there’s one at each chair?” or “Do we have all the pieces to the game in the box? How many more pieces do we need to find?” or “How many things did you put away today—count as you clean up?” (*Cog 2, 6*)

Outcome 2. Content Knowledge: Transitions intended to help children learn content knowledge, related to the current investigation or other concepts.

Science: Give out “send-off cards” and say, “If you have a *stem* on your card, you can pick a center and go play. . . If you have a *stamen* on your card, you can pick something . . ., etc.” (*S 6*)

Science: “Let’s be seeds and pick a way to travel to our centers: You can either fly, float in the air, or be carried by a bee.” (Demonstrate a quiet movement for each method.) (*S 6*)

Social Studies: Give out “send-off cards” of various restaurant workers—waiter, chef, cashier, etc., and say, “If you have a card that shows a person doing what I’m doing you can go to a center.” (Pantomime various roles—stirring a bowl, taking an order on an order pad, ringing up a customer) (*SS 4*)

Outcome 3. Pretend Play: Transitions that help children to engage in pretend play.

Investigations-Related Roles: “Today, we’re going to be like Jack and tiptoe past that sleeping giant and right out onto the playground.” (*L 7, CRE 3*)

Collective Roles: Line children up, each holding the hips of the child in front of her/him. “Okay, the quiet train is ready to go.” (Make, “sh-sh-sh-sh . . .: chugging noises). Or: “We’re going to be a long worm and wriggle out to the great room.” (*CRE 3*)

Pantomime Send-Off: “If you want to go to the center where you can do this (pantomime the activity that goes on at a center—building, putting on dress-up clothes, painting), you can go play.” (*P & S 2*)

Outcome 4. Collaboration: Transitions that encourage children to collaborate in maintaining the classroom or preparing for snack and lunch.

Clean up: “Today, you are each going to have a special partner. When it’s clean up time, you’re going to help your partner clean up something in the classroom and tell us about it at group.” (*P & S 7*)

Snack Brigade: Set up a long line of children and pass each napkin, cups, and plate, etc. along the line, like a fire brigade, from child-to-child-to-table. (*P& S 7*)

Outcome 5. Self-Regulation: Transitions that help children control impulses, regulate their own behaviors.

Freeze Games: “Today, at clean up, we’re going to play a game. When I say ‘Freeze,’ you need to stop like a statue and not move your body until I say ‘clean up’ again.” (*P & S 1*)

Walk-and-Stop: Sing Ella Jenkins song, “You walk and you walk and you walk and you STOP . . .” everyone freezes at the last word. Introduce new ways to move—slide, lurch, sneak, hop, and—of course—as they reach their destination, tiptoe. (*P & S 4*)

Outcome 6. Oral Language and Literacy: Transitions that encourage children to talk, listen, and play with language, and acquire an understanding of print.

Warmer/Colder Listening Game: Show all children, but one, a photo of the center where she/he will start the day. That child will wander the room, while all others will say, “warmer, colder, hot, very hot, cold, very cold, etc.” until the child finds her/his center. (*OL 9*)

Signs: Make stop, go, slow, fast signs with print and illustrations to guide children’s movement as they walk from one place to another or as they clean up. Periodically, during clean up, for example, hold up a sign and say, “what does the sign say to do now? We have to clean up very slowly . . .” etc. (*L3, L4, COG 13*)

Finding Your Name: Decorate wooden clothes pins, with a child’s name on each. Prior to group, clip them all over the room. At send-off, ask children to find their clothespin and then begin their play in that center. (*L3, L4, COG 13*)

Outcome 8. Musical Expression: Transitions that will promote music play, dance, and singing. **Any transition that is not planned to meet one of the above outcomes, will include a song.**

Clean up songs: “Johnny works with one hammer, one hammer, one hammer, Johnny works with one hammer, all day long. Johnny works with two hammers . . .” (Substitute the names of children who are actively cleaning up.) (*CRE 4*)

Platform 4: Intentional Transitions
Fidelity Rubric

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
82. Transitions are always fully planned and at least one a day addresses a performance and/or content standard.	
83. During transitions to group time, snack, lunch, or lining up, there is little or no waiting for the rest of the group to arrive or for activities to begin.	
84. Transitions succeed in moving children from one period of the day to another without disruptive, chaotic, or overly-active behavior, or wandering.	
85. Children obviously learn skills or knowledge during each transition time.	
86. Transitions encourage collaboration and a feeling of classroom cooperation and community.	
87. Transitions promote self-regulation	
88. Some transitions include literacy.	
89. Some transitions include planned songs or other musical experiences.	

Notes/Reflection:



**Platform Five:
Cooperative Learning Groups**

Platform 5: Cooperative Learning Groups

Description: Teachers will plan and implement a cooperative learning experience each day in the classroom. Distinct from learning center time, cooperative learning involves placing all children in the class into groups of 2 to 5 at separate tables at the same time. An adult is positioned at each table and conducts the same, brief activity. Each cooperative learning session will include the following steps:

1. Children are purposefully grouped, based on the nature of the activity. Sometimes quieter and more active children are placed together; other times older and younger children are blended. Children who are having difficulty with peer relationships might be placed with potential friends. Groups vary for each activity and group composition is always planned prior to the experience.
2. Activities are planned to address at least one performance standard and one content standard (usually related the investigation currently underway). These are engaging activities that include novel, concrete objects and often involve literacy.
3. Planned activities are often intended to show children how to use materials that will later be available to them in learning centers. For example, a class community puzzle may be put together by four children in a cooperative learning activity, with teacher guidance, and then later placed in the manipulatives center for use during free play time.
4. Activities are planned in a developmental sequence, guided by the following stages of social participation:
 - a. *First two or three sessions:* To introduce the cooperative learning group format, **on-looker/parallel** learning activities are planned. In these activities, each child is presented with a separate set of materials (e.g., each child is given a ball of clay and mirrors for self-portraits; each child has a bowl of water and sink/float materials to test). As children work, however, the teacher fosters peer watching, conversation, and interaction: “Jamal, tell Samantha, how you’re fitting the Lincoln Logs together.”
 - b. *During the first few weeks:* Early in the year, **associative/cooperative pair** learning activities are planned. In these activities, children in a group are sub-grouped into pairs. Each pair is given a set of materials to use cooperatively. (e.g., each pair is given a ball of clay or a sink and float bowl). Teachers facilitate cooperation (“Maybe one of you could paint the roots and the stems; the other could paint the flower.”)

- c. *After the first month:* As soon as they are ready, children are engaged in **fully cooperative group** learning activities. In these activities, children are presented with a single set of materials and guided in using them together. (e.g., “Here are some puzzles of plants that are all mixed up. Can you put them together?”)

Scaffolding: All teacher interactions with children in the group are purposeful and have two emphases: 1.) promote cooperative interaction among children and 2.) enhance thinking, learning, and language (based on the performance and content standards selected). The teacher uses only indirect guidance, if possible: 1.) questions, 2.) hints, 3.) modeling, 4.) suggestions. Only when children are completely stalled in their activities should teachers be more directive.

Assessment: Since the cooperative learning activity has direct adult involvement, it is the ideal context for capturing individual children’s learning and development. *At least one child* is assessed during each activity—by collecting a work sample, jotting an anecdotal record, an observation rubric, or taking a photo or video.

**Pillar 5: Cooperative Learning
Fidelity Rubric**

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
69. Shows evidence that grouping of children is planned prior to the activity; criteria used for grouping children are clear.	
70. At least one SDE performance standard and one content standard are addressed in the cooperative activity; both are clearly written on the weekly planning sheet.	
71. All steps in the cooperative learning activity are clearly planned.	
72. The cooperative learning activity includes engaging, concrete materials, and some literacy.	
73. The cooperative learning activity poses a thought-provoking problem for children to solve.	
74. The adult in each cooperative group effectively captures and maintains each child's attention; 80% of children are engaged at any one time.	
75. In the cooperative activity, the entire group (or pairs) of children are asked to perform cooperative tasks with a single set of shared materials.	
76. The adult in each group consistently encourages cooperation and conversation among the whole group of children.	
77. The adult in each group consistently uses scaffolding that includes indirect guidance (asking questions, giving hints, modeling, and making suggestions) to promote thinking.	
78. The adult in each group plans and implements a meaningful "sponge" activity to absorb extra time, if the group finishes early.	
79. The adult in each group implements a send-off activity to transition children from cooperative learning to the next scheduled classroom task.	
80. An assessment artifact (work sample, captioned photo, video, anecdotal record) is collected for at least one child in each cooperative activity.	
81. The observation shows that most children in the group have engaged in cooperative behavior.	
82. The observation shows that most children have constructed new knowledge and demonstrated the target performance standard.	

Notes/Reflection:

Full Fidelity Rubric

The full fidelity rubric, below, will be completed by head teachers, in collaboration with their classroom team, four times a year, based on viewing of video and examination of classroom documents. This same rubric will be completed by the director twice a year for each classroom and will be used for professional development and as a basis for staff evaluation.

Classroom: _____ **Head Teacher:** _____

Date: _____

Based on direct observation, rank the following items from 3 (fully met), 2 (somewhat met), or 1 (not met):

Performance Indicator	Rating
Pillar 1: Scaffolding Play	
1. All adults in the classroom are active in interacting with or observing children during free play time.	
2. All adults move in and out of children’s play activities, briefly supporting play then withdrawing.	
3. Adults provide support to children in play that matches the amount and type of assistance they need.	
4. Adults use direct guidance very rarely, and only when a child needs much support in play.	
5. Adults frequently observe (and assess) play activities, when children are engaged and in no need of support.	
6. Adults frequently interact using indirect strategies—questioning, hint-giving, modeling, or making suggestions—when children need only some help in play.	
7. Adults frequently intervene in children’s play when children need assistance interacting or conversing with peers.	
8. Adults frequently engage in “shared, sustained thinking” when children need assistance in thinking, problem solving, or learning new concepts.	
9. Adults frequently help children learn new words or extend/recast their statements, when children need support in communication or word meaning.	
10. Adults show that they pause and observe prior to every intervention in children’s play.	

11.	Adults exit children’s play after they have given support, using methods that encourage children continue playing on their own.	
12.	Adults show evidence that they observe or assess children’s on-going play, after they have exited a play area.	
Pillar 2: Balanced Schedule		
13.	The day is clearly balanced between active and quiet activities; children do not remain still for excessively long periods, nor do they engage in overly-long active play without a quiet break.	
14.	Children engage in self-directed, free choice play for half of the day.	
15.	A child-oriented daily schedule is posted for children to see; teachers refer to it regularly to help children understand the ordering of daily events.	
16.	Children are involved in a whole-group planning session early in the day and a reflection session near its end.	
17.	The following four whole group sessions are held during the day: 1.) planning and initiation, 2.) shared reading/storytelling, 3.) music/movement/games, 4.) reflection time.	
18.	At least one hour of indoor play in learning centers is provided.	
19.	A cooperative learning group is provided during the day.	
20.	A morning and an afternoon outdoor play period is provided.	
21.	An adult engages each table of children in conversation during snack and lunch times; the following three outcomes are promoted during these periods: language development, 2.) peer interaction, and 3.) content knowledge related to the investigation.	
22.	All transitions are smooth, and involve a planned activity or musical experience.	
Pillar 3: Evidence-Based Environment		
23.	Centers are partitioned on two or three sides and contain like materials that show children the types of activities that are to be conducted there.	
24.	Centers are logically arranged, with quiet areas away from louder, more active ones and messy spaces near water.	
25.	Pathways among centers are wide enough to allow easy passage, but not so wide as to encourage running.	
26.	Whole group gathering spaces for lunch or group time serve “double duty” as play and learning spaces during center time.	
27.	A quiet, getaway space is included, which is warm and comforting	

	and gives the child a feeling of being completely alone.	
28.	The classroom contains centers for all major play and learning areas.	
29.	Each center competes with each other center for children's interest, so there is no crowding or waiting at "popular" areas.	
30.	Every center draws at least some children to them during the observation, and engages them for a period of time.	
31.	There are at least 8 choices of activities for children at most centers and a good balance of novel vs. familiar, open vs. closed, and social vs. individual materials.	
32.	There are graded challenges at each center so children of diverse ages and abilities can all find something to do at their level.	
Pillar 4: Portfolio Assessment		
33.	Child portfolios contain artifacts for each child enrolled	
34.	Portfolio entries are organized around the performance standards.	
35.	A variety of types of artifacts are included: anecdotal records, work samples, photos, video, language samples, and results of formal assessments/evaluations.	
36.	Each portfolio entry is captioned to indicate the specific performance and/or content standard that it measures.	
37.	A summary narrative is written for each child, which interprets the portfolio data collected.	
38.	There is evidence that portfolio data is used in planning for both individual children and the whole group.	
Pillar 5: Integrated Planning Webs		
39.	A content web is created for each investigation; it contains rich topics drawn from teacher research.	
40.	An activities list or web is created; it directly relates to the topics generated on the content web.	
41.	Each activity on the activities list is aligned to at least one performance standard.	
42.	Each general area of the curriculum listed on the activities list has suggested methods of assessment.	
43.	Several content standards, related to each investigation are listed on the activities list.	
44.	Weekly planning sheets are completed; these are directly related to ideas on the activities list and include performance standards addressed by each activity.	

45.	There is evidence that child assessment data from portfolios is used to plan new investigations and activities.	
Platform 1: Play Experiences in Centers		
46.	Children frequently engage in pretend play; a pretend play center includes a variety of different props and includes literacy materials.	
47.	Children frequently build with large blocks and table blocks and small construction toys.	
48.	Children play games, such as board games, card games, lotto, and aiming games with scorekeeping are included.	
49.	Children engage in musical play; music play props are available.	
50.	Children engage in artistic play; a wide variety of art materials are always available on shelves.	
51.	Children frequently engage in problem solving and exploration during center time.	
Platform 2: Whole Group Experiences		
52.	Group times are clearly planned; space and all materials to be used are prepared ahead of time.	
53.	Group times are planned so there is no waiting for activities to begin.	
54.	Group times are structured so that all children are involved at all times; there is minimal waiting while individual children talk or perform.	
55.	Group times have an opening that effectively captures children's attention.	
56.	Group times have a closure that includes a smooth, intentional transition to the next activity.	
57.	Group times include short, quickly-paced activities that hold children's interest.	
58.	Teachers use management techniques that keep individual children involved.	
59.	Teachers use visual displays, gestures, and other physical cues to maintain attention.	
60.	Teachers engage children in understanding content, through question-asking, conversing, responding, defining, and explaining.	
61.	Teachers maintain an attention rate of 80% or higher during group times.	
Platform 3: Outdoor Play Experiences		
All children are well-supervised on the playground; children's play is safe and free of aggression and anti-social behavior.		

62. All adults are active in engaging children during outdoor time; “wanderers” or children in isolation from peers are involved quickly in activities by adults.	
63. Adults engage children in physical free play; all children spend at least half their time outdoors in active motor activity.	
64. Children have options for quiet activities outdoors; curriculum materials are provided on the playground.	
65. Some activities on the playground relate to the investigation that is currently underway.	
66. Some motor activities on the playground are planned and relate to performance standards.	
67. Adults engage children in games to promote inhibitory control.	
68. Adults engage children in games to promote cognitive flexibility.	
69. Adults engage children in games to promote attention.	
70. Adults engage children in games to promote working memory.	
71. Adults achieve a good balance between teacher-guided and child-guided motor play.	
Platform 4: Transitions	
72. At least one transition per day is fully planned and addresses a performance and/or content standard.	
73. Non-planned transitions include musical experiences.	
74. Transitions succeed in moving children from one period of the day to another without disruptive or overly-active behavior.	
75. Children obviously learn skills or knowledge during transition times.	
76. Some transitions encourage collaboration and a feeling of classroom cooperation and community.	
77. Some transitions promote self-regulation	
78. Some transitions include literacy.	
Platform 5: Cooperative Learning	
79. Shows evidence that grouping of children is planned prior to the activity; criteria used for grouping children are clear.	
80. At least one SDE performance standard and one content standard are addressed in the cooperative activity; both are clearly written on the weekly planning sheet.	

81. All steps in the cooperative learning activity are clearly planned.	
82. The cooperative learning activity includes engaging, concrete materials, and some literacy.	
83. The cooperative learning activity poses a thought-provoking problem for children to solve.	
84. The adult in each cooperative group effectively captures and maintains each child's attention; 80% of children are engaged at any one time.	
85. In the cooperative activity, the entire group (or pairs) of children are asked to perform cooperative tasks with a single set of shared materials.	
86. The adult in each group consistently encourages cooperation and conversation among the whole group of children.	
87. The adult in each group consistently uses scaffolding that includes indirect guidance (asking questions, giving hints, modeling, and making suggestions) to promote thinking.	
88. The adult in each group plans and implements a meaningful "sponge" activity to absorb extra time, if the group finishes early.	
89. The adult in each group implements a send-off activity to transition children from cooperative learning to the next scheduled classroom task.	
90. An assessment artifact (work sample, captioned photo, video, anecdotal record) is collected for at least one child in each cooperative activity.	
91. The observation shows that most children in the group have engaged in cooperative behavior.	
92. The observation shows that most children have constructed new knowledge and demonstrated the target performance standard.	

Notes/Reflection: