ORGANIZATION OF SPACE & TIME

in Kindergarten

IN THIS LEARNER'S GUIDE

Kindergarten is a critical year in a child's educational career and the experiences offered during this instrumental year can significantly impact the much needed foundation for both academic and lifelong success.

The organization of space and time in a kindergarten classroom creates the stage for optimizing the opportunities for supporting the whole child in all areas of development—social and emotional, language and communication, approaches to learning, cognitive, and physical development. When the organization of both time and space align with brain development research it optimizes opportunities for discovery, critical thinking and meaningful problem solving.

Arizona Department of Education, Early Childhood

EARLY FOUNDATIONS

During the first six years in life, the brain is developing at an exponential rate-the fastest it will ever develop. We know, given the research in early brain development, that these early years are foundational years that have lasting implications in a child's success in school and in life.

Why is this important to kindergarten teachers?

In the last two decades, the perception of early childhood education has narrowed significantly, ending at age four, the pre-kindergarten year. This has influenced the types of educational experiences kindergartners have had. As educational approaches have become more and more teacher-directed with fewer opportunities for active engagement, the research in early brain development has identified the significance of children having an array of meaningful experiences that support the whole child—social, emotional, physical, and cognitive growth and development.

When we focus on social and emotional development, for example, research indicates that young children thrive in environments that are both physically and emotionally safe with loving adults who care about them. This responsibility has, historically, been perceived as the work of parents but in most recent years, the significance of the teacher-child relationship has become apparent. Appropriately supporting children's social and emotional development is an intentional decision that goes beyond classroom management and can be instrumental in a child's educational success. In order to support the development of significant skills like self-awareness, the ability to self-regulate, knowing how to work effectively with others, and being able to problem-solve, children need adult guidance and opportunities to practice these developing skills. Children learn to become problem-solvers by having consistent opportunities to solve problems.

Although this example is specific to social and emotional development, this is true for all areas of development. Skills beget skills and in order to help children develop foundational skills to which future learning can build upon, teachers and administrators must have a better understanding of early brain development and the science of early childhood education.

The implications of ignoring evidence-based research about early brain development can have significant consequences and we see this in classrooms every day. In the example of social and emotional development, teachers, in most recent years, are reporting an increase in off-task behaviors and behaviors that prove challenging. By addressing these situations from a behavior modification approach as opposed to seeking to understand how to best help the child develop the skills to sucessfully engage

within the classroom community, the child will more than likely continue to struggle, oftentimes falling behind and/or have difficulty developing and maintaining friendships. The long-term implications of both scenarios—falling academically behind because they're struggling with self-regulation or having difficulty connecting with peers can negatively impact children beyond kindergarten.

Another significant developmental process that begins in the earliest of years is the foundation for literacy by way of oral language development. When a young child is surrounded by ample opportunities to engage in, play with, and expand upon language, they are creating a deeper foundational understanding of the complexities of how language works--both oral and written. Having rich language experiences contributes significantly to later reading comprehension success. Research indicates that young children, including kindergarteners, benefit from consistent opportunities to engage in meaningful language experiences. To put it in simple terms, young children need to talk…a lot, not just with the teacher but with their peers.

Often the emphasis in kindergarten is developing reading and writing skills with minimal focus in the area of language development. This is not to negate the importance of developing reading and writing skills, rather to identify the order in which children gain specific skills, concepts and abilities. Oral language development is a pre-cursor to literacy development. Singing, playing with language, sharing ideas and perspectives with not only the teacher but with peers are all important experiences if the goal is to support literacy development. Having an in-depth understanding of child development--how children learn is at the core of being an effective kindergarten teacher.

To illustrate this point, let's consider a growing baby. When babies are learning to become independently mobile, they typically move from lifting their heads and bodies up with their arms, to a form of scooting and/or crawling position. Shortly thereafter, they figure out how to get to a standing position. And finally, they confidently, albeit uncertain times, shift

from standing to walking. Each of these stages in the process is significant as it serves as a foundation for the next developing skill. Given so, we wouldn't think to expect a baby to skip any of the stages. What isn't as apparent to us is that when the baby is practicing these skills, their bodies (and brains) are preparing for the next developmental skill. Having said this, it's important to recognize that although this is a general understanding of how babies become independently mobile, not *all* babies move through each of the stages. Likewise, babies may spend a longer period of time in some stages more than others. Each and every baby has their own unique timeline. They thrive when the adults in their lives are emotionally responsive and supportive of their individual needs.

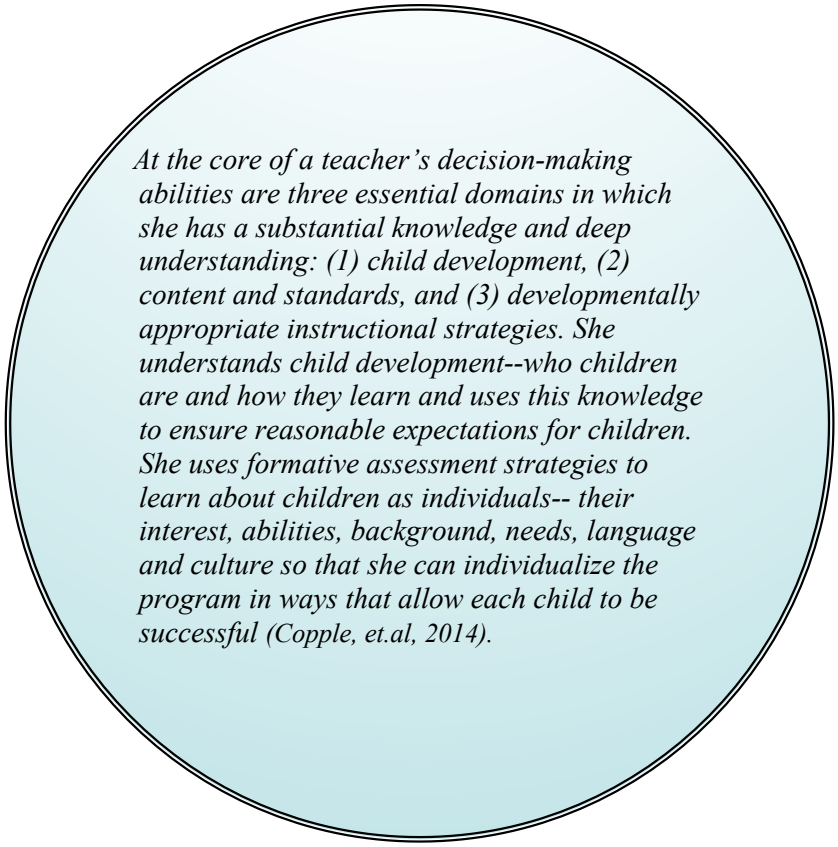
This example, although specific to babies, is not that different than working with kindergartners. Having knowledge of child development coupled with an in-depth understanding of each child's individual abilities, strengths, and needs provides incredible insight as to how to best support a child's development.

Progressions of Development

It is important for kindergarten teachers to have foundational knowledge and in-depth understanding of:

1. How children in general grow and learn--the sequences in which children gain specific skills, abilities and concepts on the continuum of early childhood development (4-8 years of age). Teaching Strategies Gold, Birth-3RD Grade Formative Assessment offers this information.

2. How to authentically acquire a deep understanding of every child's individual strengths, abilities, and needs in all areas of development-social, emotional, cognitive, language, physical.



3. The Arizona Standards for Kindergarten—ELA, Math, Science, Social Studies, Physical Education, and Fine Arts. These can be found at Arizona Department of Education's website.

SUPPORTING THE WHOLE CHILD

Kindergartners are on the early childhood continuum of development. The transition to Kindergarten is, for most children in Arizona, their first experience of school. This critical year can either create a positive beginning for their educational career or not. Unfortunately, if the experience is not positive, the research indicates that few children recover.

A whole child approach recognizes all parts of a child, not just their academic abilities. This is a paradigm shift for many teachers, administrators and schools. Supporting the whole child brings awareness to the fact that children bring with them an array of life experiences that has influenced who they are as an individual and how they interact in the world. It is recognizing that children's physical, social, emotional and cognitive development are intertwined where each facet is equally important. For example, physical development—balance, coordination, large and fine motor development impacts a child's school experience. Many children are coming to school with limited fine motor development, given the increased use of smart phones and tablets. Their ability to hold and manipulate a writing tool is still developing and without an understanding of how children develop fine motor skills, teachers will often extend the time spent holding a writing tool to provide practice. What young children need, however, is an array of experiences that support the development of their wrist muscles as well as their hand muscles. This might include easel painting, playdough, slime, Legos, purposeful cutting, using tools such as gardening or woodworking tools, etc. As children engage in these experiences, they will develop better command of their fine motor skills—becoming better equipped to proficiently use a pencil.

Authentically Supporting Children's Learning, Growth & Development Teaching Strategies Gold, Birth Through 3rd Grade

Teaching Strategies Gold is a formative assessment widely used in programs serving children birth-five years of age. Given the need for a true formative assessment process that aligns evidence-based research for children kindergarten to third grade, TSG extended the continuum to capture these early years of development.

Having an understanding of how children typically develop is an important part of the formative assessment process. When teachers know where children are developmentally, they are able to better support the individual needs of each child, guiding them along the developmental continuum. Most kindergarten teachers, however, did not have in-depth college courses or professional development in the area of child development. Fortunately, the Teaching Strategies Gold (TSG) Birth-Third Grade Assessment identifies these progressions for each area of development and offers instructional ideas and strategies to support children's learning.

"Assessment is a continuous process of observing and collecting facts; analyzing and responding; evaluating; and summarizing, planning, and communicating to others" (Burts, et.al, 2016).

This formative assessment process is an on-going process within the context of real, relevant and meaningful experiences. It occurs in real-time as the teacher observes and engages with children. Teachers capture evidence of learning through observation notes, photographs, video and audio clips, children's work samples, diagrams or sketches and checklists, participations lists, and frequency counts (Burts, et.al, 2016). The data is used as a way to inform the teacher of who each child is, what their strengths are, and the areas they are still developing. Knowing this helps guide the process of planning to support the growth, learning and development of every child.

WIDELY HELD EXPECTATIONS

From Teaching Strategies Gold Birth-3rd Grade

Social & Emotional Development

Kindergartners who get along well with their teachers and peers, who are able to listen and follow directions, and stay on task have basic skills necessary for academic achievement. Children learn and refine many of the social and emotional skills they need through interactions with both adults and peers throughout the school day. Children who struggle with self-regulation or appropriate social engagement benefit from a teacher who offers loving support and guidance. Teachers support children's social and emotional development by creating an inclusive classroom community and supporting the development of authentic relationships. Kindergarteners thrive when they see themselves as a valued member of the classroom community and when they are confident that they are genuinely valued and loved by their teacher.

SOCIAL-EMOTIONAL DEVELOPMENT

1. Regulates own emotions and behaviors
    a. Manages feelings
    b. Follows limits and expectations
    c. Takes care of own needs appropriately

2. Establishes and sustains positive relationships
    a. Forms relationships with adults
    b. Responds to emotional cues
    c. Interacts with peers
    d. Makes friends

3. Participates cooperatively and constructively in group situations
    a. Balances needs and rights of self and others
    b. Solves social problems

Physical Development

Kindergarteners are continuing to refine their physical skills. At this age, they are becoming a bit more physically coordinated with the ability to integrate all parts of a pattern of movement. They often take pride in their ability to run fast, jump high, and skip quickly. Still, intentional support of children's developing gross motor skill is significant. They need ample time outdoors. National recommendations indicate that 5-6-year olds should have a minimum of 60 minutes of moderate to vigorous physical activity per day. Ideally, kindergarteners have opportunities to engage in physical activity throughout the day—both inside and outside. Research indicates that scheduling bouts of physical activity interspersed with sedentary activities helps reduce inattentiveness and misbehavior" (NAEYC, 2014).

Fine Motor Development

What makes kindergarten unique is that all children come to school with varied experiences. Fine motor development is an area that some children may have more confidence because they have had many more opportunities to practice using their fine motor skills than others. Initially, some kindergartners may struggle with detailed tasks that require coordination, attention to details, and steadiness that is needed for writing, drawing and coloring with precision.

Supporting children's development by offering opportunities to practice using their hand muscles will help them become more proficient. Examples of these activities may include working with clay/playdough, stringing beads, building with Legos, using scissors for meaningful tasks, and painting. It's important that the activities are meaningful and engaging as opposed to pencil-paper drills such as tracing letters or cutting lines on paper.

PHYSICAL DEVELOPMENT

1. Demonstrates traveling skills
2. Demonstrates balancing skills
3. Demonstrates gross-motor manipulation skills
4. Demonstrates fine-motor strength and coordination
5. Demonstrates fine-motor strength and coordination
    a. Uses fingers and hands
    b. Uses writing and drawing tools

Language Development

Language skills of young children vary significantly. They are becoming aware of the fact that words have meaning and must learn that they also have linguistic structure. More specifically, they have the potential to develop a strong sense of phonemic awareness-the ability to map speech sounds, which is a strong predictor in reading and writing success. Kindergartners can engage in conversations with some level of complexity. They are able to respond to open-ended questions and are often willing participants in sharing their ideas.

Kindergartners **must have ample opportunities to talk, engage in language-rich experiences, and then talk some more.** Having a balance of teacher-led small group instruction/support, child-initiated opportunities for engagement and interactive large group instruction will provide rich opportunities for children to practice their communication and conversational skills.

The Arizona Department of Education offers professional development about helping children learn to read: Teaching Reading Effectively. Check the website for upcoming sessions.

LANGUAGE DEVELOPMENT

1. Listens to and understands increasingly complex language
    a. Comprehends language
    b. Follows directions
2. Uses language to express thoughts and needs
    a. Uses an expanding expressive vocabulary
    b. Speaks clearly
    c. Uses conventional grammar
    d. Tells about another time or place
3. Uses appropriate conversational and other communication skills
    a. Engages in conversations
    b. Uses social rules of language

Cognitive Development

Before children begin kindergarten, they have an array of early experiences. This background knowledge becomes the lens for how they make sense of the world. How they approach learning, whether they persist when then encounter challenges, and whether they express curiosities are all a part of cognitive development.

In an emotionally responsive classroom where children feel safe, it's best if they get to practice developing important life skills like persistence, problem solving, motivation, and flexibility. When children easily give up or feel unmotivated to problem solve, they tend to struggle academically and unfortunately, for some children, this can negatively impact how a child sees himself as a learner. This is especially true if the child develops this perspective as early as kindergarten.

Play is an integral component of cognitive development. Culturally, children engage in play based on their own life experiences. As children engage in sociodramatic play, they create complex play themes based on their cultural background and experiences. By trying on roles and engaging in pretend play, children strengthen language skills and practice both self-regulation and social awareness as they communicate their perspectives within the play, often coming to a common understanding of expected roles/behaviors.

The role of the teacher in supporting cognitive development is multi-faceted and includes helping children make connections to their world/prior knowledge. The language teachers choose to use when engaging with children can help them learn to think critically, make connections to prior experiences and even help them see themselves as competent learners who have stick-with-it-ness even in the face of adversity.

Language that Supports Cognitive Development

- Why do you think that happened?
- How did that happen?
- What did you notice about…?
- How do you know.....?
- Can you tell me what you did?
- Can you tell me more?
- Can you compare….?
- Why does/doesn't….
- How did you figure that out?
- What tells you that….?
- What can we do to get it to work?
- How do you think that went?
- Why do you think that?
- What do you think about the work you did?
- Let's create a plan!
- Let's brainstorm.
- How might we…?
- What are you planning to create?
- Let's list the steps we'll try…
- How long should we work on this?
- What kinds of materials will we need?
- Yesterday we explored…and TODAY we learned…
- We explored this before. Do you remember when we said….?
- I remember when you tried… and now you've discovered….
- I remember when we discovered….NOW we're learning to….
- I wonder how this is like the ... we worked on yesterday?

COGNITIVE DEVELOPMENT

1. Demonstrates positive approaches to learning
    a. Attends and engages
    b. Persists
    c. Solves problems
    d. Shows curiosity and motivation
    e. Shows flexibility and inventiveness in thinking

2. Remembers and connects experiences
    a. Recognizes and recalls
    b. Makes connections

3. Uses classification skills

4. Uses symbols and images to represent something not present
    a. Thinks symbolically
    a. Engages in sociodramatic play

LITERACY DEVELOPMENT

In a developmentally appropriate kindergarten environment, there are many authentic opportunities for reading and writing. Routines, such as signing in upon arrival, reading the morning message, and writing in journals are all meaningful ways children can engage in reading and writing. Ensuring that many, many books are available to children throughout the classroom, including books about their expressed interests. For example, if children noticed caterpillars outside, the teacher might see this as an opportunity to investigate caterpillars. Obtaining many informational texts about caterpillar for their research, providing clipboards with paper and pencils for observational drawings, taking photos where children

create captions, and providing different ways to report their findings by writing, drawing, creating 3-dimension representations, creating a PowerPoint presentation or an iMovie are all authentic approaches for creating a literacy-rich environment where children begin to see themselves as important members of a literate community.

This training module and guide is not intended to replace your literacy curriculum. It is to help develop a classroom environment that fosters an interest, if not an excitement about reading and writing. It's also intended as a guide to help you identify times throughout the day that children can be encouraged to read and write.

Developing the ability to read and write proficiently by third grade is at the forefront of many initiatives in Arizona. It is important to understand the developmental progressions as well as the Arizona English Language Arts Standards for Kindergarten. The Department of Education offers professional development sessions about teaching reading effectively to children. Check out the website for upcoming sessions of Teaching Reading Effectively.

LITERACY DEVELOPMENT

1. Demonstrates phonological awareness, phonics skills, and word recognition
    a. Notices and discriminates rhyme
    b. Notices and discriminates alliteration
    c. Notices and discriminates discrete units of sound
    d. Applies phonics concepts and knowledge of word structure to decode text

2. Demonstrates knowledge of the alphabet
    a. Identifies and names letters
    b. Identifies letter-sound correspondence

3. Demonstrates knowledge of print and its uses
    a. Uses and appreciates books and other texts
    b. Uses print concepts

4. Comprehends and responds to books and other texts
    a. Interacts during reading experiences, book conversations, and text reflections
    b. Uses emergent reading skills
    c. Retells stories and recounts details from informational texts
    d. Uses context clues to read and comprehend texts
    e. Reads fluently

5. Demonstrates writing skills
    a. Writes name
    b. Writes to convey meaning
    c. Writes using conventions

THE ARTS

As the push for academic achievement became priority, time for artistic expression was, in most classrooms across Arizona, eliminated. Although some schools maintained specials—art, music, and physical education, artistic expression was not integrated within planned experiences for children. It's important to clarify that art is not the same as craft activities commonly seen in classrooms. Art is the expression of the self. Personal messages are conveyed creatively through music, movement, dance, and visual arts. Although technique may be modeled and explicitly taught, the experience should be open-ended where children can make choices about what to paint, draw, sing, or dance. When children have the opportunity to make these choices it not only supports their creative spirit, but children practice developing many other skills, as well.

Encouraging children to act on their creativity supports the development of healthy risk-taking. To share something they have created can be a vulnerable experience. Developing the confidence in their ability to create something new and different is a foundational skill that will be of benefit throughout their educational career.

THE ARTS

2. Explores the visual arts
3. Explores musical concepts and expression
4. Explores dance and movement concepts
5. Explores dramatic actions and language

MATHEMATICS

"Children slowly construct informal mathematical knowledge, beginning in the first few months of life (Burts, et al, 2016, p. 111). As children explore their world, they begin to construct basic foundations including the ability to subitize, explore number, quantity and conservation (i.e. "Look, I broke my graham cracker into more pieces and now I have more than you!"). When teachers intentionally engage in language that promotes mathematical reasoning children will often begin to notice patterns in their world as well as the relationship within these patterns. Instructional approaches for teaching math have evolved over the years. Historically, math was taught primarily by way of memorizing facts, algorithms, and operations. Although memorization plays a role in math, if children do not understand what they're doing or how to identify or describe an error in their computation, then they're not really learning, they're simply memorizing. This becomes more apparent as children move into higher level math. Children need concrete, hands-on experiences before they can move into abstract thinking. They also need opportunities, both teacher-directed and child-initiated, to practice their developing skills.

MATHEMATICS

6. Uses number concepts and operations
    a. Counts
    b. Quantifies
    c. Connects numerals with their quantities
    d. Understands and uses place value and base ten
    e. Applies properties of mathematical operations and relationships
    f. Applies number combinations and mental number strategies in mathematical operations

7. Explores and describes spatial relationships and shapes
    a. Understands spatial relationships
    b. Understands shapes

8. Compares and measures
    a. Measures objects
    b. Measures time and money
    c. Represents and analyzes data

9. Demonstrates knowledge of patterns

SCIENCE & TECHNOLOGY

Young children are born scientists. They are curious and with every discovery can come a squeal of delight. Young children will stop to notice an ant hill, discover how the angles of ramps matter when you want your car to go faster, or even figure out how to disassemble a wind-up toy just to figure out how it works. We want to nurture these natural curiosities because it is our curiosities that propel the desire to learn. Without curiosity, children just lose interest and the motivation to want to figure things out or to want to know more.

Children are born scientists. They're curious about everything around them. And we spend the rest of their lives telling them to shut up and sit down.
-Neil deGrasse Tyson
Astrophysicist

Encouraging the development of scientific discovery and reasoning isn't difficult as there's an entire world to be curious about, but it does require that teachers are intentionally responsive to their curiosities, interests, and questions. Noticing children's interests and/or offering an array of experiences that encourage observation, investigation, discovery, and ways to capture and articulate their findings helps develop significant inquiry skills.

Science as a subject has been set aside in many classrooms to dedicate more time to math and ELA. Ironically, math, reading, writing, speaking and listening are all a part of the process of inquiry, observation, data collection and reporting. By following children's scientific interests and by introducing tools (i.e. magnifying glasses, loops, balances, tweezers and containers for specimens, etc.) that promote scientific discover and inquiry, teachers can encourage children to engage in scientific activities that includes research information in books and online, write hypothesis, communicate observations, share ideas, compare & contrast, conduct experiments, capture their findings—all of which help strengthen developing skills in math and ELA. Technology in schools is often perceived as an instructional strategy. Although technology can serve as a way for children to practice developing skills, the ideal use of technology in an early childhood classroom is to obtain information and as a way to capture and report their experiences including the use of cameras for still photos and videos, digital microscopes, and recording devices. With guidance and support, teachers can help kindergartners learn to capture their process with story-telling apps, presentation programs like Keynote and PowerPoint, iMovie or by printing photos from a digital device to create a presentation board or class-made book.

SCIENCE & TECHNOLOGY

1. Uses scientific inquiry skills
2. Demonstrates knowledge of the characteristics of living things
3. Demonstrates knowledge of the physical properties of objects and materials
4. Demonstrates knowledge of Earth's environment
5. Uses tools and other technology to perform tasks

SOCIAL STUDIES

Social Studies is the study of people and how people relate to one another. As young children, kindergartners are experts of their own experiences. They know about their world, their families and in kindergarten, they begin to have a better understanding of their neighborhood and community. As young children grow, learn and develop, they are able to move beyond what is closest to them, but abstract ideas about where is California in relation to where they live is difficult for them to understand. In kindergarten, social studies begins with the classroom community. Who are the children in your classroom? This question goes beyond personalities, likes, dislikes, and strengths. This question is about culture—family culture. As children within a classroom community engage with one another, they come with a unique lens based on their cultural experiences. As we help children develop a sense of belonging, we must engage in a thoughtful exploration of the diversity within the classroom.

Including photos of the children and their families as well as culturally familiar items within the classroom environment helps children feel connected to their classroom community and also fosters the experience of learning more about one another. It's important however, that you do not make assumptions or generalizations about the children's cultural backgrounds. By creating authentic relationships with families, inviting them in to share cultural stories, songs, traditions, and artifacts with the classroom community, it helps children begin to understand that although we are alike in many ways, our differences make our community experience rich and beautiful. Classroom materials should reflect all members of the classroom community. Examples of what this might look like are cradle board and culturally relevant food containers, and shopping bags from a local grocery store where many families shop in the socio-dramatic play area. Also, recordings of cultural stories recorded by family members may be available on an audio device for children to listen to in the listening center. All of these additions to the classroom should reflect the classroom community and should change from year to year.

SOCIAL STUDIES

6. Demonstrates knowledge about self
7. Shows basic understanding of people and how they live
8. Explores change related to families, people, or places
9. Demonstrates simple geographic knowledge

ENGLISH LANGUAGE ACQUISITION

English language acquisition in Arizona is bound by legislation. Children who are in Structured English Immersion classes are required to have four hours of English language development (ELD). For more information about the mandates for English Language Learners, refer to the ADE website: https://cms.azed.gov/home/GetDocumentFile?id=55257a8f1130c008a0c55ce3

ENGLISH LANGUAGE ACQUISITION

1. Demonstrates progress in listening to and understanding English
2. Demonstrates progress in speaking English

How This Informs Kindergarten Practices

In order to truly support the whole child within the kindergarten classroom, we must provide an emotionally and physically safe environment. Attention to the safety of the physical space is important as is attention to creating an environment that feels welcoming to children. It is quite amazing how an environment can influence mood, behavior, and an overall feeling of well-being. An environment filled with clutter on both the walls and tables is going to have a different feel than a space that is neat and organized. Likewise, a space that has lots of bright colors on the walls is going to feel different than a space with neutral patterns. Oftentimes, bright colors with colorful bulletin boards are associated with classrooms for young children. Unfortunately, these design choices can negatively impact children's mood, behaviors, and emotional state of being.

Clutter can also evoke feelings of anxiousness in some children. Many of us, as adults, have spaces in our home that are not as well-organized as we like. Or maybe our desk space gets cluttered, without the time needed to organize it. Many of us have difficulty feel calm and organized when our personal spaces are out of sorts. In our homes, sometimes it's just easier to shut the door of the room or avoid that junk drawer until we can get to it. Young children are not as aware of where their anxiousness may be coming from. It's important to also mention that studies have been conducted with regard to the impact of color on our mood. Even though it might look cute, bright colors can negatively impact mood and emotional states of being. It's important that we are mindful of creating spaces that are respectful to the needs of children.

In addition to the physical space, children need to feel emotionally safe in order to learn. Relationship-based approaches are critical in an environment that conveys feelings of safety. For more information about relationship-based approaches in kindergarten, check out the training the Significance of Social and Emotional Development in Kindergarten.

Next, children need an intentionally designed classroom environment that reflect who they are and where they are developmentally. Both design and schedule must support the practice they need to master developing skills. Ideally, this includes the use of real, concrete materials that are accessible to them for a better part of the day as opposed to abstract modalities such as worksheets, flashcards, and "learning" games on a device such as an iPad, Chromebook, or tablet. Research indicates that all learners need to move in order to optimize learning so it's important that young children are not expected to sit for longer than 15 minutes in any whole group experience (at the carpet or at tables). The expended energy that it

takes for children to go against their natural inclination to move is very difficult for most children and often manifests as off-task or even disruptive behavior. By creating an environment that aligns with what children need—a balance between active and quiet engagement helps optimize children's learning. Child-initiated experiences and teacher-directed lessons are both integral components within a classroom that fosters whole child development.

Additionally, we cannot dismiss the fact that children need time to play outside. Children need at minimum two 20-30 minute recesses as well as a 30 minute lunch recess. This time is important for social, emotional, and language development, not to mention the play-based opportunities where scientific explorations and discoveries authentically occur.

So, what does this actually look like in action?

The answer to this is complex and begins with a thoughtful look at (1) the organization of SPACE as well as (2) the organization of TIME.

THE KINDERGARTEN ENVIRONMENT

THE ORGANIZATION OF SPACE

The physical layout of the kindergarten classroom speaks volumes about our beliefs. If a teacher believes that children are able to be responsible for using and caring for classroom materials, for example, teachers make tools like markers, scissor, glue, paper, tape, staplers easily accessible to children. If a teacher doesn't trust that children can independently use materials then they are offered to children only for specific tasks or lessons. Likewise, if the physical layout of the room is set up with a classroom rug and desks/tables for whole group experiences primarily, it conveys the message that the way learning is to happen in this classroom is through whole group and/or teacher-directed experiences.

Designing a classroom environment that fosters whole child learning includes well-defined learning areas where materials are carefully selected, clearly organized, and accessible to children throughout the day. These defined spaces are intended to naturally encourage small group interactions where children can practice developing significant skills inclusive of academic skills. These areas include a block area, socio-dramatic play area, science and discovery area, math area, publishing and literacy area, visual arts area and a whole group area. Supporting the whole child honors the long-standing research that children learn through active engagement, both structured and unstructured. Play is the modality that helps children integrate what they're learning into real and meaningful contexts, thereby increasing the likelihood of not only recalling the information but being able to apply it in different situations.

It's important to mention that offering play-based experiences isn't a free-for-all. Oftentimes, the perception is that children are *just playing*, wasting valuable learning time. In a whole-child classroom, teachers offer a balance between structured and child-initiated and supported experiences. This balance aligns with how children learn best and is also helping them develop

significant skills that are often not intentionally supported in the classroom including: (1) creativity, (2) problem solving, (3) effective communication, (4) self-regulation, (5) persistence, (6) relationship skills, and so many others. Although these skills aren't on the list of priorities for many schools, it often becomes an issue when children lack these skills. If a child struggles with self-regulation when frustrated, it becomes a disruption. When a child falls into helplessness when given a complex problem and learns to give up, she will often fall further and further behind. A child who doesn't have relationship skills will often feel isolated and disconnected which tends to affect their academic performance. When we support the whole child, we position ourselves to be proactive, supporting the development of important lifelong skills as opposed to being reactive, blaming the child for not already having these very complex skills.

LEARNING AREAS, SPACES & WORKSTATIONS

Learning Areas

Learning areas are well-defined interest areas that are available to children throughout the entire school year. Generally, these areas are creatively designed by rugs, appropriate-sized shelves and tables. Materials are accessible to children for most of the day. Some of the materials within the learning area may change over the course of the school year, becoming more sophisticated as children's skills develop. These areas are an integral part of their learning experiences and not to be perceived as a time for "free play" after the "real work" is completed. Active participation in these areas **is the work of kindergarteners** and it's important that they are able to self-select where they'd like to play for the entire duration of time allotted for this "child-initiated work time." The key to helping children utilize these areas purposefully is to **approach planning purposefully.** Teachers must see the value of these experiences and the value of the learning areas in order for them to be valued by children and their families. This rich environment for children acts as a laboratory for learning that is best supported when teachers become highly engaged in the work of kindergartners. This experience provides many opportunities for teachers to authentically observe for understanding and to truly scaffold learning. It is also the perfect opportunity to ask inquiry –based questions and to expand upon their ideas. Intentional teachers help kindergartners make connections to prior learning/experiences and in turn, act as a bridge for making connections to their world.

KINDERGARTEN LEARNING AREAS

Block Area	Whole Group Area
Socio-Dramatic Play Area	Publishing & Literacy Area
Visual Arts Area	Sand, Water & Sensory Area
Science & Discovery Area	Math Area

Workstations

Workstations are spaces and/or bins, baskets, or containers of materials that have a specific purpose, are interchangeable and may stand alone or be integrated into one of the learning areas. An example of a workstation is a bin full of tangrams with specific tasks for children to complete individually, in pairs or small groups. Task cards or simple index cards created by the teacher that describe the process, steps, or intent of the activity in both conventional writing and in illustrations. This workstation may be placed on a table during the time dedicated to math. It may also be incorporated into the math area for an extended period of time or both. Another example is a basket with variations of the book *The Little Red Riding Hood* and an assortment of props—purchased materials or even props created by the children for them to reenact the story. This is a great way for the teacher to assess comprehension. Moreover, workstations may be created as a way to offer materials for long–term projects, to focus on specific skills or concepts, or simply to provide opportunities for practice.

EXAMPLES OF WORKSTATIONS

Poetry Station	Measurement Station	Tea Time Station
Board Game Station	Read the Walls Station	Create a Play Station
Big Book Station	Build a Structure Station	Robot Building Station
Overhead Projector Station	Project Research Station	Build a Story Station

SPACES & PLACES

Purposeful Spaces

A few more spaces that are important in supporting children's development do not require an entire area, just a space. Sometimes these are located within learning areas or as stand-alones. In the case of a listening center, this might simply be a small table in the publishing and listening area or even a few pillows in a quieter area of the room with a basket with a few books and an audio device with headphones.

Each of these spaces fulfill a significant purpose and it is strongly recommended that each of these spaces are offered in a kindergarten classroom.

PURPOSEFUL SPACES

Safe Place

Listening Center

One-Person Place

Deconstruction/ Tinkering Space

Sand, Water, Sensory Table

Safe Place: The Safe Place, coined by Dr. Becky Bailey, is a place of comfort for children when they are experiencing big emotions—sadness, frustration, anxiety, irritation, etc. It is a self-chosen area and not to be used as a place for isolation and/or punishment (i.e. time-out). Included in this space are items that support children's growing ability to self-regulate. When a child retreats to this area, it alerts the teacher that he/she might need adult support. Approaching the child in a lovingly responsive manner provides the emotional support a child needs to begin to identify the emotions he/she is feeling. It is only then that a child can learn what to do with what they are feeling. This becomes an opportune time to help children learn to regulate emotions including strategies for returning to a calm state of mind by breathing deeply, learning socially appropriate language for expressing wants and needs, and learning to develop lifelong relationship-based skills like conflict-resolution and negotiation.

Listening Center: A space where books, poems, songs are available in print and on an audio device for children to choose during their ELA block and/or during free choice. Typically, this space is limited to the number of headphones available for children. Books on tape/cd are generally what's available in this area although a wonderful idea is simply having the teacher or a parent record stories, poems, books or even sing songs or tell stories that are shared in their home and/or culture. This space can be a small rug, a few pillows, a bin or basket to hold books, poems, songs and the audio device. If the audio device needs to be charged daily, create a system to ensure that this space is readily available to children every day.

One Person Space: Some children are easily overwhelmed by noise, even if it's productive noise. Some children, like adults, just need space and a bit of time to retreat to or to work by themselves. This can simply be space under a table, in a large box, under a tent, etc. It's important to ensure there's still visibility, so using sheer fabric, if it is permitted, to give the perception of an isolated space.

Deconstruction/Tinkering Space: A high interest area, the Take Apart Area is where children disassemble small appliances. This deconstruction process not only supports fine motor development but is a powerful experience that supports the development of persistence, self-regulation and executive function skills. The complex process of taking a small appliance apart requires a great deal of skill, effort and intentionality. The opportunities for language development and mathematical exploration are great as children work collaboratively in their approach and as they deconstruct they are left with many loose parts that can be sorted, grouped and categorized. Over time, this collection of parts can lead to the endeavor of creating and constructing something new—an example of innovation in kindergarten.

Sand, Water, Sensory Table: Sand and water exploration is a multi-sensory experience that can provide incredible opportunities for children to grasp an array of mathematical and scientific concepts, as well the opportunity to practice engaging in complex language. When teachers integrate the use of sand and water exploration in thoughtful and intentional ways, it increases the likelihood that sustained learning will occur.

Both math and science involve thinking—critical thinking. When children explore the properties of water, it encourages children to pose and solve problems. With intentional support of a teacher, they are able to build authentic connections between ideas and concepts associated with equivalences of lengths, weight and volume.

Sand and water exploration not only support the development of specific cognitive skills, but the sensory experience of sand and water can be very calming for many children. For those who might need extra support in developing age-appropriate self-regulation skills, it serves as an opportune time for teachers to authentically connect with a child while modeling and supporting appropriate social actions and interactions.

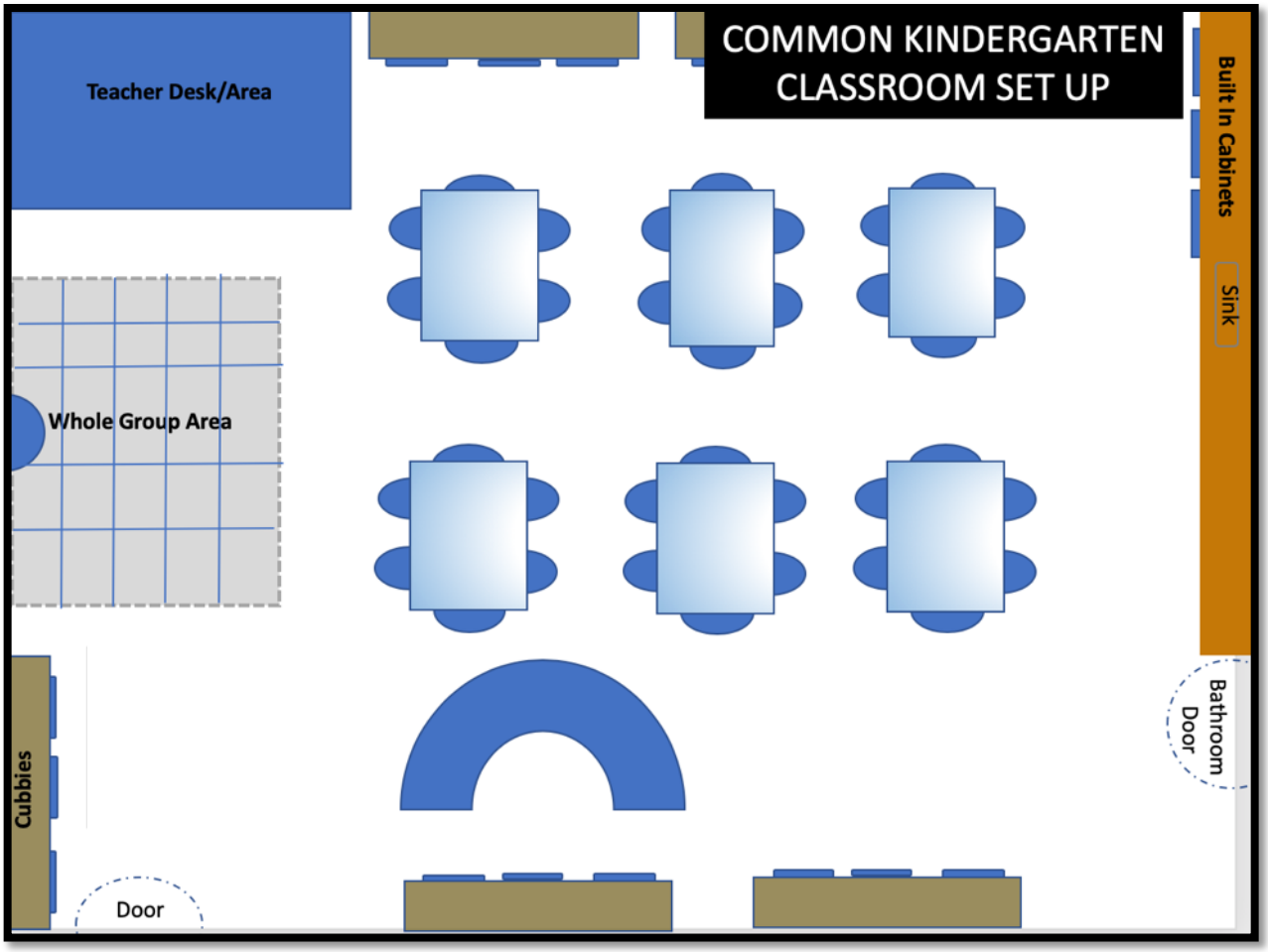
Designing the Kindergarten Classroom

Every classroom is structurally unique. Some rooms are very small, have fixed shelving units, are in L-shaped spaces, while others may be unusually large. In addition to the space, the furniture and materials vary from classroom to classroom.

As we look at classroom layout and design, let's first begin with what is a typical kindergarten classroom.

Common Kindergarten Classroom Design

Many kindergarten classrooms are set up for whole group instruction primarily—a whole group area/rug and either tables or desks. Sometimes there are shelves that hold teacher resources or materials inaccessible to children. In some classrooms, children do have access to materials that might include games, math manipulatives or other items children can use when they are done working. These shelves are often pushed up against the walls. Most kindergarten classrooms also have a horseshoe table for small group teacher directed instruction. Occasionally, teachers have a small reading nook. In general, many teachers also have a fairly large space for their desk and other teacher materials. This classroom design is a very common kindergarten classroom in Arizona.

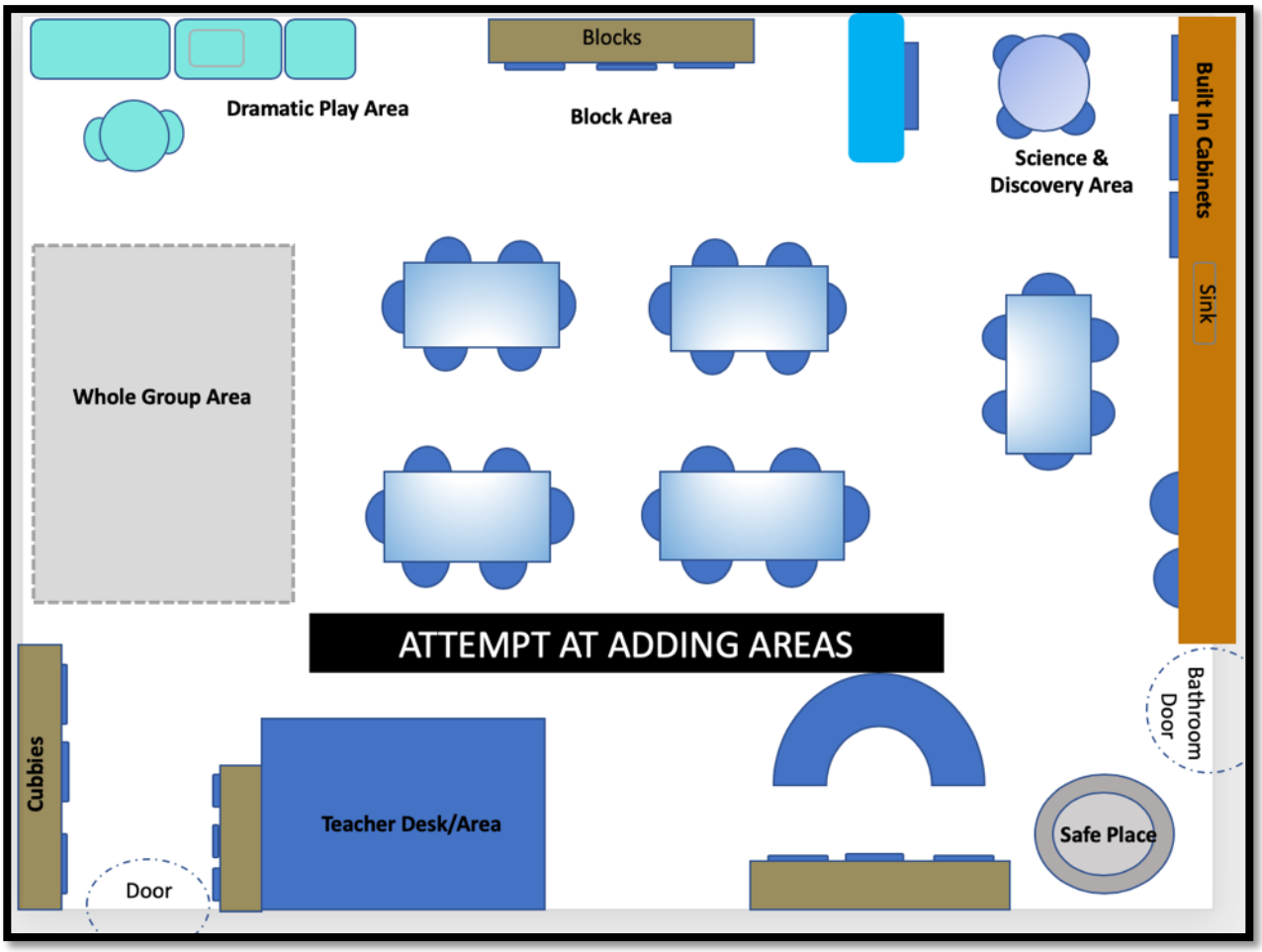


Reflection: What message does this classroom layout convey?

- About how children learn in this classroom?
- About the teacher's role in this classroom?
- About what's important in this classroom?

Attempt at Adding Learning Areas

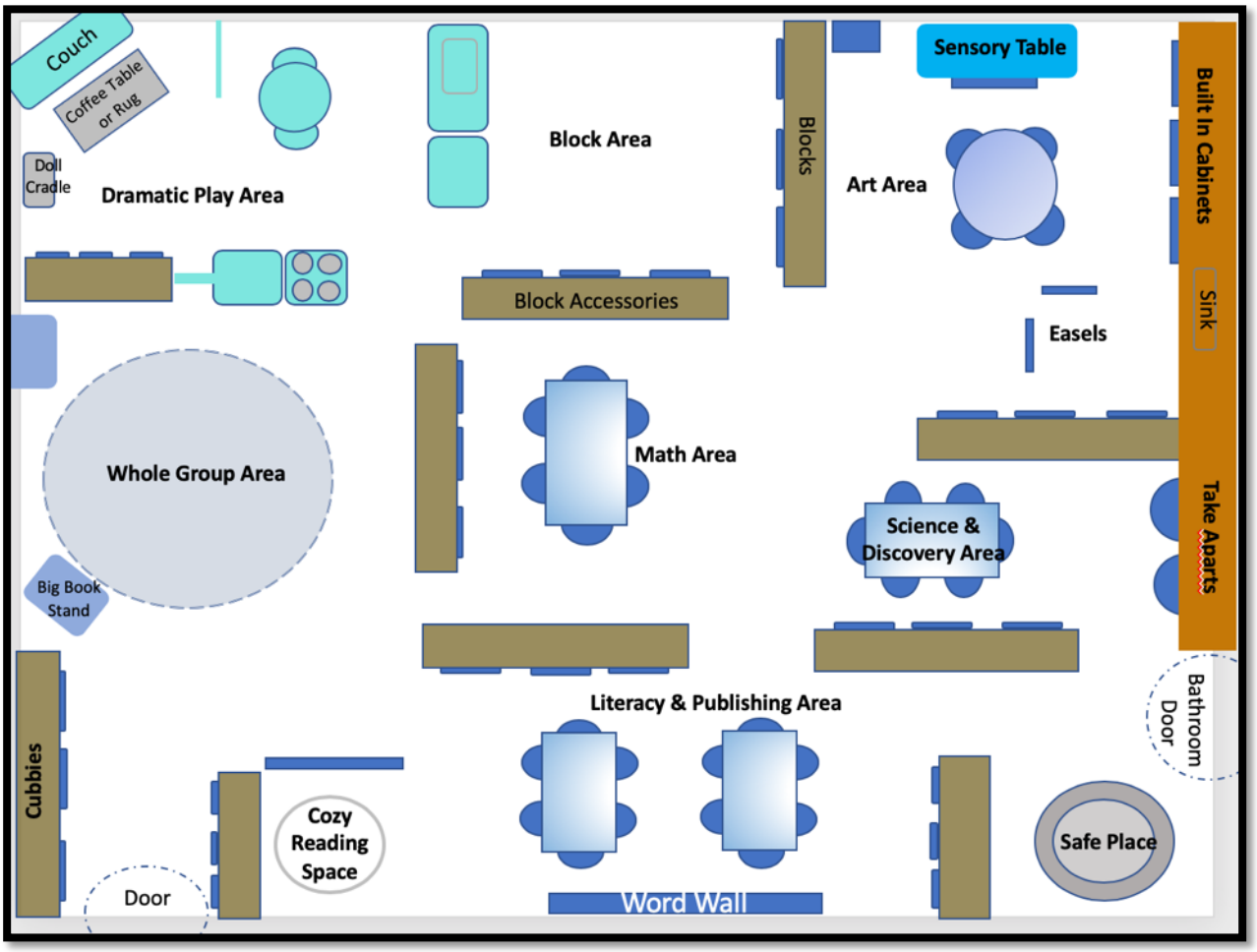
This layout is an attempt at adding learning areas. It is also a kindergarten classroom design of many, many years ago when dramatic playsets and blocks were still in kindergarten classrooms. In this classroom, the predominant space is still the whole group spaces—both the rug and the tables/desks. Shelves and furniture—block shelf, dramatic play furniture, and a shelf with a few



science materials are still on the perimeter of the room. The horseshoe table and teacher's area take up one side of the room and in this classroom design, a safe place has been added.

Reflection: What message does this classroom layout convey?

- About how children learn in this classroom?
- About the teacher's role in this classroom?
- About what's important in this classroom?



Learner Centered Classroom Environment

This classroom environment is intentionally designed for the learner. The learning areas are well-defined, protected by shelves or a natural barrier like the walls, on 1-2 sides. Enclosing spaces like this encourages children to engage fully in their work and be less distracted by what is happening in other parts of the room. The shelves in each of the areas are low and the materials on the shelves are meant for children's use. Containers are open so that classroom supplies are easily accessible to children. Teacher resources or materials that are not to

be used by children are stored in closed cabinets, if possible. The tables are located within the learning areas and can still be utilized if children are required to sit at a table for specific tasks or assignment. Teachers also use flexible seating like wiggle seats, floor pillows or beanbags where children use clipboards or lap desks to work.

Small group instruction can occur at any of the tables in the classroom, within any of the learning areas, and even while sitting on the floor. Teachers often have a computer station to hold their laptop and some of the materials they need access quickly.

Classroom is divided into Learning Areas:

- ❑ Socio-dramatic Play Area
- ❑ Block Area
- ❑ Math Area
- ❑ Publishing & Literacy Area
- ❑ Whole Group Area
- ❑ Creative Arts Area
- ❑ Science & Discovery Area

Include Significant Spaces/Places

- ❑ Safe Place
- ❑ Deconstruction/Tinkering Space
- ❑ Listening Center
- ❑ Sand/Water/Sensory Table

General Guidelines

- Boundaries are well defined by stable shelves that are approximately 36 inches
- Areas are still visible by the teacher (no blind spots)
- If possible, the visual arts area is near a sink
- Tables are incorporated into the learning areas
- Learning areas are free of clutter, teacher materials and unnecessary furniture/materials
- Traffic flow permits children to work without interruption or disruption (i.e. Block Area is a protected space where children aren't passing through to get to the restroom/another area)
- The socio-dramatic play and block areas are side-by-side, encouraging interrelated play/work
- Every attempt is made to keep noisier areas away from the quieter areas

General Design Guidelines:

- Separate more active/noise areas from quieter areas.
- Provide 1-2 person areas for children who want to work on their own or with a friend.
- Materials should be well stocked and in good condition (i.e. markers with caps, sharpened pencils, clean sheets of paper, clean paint brushes)
- Label all materials in pictures and words. This helps with organization and also supports children's understanding of how to care for their classroom.

Storing & Presenting Materials

- Materials on shelves in the learning areas are intended for children's use, not as teacher storage
- Materials are stored in baskets or containers that are easily accessible to children throughout the day
- Shelves and containers are labeled with pictures, the object itself of outlines/silhouettes

The learning environment we are in effects our moods, ability to form relationships, effectiveness in work or play – even or health. In addition, the early childhood group environment has a very crucial role in children's learning and development.

Young children are in the process of rapid brain development. In early years, the brain develops more synapses than they can possibly use. Those that are used by the child form strong connections, while the synapses that are not used are pruned away. Children's experiences help to make this determination. The National Scientific Council of the Developing Child compares the development of the brain to constructing a house stating, "just as a lack of the right materials can result in blue prints that change, the lack of appropriate experiences can meet alterations in genetic plans." They further state, "building more advanced cognitive, social, and emotional skills on a weak initial foundation of brain architecture is far more difficult and less effective than getting things right from the beginning" (2007, p.1). because children's experiences are limited by their surroundings, the environment we provide for them has a crucial impact on the way the child's brain develops (Bullard, 2009)

ORGANIZING THE LEARNING AREAS: BLOCK AREA

The Significance of Blocks

The use of unit blocks has become obsolete in most kindergarten classrooms throughout Arizona. Unfortunately, activities like block exploration are often perceived as less important than paper-pencil activities. Contrary to this belief, block exploration is actually significant in providing opportunities for children to develop foundational math and science skills that can't be accomplished with the use of worksheets.

By providing concrete experiences with unit blocks, as opposed to using pictures, cutouts, or worksheets to simply memorize the names of shapes, children obtain a real understanding of the physical properties of shapes, which is very different than simply knowing what they are called. The benefits of block play does not end there. Because blocks are three-dimensional, children are able to gain an in-

depth understanding of number and operations, measurement, geometry and spatial relationships as they construct with blocks. Even further when teachers carefully observe, they will notice that during block play children sort, count and classify blocks, they compare quantities, and measure width, height, and length, all of which are important foundational skills.

When children flip, rotate, build, and explore with unit blocks, they're developing knowledge of matter, motion, and stability. These experiences, which are inherent in block play, are foundational physical science skills. This type of exploration also offers opportunities to creatively plan and problem solve as well as develop spatial visualization and spatial orientation, all of which influence their conceptual understanding of complex ideas.

The opportunities for social and emotional learning are significant in the block area. With intentional support of the teacher, children are able to practice socially appropriate approaches for working collaboratively with peers and working through conflict successfully. Developing peer-to-peer tasks like asking children to work together to build a structure with a solid foundation that 2 children can sit inside of, promotes collaborative effort, problem-solving, language development, and critical thinking.

The intentional use of language by the teacher is an instructional strategy that strengthens children's language and literacy development. By integrating complex language within the context of their experiences, children are able to make meaningful connections between their experiences and the language being used. Likewise, block exploration is a perfect activity for engaging children in critical thinking and problem solving. By posing open-ended questions where children have to think hard about their responses, "What do you think might happen if you stacked three blocks on top of that foundation? How did you manage to make that structure stand? How high do you think you will have to make structure in order for the marble to roll all the way to the bottom? Why do you think that?"

Another way to intentionally capture the benefits of block exploration is to develop long-term studies using block play as the vehicle for learning. Studies of local buildings, architectural design of monuments or structures, ramps and pathways, or even linking building with literature like The Three Little Pigs or The Three Billy Goats Gruff.

Having an understanding of how children learn and develop is significant when intentionally supporting children's block exploration. Although it is most obvious that mathematical concepts are supported, block play actually addresses all other areas of learning when a teacher's instructional strategies support the natural progressions of learning as well as the individual developmental needs of children.

It is important to mention that these developing skills are required in professions that include, but are not limited to engineering, architectural design as well as many artistic careers.

The block area should include a minimum of 300 unit blocks for approximately 3 children to use. The space should be protected on at least 3 sides and should not be in a walkway/pathway. In addition to unit blocks, other blocks including large hollow blocks, tree blocks, and an array of props to enhance the experience should be intentionally organized and easily accessible to children (see materials list for detailed list of materials for the block area).

Block building and construction supports the development and understanding of many concepts. Through their active exploration, children learn to recognize and compare shapes, they learn basic measurement skills particularly as their structures become much more elaborate and extensive. The experience provides opportunities for rich dialogue including vocabulary building and language development when the teacher intentionally engages with children. Also, block exploration is one of the best approaches in supporting the understanding of physics.

The experience of building and constructing provides an in-depth understanding of many foundational concepts for young children.

Block Play Benefits *(aligned with Arizona Standards & Teaching Strategies Gold)*

Children get to….

- Work collaboratively with others
- Practice articulating ideas and listening to the ideas of others
- Negotiate roles and practice social language
- Solve problems as they arise
- Draw plans and share with others
- Explain thinking orally, in pictures, recognizable words, labels, captions, or descriptors
- Create signs using sight words
- Practice using nouns, verbs, and prepositions to describe structures & buildings
- Tell personal experiences in logical sequence with detail
- Use small & large muscles when building
- Experiment with balance & stability
- Practice making predictions, observations and asking questions
- Develop an understanding of spatial relationships and shapes
- Represent messages with pictures and words in the form of signs
- Write letters to represent sounds heard in words

Suggested Materials

BASIC MATERIALS

- ❑ 2-3 32” shelves & storage containers for blocks and accessories
- ❑ Wooden unit blocks come in different shapes and sizes such as triangles, squares, double unit blocks, cylinders and arches, etc. Min 2 sets (approx. 150 in 16-20 shapes/per set)
- ❑ All types of vehicles—cars, trucks, matchbox cars, trains, farm vehicles, etc.
- ❑ Traffic/road signs (set of 8-12)
- ❑ Floor road map or make roadways/maps with masking tape
- ❑ Small people representing various ethnic groups, ages, abilities
- ❑ Variety of animals—zoo, farm, domestic, native, jungle, ocean, etc.
- ❑ Ramps, boards, cardboard cylinders
- ❑ Small dollhouse furniture
- ❑ Books on construction, building, transportation, worldwide buildings/structures
- ❑ Clipboards
- ❑ Masking tape
- ❑ Post-its or index cards for sign making
- ❑ Writing tools

MATERIAL TO ENHANCE LEARNING OPPORTUNITIES

- ❑ Blueprints of buildings, photos of buildings (locally and all over the world)
- ❑ Graphing paper with pencils/pens to write
- ❑ Overhead projector with transparencies of pictures of all kinds of buildings/construction
- ❑ Train set with track and train cars
- ❑ Measuring tape
- ❑ Tile, carpet, wood flooring samples (varying sizes)
- ❑ Natural stones, pine cones, pretend trees, etc.
- ❑ Mirrors
- ❑ Platforms (to provide opportunities to build at different levels)
- ❑ Wooden doll house and accessories
- ❑ Level for building

ORGANIZING THE LEARNING AREAS: SOCIO-DRAMATIC PLAY AREA

Oftentimes, the perception of dramatic play is that children are simply playing and that not a lot of learning is happening. Current brain research, particularly in the area of language development, suggests otherwise. Dramatic play provides a forum for children to engage in roles, oftentimes familiar to them, with a different "voice". They take on the role of mother, father, barista, vet/doctor, bank teller, etc. and in doing so, they play with language that is more sophisticated than the language they may use day-to-day. The practice of using adult language strengthens their foundation in oral language development, which in turn is the foundation for literacy development.

In addition to the incredible language opportunities that occur in the dramatic play area, children learn to make sense of their world as they assume various roles. They learn to express their feelings and thoughts and begin to gain a deeper understanding of who they are. They develop complex social and higher order thinking skills as they act out stories and themes. Engaging in this way requires that children practice negotiation skills, balancing their own needs with the needs of others, transferring their knowledge and understanding from one situation to another, developing a plan and acting on it, and synthesizing an array of information. Likewise, when children are provided the opportunity to invent scenes and stories their motivation comes from within, which is a powerful message of pursuing their own ideas.

Delving deeper into the social nature of dramatic play, it's important to note that these types of interactions support the development of children's social and emotional **intelligence.** The ability to read social cues, recognize and regulate emotions and work collaboratively with

peers in projects that extend over time are all lifelong skills that contribute significantly to academic success.

When teachers add props that appear to be small details (appointment book, magazines for the waiting area, note pads/post-it notes, etc.), it enhances the potential for a much richer experience. Even further, when writing opportunities are purposefully embedded within the context of relevant experiences, it provides meaningful writing practice and it helps them understand that writing serves many purposes.

Socio-Dramatic Play Benefits

(aligned with Arizona Standards & Teaching Strategies Gold)

Children get to….

- Collaboratively decide play schemes and roles
- Practice using complex language during pretend play
- Practice social conversations, strengthening appropriate social language & skills
- Tell or retell personal experiences or creative stories in a logical sequence with details
- Use nouns, verbs, and prepositions when engaging in play schemes
- Derive meaning of words based on how they are used in a sentence
- Write letters to represents sounds heard in words
- Produce and expand sentences in shared language activities

Suggested Materials

BASIC MATERIALS

- ❑ **BASIC FURNISHINGS:** Child-sized stove, sink, refrigerator, hutch, small table with 2-4 chairs (one piece kitchen is not recommended)
- ❑ 1-2 32"open shelving for storing dishes, props, and accessories
- ❑ Additional furnishings (extras) such as washer/dryer, dresser, bed, living room furniture (ALL CAN BE REPURPOSED OR EVEN MADE OUT OF CARDBOARD BOXES)
- ❑ **COOKING UTENSILS**: Pots/pans, eating utensils, dishes, bakeware, measuring cups, mixing spoons and cups
- ❑ **FAMILIAR FOOD PROPS**: Collection of empty containers such as food boxes/containers, canned goods (if empty, be sure the edges aren't sharp) representative of children's ethnicities; realistic sized fruits and vegetables, glass gems (for pretend food preparation)
- ❑ **TRYING ON ROLES PROPS:** Role playing costumes (scrubs, doctor's jacket, smocks/aprons, dresses, suits, fire fighter jacket, baker's hat, jewelry/accessories, array of shoes, purses, wallets, ties, sunglasses, etc.
- ❑ Full length unbreakable mirror
- ❑ Telephones (if using old cell phones, remove batteries), clocks, radio (cut cord), camera
- ❑ **WRITING/READING MATERIALS:** Cookbooks, appropriate magazines, coupon and store circulars, home calendar, TO BUY/SHOPPING LIST pad, menus, post-it notes, note pads, pens/writing utensils
- ❑ **RELATIONSHIP PROPS:** Baby dolls of varying ethnicities (at the very least, dolls representative of the children in the classroom), shelf to display dolls, cradle, baby accessories (bottle, bib, rattle, board books, blanket, etc.)

MATERIAL TO ENHANCE LEARNING OPPORTUNITIES

- ❑ **KITCHEN TOOLS:** Placemats, pot holders, kitchen towels
- ❑ **RELATIONSHIP PROP EXTRAS:** Blanket, stroller, baby bed, baby bath tub, high chair, baby carriers from various cultures
- ❑ **HOME ENHANCEMENTS:** Vases, artificial flowers, pictures in frames, tablecloth, doilies,
- ❑ Fabrics or blankets
- ❑ **CLEANING TOOLS:** Spray bottle, rag, mop, broom, dustpan
- ❑ Steering wheel & extra chairs (pretend to be in a vehicle)
- ❑ Playdough (chocolate/brown works great for making cookies)
- ❑ Stuffed animal (dog/cat) & pet accessories (bowls, food, leash, collar, food mat, toys, etc.)
- ❑ **ROLE PLAYING**: Props for familiar scenes that might include playing pizzeria, grocery store, shoe store, coffee shop, nursery, etc.

ROLE PLAYING EXAMPLES

Medical Office: band aids, cotton balls, ace bandages, sports tape, make-shift examination table, doctor's kit with real tools, dolls, blankets, white shirts or doctor's coats, phone, appointment book, prescription pads, pens, magazines for waiting room, cash register for payments, etc.

Restaurant: cash register, menus, empty food containers, fancy table clothes and table dressings, order pads/receipts, chef hat, etc. (consider restaurants children will have been in)

Grocery store: cash register, paper bags, empty food boxes/containers, aprons, coupons, store circulars for local grocery stores, toy shopping carts, sale signs, furniture/boxes for displays, etc.

Post office: shoulder strap totes to carry mail, envelopes, cancelled stamps or seals, rubber stamps, circulars, junk mail, place for sorting mail, scale, boxes of different sizes, packing tape, bubble wrap for packing, cash register, writing pads

ORGANIZING THE LEARNING AREAS: WHOLE GROUP AREA

The whole group meeting area is an area that is included in most kindergarten classrooms. Oftentimes, children spend significant amounts of time sitting in this space. In general, young children should not be expected to sit for extended periods of time—not beyond 15-20 minutes. Although every child is unique, all young children need to physically move. Their whole bodies need to be actively engaged. For children who have special needs or who simply need additional support, it may be helpful to have core disks, wiggle seats, or other tactile input seats for sitting at whole group.

Meeting as a whole group is a wonderful way to build a sense of community among the children, particularly if children are asked to sit in a circle where they get to see each member of their classroom community. This conveys the message that we are all here to learn from one another and that each person is significant in our classroom community.

When meeting as a whole group, teachers can share what is planned for the day, provide some guided-instruction, and lead in group games, songs, and stories. It is most beneficial when children are encouraged to share their reflections and ideas about their experiences during these group times. This process of learning to share ideas and listen to one another is a foundational life skill, however, sitting and waiting for long periods of time isn't developmentally appropriate for young children. Sometimes 20 minutes is too long for children to sit and listen. It's important that the bulk of the day is not spent in whole group instruction, rather that children are able to actively engage in real and meaningful experiences in small groups, in pairs, or independently, if they choose.

The space dedicated to whole group gatherings can serve as a place for small groups, can be doubled as the block area if the classroom size is small, or as a space for children to use while reading, journaling (with clipboards), putting puzzles together, etc. Including throw pillows, doggy beds, plastic crates, rockers and other innovative seating spaces creates an array of varied physical experiences that oftentimes helps children get and stay focused for longer periods of time.

Whole Group Area Benefits:

(aligned with Arizona Standards & Teaching Strategies Gold)

Children get to….

- Engage as an integral member of the classroom community
- Show and share interest, concern, and care for others through thoughtful engagement as a community member
- Practice listening, speaking, conversing, questioning, and discussing to clarify and understand
- Listen and respond to stories, poems and nonfiction
- Discuss classroom happenings and engage in collaborative problem solving as needed
- Explore sounds, rhythms and language structures through music and songs
- Engage in movement and dance
- Orally produce rhyming words in responses to spoken words
- Listen and engage in read-clouds and make predictions based on title, cover, illustrations, and text
- Produce and expand sentences in shared language activities

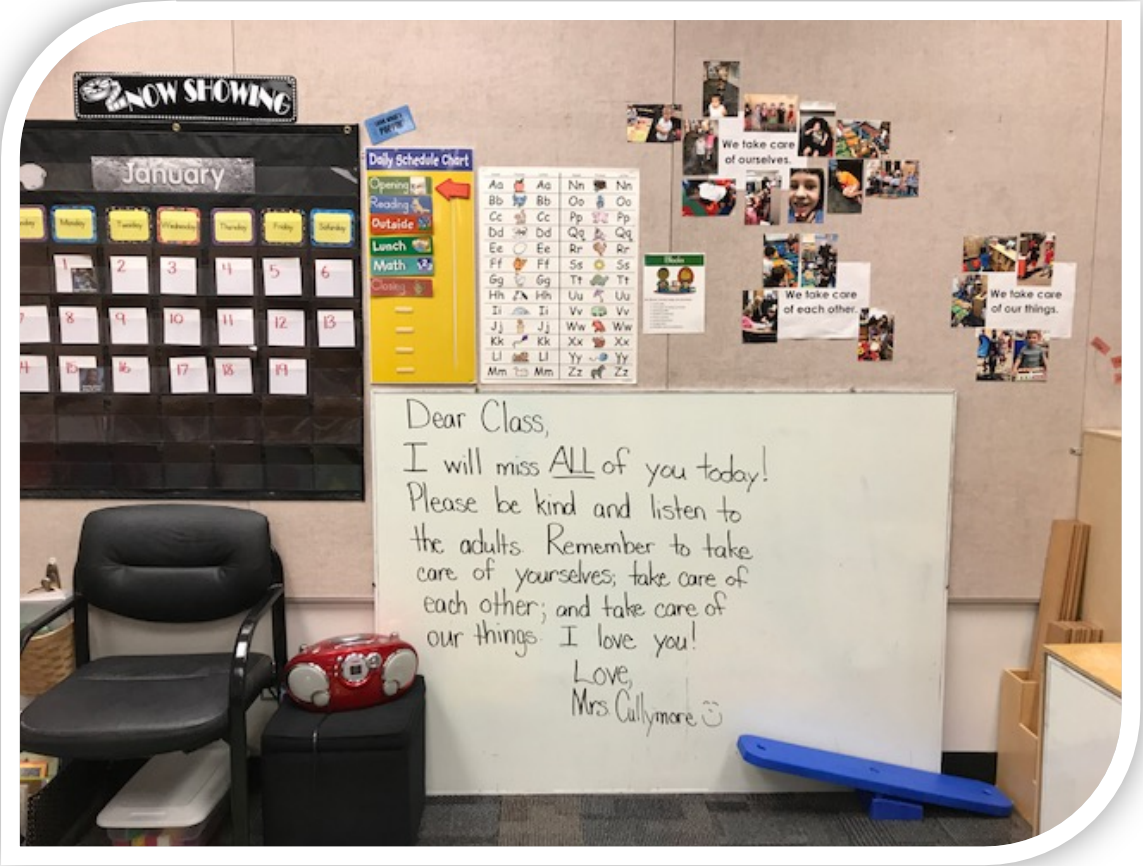
Suggested Materials

BASIC MATERIALS

- ❑ Circle rug recommended
- ❑ Chart paper & stand
- ❑ Big book stand
- ❑ Big books
- ❑ Engaging read-alouds
- ❑ Pointers
- ❑ Flexible seating options
- ❑ Large Area Rug (preferably circle/space where children can sit in a circle)
- ❑ Picture schedule
- ❑ Authentic calendar
- ❑ Job chart (every child has a job)
- ❑ Big book stand (+ pointers)

MATERIALS TO ENHANCE LEARNIN OPPORTUNITIES

- ❑ Anchor charts
- ❑ Shared writing
- ❑ Daily morning message
- ❑ Dictated stories
- ❑ Experiential charts
- ❑ Stories written by children



ORGANIZING THE LEARNING AREAS: MATH AREA

In order to develop number sense, children need concrete materials to explore and opportunities to engage with mathematical concepts. Building number sense is not a quick process. Young children "require in-depth, meaningful tasks over a long period of time to establish a sophisticated understanding of numbers" (Linder, et al., 2011). Having a math learning area is an effective way to provide opportunities for practice to kindergarteners on a regular basis.

The math area is generally at least one shelf and a table that children can place the materials on. Sometimes a rug can also be used to define the space for these materials to be used. Materials should be well-organized with labels and stored in a way that is interesting and easily accessible to children. Intentionally selecting materials that promote open-ended mathematical discovery as well as providing activities that encourage children to solve specific problems help children develop a deeper understanding of mathematical concepts and ideas. Having math journals for children to continually document their work and discoveries (that may require the support of a teacher initially) can give children a visual understanding of their progression of skills and understanding over the course of the school year. Remember however, that it may require the thoughtful support of the teacher to point out their continued development and learning.

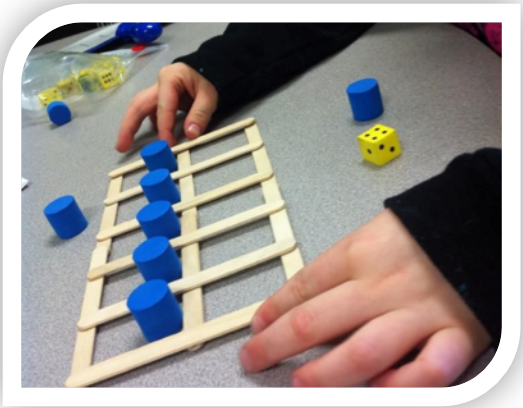
In addition to the obvious benefits to young children, a math learning area also benefit kindergarten teachers. They provide teachers with opportunities to observe and formatively assess mathematical understanding as children interact with intentionally selected materials in

the learning area. Teachers can also intentionally select materials that encourage the practice of specific concepts. When used effectively, math learning areas are a valuable component of a quality mathematics program.

Explorations in the math learning area will vary and change as children develop mathematical skills throughout the school year. It is important to intentionally select materials that are developmentally appropriate. Developmentally appropriate materials meet children's ability levels where they are while providing opportunities to further extend understanding of concepts. For example, early in the school year, math learning areas might focus on counting and equivalency experiences (equal and not equal). After children develop a **strong** sense of equivalency, addition and subtraction symbols are introduced. It would not be appropriate to introduce addition and subtraction symbols in the math learning area before children understand that quantities on both sides of the equal sign should be, well, equal.

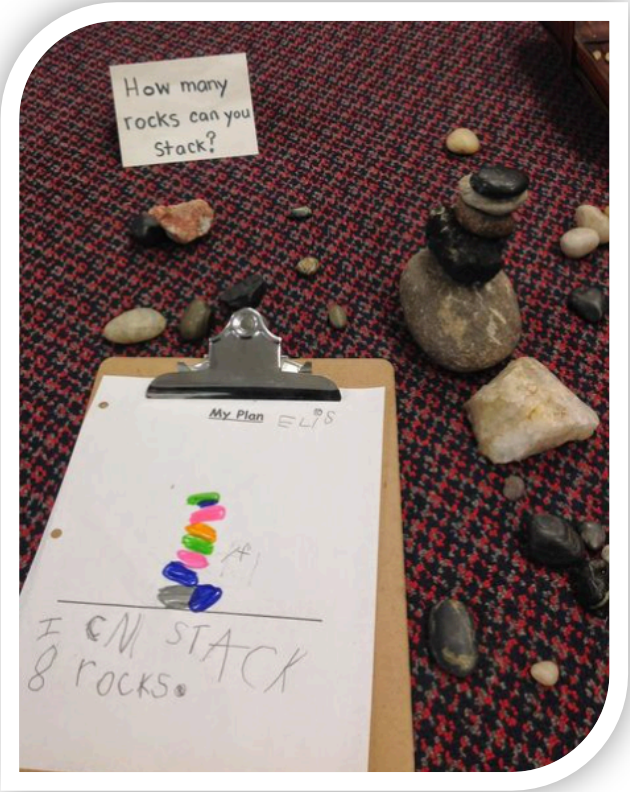
Some examples of learning opportunities that might be found in this area are:

- Clipboards and survey prompts for children to survey others and tally results. They can write the number after counting the tallies and/or create a graph to display their results.
- A Venn Diagram with assorted materials (shells, seeds, buttons, etc) to place in circles according to given or child-selected attributes.
- A bowl of seeds, tongs, dice and an empty bowl. Children can roll dice, count the dots, use the tongs to transfer the quantity of seeds to the empty bowl.



The key to creating a successful math area is to create opportunities where children are excited to use the materials. What is offered should change based on their developing knowledge and

understanding. In the beginning, it may include opportunities for more open exploration and as they progress, it may include specific tasks or challenges children get to work through collaboratively.



Math Area Benefits:

(aligned with Arizona Standards & Teaching Strategies Gold)

Children get to….

- Work collaboratively with others
- Practice developing prosocial skills
- Demonstrate initiative
- Practice listening and speaking when sharing ideas, reflecting, offering solutions to problems
- Represent thinking in pictures and words
- Explore patterns in language, numbers, events, in their world
- Develop an understanding of one-to-one correspondence
- Investigate quantity using manipulatives and tools
- Practice composing & decomposing numbers
- Explore standard and non-standard measurement
- Sort, group & classify according to attributes
- Develop mathematical vocabulary
- Measure, compare, count and record observations
- Write letters to represents sounds heard in word
- Produce and expand sentences in shared language activities

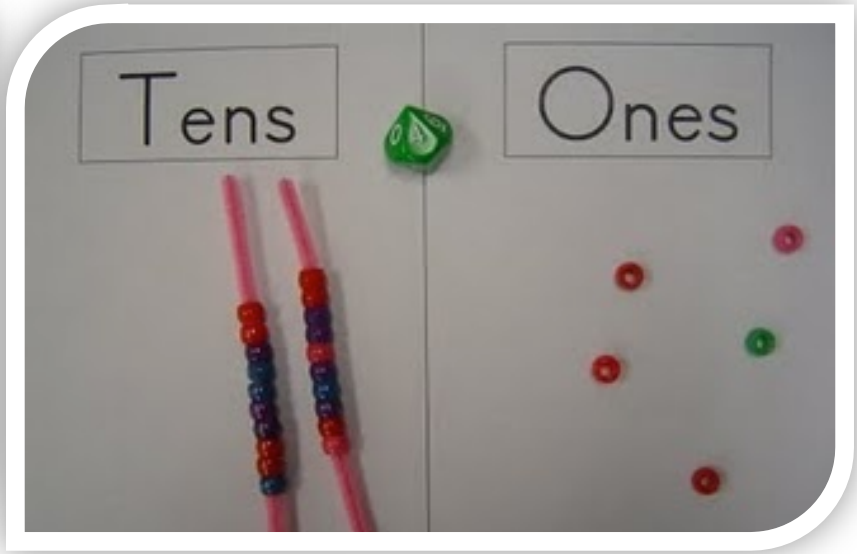
Suggested Materials

Basic Materials

- ❑ Smaller table (for 4-6 children comfortably)
- ❑ 1-2 36” open shelf units to store materials accessible to children
- ❑ Small wooden blocks/1-inch wooden cubes
- ❑ Number books: counting, patterns, sorting, etc.
- ❑ Math Journals
- ❑ Interlocking blocks (AKA Legos)
- ❑ Magnetic shapes
- ❑ 10 Frames
- ❑ Different complexities: variety of pieces (5-100), interlocking, sequence puzzles, floor puzzles
- ❑ Scales, balances and weights
- ❑ Cloth tape measures, rulers, measuring tapes
- ❑ 1-Inch cubes
- ❑ Pattern cards to match with pattern blocks
- ❑ Parquetry blocks
- ❑ Dice & dice games
- ❑ Small objects to count—beans, counters, keys, buttons, natural items like stones/rocks, leaves, etc., colored beads, etc.
- ❑ Attribute beads and activity cards
- ❑ Counting links
- ❑ Rekenreks
- ❑ Short path, long path games, circular path games
- ❑ Games or puzzles where quantities of objects are matched to written numbers
- ❑ Magnetic numbers
- ❑ Number puzzles
- ❑ Playing cards
- ❑ Dominos
- ❑ Geoboards
- ❑ 3-Dimensional shapes

Materials to Enhance Learning Opportunities

- ❑ Real opportunities to use/record numbers: thermometer, height chart, tape measures, setting the table for snack, etc.
- ❑ Tasks that include 1-2 children taking polls/surveying children
- ❑ Charting, graphing meaningful information
- ❑ Materials that encourage children to extend patterns identified in the natural world (graphing paper, fabrics, sea shells, leaves, etc.)



ORGANIZING THE LEARNING AREAS: SCIENCE & DISCOVERY AREA

Science is a term that can quickly conjure up mental images of white lab coats, protective eyewear and beakers, which can feel a bit daunting. Uncertainties about science can deter teachers from incorporating science experiences in the classroom. And with the emphasis in ELA and Math, science is often not incorporated into the kindergarten experience for children at all.

Understanding what science *is* helps to understand the importance of incorporating scientific discovery in the kindergarten classroom. Science is both a body of knowledge as well as a process of discovery where isolated and static facts can be linked into coherent and comprehensive understandings of the natural world. Science is exciting trying to figure things out and especially so when discoveries are made. Science is useful as the knowledge gleaned can contribute to new developments in the world. Science is a global human endeavor where people from all over the world participate and will continue to do so as it is ongoing and ever changing.

When children engage in exploratory science experiences, important inquiry skills are fostered. Providing real and relevant experiences where the intent is to explore materials, objects, and events by acting upon them and then noticing what happens can become an incredible platform

for engaging children in critical thinking. Encouraging children to ask questions and to wonder helps to propel their natural curiosities into the process of in-depth exploration and discovery.

Children learn by doing and in order to construct knowledge they need time to work with peers. As children collaboratively engage in an environment rich with simple tools, interesting materials, and effective planned experiences, they become investigators and even scientists who are able to discuss ideas and listen to new perspectives.

When teachers intentionally observe children and wonder about their thinking process, they are better able to scaffold learning by authentically extending their experiences, asking inquiry-based questions, and model sophisticated language within the context of their discoveries and reflections. Additionally, helping children learn to capture their ideas through multiple forms of representation including drawings, simple graphs, and writing is an example as to how science truly supports all content areas in kindergarten.

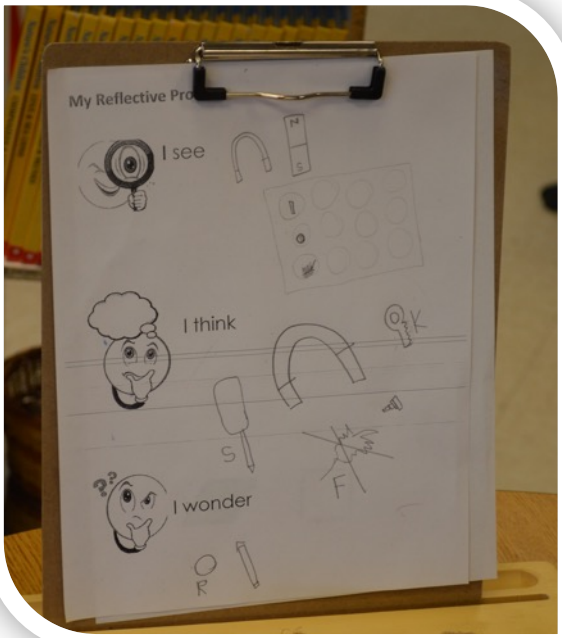
Suggested Materials

BASIC MATERIALS

- ❑ Smaller table (for 4-6 children comfortably)
- ❑ 1-2 36" open shelf units to store materials accessible to children
- ❑ Nature Science Books (factual-animals, plants, birds, fish, human body, seasons, weather, environment
- ❑ Science magazines (Ranger Rick Jr., National Geographic Little Kids)
- ❑ Nature/science floor puzzles
- ❑ Science Journals
- ❑ Various types of magnets with iron/metal and non-iron/metal items
- ❑ Magnifying glasses (high quality)
- ❑ Microscopes with clear and prepared slides
- ❑ Bug viewers
- ❑ Sink and float items
- ❑ Pulleys/levers
- ❑ Prisms, plastic translucent color paddles, kaleidoscopes, colored glasses
- ❑ Writing materials (to capture ideas/labeling and record observations)
- ❑ Balance scale
- ❑ Tape measure
- ❑ Mirrors
- ❑ Eye droppers

MATERIALS TO ENHANCE LEARNING OPPORTUNITIES

- ❑ Natural Objects—Native items are best Flowers (fresh and dried), leaves, seashells, rocks, pine cones, acorns, bird nests, feathers (variety, large quill), fossils, bones, woods, twigs, branches, drift wood, weeds, seed pods, insects, seeds, gourds packets
- ❑ Classroom pet
- ❑ Classroom plants, flowers, terrariums
- ❑ Worm composting
- ❑ Children maintained garden
- ❑ Birdhouse, feeders visible from window
- ❑ Flashlights



Science is a powerhouse!

Scientific exploration & discovery can support all areas of development!

ORGANIZING THE LEARNING AREAS: PUBLISHING & LITERACY AREA

One of the most valuable experiences in kindergarten is the opportunity to engage in language-rich experiences, as this is the foundation for literacy development. Intentional language opportunities should occur all day, every day, in every area of the classroom between the teacher and children as well as peer-to-peer. Having an area dedicated to literacy does not imply that these experiences are limited to this Learning Area. It is, however, an area where children have access to tools that promote and practice meaningful application of language and literacy knowledge and understanding.

A Comfy Reading/Library:
Although books should be available throughout the classroom, this space is designed as a cozy space to comfortably read great books. A standing, forward facing bookshelf with an array of books helps children visually identify books that may be of an interest to them. It is a good idea to make this space small enough for a few children, using a shelf as a barrier to protect this space.

The Office Space:
The office space is a part of the publishing and literacy area where children have access to an array of materials that would be available in a well-stocked office. The intent is to encourage children to use writing materials in a meaningful way. A table with an array of paper (lined, unlined, cardstock, blank books, etc.), stapler, scotch tape, post-it notes, envelopes, hole punch, and many types of writing tools (that are in great condition) organized in a way that encourages pretend office play becomes a wonderful opportunity for engaging in language and literacy development.

Publishing Space:
This publishing space is intended as a place where children can create their own books. It can be tied to the office space but doesn't have to be. Providing access to blank books of varying sizes

and varying page lengths with an array of writing utensils gives children a place to capture their stories. It is also important to provide the tools for children to create their own books—blank paper, stapler, and even a book-binding unit with binding combs.

Having this space as a work station for tasks such as writing a story about an exciting experience, writing what it means to be a friend, or capturing the important details of the study of water the class is working on are all worthy writing experiences, particularly because it is relevant to their world and that they get to share their experiences with their teacher and peers.

English Language Arts- Work Stations

The publishing & literacy area is a great space to include games and activities that support children's practice in oral language development and literacy development. Highly-interactive games that children can use independently or with peers provide important practice in obtaining confidence in their developing skills. Creating additional workstations including a listening station, a puppet theater, and/or a flannel board station are excellent additions to this area that help provide meaningful opportunities for practice.

Supporting Children's Foundational Skills

Research shows that in order to support children's ability to think critically they need real and relevant, hands-on experiences. It is through the use of highly interactive opportunities for learning and collaborative engagement with their peers that provides the necessary practice they need in order to develop the skills they will need for continued academic success. The use of worksheets as an instructional strategy or as a way for children to practice is not considered a hands-on experience. Worksheets do not support children's ability to think abstractly or develop complex, higher-order thinking skills. They also do not provide opportunities for children to wonder, question, discover, problem-solve –all of which are important in becoming critical thinkers.

Worksheets also have a right-wrong answer. For children who are less successful at worksheets they may see themselves as failures and may develop early aversion to taking risks. Learning requires some degree of risk-taking. Kindergartners are capable learners who need many, many opportunities to be in charge of their learning where they are supported in developing their confidence as learners. Moreover, worksheets do not support children's ability to wonder, discover, problem solve, or become critical thinkers.

Recording sheets are different than worksheets. Recording sheets are simply used as a place for children to record their observations, discoveries, and/or reflections of an experience, activity, or task.

Suggested Materials

BASIC MATERIALS

- ❑ Smaller tables (for 4-6 children comfortably)
- ❑ 3-5 36" open shelf units to store materials accessible to children

Informational Text/Factual Books

- ❑ Real animals, facts about animals and plants, real life experiences—visiting the dentist, feelings, etc.
- ❑ Number, shape, color, alphabet books
- ❑ Nature and Science Books: five senses, human body, animal homes and lives, native books (about AZ), insects, physics, water, shadows, plants

Books of Varying Genres

- ❑ Fantasy: Pretend stories about people and animals
- ❑ Predictable, rhyming, song, etc.
- ❑ Project related books

Writing Support

- ❑ All types of writing utensils –pencils (black and colored), markers of varying sizes, pens
- ❑ Paper (variety- e.g. lined and unlined memo pads and legal pads, copy books, drawing and construction paper, stationary, envelopes notepads, notebooks, post-it notes, index cards (assorted sizes), stapled paper made into books
- ❑ Binder clips/rings, scissors, glue & glue sticks, hole punchers, rulers, tape/tape dispensers
- ❑ Envelopes of all sizes
- ❑ Pocket charts & sentence stripsStamps and stamp pads (alphabet stamps, word stamps, date stamps, office stamps-paid, sign here, etc)

Writing Support

- ❑ Many different types of blank books and/or ways to create their own published books
- ❑ Writing utensils- pens, pencils (writing and colored), crayons, chalk, and markers (broad, fine point, variety of colors
- ❑ Stapler, staples, and paper fasteners
- ❑ While You Were Out pads
- ❑ Scissors, glue and glue sticks, hole punchers, rulers, tape
- ❑ Binder clips/rings
- ❑ Envelopes of all sizes

MATERIAL TO ENHANCE LEARNING OPPORTUNITIES

Additional Language Materials

- ❑ Interactive word wall
- ❑ Project related work: high frequency words, environmental print, etc.
- ❑ Flannel board and accessories
- ❑ Puppets, puppet theatre
- ❑ Listening area with recorded stories
- ❑ Alphabet games and puzzles
- ❑ Magnetic boards (three per classroom, magnetic letters (upper- and lowercase)
- ❑ Word games
- ❑ Language games (i.e. story cubes/stones)
- ❑ Audio recording device to record children's stories

Publishing & Literacy Area Benefits:

(aligned with Arizona Standards & Teaching Strategies Gold)

Children get to….

- Relate a personal experience or creative story in a logical sequence with details
- Ask and answers questions about unknown words
- Demonstrate knowledge of print conventions
- Collaboratively create and tell stories with one another
- Identify upper and lowercase letters of the alphabet
- Blend two or three spoken syllables to pronounce words
- Identify elements of a story as well as identify beginning, middle, and ending of a story
- Take creative risks
- Write letters to represents sounds heard in words
- Produce and expand sentences in shared language activities
- Write a narrative with a main idea based on personal experience and supporting details with guidance, as needed
- Move through the process of book publishing—developing as story writing, and illustrating

ORGANIZING THE LEARNING AREAS: VISUAL ARTS AREA

Providing opportunities for creativity in kindergarten directly supports the many other content areas that teachers are trying to focus on day-to-day. Creative arts further the development of necessary foundational skills that strengthen cognitive growth and development. Studies show that there is a direct correlation between art and achievement in other areas of learning.

Creative arts in kindergarten are experiences where children are able to construct their own artistic creations, representations, and expressions. It is not "arts & crafts" where children are coloring, cutting, and/or pasting to create a predetermined model such as coloring sheets, creating egg carton caterpillars, or making candy cane reindeers. Creative art is about creativity that belongs to the children; where they are in charge of their own work. It is not providing pre-cut shapes to glue, creating a model for children to follow, or making cute products to hang in the classroom, rather it is to offer an array of open-ended, process-oriented experiences for children to explore and create expressions of their own ideas.

Therefore, the teacher's role in supporting children's artistic expression is focused primarily on the ***experience or the process***, the exploration of artistic techniques and tools, and to provide an array of materials for children to use.

Taking a closer look at progressions of learning, creative arts support fine motor development as many of the motions involved in creating art are a part of fine motor skills, which are necessary for writing. Holding different sizes and types of paintbrushes, cutting, gluing, weaving, and even placing small sequins on a painting requires some level of fine-motor precision.

Taking an even closer look at creative art, it's beneficial to consider what artists do. Art is the expression of an idea in a physical form. Artists pay close attention to their world and have to make decisions about what to create and how to create it. This requires problem solving, critical thinking skills and some level of risk-taking.

Likewise, true artistic expression also requires inventiveness. Inventiveness, along with the ability to problem-solve, use critical thinking skills as well as the willingness to take a risk in not

only creating something different, but sharing that idea with others are all traits of successful writers, inventors, entrepreneurs, and leaders. These foundational skills are supported when we nurture children's natural artistic curiosities and interests.

Moreover, one of the greatest values of open-ended art experiences is the rich dialogue that can occur when engaging in and sharing their creative art experiences with others. Conversations about color, texture, their ideas and their reflections provide great insight as to how children are making sense of their world.

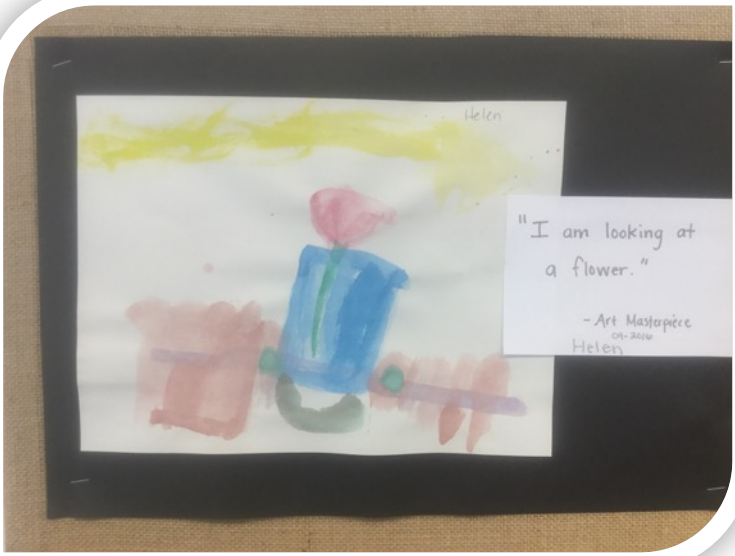
Art has the role in education of helping children become like themselves, instead of more like everyone else.

Sydney Gurewitz Clemens

Visual Arts Area Benefits: *(aligned with Arizona Standards & Teaching Strategies Gold)*

Children get to….

- Express thinking creatively
- Explore non-verbal ways to express thoughts, emotions and ideas
- Create collaboratively with others
- Engage in creative risk-taking
- Take pride in creative self-expression
- Learn that messages can be represented in pictures
- Describe their exploration of varied art mediums
- Support fine motor development necessary for writing
- Develop a sense of aesthetics



Suggested Materials

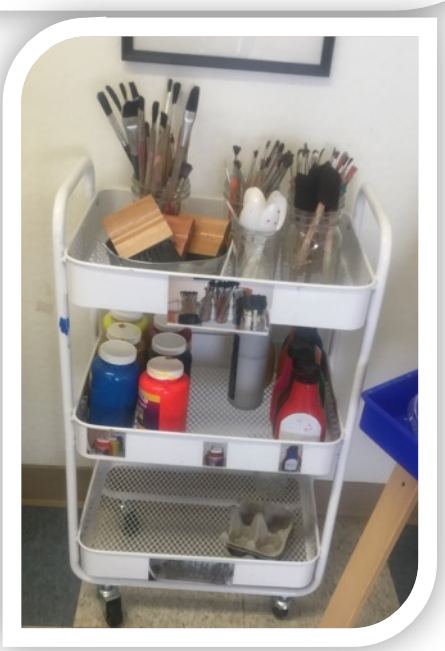
BASIC MATERIALS

- ❑ Smaller tables (for 4-6 children comfortably)
- ❑ 1-2 36" open shelf units to store materials accessible to children
- ❑ Large and small crayons (assorted colors including skin tones)
- ❑ Variety of pens, pencils, colored pencils/sharpeners
- ❑ Thick and thin washable markers (large assortment)
- ❑ Chalk (white and colored), erasers
- ❑ Paper: an array of sizes and colors, lined and blank, newsprint, construction, tissue paper, white printer paper, drawing, fingerpaint, easel, construction paper
- ❑ Dry erase boards/markers
- ❑ Painting easel, fresh paint, clean brushes with available paper that's easily accessible to children.
- ❑ Watercolor paints
- ❑ Variety of paint utensils: paint brushes (long easel, "chubby", and watercolor), rollers, squeeze and spray bottles, sponges, Q-tips, paint scrapers
- ❑ Smocks/paint shirts
- ❑ Paints accessible to children
- ❑ Glue/paste, glue sticks
- ❑ Playdough (ready-made and homemade)
- ❑ Pipe Cleaners/Chenelle Stems
- ❑ Scissors (varying abilities, left & right handed)
- ❑ Staplers
- ❑ Paper punches
- ❑ Tape (various types), tape holder
- ❑ Playdough accessories (craft sticks, blunt knives, scissors, pipe cleaners, hammers, rolling pins, sculpting tools, pizza cutters), garlic press, potato masher

MATERIAL TO ENHANCE LEARNING OPPORTUNITIES

- ❑ Real art materials—acrylic paints, chalk pastels, real watercolors
- ❑ Paper scraps, magazines, cards, wrapping paper, ribbon, wallpaper, lace, greeting cards, catalogs
- ❑ Cardboard tubes, boxes, rolls for construction
- ❑ Felt/fabric remnants (assorted sizes and colors)
- ❑ Yarn/string (assorted colors)
- ❑ Cotton balls, pompoms Glitter, buttons, sequins, gems, packing pieces

- ❑ Natural objects (leaves, seeds, twigs, feathers, shells) Art tissue
- ❑ Recycled items- e.g margarine tubs, cartons, plastic bottles, cans, boxes, toilet paper rolls, catalogs, magazines
- ❑ Wood for gluing/construction
- ❑ Crafting wire & wiring tools



SPACES & PLACES:
SAND, WATER & SENSORY TABLE

Sand and water exploration is a multi-sensory experience that can provide incredible opportunities for children to grasp an array of mathematical and scientific concepts, as well as the opportunity to practice engaging in complex language. When teachers integrate the use of sand and water exploration in thoughtful and intentional ways, it increases the likelihood that sustained learning will occur.

Both math and science involve thinking—critical thinking. When children explore the properties of water, it encourages children to pose and solve problems. With intentional support of a teacher, they are able to build authentic connections between ideas and concepts associated with equivalences of lengths, weight and volume. Sand and water exploration not only support the development of specific cognitive skills, but the sensory experience of sand and water can be very calming for many children. For those who might need extra support in developing age-appropriate self-regulation skills, it serves as an opportune time for teachers to authentically connect with a child while modeling and supporting appropriate social actions and interactions.

Suggested Materials

BASIC MATERIALS

- ❑ Water/Sand table with lid or a cement mixing bin, medium sized storage containers will also work although emptying isn't as easy
- ❑ Bins, containers to organize materials, shelf/space to display materials
- ❑ Aprons/smocks
- ❑ Measuring cups & spoons, variety of
- ❑ containers/pails/buckets, bottles, jars (assorted sized and shapes)
- ❑ Shovels, all types of scoops/scooping tools
- ❑ Items for sinking/floating
- ❑ Broom, dustpan, mop for cleanup
- ❑ Towels available for clean up
- ❑ Kitchen utensils—slotted spoons, regular spoons, egg beaters, tongs, pots, pans, muffin tins, whisks

MATERIAL TO ENHANCE LEARNING OPPORTUNITIES

- ❑ Sand, bird seed, water beads, soil, play pellets, etc.
- ❑ Pumps, siphons, sand/waterwheels
- ❑ Funnels, plastic tubing/pipes

- ❑ Nature items such as shells, pieces of wood, rocks, findings from outdoors
- ❑ Sponges, small water droppers, spray bottles, turkey basters, egg beaters
- ❑ Trowels, rakes, sand scrapers, sifters
- ❑ Props for dramatic play experiences—cars, diggers, boats, airplanes, people, blocks of varying sizes, tiles, small trees, etc.
- ❑ Array of magnets

Children learn as they play. More importantly, in play, children learn how to learn.

-D. Fred Donaldson

SPACES & PLACES
SAFE PLACE

The Safe Place, coined by Dr. Becky Bailey, is a place of comfort for children when they are experiencing big emotions—sadness, frustration, anxiety, irritation, etc. It is a self-chosen area and not to be used as a place for isolation and/or punishment (i.e. time-out). Included in this space are items that support children's growing ability to self-regulate. When a child retreats to this area, it alerts the teacher that he/she might need adult support. Approaching the child in a lovingly responsive manner provides the emotional support a child needs to begin to identify the emotions he/she is feeling. It is only then that a child can learn what to do with what they are feeling. This becomes an opportune time to help children learn to regulate emotions including strategies for returning to a calm state of mind by breathing deeply, learning socially appropriate language for expressing wants and needs, and learning to develop lifelong relationship-based skills like conflict-resolution and negotiation.

BASIC NECESSITIES

- ❑ Cozy, defined space
- ❑ Soft cushions, bean bag, or soft chair, designated area under a table, in a large box
- ❑ Books that provide comfort, connection, expressions of love
- ❑ Stuffed animals
- ❑ Puzzles (helps with creating a calm state, and promotes internal organization)
- ❑ Pictorial charts that provide visual cues for deep breathing
- ❑ Photo albums/picture displays of the children expressing empathy, caring for others, working collaboratively, etc.
- ❑ Photos of family members, particularly for children who are adjusting to being away from home and/or find comfort in family members
- ❑ Squishy balls or other fidget toys
- ❑ Paper & crayons/colored pencils
- ❑ Headphones & audio player with instrumental, soothing music

SPACES & PLACES
DECONSTRUCTION/TINKERING

A high interest area, the Take Apart Area is where children disassemble small appliances. This deconstruction process not only supports fine motor development but is a powerful experience that supports the development of persistence, self-regulation and executive function skills. The complex process of taking a small appliance apart requires a great deal of skill, effort and intentionality. The opportunities for language development and mathematical exploration is great as children work collaboratively in their approach and as they deconstruct they are left with many loose parts that can be sorted, grouped and categorized. Over time, this collection of parts can lead to the endeavor of creating and constructing something new—an example of innovation in kindergarten.

BASIC NECESSITIES

- ❑ Old appliances with cord cut off (VCR, clock, toaster, DVD, record player, adding machine) **NEVER USE A TV OR COMPUTER MONITOR…THEY HOLD ELECTRICITY**
- ❑ Wind up toys or toddler toys to take apart
- ❑ Array of tools (screwdrivers, phillips, needle-nose pliers, clamps)
- ❑ Precision/micro tools for tiny screws
- ❑ Safety glasses
- ❑ Containers to hold pieces
- ❑ Duct tape

THE ORGANIZATION OF TIME

KINDERGARTEN HALF DAY SCHEDULE

10 Minutes **Welcome Routines/Arrival**
Sign-in, Wash hands, Welcome routines & rituals

15 Minutes **Whole Group Gathering**
Build a sense of community
Welcome songs
Announcements
Reflections of prior experiences/learning
Plan for the day

45 Minutes **Focused Area: English Language Arts**
Children's literature, shared reading, guided reading
Tier 2 Intervention; small groups
Oral language stations
Literacy & writing stations
ELA related experiences in Learning Areas
Practice, practice, practice developing skills

15 Minutes **Outdoor Exploration/Recess**

20 Minutes **Learning Areas: Project-Based Learning, Exploration & Investigations**
Opportunity to freely engage within the learning environment & small groups
Complete specific tasks & challenges
Project work/ on-going investigations-integrated approach (integrating all content areas)
Tier 2 interventions; small groups
Practice, practice, practice developing skills

20 Minutes **Focused Area: Math**
Math stations
Math tasks/challenges
Small group guided opportunities
Practice, practice, practice developing skills

10 Minutes **Reflection, Anticipation, Closure**
Reflection of the day; what's to come
End of day routines
Good-bye rituals

Specials vary according to school/district and are not included in this sample schedule.

Trying to schedule enough time for children to become truly engaged in their experiences is challenging in a half-day program. Research shows children need extended periods of time to explore, engage and investigate. There is a misconception that in general, young children have short attention spans. On the contrary, if the experiences offered to them are highly engaging, align with how young children develop and learn, and are of interest to them, young children can engage in activities for considerably long periods of time. When they are given **longer periods** of time in real, engaging and meaningful experiences the likelihood of sustaining their learning increases substantially.

As teachers are planning the ½ day schedule, the key is to maximize opportunities for sustained engagement in hands-on experiences rather than segment activities into shorter periods of time.

**This schedule does not account for Structured English Immersion (SEI) Requirements. Please refer to the Office of English Language Acquisition Services (OELAS) at the Arizona Department of Education for more information about the scheduling requirements in classrooms serving English Language Learners.*

FULL DAY Scheduled Times of the Day EXAMPLE*

10-15 Minutes	**Welcome Routines/Arrival** Sign-in, Wash hands, Welcome routines & rituals
15 Minutes	**Whole Group Gathering** Build a sense of community Welcome songs Announcements Reflections of prior experiences/learning Plan for the day
15 Minutes	**Breakfast**
90 Minutes	**Focused Area: English Language Arts** Children's literature, shared reading, guided reading Tier 2 Intervention; small groups Oral language stations Literacy & writing stations ELA related experiences in Learning Areas Practice, practice, practice developing skills
25 Minutes	**Outdoor Exploration/Recess**
45 Minutes	**Learning Areas: Project-Based Learning, Exploration & Investigations** Opportunity to freely engage within the learning environment & small groups Complete specific tasks & challenges Project work/ on-going investigations-integrated approach (integrating all content areas) Tier 2 interventions; small groups Practice, practice, practice developing skills
35 Minutes	**Lunch/Recess**
15 Minutes	**Whole Group** Children's literature, read-aloud, journals
50 Minutes	**Specials**
50 Minutes	**Focused Area: Math** Math stations Math tasks/challenges Small group guided opportunities Practice, practice, practice developing skills
15 Minutes	**Reflection, Anticipation, Closure, Good-bye Rituals** Reflection of the day; what's to come End of day routines and rituals

Note: All times shown are approximate and will depend on your child's school day. However, the relative proportion of time allotted for different types of activity should not vary greatly. For example, the proportion of time devoted to work time should exceed the amount of group time regardless of the specifics of your child's schedule.

**This schedule does not account for Structured English Immersion (SEI) Requirements. Please refer to the Office of English Language Acquisition Services (OELAS) at the Arizona Department of Education for more information about the scheduling requirements in classrooms serving English Language Learners.*

General Guidelines:

- The classroom environment is used throughout the day
- Blocks of time for ELA & Math are embedded in the schedule. Hands-on, interactive experiences can occur that are math and ELA specific throughout the classroom—in learning areas, on tables, on the floor, etc. For example, reenacting a version of Three Little Bears in the socio-dramatic play area may be a planned experience for a small group of children during the ELA block.
- Children may have tasks to be completed during the ELA and math block of time. Ideally, they're integrated into the learning areas, but that doesn't always happen. Using the table for a math task/lesson during this block of time is absolutely acceptable.
- During the 45-minute block of open work time, children can freely move from learning areas—round robin shifting is not an appropriate approach.
- Teachers can conduct small groups or guide a study/project during the open work time. It's also a perfect time to work with a child or specific child within the learning areas.
- Assessment should happen throughout the entire day—true formative assessment happens as children are engaging, exploring, discovering, and conversing with one another. Teacher observations guide the planning process.

This guide accompanies *The Organization of Space & Time in Kindergarten* training module and is to be used as a supplemental resource for teachers as they learn to implement strategies that support a whole child approach. The content of the training module and the guide serves as examples of how to create a learning environment and how to schedule the day to support the effective implementation of the Teaching Strategies Gold, K-3 Formative Assessment.

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