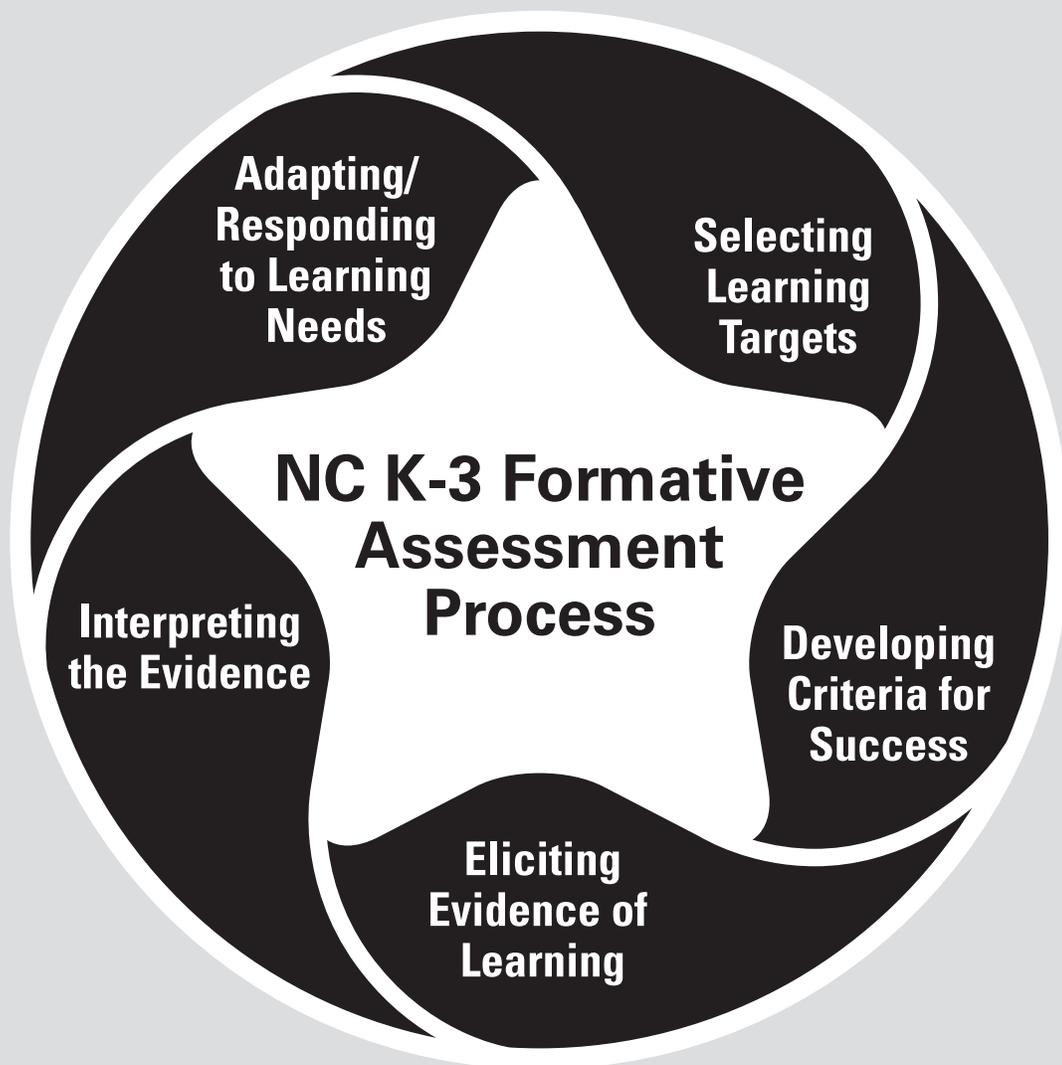


NC Construct Progressions and Situations

OFFICE OF EARLY LEARNING



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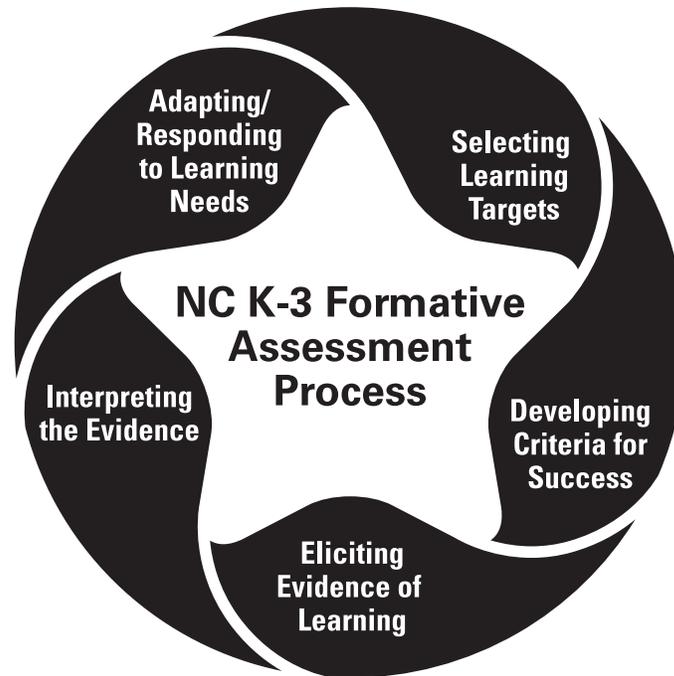
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INTRODUCTION

This second edition of *NC Construct Progressions and Situations* is the result of the work of numerous teachers and experts in North Carolina over an eighteen-month period. This is a homegrown teaching support, and we expect that the instrument will be perfected through an iterative improvement process that relies on feedback from North Carolina's teachers. This is not the final word on the essentials of early learning but a living document to help teachers identify where students are with respect to their learning and development.

By its nature and development, this process provides teachers with information to include and respond to individual student's specific strengths as well as her/his specific areas for growth. The NC K-3 Formative Assessment Process (FAP) is a part of daily instruction, rather than a formal one-on-one testing situation. Gathering information about student learning in a formative manner is a natural, ongoing process that is applicable to all students. The K-3 Formative Assessment Process stakeholders worked diligently to design an assessment process that is applicable to as many students as possible. The NC K-3 Formative Assessment Process was developed by utilizing the Universal Design for Learning (UDL). As such, the NC FAP is accessible for all students and is developed in a manner that affords all students an opportunity to maximize his/her learning potential. This is a measurement of growth and provides information to guide instruction, even for our most significantly involved students and students who are English language learners.

In this guide you will find the first iteration of construct progressions and situations from all five of the developmental domains. The construct progressions are pathways of learning that can provide clarity for teachers about how a particular concept develops and how to identify learning targets for students. The progressions are accompanied by classroom situations that assist teachers in identifying a student's development within the context of instruction, and to support efforts to adapt and respond to learners' needs.

Inherent to the effective implementation of the NC K-3 Formative Assessment Process is the recognition and adaptation of classroom environments so as to foster the growth and development of all students. Classroom environments must be conducive to learning as well as to the developmental needs of K-3 students. Effective teachers work to learn as much as possible about their students. Knowing what skills students have already learned, what their likes/dislikes are, and/or if they learn more effectively in large groups, small groups, or in one-on-one settings are but a few important considerations as we move toward our ultimate goal of helping students learn to the maximum of their abilities. This knowledge helps teachers plan lessons to be sure; however, and more importantly, this information helps teachers meet the unique needs of all students in their classrooms, increasing the likelihood that all students will benefit from the instruction provided. Teachers are now equipped with information that allows them to focus on more specific learning targets in a way that encourages all students to explore, initiate learning according to their skills and interests, and collaborate effectively with their peers. Utilizing the NC Formative Assessment Process provides teachers with the information to be successful in these endeavors.

We trust this tool inspires and motivates great teaching. As always, we welcome your thoughts, comments, and classroom tales of the support in action.

"The contents of this guide were developed under a grant from the Department of Education. However, these contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the federal government"

ARCHITECTURE

Within each of the 5 Domains of Learning and Development, the NC K-3 Assessment Think Tank developed claims- broad goals that identify the knowledge, abilities, and approaches toward learning that are most essential for children to develop during kindergarten through third grade. These claims were used to identify specific constructs for which the assessment would focus.

The five interrelated domains of learning and development included in North Carolina's definition of school readiness (Ready for School Goal Team, 2000) constitute the focus of education during the early elementary school years and serve as the organizing structure of the K-3 Formative Assessment Process.

A construct refers to what the assessment has been designed to measure within a specified claim.

Problem Solving

DOMAIN: Cognitive Development

CLAIM: Students can use content-independent abilities and strategies as well as content-specific skills, processes, and approaches to solve problems and acquire information.

RATIONALE

The focus of this construct progression is problem solving within the domain of Cognitive Development. There are many opportunities during the day for children to engage in emotional and social problem solving. The constructs Emotions and Social Skills address these opportunities. Additionally, both goal setting and perseverance play a critical role in problem solving. Perseverance and goal setting are addressed in the construct progressions Engagement in Self-Selected Activities and Assigned Tasks within the domain of Approaches to Learning. Therefore, this progression is looking specifically at the problem solving process when learning content, rather than how they handle their feelings, relate to other people, or pay attention to the content. In *Assessment for Learning and Development in K-3* (the NC Think Tank report), the report identifies the Cognitive Development domain states, "Children's cognitive capabilities provide the foundation for learning throughout life. These cognitive skills – including regulating attention, remembering, reasoning, and problem solving – are essential for acquiring new information and apply it to new situations. Research indicates that strong cognitive skills positively affect academic achievement (Raver, 2012; Evans & Rosenbaum, 2008; Duckworth & Seligman, 2005). Moreover, the continuing development of these skills necessary for ongoing mastery, depends upon active engagement in developmentally appropriate education."

A claim is a broad goal that identifies the knowledge, abilities, and approaches toward learning that are most essential for children develop during kindergarten through third grade.

The rationale provides research that articulates the importance of attending to the construct within the K-3 years.

The understandings, skills, and performance descriptors in this construct progression describe the development of academic problem solving. This progression is not developmentally inevitable but rather reflects the problem solving capabilities that are developed as a result of experience and instruction. In order for children to practice problem solving, teachers need to create opportunities that allow for discovery learning and opportunities to solve problems.

Problem solving is an activity that requires interpretation, sense making, the acquisition and application of knowledge, and the use of the deep thinking behind the figuring-out that occurs. Ginsburg proposes that even though students are often able to solve problems, they do not always explain their problem solving process, sophisticated problem solvers not only solve problems but they also explain their process.

This report was developed in collaboration with us, including Dr. Herb Ginsburg of Columbia Teachers College, Dr. Margaret Heritage of UNC-Chapel Hill, Lynn Baker-Ward of N.C. State University, Drew Poily of UNC-Charlotte, and Sharon Ritchie of the Frank Porter Graham Center at UNC-Chapel Hill. Also our colleagues at DPL, including members of Curriculum and Instruction, and Heather Reynolds and Matt Hoskins of Exceptional Children. We value the feedback of teacher reviewers Nicole Pait, Amy Ebert, Jamie Gray, Natalie Vandeventer, and Mary Louise Jones. And thank you to the Regional Consultants for the Race to the Top/Early Learning Challenge Grant in the Office of Early Learning of the N.C. Department of Public Instruction.

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

APPROACHES TO LEARNING

Goal APL-2: Children actively seek to understand the world around them.

Goal APL-4: Children demonstrate creativity, imagination, and inventiveness.

Goal APL-5: Children are willing to try new and challenging experiences.

Goal APL-6: Children use a variety of strategies to solve problems.

LANGUAGE DEVELOPMENT AND COMMUNICATION

Goal LDC-3: Children ask and answer questions in order to seek help, get information, or clarify something.

Goal LDC-4: Children speak audibly and express thoughts, feelings, and ideas clearly.

Each construct progression is aligned to NC standards found within the NC Foundations for Early Learning and Development and the NC Standard Course of Study.

A construct progression is a carefully sequenced set of understandings and skills for a particular concept or subject matter that traces the development of learning over time from a rudimentary form through more sophisticated states. It is comprised of 3 parts: Understandings, Skills, and Performance Descriptors.

CONSTRUCT PROGRESSION

Domain: Approaches to Learning

PERSEVERANCE IN ASSIGNED ACTIVITIES CONTINUED FROM PREVIOUS PAGE

UNDERSTANDING: Children understand that they can adapt strategies to accomplish activities in a

| SKILLS | H. Uses a learned strategy to accomplish a familiar activity in a new context. | I. Adapts strategies to accomplish activities that are more sophisticated or in a different context. |
|-------------------------|--|---|
| | During classroom work, a child uses noise-cancelling headphones to limit distractions. During a loud school assembly, the child asks the teacher if he can go back to the classroom and get the headphones to wear during the program. | Fatima enjoys listening to Mrs. Romig read books. It helps Fatima remember the details of the story when Mrs. Romig uses silly voices and big hand gestures. When Mrs. Romig asks Fatima questions about the characters in the story, Fatima likes to answer the questions by mimicking Mrs. Romig's silly voices and even her gestures. During science instruction, Mrs. Romig explains to the class that they will compare different types of dogs. Fatima adapts Mrs. Romig's strategy and creates her own silly voices and gestures to help her remember what makes each dog special. |
| PERFORMANCE DESCRIPTORS | On a science unit about insects, the students keep a journal of observations of insects indoors and outdoors while working on a project. Later in the year, during a social studies unit on the environment, Gabrielle begins to keep a journal to record observations about the school's recycling program. | Whenever the class is working to solve a challenging math problem, Ms. Gordon reminds them to sing a song that she has taught them with the steps needed for solving math problems. This strategy helps Leslie focus on the math problem and solve it step by step. During spelling instruction, when Leslie encounters a challenging word, she decides to make up her own song in order to help remember how to spell the word. During language arts instruction, Sydney's teacher encourages students to use stories from their own lives to help them connect to the text they are reading. Sydney understands that she can adapt this language arts strategy to other subjects. So when they are studying recycling, Sydney records in her science journal how much is thrown away at home that could be recycled, and connects it to the landfill problem she's been reading about. |

Understandings identify the major concepts within a particular construct

Skills identify the competencies within each "understanding," ranging from simple to more complex levels

Performance Descriptors paint a picture of what a child may say, do, make or write to demonstrate his/her understanding or skill at each stage of the progression. They help teachers make inferences from evidence gathered to identify where student's learning status is along the progression.

ARCHITECTURE

SITUATION: *How Many are Here Today?*

Situations are intentionally planned instructional activities designed to provide teachers guidance on or examples for setting up a learning activity to learn about students through observation and probing.

| Understanding: Children recognize that counting tells the number of objects*. | | | | | |
|---|--|---|--|--|--|
| Selecting Learning Target(s) | A. Says or indicates counting words randomly, with one number for each object, while tapping or pointing to one and only one object to determine the number of objects in a collection. | B. Says or indicates counting words sequentially, saying one number for each object, while tapping or pointing to one and only one object to attempt to determine the number of objects in a collection without keeping track of objects counted. | C. Keeps track of objects when counting, not counting them twice or missing any. | D. States or indicates that the last number counted is the total quantity. (Cardinality) | E. States or indicates that the last number counted is the total quantity. (Cardinality) |
| | * The amount and arrangement of objects vary according to the student's needs. Therefore, it is possible that a student may demonstrate different skills based on the amounts and/or arrangements used. It is important to record these two factors with the documentation. | | | | |
| General Description | In a small or large group setting, children are invited to count the number of children, boys, girls, and other types of categories (e.g., color of shirt, type of shoes, type of lunch choice). As children count the various groups, the teacher carefully observes and makes notes about the children's counting abilities, paying attention to counting words, the sequence of counting words, one-to-one correspondence, and cardinality. | | | | |
| Eliciting Evidence of Learning | <p>The teacher gathers the children together and asks for a volunteer to count the number of children at school today. After the volunteer counts the children, the teacher then asks for all of the girls to stand up and for a volunteer to count the number of girls at school today. The teacher continues to call on volunteers to count different groups of students, making sure to pick categories that provide different quantities of children to count, including larger and smaller groups.</p> <p>In an effort to find the child's edge of understanding, when the teacher is selecting a student to count a particular group, the teacher intentionally selects a student who may likely count the number of children in the specified group with who – based on previous observations – may be able to count larger quantities, the teacher selects those volunteers to count the larger groups of children, such as the entire class. For children who may find larger groups of children to count, the teacher asks them to count the smaller groups of children, such as the number of children with braids in their hair.</p> <p>Vignette: During Morning Meeting Time, the teacher asks the children, "I wonder how many children are here today?" Several children say, "We can count!" The teacher agrees and asks for a volunteer to count all of the children in the class. The teacher selects Megan. The teacher has observed Megan counting larger quantities of objects at the Math Station and anticipates that this opportunity may challenge her but not frustrate her. Megan begins to count the children, gently touching each child's head. She counts the children with one-to-one correspondence and does not skip any children or count them twice. The teacher asks, "How many children are here today?" Without having to recount the children, Megan responds correctly, "25. Everybody is here!" The teacher probes, "What if Benjamin counted all of the children? Would there still be 25?" Megan pauses, shrugs her shoulders, and says, "I don't know." The teacher invites Benjamin to count all of the children. Benjamin counts them accurately and reports, "Yup. There are 25 children." Megan says, "WOW! We got the same." The teacher probes, "You seem surprised. Tell me what you're thinking." Megan replies, "I thought they would be different." The teacher notes that Megan was surprised that recounting the same group ended up with the same number.</p> <p>Suggested Probes:</p> <ul style="list-style-type: none"> • "How many (name of object) did you count?" • "If (name of child) counted them again, how many would (s/he) have?" • "Tell me what you're thinking." <p>Probes to Avoid:</p> <ul style="list-style-type: none"> • "If you counted them again, you would have the same amount, right?" • "That's right. It will be the same because we didn't add any or take any away, did we?" | | | | |
| Interpreting the Evidence | <p>Observation: As Megan counted the children in the class, she counted each child, using the correct counting sequence and one-to-one correspondence without losing track of the children she counted. Megan also accurately stated "25," identifying the total amount. When probed about re-counting the same children, Megan stated, "I thought they would be different."</p> <p>• Construct Progression Best Fit: D. States or indicates that the last number counted is the total quantity. (Cardinality)</p> | | | | |
| Using the Evidence to Inform Instruction | Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the student's learning needs. If the student has not met the same learning target if the student hasn't met it. If the student has met the learning target for teaching and learning. | | | | |

Situations are organized around the 5 critical components of the formative assessment process

Probes are open-ended questions that invite a student to demonstrate what he or she knows and is able to do, while refraining from instructing or leading the student

Engagement in Self-Selected Activities

DOMAIN: Approaches to Learning

CLAIM: Students can maintain focus and persevere to accomplish collaborative tasks whether those tasks are chosen by them, or assigned to them.

RATIONALE

“Attention-related skills such as task persistence and self-regulation are expected to increase the time during which children are engaged and participating in academic endeavors. Research has shown that signs of attention and impulsivity can be detected as early as age 2.5 but continue to develop until reaching relative stability between ages 6 and 8 (Olson, Sameroff, Kerr, Lopez, & Wellman, 2005; Posner & Rothbart, 2000). Studies linking attention with later achievement are less common, but consistent evidence suggests that the ability to control and sustain attention as well as participate in classroom activities predicts achievement test scores and grades during preschool and the early elementary grades (Alexander, Entwisle, & Dauber, 1993; Raver, Smith-Donald, Hayes, & Jones, 2005). These attention skills, which are conceptually distinct from other types of interpersonal behaviors, are associated with later academic achievement, independent of initial cognitive ability (McClelland, Morrison, & Holmes, 2000; Yen, Konold, & McDermott, 2004) and of prior reading ability and current vocabulary (Howse, Lange, Farran, & Boyles, 2003). Examining attention separately from externalizing problems has clarified the role of each in achievement, suggesting that attention is more predictive of later achievement than more general problem behaviors (Barriga et al., 2002; Hinshaw, 1992; Konold & Pianta, 2005; Ladd, Birch, & Buhs, 1999; Normandeau & Guay, 1998; Trzesniewski, Moffitt, Caspi, Taylor, & Maughan, 2006; Duncan et. al, 2007, p. 1430). As mentioned in *Engaging and Re-Engaging Students in Learning at School* (2008), “Fredricks, Blumenfeld, and Paris (2004) conclude: Engagement is associated with positive academic outcomes, including achievement and persistence in school; and it is higher in classrooms with supportive teachers and peers, challenging and authentic tasks, opportunities for choice, and sufficient structure” (pg. 3).

Children learn in different ways. Therefore, when only one teaching method is used, and children do not have a choice about that method, many children may not achieve the learning objective. In order to ensure that all children learn a particular skill, a variety of approaches must be provided. When teachers provide purposefully planned and relevant opportunities from which students can choose, they are increasing possibilities for students to develop autonomy, self-reliance, and self-esteem as well as increasing the students’ ability to solve problems, think divergently, accept responsibility for their actions, and learn persistence and task completion (Grossman, 2007).

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

Goal AP-7 Children demonstrate initiative.

Goal AP-8 Children maintain attentiveness and focus.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

As Local Education Agencies embrace the NCSCOS, they will work to empower educators to use a variety of instructional approaches that address the diverse needs of their students. These efforts will be made to improve the academic performance of all students. The NCSCOS does not define these varied instructional practices. Nor does it define how students should approach the learning of these standards. However, the introductory sections of the NCSCOS documents encourage best practices and provide explanations of effective learning cultures. These descriptors bring clarity to possible ways to provide opportunities for students to exhibit these approaches to learning behaviors.

The instructional support components of the NCSCOS documents complement the standards and provide guidance to educators as they develop a desirable pedagogy that allows students to learn by taking risks and overcoming challenges to acquire new knowledge. For example, the preamble to the NC Essential Standards for K-2 Social Studies states that there are two primary purposes of social studies. “The first is to develop young people who are knowledgeable, critical, and capable of making informed decisions about the world and their place in it. The second purpose is to prepare young people to participate actively and responsibly in a culturally diverse, democratic, and increasingly interdependent world.” Therefore, you will find reference to skills such as independence, setting goals and demonstrating initiative within the introductory & supplemental materials of the NC Standard Course of Study documents, including the Common Core State Standards.

ENGAGEMENT IN SELF-SELECTED ACTIVITIES

| | | |
|-------------------------|---|---|
| UNDERSTANDING | Children understand that daily classroom routines provide opportunities for them to make choices of interest. | Children understand that making choices allows them to pursue their interests. |
| SKILLS | A. Wanders, examining many options for self-selected activities in the classroom environment, but does not settle with one particular choice. | B. Begins to make purposeful choices for self-selected activities that are highly engaging and begins to sustain engagement in a chosen activity. |
| PERFORMANCE DESCRIPTORS | <p>Felipe is in the block corner observing other children using file cards and markers to make road signs. He notices activity in the dramatic play center and moves to that area of the classroom. Felipe briefly interacts with the cash register and grocery props, but he decides to leave and go to the Art Center.</p> <p>In the Media Center, Abigail is given an opportunity to choose a book to be checked out. She walks from shelf to shelf and mimics the actions of peers by pulling the books off the shelves. Before Abigail takes an interest in any book, she notices other peers in a different location of the media center. Abigail drops a book on a table to migrate to that other area in the media center. Abigail repeats the action of pulling books from shelves, without selecting any particular book.</p> | <p>Aiden chooses to enter the Dramatic Play Center and stays there to explore the materials. He begins to remove items from the stove, the cupboard, etc., and piles them in the middle of the dramatic play table. Aiden explores the items, but he does not appear to be trying to accomplish a specific task.</p> <p>Diego chooses the Math Center and stays there to explore different materials. He selects the counting bears, pours them onto the table and arranges them in various ways.</p> |

ENGAGEMENT IN SELF-SELECTED ACTIVITIES

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| <p>Children understand that they can make a plan and accomplish a task of interest to them, even when there are other things going on around them.</p> | <p>Children understand that when they are working toward completion of a plan, there may be distractions and interruptions, but that their task will be there when they get back.</p> | <p>UNDERSTANDING</p> |
| <p>C. Sustains engagement in a self-selected activity, ignoring task-irrelevant information and low-level distractions from peers or other classroom activities.</p> | <p>D. Sustains engagement in self-selected activities, while increasingly resisting distractions. Resumes or re-engages in activities following interruptions.</p> | <p>SKILLS</p> |
| <p>Angel begins to build in the block corner. She removes a collection of blocks from the storage shelf and piles them near the foundation of her building. Angel proceeds to build a tall building until all of the chosen blocks are used, ignoring the various distractions of other children also building nearby.</p> <p>Brandon goes to the Art Center and chooses a large popsicle stick out of the bin. He doesn't stay to work in the Art Center but quickly takes the popsicle stick to the puppet corner and uses the popsicle stick as a puppet while performing a puppet show.</p> | <p>Diamond goes to the Bookmaking Center and selects various materials including paper, a stapler, and markers to make a book. Liam comes over to show Diamond his Lego® structure. After stopping to admire the Lego® structure, Diamond returns to making her book. But before the book is completed, the entire class is asked to stop what they are doing to go to lunch. After lunch, the teacher allows children to return to what they were doing, and Diamond returns to the Bookmaking Center and continues to work until her book is completed.</p> <p>Luis goes to the painting easel, produces a painting, and leaves it to dry. Later during a free choice time, Luis returns to the art center, takes the dried painting, and uses pieces from the collage box to further develop the design by gluing pieces onto the painting.</p> | <p>PERFORMANCE DESCRIPTORS</p> |

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SITUATION: *Engaging in Purposeful Choices*

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| Selecting Learning Target(s) | Understanding: Children understand that daily classroom routines provide opportunities for them to make choices of interest. | Understanding: Children understand that making choices allows them to pursue their interests. | Understanding: Children understand that they can make a plan and accomplish a task of interest to them, even when there are other things going on around them. | Understanding: Children understand that when they are working toward completion of a plan, there may be distractions and interruptions, but that their task will be there when they get back. |
| | A. Wanders, examining many options for self-selected activities in the classroom environment, but does not settle with one particular choice. | B. Begins to make purposeful choices for self-selected activities that are highly engaging, and begins to sustain engagement in a chosen activity. | C. Sustains engagement in a self-selected activity, ignoring task-irrelevant information and low-level distractions from peers or other classroom activities. | D. Sustains engagement in self-selected activities, while increasingly resisting distractions. Resumes or re-engages in activities following interruptions. |
| Identifying Opportunities for Eliciting Evidence of Learning | <p>Children demonstrate their ability to make purposeful choices when provided with opportunities to self-select tasks throughout the day. Observing children as they make choices in these situations can provide evidence of their engagement and focus. Throughout the day children may be observed:</p> <ul style="list-style-type: none"> • Choosing a standards-based, cross-curricular learning center or station based on interest • Selecting and using materials • Selecting a seat at lunch or during group time • Deciding to work independently, with a group or with a partner • Participating in an activity on the playground | | | |
| Eliciting Evidence of Learning | <p>Based on their interest, children choose from open-ended and meaningful standards-based learning centers/stations. Sufficient time is provided for children to explore the various learning areas, freely choose areas in which to work, and become invested in the activities, allowing for personal, authentic inquiry and ownership.</p> <p>These standards-based learning centers or stations could include: blocks, creative arts, drama, math, puzzles and games, reading, science, and writing. Each learning area offers intentionally selected materials that are easily available for children, such as: art supplies (e.g., variety of paper, drawing and collage materials, paint, play dough), various levels and types of books, building materials and accessories, manipulatives (e.g., counters, shapes, letters), writing supplies (e.g., assortment of paper, pencils, markers), and creative and dramatic play items or unit-themed items (e.g., menus, telephones, cash registers, keyboards). Each inviting learning area is appropriate for young learners and offers carefully selected materials that build on student strengths and interests.</p> <p>As children explore various learning area options, the teacher moves among the children observing their ability to choose and sustain a choice. It will take several observations for the teacher to have enough evidence to feel confident about a pattern of behavior for the child.</p> | | | |
| Eliciting Evidence of Learning: Suggested Probes | <p>A. After several days of the teacher modeling the routine of selecting a learning station, a child continues to walk around the room from place to place not making a decision to remain.</p> <p style="padding-left: 40px;">T: I see you are walking around the room, have you selected a learning station?</p> <p style="padding-left: 40px;">T: I see you have not selected a place to work, do you need help?</p> <p>B. After several days of providing a time during the day for children to choose a learning area and work, a child is observed multiple times quickly making a decision but engages in each decision made on a minimal basis.</p> <p style="padding-left: 40px;">T: With so many learning station choices, why did you choose this work area?</p> <p style="padding-left: 40px;">T: I noticed you quickly selected this learning station, can you tell me why?</p> <p style="padding-left: 40px;">T: What do or did you like about this learning area?</p> <p style="padding-left: 40px;">T: What made you leave?</p> <p style="padding-left: 40px;">T: I see that you chose X choice. Tell me what you are thinking of working on there.</p> | | | |

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| Eliciting Evidence of Learning: Suggested Probes | <p>C. After the teacher helps children know the routine of returning to a learning area after an activity and making a choice to work on something of interest until others are finished, a child is observed doing so during a variety of transitions.</p> <p>After lunch, a child moves quickly to a learning station where he/she was previously engaged and continues to work where he/she left off.</p> <p>After completing an assigned task, a child knows to get a familiar book and reread until the others at the table have completed the task.</p> <p>T: Please take your reading materials back to your desk and return to your morning activity center. After circle time, a child knows to return to his learning space and continue with a morning activity of choice until the next transition occurs. After an interruption such as a fire drill, lunch, or recess, ask the students to return to their learning station work area.</p> <p>T: Now that we have returned to the classroom, please go to your selected learning station and complete your work.</p> <p>D. No probe is needed if the child returns to the previous task after an interruption. The teacher's comment to the child who returns to the previous task could serve as a probe to another child who overhears it.</p> <p>T: Wesley, thanks for going right back to the writing center! I know you were working on your Thank You letter before the fire drill. Show me what you have left to do.</p> |
| Eliciting Evidence of Learning: Probes to Avoid | <ul style="list-style-type: none"> • "Maybe you need to stay here and finish your painting, since many artists fill their whole canvas. Possibly add some more colors." • "I think you should go to the writing center today." • "Stay here and finish this puzzle." • "Please go back to the block center and finish building the block tower with Jeremy." |
| Interpreting the Evidence | <p>Observation: During center time the teacher observes a child wandering about the room looking at several things, but not selecting a center or becoming engaged. The teacher invites the child to the block center and attempts to engage her by asking her questions like, "What do you like to build?" and "How can you use the blocks to make it?" The child engages in building and becomes focused on creating a house. She sustains her attention to the task briefly, but gets distracted by other children who are next to the block center in the dramatic play area. She gets up and goes to them instead of continuing to build. The teacher attempts to re-engage the child in the block center, but the child remains with the other students a few moments, and then moves on again.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: A. Wanders, examining many options for self-selected activities in the classroom environment, but does not settle with one particular choice. <p>Observation: The teacher observes a child scanning the learning center choices in the classroom. The child keeps walking around the room, but after a probe from the teacher the child chooses to play in the block center. He begins to build a structure, but leaves the center after a few minutes when he notices another center across the room. The child engages in the new center for several minutes as well, but is distracted by interruptions.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: B. Begins to make purposeful choices for self-selected activities that are highly engaging, and begins to sustain engagement in a chosen activity. <p>Observation: The teacher observes a child choose the block center. The child removes a collection of blocks from the shelf and piles them near the foundation. The child proceeds to build until all the chosen blocks are used and ignores the possible distractions of other children also building nearby.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: C. Sustains engagement in a self-selected activity, ignoring task-irrelevant information and low-level distractions from peers or other classroom activities. |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |

Perseverance in Assigned Activities

DOMAIN: Approaches to Learning

CLAIM: Students can maintain focus and persevere to accomplish collaborative activities whether those activities are chosen by them, or assigned to them.

RATIONALE

Attention-related skills, such as activity persistence and self-regulation, are expected to increase the time during which children are engaged and participating in academic endeavors. Research has shown that signs of attention and impulsivity can be detected as early as age 2.5 but continue to develop until reaching relative stability between ages 6 and 8 (Olson, Sameroff, Kerr, Lopez & Wellman, 2005; Posner & Rothbart, 2000). Studies linking attention with later achievement are less common, but consistent evidence suggests that the ability to control and sustain attention, as well as participate in classroom activities, predicts achievement test scores and grades during preschool and the early elementary grades (Alexander, Entwisle & Dauber, 1993; Raver, Smith-Donald, Hayes & Jones, 2005). These attention skills, which are conceptually distinct from other types of interpersonal behaviors, are associated with later academic achievement, independent of initial cognitive ability (McClelland, Morrison & Holmes, 2000; Yen, Konold & McDermott, 2004) and of prior reading ability and current vocabulary (Howse, Lange, Farran & Boyles, 2003). Examining attention separately from externalizing problems has clarified the role of each in achievement, suggesting that attention is more predictive of later achievement than more general problem behaviors (Barriga et al., 2002; Hinshaw, 1992; Konold & Pianta, 2005; Ladd, Birch & Buhs, 1999; Normandeau & Guay, 1998; Trzesniewski, Moffitt, Caspi, Taylor & Maughan, 2006; Duncan et al., 2007, p. 1430). Fredricks, Blumenfeld & Paris (p. 59, 2004) conclude: "Engagement is associated with positive academic outcomes, including achievement and persistence in school; and it is higher in classrooms with supportive teachers and peers, challenging and authentic activities, opportunities for choice, and sufficient structure."

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

AP-7 Children demonstrate initiative

AP-8 Children maintain attentiveness and focus

NC Standard Course of Study (Common Core State Standards & Essential Standards)

As Local Education Agencies embrace the NCSCOS, they will work to empower educators to use a variety of instructional approaches that address the diverse needs of their students. These efforts will be made to improve the academic performance of all students. The NCSCOS does not define these varied instructional practices. Nor does it define how students should approach the learning of these standards. However, the introductory sections of the NCSCOS documents encourage best practices and provide explanations of effective learning cultures. These descriptors bring clarity to possible ways to provide opportunities for students to exhibit these approaches to learning behaviors.

The instructional support components of the NCSCOS documents compliment the standards and provide guidance to educators as they develop a desirable pedagogy that allows students to learn by taking risk and overcoming challenges to acquire new knowledge. For example, the introduction to the NC Essential Standards for K-2 Social Studies states that there are two primary purposes of social studies. "The first is to develop young people who are knowledgeable, critical, and capable of making informed decisions about the world and their place in it. The second purpose is to prepare young people to participate actively and responsibly in a culturally diverse, democratic, and increasingly interdependent world." Therefore, you will find reference to skills such as independence, setting goals and demonstrating initiative within the introductory & supplemental materials of the NC Standard Course of Study documents, including the Common Core State Standards.

PERSEVERANCE IN ASSIGNED ACTIVITIES

UNDERSTANDING: Children understand that completing assigned activities is a part of the daily routine of school.

| SKILLS | A. When assigned an activity, focuses on various other distractions that are not relevant to the assigned activity. | B. When assigned an activity, ignores some distractions, begins focusing on the on-task behavior of other children, and mimics some of the strategies used by the other children. | C. Uses strategies provided or prompted by the teacher, while resisting distractions and attempting to complete an assigned activity. | D. Uses learned strategies with some support from the teacher, while sustaining attention to accomplish assigned activities. |
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| PERFORMANCE DESCRIPTORS | <p>The teacher has given directions to the entire class for an activity involving a project on castles. Marquise is very interested in castles, but he does not engage in the assigned castle activity because he also is interested in the block corner, and his attention is on playing with the blocks. The teacher talks to Marquise and reminds him that the blocks will still be there for him to play with after he finishes the castle activity, but Marquise does not stop playing with the blocks.</p> <p>The class is having their first session with a newly introduced math manipulative for their study of measurement. Amar is distracted by his new light-up tennis shoes, and keeps stomping his feet to make them flicker. Ms. Herr reminds Amar of the activity with the manipulatives, but he continues to be distracted by his shoes.</p> <p>The class visits the media center to look for books that support an upcoming writing project. The teacher provides all of the students with a checklist to help them select high-quality resources. First, Aesha goes to the water fountain but is redirected to the informational texts by the teacher. Then, Aesha stops to read the posters on the wall and decides to discuss them with her nearby classmates. The teacher provides redirection to assist Aesha for returning to the assigned task. Aesha heads to the pencil sharpener, stopping by the puppet corner on her way. By the time the class is ready to leave the media center, Aesha has not selected books for her upcoming project.</p> | <p>As part of a study of "Our Families," the teacher has asked each child to draw, paint, or color a picture that includes all of their family members. Amy gets paper and a box of markers from the supply shelf, but as she takes the markers out of the box, she lines up the markers and begins switching the caps. Amy notices that several of her friends have begun to make pictures of their families, and she begins to work on her own picture of her family.</p> <p>The teacher has assigned an independent task for children to do while seated together at tables. Catherine is focused on finishing a book she's been reading and does not immediately engage in the task. The teacher draws Catherine's attention to other children's work behavior and encourages her to work on the task, "just like Grace is doing." After Catherine's attention has been drawn to the other students, she also gets crayons and begins to color.</p> <p>As the teacher explains that she is going to show a video about math concepts found in nature, she asks the children to gather their math journals from the bookshelf and find a spot best for viewing the screen. She also explains that she would like the students to write down or draw anything that they see in the video that connects to what they discussed on this subject earlier in the week. The children in the back of the class pick out their materials and carry them to a spot closer to the screen. Leticia initially stays in her seat chatting with her neighbor, but then gets her notebook and moves to the front of the room with her materials after she sees her classmates doing so.</p> | <p>The class is working in four collaborative groups to produce murals about seasons. The teacher has given each "season group" a stack of magazines and asked them to find pictures that depict their season, cut out the pictures, and place them on their mural. Les gets interested in an advertisement for a car and is not finding pictures for his group. The class has an agreed-upon signal to help each other stay focused, which is to say, "Engine, engine, on the track." When the teacher says this to Les, he starts flipping pages again to find the pictures they need.</p> <p>Rather than working on the assigned activity, Raha is sitting at the computer pretending to type. In order to help Raha proceed with the task, Ms. Berry provides Raha with laminated picture cues that show the procedure she would like Raha to follow when searching for images. Raha takes the picture cues with her and leaves for the computer lab to begin her work.</p> <p>During whole group instruction, Mr. Carter assigns an individual activity related to the class's current mapping unit to be completed when group time is over. Instead of starting her assignment, Olivia stops by another student's desk to chat. Mr. Carter gently reminds Olivia of the assigned activity, and suggests that she refer to the instructions on the chart he has made for this activity. Olivia looks at the chart and then goes to her seat and begins working on the assignment.</p> | <p>Leland likes to finish projects in one sitting, so he has learned that it is better for him to get his materials before he begins working. The teacher knows how well this strategy works for Leland, so as Leland leaves group time to begin an individual activity, the teacher says to him, "What are you going to get at the supply shelf on the way to your seat?"</p> <p>Raul pushes away from his desk instead of working on the math word problems the class has been assigned. The teacher asks Raul what he can do to help himself stay focused. Raul decides to look at a number line and is able to get back to his work and complete all of the word problems that were assigned.</p> <p>While working to incorporate their daily classroom weather report into a school-wide podcast, Aarav's group is having difficulty reaching a consensus. The teacher asks Aarav if he remembers any strategies that helped him work through challenging group situations in the past. Aarav makes a copy of a chart format he has used before, which enables him to keep track of the ideas presented, helping the group move ahead by selecting roles and responsibilities, and helping to keep the group focused until the project is completed.</p> |

PERSEVERANCE IN ASSIGNED ACTIVITIES CONTINUED ON NEXT PAGE

UNDERSTANDING: Children understand that they can use learned strategies to make a plan and to accomplish an assigned activity.

| E. Sometimes uses learned strategies to accomplish an activity. | F. Consistently uses learned strategies and perseveres to accomplish assigned activities. | G. Formulates a plan and perseveres in activities that require multiple steps, occur over multiple sessions, or may be more open-ended. | SKILLS |
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| <p>The class has been studying nonstandard measurement, using objects laid end-to-end to measure other objects. At first, Lily Grace uses plastic counting bears and makes sure they are touching end-to-end like the teacher showed them yesterday. However, when she later uses the bears to measure, she is distracted by the shape and color of the bears and begins sorting the bears by color and size.</p> <p>Kaj is excited about the upcoming writing contest. Her teacher has reminded the students to organize their work to stay on task. Even though Kaj sometimes jumps ahead and leaves out important steps when she is writing, she remembers that in the writer's workshop, the teacher showed them how to organize by using the stages of the writing process. Using that strategy, Kaj selects a notebook and some drawing paper to help her organize her work so that she can stay focused on the assigned task. After mapping out her story in her notebook, she takes the drawing paper to the computer station and begins to collect information by recording interesting ideas and drawing pictures of images that inspire her.</p> <p>Eduardo's small group is assigned the task of creating a map of the nature trail on the school grounds. Eduardo helps the group think about the necessary steps and a timeline to complete the assignment. On the first and second day, Eduardo checks off his completed tasks on the group's timeline. However, by day three, Eduardo doesn't use the timeline and instead misses important design details.</p> | <p>After beginning a writing assignment, Flora completes one sentence but stops writing and puts her head down on her arms. But instead of giving up, Flora remembers the teacher saying that it helps to go to the Word Wall first and copy some of the words she might need. She used the strategy the previous week to get started on another writing assignment, so she gets a piece of paper and a pencil and heads for the Word Wall again.</p> <p>As Faye begins to write longer stories, she uses a strategy to check her work as she writes and to keep on track. For each paragraph in the story that she completes, Faye uses the teacher's chart to see that the paragraph has the correct structure before she moves on to the next paragraph. This review strategy helps her persevere and move on to writing the next part of the story.</p> <p>The class has been assigned projects on habitats. Tito has chosen to make a collage about the rain forest. Tito paints a background for the collage, showing the plant life of the rain forest. Although Tito is eager to be the first one finished, he has learned from previous projects that he has to be patient while a painting dries, and that if he keeps working while he is waiting, it will be easier to complete the project. While the painting is drying, he begins to look through magazines for pictures of rainforest animals that he can cut out and glue onto his collage.</p> | <p>The teacher has assigned an open-ended activity to make something in the art center as a thank you for the volunteer grandparents. Dominique has learned that making a design or a map of what he wants to do will help him complete challenging activities. He designs a thank-you card, drawing a picture of what the cover will look like, and a separate picture of what the inside will be. Dominique places the design at his workspace in the art center, gathers the necessary materials, and works in a focused manner to complete the card.</p> <p>As an extension of a science lesson, students are provided materials to build a bridge that will withstand the weight of three Matchbox cars. CJ examines her materials and tests the strength of various combinations of those materials before she starts building. Although her bridge falls many times during the stages of building, she continues to build until she completes a structure that she believes will withstand the weight of the three cars.</p> <p>Mr. Ransford provides a menu of various options for students to demonstrate what they have learned during their state of matter unit. Hadiza selects a diagram project, sketches out a draft of what her diagram will look like, and then decides to use a computer application to create it.</p> | <p style="writing-mode: vertical-rl; transform: rotate(180deg);">PERFORMANCE DESCRIPTORS</p> |

PERSEVERANCE IN ASSIGNED ACTIVITIES CONTINUED FROM PREVIOUS PAGE

UNDERSTANDING: Children understand that they can adapt strategies to accomplish activities in a variety of contexts.

| SKILLS | H. Uses a learned strategy to accomplish a familiar activity in a new context. | I. Adapts strategies to accomplish activities that are more sophisticated or in a different context. |
|-------------------------|--|---|
| PERFORMANCE DESCRIPTORS | <p>During classroom work, a child uses noise-cancelling headphones to limit distractions. During a loud school assembly, the child asks the teacher if he can go back to the classroom and get the headphones to wear during the program.</p> <p>While working on a science unit about insects, the students keep a daily journal of observations of insects indoors and outdoors while they are at school. Later in the year, during a social studies unit on protecting the environment, Gabrielle begins to keep a journal to help her record observations about the school’s recycling program.</p> <p>The teacher introduces the students to a new website for creating digital information flyers. She tells the students that they will build a digital flyer about a famous historical event. Although Ira has not created a flyer online before, he remembers that when the class created a newsletter, they had a plan for the order of collecting material, writing articles, and editing them to fit the space available in the newsletter. He gets a copy of the newsletter plan and refers to it as a way to help him complete the new activity.</p> | <p>Fatima enjoys listening to Mrs. Romig read books. It helps Fatima remember the details of the story when Mrs. Romig uses silly voices and big hand gestures. When Mrs. Romig asks Fatima questions about the characters in the story, Fatima likes to answer the questions by mimicking Mrs. Romig’s silly voices and even her gestures. During science instruction, Mrs. Romig explains to the class that they will compare different types of dogs. Fatima adapts Mrs. Romig’s strategy and creates her own silly voices and gestures to help her remember what makes each dog special.</p> <p>Whenever the class is working to solve a challenging math problem, Ms. Gordon reminds them to sing a song that she has taught them with the steps needed for solving math problems. This strategy helps Leslie focus on the math problem and solve it step by step. During spelling instruction, when Leslie encounters a challenging word, she decides to make up her own song in order to help remember how to spell the word.</p> <p>During language arts instruction, Sydney’s teacher encourages students to use stories from their own lives to help them connect to the text they are reading. Sydney understands that she can adapt this language arts strategy to other subjects. So when they are studying recycling, Sydney records in her science journal how much is thrown away at home that could be recycled, and connects it to the landfill problem she’s been reading about.</p> |

RESOURCES USED

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SITUATION: *Persevering Through an Investigation*

| | | | | | | | | | |
|--------------------------------|---|---|---|--|--|---|---|--|--|
| Selecting Learning Target(s) | Understanding: Children understand that completing assigned activities is a part of the daily routine of school. | | | | Understanding: Children understand that they can use learned strategies to make a plan and to accomplish an assigned activity. | | | Understanding: Children understand that they can adapt strategies to accomplish activities in a variety of contexts. | |
| | A. When assigned an activity, focuses on various other distractions that are not relevant to the assigned activity. | B. When assigned an activity, ignores some distractions, begins focusing on the on-task behavior of other children, and mimics some of the strategies used by the other children. | C. Uses strategies provided or prompted by the teacher, while resisting distractions and attempting to complete an assigned activity. | D. Uses learned strategies with some support from the teacher, while sustaining attention to accomplish assigned activities. | E. Sometimes uses learned strategies to accomplish an activity. | F. Consistently uses learned strategies and perseveres to accomplish assigned activities. | G. Formulates a plan and perseveres in activities that require multiple steps, occur over multiple sessions, or may be more open-ended. | H. Uses a learned strategy to accomplish a familiar activity in a new context. | I. Adapts strategies to accomplish activities that are more sophisticated or in a different context. |
| Preparation | <ul style="list-style-type: none"> Any necessary science-related investigative tools (e.g., microscope, magnifying glass, magnets, collection of environmental objects) Content-related materials for introducing and demonstrating the topic of study A risk-free classroom environment that allows for teacher-student or student-to-student interaction through questioning, guided practice, and reflection | | | | | | | | |
| General Description | The teacher presents an assigned inquiry-based activity and purposefully observes what children do to persevere with the assigned activity. Then, the teacher provides an opportunity for the students to reflect on strategies used to persevere throughout the investigation. | | | | | | | | |
| Eliciting Evidence of Learning | <p>The teacher sets the purpose for the activity by providing information about the following:</p> <ol style="list-style-type: none"> Content-specific information (e.g., animals, habitats) Information about the use of materials (e.g., "On your tables, you will find ...") Information related to the process of working independently or working in a group to complete the assigned activity (e.g., "As you think about getting started ..."; "while you are working, you may consider..."; "when you complete the activity, you may choose to ...") <p>The teacher then provides independent work time for the students to use and explore the materials to make connections with the topic of study. As the students work, the teacher facilitates their learning by:</p> <ul style="list-style-type: none"> Observing how students interact with the materials Using questions and probes to support increases in content knowledge Conferring with students to help them monitor their own learning Continuing observation for perseverance <p>Then, time is provided for the students to reflect on how they persevered throughout the activity and to share findings, discoveries, and processes that were helpful for completing the assigned activity.</p> <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> What might help you or your group to get started? What could you do first? Tell me more about your progress on this activity. What have you used before that you can use today to help you? Was there something that you did to help you complete the activity? What questions would you like to ask others that may help you next time? Look at your visual checklist/visual cues; what do you need to do next? <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> Why aren't you working? Why are you asking someone for help with this activity? Why are you not able to complete the activity? | | | | | | | | |

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| Interpreting the Evidence | <p>Observation: Evan is responsible for examining a rock collection and categorizing the rocks with like attributes. Instead of examining the rocks’ features and sorting them, Evan begins to line them up and pretends they are race cars and manipulates them by sliding them across the table to see which rock slides the farthest. He says, “And the winner is the green spotted rock.” His teacher asks, “Do you notice something about the green spotted rock that is similar to another rock in the collection?” Evan responds with “no,” and he places two more rocks on the table to start a new race.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: A. When assigned an activity, focuses on various other distractions that are not relevant to the assigned activity. <p>Observation: The students were provided materials and written instructions to build a three-dimensional diorama of the science concept they’ve been discussing during their thematic unit. Jackson sorts through his materials – seemingly without purpose – while watching how the other students are arranging their dioramas. He has learned to ask the teacher for help instead of giving up. The teacher provides a model for him, saying, “You always have great ideas; have you thought about asking a peer what helped them get started?”</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: C. Uses strategies provided or prompted by the teacher, while resisting distractions and attempting to complete an assigned activity. <p>Observation: Kaj is excited about the upcoming science fair writing contest. Her teacher has reminded the students to organize their work to stay on task. Even though Kaj sometimes jumps ahead and leaves out important steps when she is writing, she remembers that in writer’s workshop the teacher has shown them how to organize by using the stages of the writing process. Using that strategy, Kaj selects a notebook and some drawing paper to help her organize her work, so that she can stay focused on the assigned task. After mapping out her story in her notebook, she takes the drawing paper to the computer station and begins to collect information by recording interesting ideas and drawing pictures of images that inspire her.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: E. Sometimes uses learned strategies to accomplish an activity independently. <p>Observation: The class has been assigned to complete projects about habitats. Tito has chosen to make a collage on the rainforest. Tito paints a background for the collage, showing the plant life of the rain forest. Although Tito is eager to be the first one finished, he has learned from previous projects that he has to be patient while a painting dries, and that if he keeps working while he is waiting, it will be easier to complete the project. While the painting is drying, he begins to look through magazines to cut out pictures of animals that live in the rainforest.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: F. Consistently uses learned strategies and perseveres to accomplish assigned activities. <p>Observation: Fatima enjoys listening to Mrs. Romig read books. It helps Fatima remember the details of the story when Mrs. Romig uses silly voices and big hand gestures. When Mrs. Romig asks Fatima questions about the characters in the story, Fatima likes to answer the questions by mimicking Mrs. Romig’s silly voices and even her gestures. During science instruction, Mrs. Romig explains to the class that they will compare different types of dogs. Fatima adapts Mrs. Romig’s strategy and creates her own silly voices and gestures to help her remember what makes each dog special.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: I. Adapts strategies to accomplish activities that are more sophisticated or in a different context. |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn’t met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |
| Additional Opportunities | <p>There are many opportunities throughout the day for teachers to elicit evidences of learning. Students demonstrate perseverance in individually assigned activities across content areas in a variety of ways, such as: listening to a book read aloud, solving a problem, engaging in a writing activity, working on individual projects, creating artwork, using technology to perform an activity, working outdoors in the school garden, participating in a movement/physical activity, etc.</p> |

Object Counting

DOMAIN: Cognitive Development

CLAIM: Students can use content-independent abilities and strategies as well as content-specific skills, processes, and approaches to solve problems and acquire information.

RATIONALE

Children need to develop foundational concepts, such as knowledge of numbers, in order to build future math and reading skills. The ability to understand number names, the counting sequence, and that counting tells the number of objects, are essential understandings needed in the early developmental years. Understanding counting is more than being able to count to 100. Counting is a complex concept. Children move through progressive mathematical stages in order to understand that quantities remain the same when they are rearranged; they learn to be consistent and accurate and to see relationships between numbers. Research shows that general math achievement measured around kindergarten entry has been found to be highly predictive of subsequent mathematics achievement, measured around third grade (Duncan et al., 2007; Claessens, Duncan, & Engel, 2009; Claessens & Engel, 2013). Key advocacy groups, such as the National Association for the Education of Young Children (NAEYC) and the National Council of Teachers of Mathematics (NCTM), have issued position statements on the importance of early mathematics, arguing that mathematics education for 3- to 6-year olds is essential to promoting future mathematics achievement (NAEYC & NCTM, 2002). Children's ability in mathematics has also been found to affect reading ability. "Most surprising is that it also predicts later reading achievement even better than early reading skills. In fact, research shows that doing more mathematics increases oral language abilities, even when measured during the following school year. These include vocabulary, inference, independence, and grammatical complexity" (Clements & Sarama, 2013).

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

CD-10 Children show understanding of numbers and quantities during play and other activities.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality.

K.CC.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.

OBJECT COUNTING

UNDERSTANDING: Recognizes that counting tells the number of objects*.

| SKILLS | A. Says or indicates counting words out of sequence while pointing to objects. | B. Says or indicates counting words in the correct sequence without keeping track of objects counted (counts with one-to-one correspondence and one-to-one tagging). | C. Says or indicates counting words in the correct sequence while keeping track of objects counted (counts with one-to-one correspondence and one-to-one tagging). | D. States or indicates that the last number counted is the total quantity. (Cardinality) |
|-------------------------|--|---|---|--|
| PERFORMANCE DESCRIPTORS | <p>Liam is counting his five crayons before he begins his art project. He touches two crayons as he says the counting words out loud, "one, three, six".</p> <p>During snack time, the teacher notices that Zahir has lined up four crackers. The teacher asks Zahir, "How many crackers do you have?" Zahir moves the first cracker over and says "one." He moves the second cracker over and says, "two." He then moves the third AND fourth crackers over and says, "five."</p> | <p>There are seven chrysalises hanging from branches placed in the butterfly pavilion. Isabella is looking at the butterfly pavilion and the teacher asks, "How many chrysalises are in the branches?" As Isabella points to some chrysalises, she says, "One, two, three, four." The teacher asks, "Did you count all of the chrysalises?" Isabella says, "Yes."</p> <p>Davis has 10 animal crackers on a napkin. He touches each animal cracker while saying the counting words in the correct sequence. Davis counts three of the crackers a second time, finishing his counting with, "11, 12, 13."</p> | <p>Mr. Martinez says, "Olivia, please count the number of beanbags for your team." Olivia moves one beanbag at a time and says, "One, two, three, four, five, six, seven, eight," without counting any of them twice or missing any.</p> <p>In the hall outside the cafeteria, Ms. Bandini pointed out the new poster showing six fruits. MacKensie said, "Wow, one, two, three, four, five, six! I love fruit!"</p> <p>NOTE: The child could visually track the objects without pointing. If the child correctly counts all of the objects presented, his/her ability to keep track may be inferred.</p> | <p>Mr. Martinez says, "Olivia, please count the number of beanbags for your team." Olivia counts the beanbags saying, "One, two, three, four, five, six, seven, eight" without counting any individual beanbag twice or missing any. Mr. Martinez then asks Olivia, "How many beanbags do you have for your team?" Olivia says, "Eight," without having to recount the beanbags.</p> |

* The **amount** and **arrangement** of objects vary according to the student's needs. Therefore, it is possible that a student may demonstrate different skills based on the amounts and/or arrangements used. It is important to record these two factors with the documentation. (i.e. Carlos can count ten objects and keep track of them without missing any or counting any twice (one-to-one correspondence), he has a current learning status of skill "C" up to ten. When Carlos is working with a set of five objects, he can state that the last number counted is the total quantity, he can state that he has the same total quantity when asked, if none have been removed or added and he can even indicate that he still has five after the objects have been rearranged. Carlos has a current learning status of skill "F" for a quantity of five objects at the same time as he has a current learning status of "C" for a quantity of ten.)

OBJECT COUNTING

UNDERSTANDING: Recognizes that counting tells the number of objects*.

| E. States or indicates that the same total quantity of previously counted objects does not change unless objects are added or removed. | F. States or indicates that the same total quantity of previously counted objects does not change when the objects are rearranged (conservation). | G. Continues the counting sequence automatically when ONE object is added to the set. | H. Continues the counting sequence automatically when MORE THAN ONE object is added to the set. | SKILLS |
|--|--|--|---|--------------------------------|
| <p>At the Art Center, Patrick gets and counts seven markers. Mrs. Sims asks Patrick, "How many markers did you count?" Patrick says "Seven. See. One, two, three, four, five, six, seven, eight." because he counts one of the markers twice. "That's not right! I should have seven!" Patrick recounts, "One, two, three, four, five, six, seven. That's right, seven."</p> | <p>During snack time, Chandler counts out some animal crackers and places them on his plate. Miguel asks, "How many crackers are on your plate?" Chandler answers, "Eight." Chandler then accidentally turns over his plate and the animal crackers are arranged differently on the table. Miguel says, "That looks like a lot more crackers! How many do you have now?" Chandler says, "I still have eight."</p> <p>Ben and Davion are playing a card game. Ben ask Davion, "How many cards do you have?" Davion responds by counting, "One, two, three, four, five, six. I have six cards." Davion drops the six cards. When Ben asks, "How many cards do you have now?" Davion replies, "I still have six cards."</p> | <p>Brittany and Mario have jobs as cashiers in their class market. Brittany accurately counts the pennies in the cash register and tells Mario, "We have 12 pennies." Mario sees an extra penny on the floor, picks it up, hands it to Brittany, who says, "Now we have 13 pennies!"</p> <p>The teacher holds up the Compliment Jar filled with cubes, one cube for every compliment the class receives. She reminds the class, "Yesterday we counted eight cubes in the jar". She asks Chloe, "If I get one more cube for the compliment we just received and put that cube in the jar, how many cubes will there be?" Chloe pretends that her hand is the Compliment Jar and mimics putting another cube in, saying, "Eiiiggghhhttt and now nine."</p> | <p>Sarah and Zola are playing a Partner Plus Counting Game. Sarah rolls a six with her die; counts out six counting bears; and places them on the game board. Sarah states, "We have six bears." Zola rolls a four; picks up four counting bears; and adds them to the game board and says, "Now there are ten bears."</p> <p><i>* Zola might roll a four and say, "Seven, eight, nine, ten," as she places each bear on the game board. "Now we have ten bears!"</i></p> | <p>PERFORMANCE DESCRIPTORS</p> |

* The **amount** and **arrangement** of objects vary according to the student's needs. Therefore, it is possible that a student may demonstrate different skills based on the amounts and/or arrangements used. It is important to record these two factors with the documentation. (i.e. Carlos can count ten objects and keep track of them without missing any or counting any twice (one-to-one correspondence), he has a current learning status of skill "C" up to ten. When Carlos is working with a set of five objects, he can state that the last number counted is the total quantity, he can state that he has the same total quantity when asked, if none have been removed or added and he can even indicate that he still has five after the objects have been rearranged. Carlos has a current learning status of skill "F" for a quantity of five objects at the same time as he has a current learning status of "C" for a quantity of ten.)

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SITUATION: *Counting Throughout the Day*

| Understanding: Recognizes that counting tells the number of objects*. | | | | | | |
|---|--|--|--|--|--|---|
| Selecting Learning Target(s) | A. Says or indicates counting words out of sequence while pointing to objects. | B. Says or indicates counting words in the correct sequence without keeping track of objects counted (counts with one-to-one correspondence and one-to-one tagging). | C. Says or indicates counting words in the correct sequence while keeping track of objects counted (counts with one-to-one correspondence and one-to-one tagging). | D. States or indicates that the last number counted is the total quantity. (Cardinality) | E. States or indicates that the same total quantity of previously counted objects does not change unless objects are added or removed. | F. States or indicates that the same total quantity of previously counted objects does not change when the objects are rearranged (conservation). |
| | <p>* The amount and arrangement of objects vary according to the student’s needs. Therefore, it is possible that a student may demonstrate different skills based on the amounts and/or arrangements used. It is important to record these two factors with the documentation. (i.e. Carlos can count ten objects and keep track of them without missing any or counting any twice (one-to-one correspondence), he has a current learning status of skill “C” up to ten. When Carlos is working with a set of five objects, he can state that the last number counted is the total quantity, he can state that he has the same total quantity when asked, if none have been removed or added and he can even indicate that he still has five after the objects have been rearranged. Carlos has a current learning status of skill “F” for a quantity of five objects at the same time as he has a current learning status of “C” for a quantity of ten.)</p> | | | | | |
| Identifying Opportunities for Eliciting Evidence of Learning | <p>When given the opportunity to interact with a variety of objects throughout the day, children often count. For instance, children may count to see how many classmates are present, how many letters are in a name, how many children lined up, how many names are next to a menu choice for lunch, how many crackers for snack, how many pips are on a die, or how many objects are in a container. This counting sometimes requires action on the teacher’s part to intentionally initiate a counting experience (e.g., “I wonder how many letters are in your name?”). As children count to determine “how many,” the teacher uses probes in an effort to learn about the students’ understanding of counting.</p> | | | | | |
| Eliciting Evidence of Learning | <p>As children explore various math manipulatives, the teacher moves among the children, observing them working with the objects. The teacher pays particular attention to children who are counting the objects or invites children to count various objects (e.g., “How many blue ones do you have?”), and poses various questions and makes comments about the collections the children are counting (e.g., “How many buttons do you have?” or “If we moved your cubes around, I wonder how many you would have?”).</p> <p>Suggested Probes:</p> <ul style="list-style-type: none"> • “Count out loud for me so I can hear your thinking.” • “This time, point as you count.” • “How many (name of object) do you have?” • “If you counted them again, how many would you have?” • “Are you sure?” <p>Probes to Avoid:</p> <ul style="list-style-type: none"> • “When you count, be very careful not to miss any.” • “Line them up like this to count.” Or “When you count, move them one by one so you don’t count something twice.” • Stating, “You have four, right?” after a child counts a set of four, “one...two... three... four.” • “You counted eleven cubes. So, if I counted them again, it would still be eleven. Right?” | | | | | |
| Interpreting the Evidence | <p>Observation: Jonah accurately counts several collections of six objects or fewer while counting in the correct sequence, keeping track of the objects, and knowing that the last number stated represents the quantity counted. When there are seven or more, he loses track each time, counting objects multiple times.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: D. States or indicates that the last number counted is the total quantity. (Cardinality) NOTE: Teacher should make a note to indicate things such as, “Child consistently counted 6 or fewer objects.” <p>Observation: The teacher uses a verbal probe with Samira, asking, “Do you think there would still be eleven objects if I counted them?” Without hesitation, Samira responds, “Yes! Because that’s how many there are.”</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: E. States or indicates the same total quantity of previously counted objects does not change unless objects are added or removed. | | | | | |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn’t met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> | | | | | |

SITUATION: *How Many are Here Today?*

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|---|---|--|--|--|--|
| Selecting Learning Target(s) | Understanding: Recognizes that counting tells the number of objects*. | | | | |
| | <p>A. Says or indicates counting words out of sequence while pointing to objects.</p> | <p>B. Says or indicates counting words in the correct sequence without keeping track of objects counted (counts with one-to-one correspondence and one-to-one tagging).</p> | <p>C. Says or indicates counting words in the correct sequence while keeping track of objects counted (counts with one-to-one correspondence and one-to-one tagging).</p> | <p>D. States or indicates that the last number counted is the total quantity. (Cardinality)</p> | <p>E. States or indicates that the same total quantity of previously counted objects does not change unless objects are added or removed.</p> |
| <p>* The amount and arrangement of objects vary according to the student’s needs. Therefore, it is possible that a student may demonstrate different skills based on the amounts and/or arrangements used. It is important to record these two factors with the documentation. (i.e. Carlos can count ten objects and keep track of them without missing any or counting any twice (one-to-one correspondence), he has a current learning status of skill “C” up to ten. When Carlos is working with a set of five objects, he can state that the last number counted is the total quantity, he can state that he has the same total quantity when asked, if none have been removed or added and he can even indicate that he still has five after the objects have been rearranged. Carlos has a current learning status of skill “F” for a quantity of five objects at the same time as he has a current learning status of “C” for a quantity of ten.)</p> | | | | | |
| General Description | <p>In a small or large group setting, children are invited to count the number of children, boys, girls, and other types of categories (e.g., color of shirt, type of shoes, type of lunch choice). As children count the various groups, the teacher carefully observes and makes notes about the children’s counting abilities, paying attention to counting words, the sequence of counting words, one-to-one correspondence, and cardinality.</p> | | | | |
| Eliciting Evidence of Learning | <p>The teacher gathers the children together and asks for a volunteer to count the number of children at school today. After the volunteer counts the children, the teacher then asks for all of the girls to stand up and for a volunteer to count the number of girls at school today. The teacher continues to call on volunteers to count different groups of students, making sure to pick categories that provide different quantities of children to count, including larger and smaller groups.</p> <p>In an effort to find the child’s edge of understanding, when the teacher is selecting a volunteer to count a particular group of children, the teacher intentionally selects a student who may likely count the number of children in the specified group without frustration. Thus, for children who – based on previous observations – may be able to count larger quantities, the teacher selects those volunteers to count larger groups of students, such as the entire class. For children who may find larger groups of students too frustrating to count, the teacher selects those children to count the smaller groups of children, such as the number of children with braids in their hair.</p> <p><u>Vignette:</u> During Morning Meeting Time, the teacher asks the children, “I wonder how many children are here today. How can we find out?” Several children say, “We can count!” The teacher agrees and asks for a volunteer to count all of the children. As hands are raised, the teacher selects Megan. The teacher has observed Megan counting larger quantities of objects at the Math Station and anticipates that this opportunity may challenge her but not frustrate her. Megan begins to count the children, gently touching each child’s head. She counts the children with one-to-one correspondence and does not skip any children or count them twice. The teacher asks, “How many children are here today?” Without having to recount the children, Megan responds correctly, “25. Everybody is here!” The teacher probes, “What if Benjamin counted all of the children? Would there still be 25?” Megan pauses, shrugs her shoulders, and says, “I don’t know.” The teacher invites Benjamin to count all of the children. Benjamin counts them accurately and reports, “Yup. There are 25 children.” Megan says, “WOW! We got the same.” The teacher probes, “You seem surprised. Tell me what you’re thinking.” Megan replies, “I thought they would be different.” The teacher notes that Megan was surprised that recounting the same group ended up with the same number.</p> <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • “How many (name of object) did you count?” • “If (name of child) counted them again, how many would (s/he) have?” • “Tell me what you’re thinking.” <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> • “If you counted them again, you would have the same amount; right?” • “That’s right. It will be the same because we didn’t add any or take any away, did we?” | | | | |
| Interpreting the Evidence | <p>Observation: As Megan counted the children in the class, she counted each child, using the correct counting sequence and one-to-one correspondence without losing track of the children she counted. Megan also accurately stated “25,” identifying the total amount. When probed about re-counting the same children, Megan stated, “I thought they would be different.”</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: D. States or indicates that the last number counted is the total quantity. (Cardinality) | | | | |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn’t met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> | | | | |

SITUATION: *Grab a Handful*

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|--------------------------------|--|---|---|---|---|
| Selecting Learning Target(s) | Understanding: Recognizes that counting tells the number of objects*. | | | | |
| | A. Says or indicates counting words out of sequence while pointing to objects. | B. Says or indicates counting words in the correct sequence without keeping track of objects counted (counts with one-to-one correspondence and one-to-one tagging). | C. Says or indicates counting words in the correct sequence while keeping track of objects counted (counts with one-to-one correspondence and one-to-one tagging). | D. States or indicates that the last number counted is the total quantity. (Cardinality) | E. States or indicates that the same total quantity of previously counted objects does not change unless objects are added or removed. |
| | <p>* The amount and arrangement of objects vary according to the student's needs. Therefore, it is possible that a student may demonstrate different skills based on the amounts and/or arrangements used. It is important to record these two factors with the documentation. (i.e. Carlos can count ten objects and keep track of them without missing any or counting any twice (one-to-one correspondence), he has a current learning status of skill "C" up to ten. When Carlos is working with a set of five objects, he can state that the last number counted is the total quantity, he can state that he has the same total quantity when asked, if none have been removed or added and he can even indicate that he still has five after the objects have been rearranged. Carlos has a current learning status of skill "F" for a quantity of five objects at the same time as he has a current learning status of "C" for a quantity of ten.)</p> | | | | |
| Preparation | <ul style="list-style-type: none"> Counting book (e.g., <i>Count!</i> by Denise Fleming; <i>Feast for 10</i> by Cathryn Fallwell; <i>Let's Count</i> by Tana Hoban) Collections of various-sized counting objects (e.g., cotton balls, cubes, jacks) in tubs or paper bags | | | | |
| General Description | <p>After reading a counting book and counting collections of objects in the book together, children are asked to grab a handful of counting objects out of one of the containers, count to determine how many they have in their hand, and say out loud the number of objects counted. Students repeat this task several times, using a variety of materials. This occurs in a whole group, small group, or a center or station.</p> | | | | |
| Eliciting Evidence of Learning | <p>The teacher reads aloud a counting book, inviting the children to point and count together different groups of objects in the book. Then, the teacher introduces various collections of objects for the students to count. The students are asked to use one hand to reach into the container, grab a handful of objects, count the number of objects grabbed, and say out loud the number of objects counted.</p> <p>The teacher observes the students counting the different objects, and increases or decreases the difficulty by asking students to count specific collections. Thus, a child who is unable to count a large quantity of smaller-sized objects accurately is asked to count the collections of larger-sized objects, therefore decreasing the quantity of objects likely to fit in a handful. If a child accurately counts a few objects, then the teacher asks the child to count the collections of smaller-sized objects, thus increasing the quantity likely to be grabbed in a handful. The teacher also uses probes or asks open-ended questions in an attempt to uncover what the children know and are able to do.</p> <p><u>Vignette:</u> During Math Stations, Jonah and Samira are counting objects. Jonah reaches in and grabs a handful of cubes. He counts them, touching each one as he says the numbers in the correct sequence, "One, two, three, four, five, six, seven, eight, nine, ten, eleven"; however, he counts several cubes twice. He then turns to Samira and says, "Eleven! I grabbed eleven."</p> <p>As the teacher observes, she notices that Jonah does not consistently keep track of objects when the collection has eight or more. She asks Jonah to count objects from the two containers that contain larger objects. As the teacher observes, she notices that Jonah is able to accurately count collections of six or fewer objects while counting in the correct sequence, keeping track of the objects, and knowing that the last number stated represents the quantity counted.</p> <p>She also notices that Samira quickly and accurately counts collections of ten or more objects. As Samira counts a collection of objects and reports, "Eleven," the teacher probes. "Samira, I heard you say that you counted eleven objects. What would happen if you counted them again? How many would you have?" Samira responds without hesitation, "Eleven." The teacher probes further, "Are you sure?" Samira turns and counts the objects quickly and accurately. "Eleven. See. I knew there would be eleven." The teacher probes, "How did you know that there would be eleven?" Samira responds, "Because that's how many there are."</p> <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> "How many (name of object) do you have?" "If you counted them again, how many would you have?" "Are you sure?" "How do you know?" <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> "If you counted them again, you would have the same amount; right?" "That's right. It will be the same because we didn't add any or take any away, did we?" | | | | |

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| Interpreting the Evidence | <p>Observation: After the teacher changed the type of objects Jonah counted, Jonah accurately counted collections of six or fewer objects while counting in the correct sequence, keeping track of the objects, and knowing that the last number stated represented the quantity counted.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: D. States or indicates that the last number counted is the total quantity. (The teacher made a note that Jonah was consistently successful with collections of six or fewer objects.) <p>Observation: Samira consistently counted collections of ten or more objects. When probed further, Samira indicated without hesitation that the quantity of a particular collection of 11 objects she has counted will remain 11, even if recounted.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: E. States or indicates the same total quantity of previously counted objects does not change unless objects are added or removed. (The teacher made a note that Samira was consistently successful with collections of eleven or fewer objects.) <p>NOTE: Since the observation ended at this point in time, the teacher makes a note to probe further next time to determine what Samira would think if the objects counted were rearranged and then recounted.</p> |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |

SITUATION: *Just One More*

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| Selecting Learning Target(s) | Understanding: Recognizes that counting tells the number of objects*. | |
| | G. Continues the counting sequence automatically when ONE object is added to the set. | H. Continues the counting sequence automatically when MORE THAN ONE object is added to the set. |
| | <p>* The amount and arrangement of objects vary according to the student’s needs. Therefore, it is possible that a student may demonstrate different skills based on the amounts and/or arrangements used. It is important to record these two factors with the documentation. (i.e. Carlos can count ten objects and keep track of them without missing any or counting any twice (one-to-one correspondence), he has a current learning status of skill “C” up to ten. When Carlos is working with a set of five objects, he can state that the last number counted is the total quantity, he can state that he has the same total quantity when asked, if none have been removed or added and he can even indicate that he still has five after the objects have been rearranged. Carlos has a current learning status of skill “F” for a quantity of five objects at the same time as he has a current learning status of “C” for a quantity of ten.)</p> | |
| Preparation | <ul style="list-style-type: none"> • 15 connecting cubes of the same color per student • The quantity of cubes can be adjusted as needed. | |
| General Description | <p>The teacher introduces the game “Just <i>One More</i>” to the students, walking through the steps of the game while modeling with connecting cubes. Students are then provided a bag of connecting cubes to play the game alongside the teacher as the teacher walks through the steps with the children as they play. Last, the children play the game independently. As the children play the game, the teacher carefully observes the strategies used by the children to determine the quantity in each tower created. Based on these observations, the teacher adjusts the game for some children by changing the number of cubes in the tower or asking children to play “Just <i>Two More</i>.”</p> | |
| Eliciting Evidence of Learning | <p>The teacher introduces the game “Just <i>One More</i>” to the students, modeling each step in front of the children:</p> <ol style="list-style-type: none"> 1. Snap 10 connecting cubes of the same color together to make a tower. 2. Place the tower behind your back, and snap the tower into two parts. 3. Choose one of the two snapped-off parts to count. 4. Count the number of cubes in the selected part, and say out loud how many cubes are in the part you chose. 5. Then say, “Just <i>One More</i>” and snap on one more cube to the tower. 6. Last, say out loud how many cubes are in the new tower. <p>The teacher then gives each student a bag with 15 connecting cubes and asks the children to play the game along with the teacher as the teacher repeats the directions, modeling the action, while watching the children throughout the steps. Once the children have had an opportunity to play the game with the teacher, the children then play the game independently. As the children play the game both with and without the teacher, the teacher carefully watches to see how the children determine the new quantity after the ‘one more’ cube is added. The teacher makes note if a child counts all of the cubes again each time the game is played, if the child quickly states the quantity without counting all of the cubes, or if the child sometimes recounts all of the cubes (perhaps when the beginning quantity is larger), while other times states the quantity quickly without counting (perhaps when the beginning quantity is smaller).</p> <p>While observing the children, the teacher may differentiate the game by asking children to make a tower using more than 10 cubes (perhaps 15 or 20) or fewer than 10 cubes (perhaps 6 or 8), providing additional cubes as needed. The teacher may also decide to adjust the difficulty of the game by introducing the version “Just <i>Two More</i>,” asking the student to snap on 2 more cubes to the selected part of the tower.</p> <p><u>Vignette:</u> As the children play the game, the teacher watches Anthony place his tower of 10 blue cubes behind his back and snap them into two pieces. He chooses the piece in his right hand, places the other piece on the floor, and begins counting the selected piece. The teacher listens carefully as he counts, noting that he counted the cubes accurately as he says out loud, “Six!” He then reaches down to pick up one cube, and dramatically says, “Just one more!” as he snaps one cube to the tower of 6. Without recounting the cubes, he quickly says “Seven!” and shows them to another student near him. Anthony then makes a new tower of 10 cubes and plays the game again. The teacher watches him for several moments, noticing that each time he adds one more cube, he instantly knows one more than the previous count. The teacher then probes, “Anthony, this time play ‘Just <i>Two More</i>,’ and see what you find out.” Anthony selects the part of the snapped tower that has 6 cubes. He then adds 2 more cubes to his tower. He pauses, looks at the teacher, and then counts each cube: “1, 2, 3, 4, 5, 6, 7, 8. Eight! I have eight cubes now.” As Anthony continues to play “Just <i>Two More</i>,” the teacher notes that he counts all of the cubes each time to determine the new quantity.</p> <p><u>Possible Probes:</u></p> <ul style="list-style-type: none"> • “What would happen if you snapped on 2 more?” • “Do you know how many you have without counting?” • “This time, make a tower of [15; more than 10; etc.] and play ‘Just <i>One More</i>.’ ” <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> • “You’re right. It is seven because seven comes after six.” • “It’s just the next number, isn’t it?” | |
| Interpreting the Evidence | <p>Observation: As Anthony played “Just <i>One More</i>” with a tower of 10 cubes, he accurately stated the correct quantity without recounting. When Anthony played “Just <i>Two More</i>” with a tower of 10 cubes, he recounted each time to determine the new amount.</p> <p>• <u>Identify Learning Status on Construct Progression:</u> G. Continues the counting sequence automatically when ONE object is added to the set, without counting all of them again.</p> | |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn’t met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> | |

Problem Solving

DOMAIN: Cognitive Development

CLAIM: Students can use content-independent abilities and strategies as well as content-specific skills, processes, and approaches to solve problems and acquire information.

RATIONALE

The focus of this construct progression is problem solving within the domain of Cognitive Development. There are many opportunities during the day for children to engage in emotional and social problem solving. The constructs Emotional Literacy and Emotion Regulation address these opportunities. Additionally, both goal setting and perseverance play a critical role in problem solving. Engagement, perseverance, and goal setting are addressed in the construct progressions Engagement in Self-Selected Activities and Perseverance in Assigned Tasks within the domain of Approaches to Learning. Therefore, this progression is looking specifically at how children approach the problem solving process when learning content, rather than how they handle their feelings, relate to others, or engage with/pay attention to the content. In *Assessment for Learning and Development in K-3*, (the NC Think Tank report), the rationale for the claims within the Cognitive Development domain states, “Children’s cognitive capabilities provide the foundation for learning that occurs in school and in life. These cognitive skills – including regulating attention, remembering, reasoning, and problem solving – enable children to understand new information and apply it to new situations. Research indicates that strong cognitive skills positively affect educational outcomes (Raver, 2012; Evans & Rosenbaum, 2008; Duckworth & Seligman, 2005). Moreover, the continuing development of cognitive skills, as necessary for ongoing mastery, depends upon active engagement in developmentally appropriate education.”

The understandings, skills, and performance descriptors in this construct progression describe the development of academic problem solving in young children. This progression is not developmentally inevitable but rather reflects the problem solving capabilities that children progressively develop as a result of experience and instruction. In order for children to practice problem solving, teachers need to provide an environment that allows for discovery learning and opportunities to solve problems.

According to Ginsburg (2015), problem solving is an activity that requires interpretation, sense making, the acquisition and application of strategies, and the articulation of the deep thinking behind the figuring-out that occurs. Ginsburg proposes that even though students will vary in their ability to justify and explain their problem solving process, sophisticated problem solvers not only solve problems but also justify why their solution makes sense.

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ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

APPROACHES TO LEARNING

Goal APL-2: Children actively seek to understand the world around them.

Goal APL-4: Children demonstrate creativity, imagination, and inventiveness.

Goal APL-5: Children are willing to try new and challenging experiences.

Goal APL-6: Children use a variety of strategies to solve problems.

LANGUAGE DEVELOPMENT AND COMMUNICATION

Goal LDC-3: Children ask and answer questions in order to seek help, get information, or clarify something that is not understood.

Goal LDC-4: Children speak audibly and express thoughts, feelings, and ideas clearly.

CONSTRUCT PROGRESSION

COGNITIVE DEVELOPMENT

Goal CD-1: Children use their senses to construct knowledge about the world around them.

Goal CD-2: Children recall information and use it for new situations and problems.

Goal CD-3: Children demonstrate the ability to think about their own thinking: reasoning, taking perspectives, and making decisions.

Goal CD-13: Children use mathematical thinking to solve problems in their everyday environment.

Goal CD-15: Children explore the natural world by observing, manipulating objects, asking questions, making predictions, and developing generalizations.

NC Standard Course of Study (Common Core State Standards and Essential Standards)

C.1 Use creative strategies to make decisions and solve problems.

1. V.2.1 and 2.V.2.1: Recognize that artistic problems have multiple solutions.

3. V.2.1: Create art through a process that includes generating ideas, planning solutions, and producing original art.

Common Core State Standards: Standards for Mathematical Practice for Grades K-12

- Make sense of problems and persevere solving them.
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Revised Bloom's Taxonomy: Cognitive Processes

- Understand
- Apply
- Analyze
- Evaluate
- Create

RESOURCES USED

H. Ginsburg, personal communication, May 28, 2015

K-3 North Carolina Think Tank. (2013). *Assessment for learning and development in K-3: A report by the K-3 North Carolina think tank*. Raleigh, NC: Author.

North Carolina Department of Public Instruction. (2013). Quick Reference Guides <http://www.ncpublicschools.org/curriculum/links/reference-guides/>

North Carolina Foundations Task Force. (2013). *North Carolina Foundations for Early Learning and Development*. Raleigh, NC: Author

PROBLEM SOLVING

UNDERSTANDING: Children understand that in order to solve problems they can use familiar procedures and tools.

| SKILLS | E. Attempts to solve a familiar problem using procedure(s) and tools learned in previous problem solving experiences. | F. Solves a familiar problem using procedure(s) and tools learned in previous problem solving experiences. | G. Attempts to solve a novel problem by using previously learned procedure(s) without demonstrating knowledge of why the procedure is or is not successful. |
|-------------------------|--|--|---|
| PERFORMANCE DESCRIPTORS | <p>While putting together a wooden puzzle with the same number of pieces as puzzles he has solved before, George remembers to place the corners first and work next on the flat-sided border pieces. George is unable to complete the puzzle because this procedure doesn't work for the remaining pieces.</p> <p>In the Bookmaking Center, Lashonda is making a book about her family. The book on her family is not a story and does not have a specific story structure like other books she has made. When she tries to sequence the pages of her family book from beginning to end, Lashonda says, "This isn't working like my story books."</p> <p>Margaret's class is designing a leprechaun trap for St. Patrick's Day. Ms. Stinnett asks the students to think about how the leprechaun will trigger a door to activate the trap. Margaret says, "I remember from when we did simple machines that pulleys are a good way to open and close doors. Maybe we can use a pulley to make a trap door?" Margaret uses a string and the top of a shoebox to demonstrate how her idea might work.</p> <p>Ms. Vintinner has assigned an open-ended activity to make something in the art center as a thank you for the volunteer grandparent. Previously, Dominique has had a problem completing this type of open-ended assignment. Dominique has learned that if he needs to make something really big, it helps to make a plan before beginning the actual item, so he sketches a design for the poster.</p> | <p>Slater and Christy have worked together to complete a jigsaw puzzle. Slater uses corners and colors as his solving strategy, and he observes Christy using the picture on the box as her strategy. Later, Slater uses corners, colors, AND the picture on the box as his strategy to complete a similar puzzle.</p> <p>Rhonda wants to write a letter to her mom. Ms. Penuel has been modeling letter writing by having the class compose letters as a group activity. On the wall there is the letter that the class wrote together to thank the custodian for keeping the school clean. Rhonda looks at the posted model letter and remembers to use a greeting [Dear Mom] and a closing [Love Rhonda].</p> <p>Ms. Nelson has asked Colson to sort a collection of rocks by their properties. Colson has learned from a bird study to use a website to identify birds, so he searches for and finds a website on rocks, and uses it to identify the rocks.</p> <p>Mrs. Pennington asks the children to paint a picture in the style of a favorite artist. Philli remembers that the class studied the brushstrokes of Van Gogh in order to imitate his style. She chooses Seurat as her artist and studies Seurat's Pointillist painting technique in order to imitate his style.</p> | <p>During free choice centers, Lynne chooses tangrams for the first time because they look like puzzles to her. She selects a picture card with the shape of a house and uses the familiar strategy of moving around the pieces to complete the puzzle. She creates a shape that looks like a house, but it does not match the one on the card. Ms. Pellichero says, "You have used the square for the chimney. What two pieces make the rest of the roof?" Lynne is unable to select which pieces match the outline of the roof to complete the activity successfully.</p> <p>Thomas is practicing addition during Morning Math time. He looks through the cards to find a new kind of math problem. The problem on the card is $186 + 30 =$. Thomas knows how to solve 2-digit + 2-digit problems by grouping the tens, grouping the ones, and adding on. He decides to try the same plan to solve the new problem. His answer is 1116 ($1+11+6$). He looks at the answer on the back of the card and sees that it doesn't match. He retries solving several times, using the same procedure.</p> <p>Mrs. Heritage's class has been learning about how laws are passed at the local government level. She challenges her students to write a "law" that they would like to have at school. Jonathan writes about being able to sit where you want to in the cafeteria. He looks at the "Writing About Our Opinions" chart on the wall, and includes an opinion statement and provides reasons to support his opinion. Jonathan reads his writing aloud, and the class cheers and starts saying things like, "Yeah, we need that law!" Mrs. Heritage asks Jonathan if he knows why his writing worked so well and has the students excited, and he says, "I don't know. I just wrote what I was thinking."</p> |

PROBLEM SOLVING CONTINUED ON NEXT PAGE

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| <p>UNDERSTANDING: Children understand that there are cognitive concepts that connect to problems that need to be solved.</p> | | <p>UNDERSTANDING: Children understand that cognitive concepts and procedural knowledge are used to solve familiar and novel problems efficiently.</p> | |
| <p>H. Uses concept knowledge with learned procedures to form a hypothesis.</p> | <p>I. Solves a novel problem by applying the process of solving a familiar problem when certain conceptual patterns exist.</p> | <p>J. Generates and explains a new problem solving strategy when one is not working. (self-monitoring)</p> | <p>SKILLS</p> |
| <p>Isabella is playing a game that matches cards with color circles to cards with color words. Although she cannot read the color names, Isabella sorts through the cards and finds one with a word that begins with “r”. Isabella tells her teacher that because the Spanish word <i>rojo</i> begins with an “r,” she thinks the only color word in her game beginning with “r” must be “red”.</p> <p>When confronted with a round jigsaw puzzle, Danielle combines her concept knowledge that rectangles have straight sides and circles have curved sides with her procedural knowledge of separating all the pieces with the same kind of edge. The teacher asks Danielle if she has a plan for completing the puzzle. Danielle explains her hypothesis, saying, “I think that I can do this puzzle if I begin by separating all the pieces with a curved side.”</p> <p>Debra is conducting an investigation on what factors affect lima bean seed growth. She knows to make a list of the variables when creating an experiment, so she lists seed size, amount of water, amount of soil, duration of light. She has heard that rainfall is important to farmers, so she hypothesizes that the most important variable is the amount of water. Debra creates an experiment where seed size, type of soil, and light are the same, but the dampness of the soil in different pots varies.</p> | <p>Sally remembers her teacher reading the book <i>Little Yellow, Little Blue</i> (by Leo Leonni). The teacher then gave each child a ball of yellow play dough and a ball of blue play dough, which they mixed together to make green. Therefore, Sally knows that you can make new colors by mixing two colors together. She wants to make a light green and mixes yellow and light blue. When that does not work, she remembers the teacher making pink from red and white, and she decides to add white to the green and gets the shade of green she is looking for.</p> <p>Mr. Chapin has given the class some start unknown problems for the first time. Tony knows how to form an equation for a change unknown problem. He uses this knowledge of the process to create an equation that he believes will work for the start unknown problem. He knows that to solve the problem “2 bunnies were on the grass, some more arrived, now there are 5,” he can use the equation $2 + ? = 5$. For the start unknown problem of “Some bunnies were on the grass, 3 more arrived, now there are 8,” he writes the equation $? + 3 = 8$ and solves the problem successfully.</p> <p>Orion is using a website to create a digital information flyer. Although he has not created a flyer online before, Orion says, “I remember that when we created a newsletter, we had a plan for the order of collecting material, writing articles, and editing them to fit the space.” Orion then gets a copy of the newsletter plan and refers to it as he works to complete the flyer.</p> | <p>As the class is preparing to go to the cafeteria, Ms. Sandburg says, “They are painting the halls, and we can’t go our usual route to the cafeteria. Does anyone have any ideas of how we can solve this problem?” When Jean suggests, “We can walk down the middle of the hall,” Ms. Sandburg explains that the hall is closed. Then Jean suggests, “Let’s use a map to see if there is a different way. Our fire drill map will show us the entire school.”</p> <p>Joe wants to put together a 3-D stegosaurus. He knows that the backbone of a stegosaurus goes from small pieces at the neck, to larger pieces on the back, to smaller pieces at the tail. When he attempts to build a stegosaurus with unit blocks, the blocks will not support each other from small to large to small. So Joe tries building with plastic interlocking blocks, and is successful. Joe explains that the unit blocks won’t work because of the weight of the larger ones, but that plastic interlocking blocks work because locking together gives them stability.</p> <p>As an extension of a science lesson, students are provided materials to build a bridge that will withstand the weight of three small metal toy cars. CJ examines her materials and tests the strength of various combinations of those materials before she starts building. Although her bridge falls many times during the stages of building, she continues to build until she completes a structure that will withstand the weight of the three cars. She explains that her first bridge was strong enough but that it had two bases that weren’t the same and the bridge was unbalanced, and that her successful bridge has two bases that match and are balanced.</p> | <p>PERFORMANCE DESCRIPTORS</p> |

PROBLEM SOLVING CONTINUED FROM PREVIOUS PAGE

UNDERSTANDING: Children understand that cognitive concepts and procedural knowledge are used to solve familiar and novel problems efficiently.

| SKILLS | K. Invents and explains multiple novel strategies for solving a problem. | L. Justifies why the strategy used was the most efficient one to solve the problem. | M. Generates sophisticated problems for others to solve. |
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| PERFORMANCE DESCRIPTORS | <p>Ms. Leuciuc has asked the class to come up with as many ways to make 12 as possible. Hilary invents the following strategies:</p> <ul style="list-style-type: none"> Hilary explains that when you add one, you get the next highest number. In math center she uses linking plastic cubes and first makes a tower of 11 yellow cubes, 1 with a red cube, and then joins them together to make 12. Hilary explains that you can put two even numbers together to make an even number, and uses linking plastic cubes to make two towers of six each, and then joins them together to make 12. Then Hilary says, "I can divide the two towers of six in half," and she does so to come up with three, three, three and three, and joins the four towers of three to make 12. <p>Denise's class has been challenged by Mrs. Rutherford to create recycled material structures, which must be four feet high and stable when completed. Denise's work group invents the following ideas for completing the challenge. Denise explains to Mrs. Rutherford:</p> <ol style="list-style-type: none"> "Flattening cardboard boxes to make layers is to provide stability between other layers" "Filling one-gallon milk cartons with recycled water is to provide weight at the bottom" "Attaching one part of the structure to another with twist ties or yarn is to keep it from coming apart" <p>Mark is on the playground and notices that a trashcan has tipped over and there is trash everywhere. This has been a constant problem, so Mark develops a plan to solve the trash problem and explains it to his class:</p> <ol style="list-style-type: none"> Test how the lid fits on the trashcan, to determine if it fits properly Test how the trashcan sits on the ground, to determine if it is secured properly Observe the trashcan every two hours, to see when it gets turned over | <p>Ms. Jackson has given the class some outlines to fill in with pattern blocks. She asks the class if they have any ideas about what would be the fastest way to fill the outlines with the fewest pattern blocks. Rob demonstrates that the way to use the fewest pattern blocks is to always try and use the yellow hexagons first, because they take up the most space.</p> <p>During a math lesson involving 2-digit + 2-digit problems, Ms. Dodson asks the class if anyone can explain how they solved the problem $26 + 15$. When Rea says, "I grouped by tens. $5 + 5$ is 10; $+20$ is 30; $+1$ is 31," Ms. Dodson asks Rea to explain why she thinks that was the best way to solve the problem. Rea says, "It was quicker than counting on from 26 and faster than drawing 26 dots and 15 dots and counting them all."</p> <p>The class is given a 3-D model of a dinosaur to assemble. Sandy recognizes that the model is a new kind of puzzle. She can tell from the picture of the completed model that the pieces of the dinosaur's backbone are all shaped the same, but are different sizes. Sandy separates all the pieces that form the dinosaur's backbone, using the same strategy that helps her solve jigsaw puzzles. She explains that her sorting the pieces first was better than starting the puzzle without sorting the pieces, because it's faster than looking for each pieces as you need it.</p> <p>During an integrated lesson, collaborative groups are building models of four layers of the earth's crust. The available materials are cotton batting, play dough, plastic grass, Styrofoam peanuts, coffee grounds, and dried beans. Amy explains that they chose not to use the plastic grass because it would be crushed under the weight of any other material, and they didn't use the coffee grounds because they would mix with the other layers. Amy also explains that there were other solutions to the problem that worked, but that the one they chose worked best because of the density of the materials.</p> | <p>Lori loves to play color shape bingo. She decided the game has become too easy and decides to make a new version of the game. First she uses all the traditional shapes and then adds a trapezoid, octagon, and hexagon. To further make the game interesting, she cuts all the cards in half. She explains to her peers that now they must get both sides of a shape and fill their card with all the shapes in order to win.</p> <p>Tom makes double-sided construction paper mosaics in the art center. Then he decides that he can use the mosaics to make puzzles for his friends. He takes each mosaic, cuts it into puzzle pieces, and puts the pieces into a plastic zipper bag. Tom asks the teacher to put his mosaic puzzles in the puzzle center for his friends to solve.</p> <p>Katrina's class enjoys playing board games during a rainy day indoor recess. After school, Katrina decides to make her own board game for the class using the vocabulary from their science inquiry activities. Katrina chooses a science mystery for the players to solve and creates a playing board with squares representing the scientific method (ask a question, do some research, state your hypothesis, do an experiment, analyze your data, and report your data). Each square has a corresponding card that gives a clue to help the player solve the mystery. Katrina brings her board game to school and adds it to the game shelf.</p> |

SITUATION: *Building With STEAM In Mind* (*Science, Technology, Engineering, Arts, Math*)

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| Selecting the Learning Target(s) | Understanding: Children understand that there are academic problems and that they can attempt to solve them. | | | | Understanding: Children understand that in order to solve problems they can use familiar procedures and tools. | | |
| | A. Considers a problem without attempting to solve. (This may manifest as a child moving away from the problem.) | B. Attempts to solve a problem by mimicking the motions and procedures of others. | C. Seeks support from others prior to starting to problem solve or very early in the problem-solving process. | D. Attempts to solve a problem using random trial and error. | E. Attempts to solve a familiar problem using procedure(s) and tools learned in previous problem-solving experiences. | F. Solves a familiar problem using procedure(s) and tools learned in previous problem-solving experiences. | G. Attempts to solve a novel problem by using previously learned procedure(s) without demonstrating knowledge of why the procedure is or is not successful. |
| | Understanding: Children understand that there are cognitive concepts that connect to problems that need to be solved. | | | | Understanding: Children understand that cognitive concepts and procedural knowledge are used to solve familiar and novel problems efficiently. | | |
| | H. Uses concept knowledge with learned procedures to form a hypothesis. | I. Solves a novel problem by applying the process of solving a familiar problem when certain conceptual patterns exist. | J. Generates and explains a new problem-solving strategy when one is not working (self-monitoring). | K. Invents and explains multiple novel strategies for solving a problem. | L. Justifies why the strategy used was the most efficient one to solve the problem. | M. Generates sophisticated problems for others to solve. | |
| Preparation | <ul style="list-style-type: none"> Materials to use for building (e.g., interlocking plastic blocks, pieces of corrugated and flat cardboard, small empty boxes, cardboard and plastic tubes, Styrofoam blocks, foam peanuts, other donated materials) Adhesives (e.g., tape, glue, low-temperature glue guns, staplers and staples) Familiar grade-level-appropriate books that involve a setting in which the building is an important element, such as: <i>The Three Billy Goats Gruff</i>; <i>Building a House</i> by Byron Barton; <i>The Three Little Pigs</i>; <i>Rapunzel</i>; <i>The Borrowers</i> by Mary Norton; books with castles or forts as settings; <i>Magic Tree House</i> books by Mary Pope Osborne; <i>Roberto, the Insect Architect</i>, by Nina Laden; <i>If I Built a House</i> by Chris Van Dusen; <i>Rosie Revere, Engineer</i> by Andrea Beaty; <i>The Wonderful Wizard of Oz</i> by L. Frank Baum; <i>Mr. Ferris and His Wheel</i> by Kathryn Gibbs Davis; <i>The Mighty Mars Rovers</i> by Elizabeth Rusch; <i>Iggy Peck, Architect</i> by Andrea Beaty A risk-free classroom environment that allows for teacher-student and student-to-student interaction, creativity, and open-ended activities | | | | | | |
| General Description | In a small or large group setting, children use content-specific knowledge and vocabulary to solve an open-ended engineering problem that is related to an instructional unit with familiar vocabulary and content. As children solve the problem individually or in groups with the materials provided, the teacher carefully observes and makes notes about the children’s problem-solving abilities, paying attention to attempts and procedures to solve problems. The students then use journals to record their findings; new connections made between the engineering, math, arts, and other concepts; and other questions they still may have. The teacher encourages students to use drawing and writing in their journals to reflect on the concepts they are learning. | | | | | | |
| Eliciting Evidence of Learning | <p>After reading the book and/or viewing a short video of a version of <i>The Three Billy Goats Gruff</i> with the class, the teacher shows the children a collection of materials that have been gathered for an activity. The teacher poses the following problem to the group: “I want you to build a bridge with the materials that are here on the science table. This bridge, when you are finished, must be able to stand up on its own, without you holding it, <u>and</u> support the third billy goat figure and the troll figure at the same time.” The teacher shows the goat and troll figures and the support materials and resources available, including the pictures of bridges for children to examine carefully as needed. “When you are finished, use these figures to see if your bridge will support both of these characters at the same time.”</p> <p>As children work individually or in groups to build a bridge with the specified characteristics, they use content-specific knowledge and vocabulary within the learning context. The teacher carefully observes and makes notes about the children’s problem-solving abilities, paying attention to attempts and procedures to solve problems. To provide opportunities for students to articulate their thinking and make connections to the new learning, the teacher talks with the children as they work, using questions and probes such as: “Tell me about some of the choices that you made.” “Why did you decide to solve the problem this way?”</p> <p>The students then use journals to record their findings; new connections made between the engineering, math, arts, and other concepts; and other questions they still may have. The teacher encourages students to use drawing and writing in their journals to reflect on the concepts they are learning.</p> | | | | | | |

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| Eliciting Evidence of Learning, continued | <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • Tell me about your plan. Did you have to revise your plan? • What might help you get started? • What could you do first? • Tell me more about the choices you have made. • Why did you decide to solve the problem this way? • Are there other strategies? • Can you think of other problems you have solved that are similar to this one? • Are there any other tools you would like to use that aren't already here? • What is working well for you? What is not working? <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> • Do you think that amount will be enough? • That's not the right answer. • This will never work. Can you do it a different way? • You should do this the same way we did our project last week. • Look at how your friend is doing it. Why don't you try that? |
| Interpreting the Evidence | <p>Observation: Steven looks at the available materials and says, "These aren't the things I like to build with. I have better building toys at home," and walks away.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> A. Considers a problem without attempting to solve. (This may manifest as a child moving away from the problem.) <p>Observation: Laronda watches a friend gather materials and gathers the same materials for herself. She sits near her friend and builds something similar to what her friend is building, but when Mr. George asks Laronda how she is going to build her bridge, Laronda says, "I don't know. I like the way she's stacking her materials, so I'm trying to copy hers."</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> B. Attempts to solve a problem by mimicking the motions and procedures of others. <p>Observation: Sam gathers materials for building, but before he begins, he asks Mr. George, "I can't figure out how to make the bridge stand up. Can you show me how to do that?"</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> C. Seeks support from others prior to starting to problem solve or very early in the problem-solving process. <p>Observation: Caleb gathers a pile of foam peanuts and tries to build a wall with them. He can't get them to stack or stick together, so he puts back the foam peanuts and gets some blocks of Styrofoam. Caleb is able to stack these into a wall, and he tries masking tape for holding them together, but the tape won't stick to the Styrofoam. He tries clear adhesive tape, packing tape, fabric tape, washi tape, and duct tape.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> D. Attempts to solve a problem using random trial and error. <p>Observation: Shana says, "This was so much fun when we did it last week," and chooses all of the plastic interlocking blocks that are available to build her bridge. However, there are not enough to build a bridge large enough for both characters, and Shana is unable to combine other materials with the blocks she has already used.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> E. Attempts to solve a familiar problem using procedure(s) and tools learned in previous problem-solving experiences [procedural knowledge: building]. <p>Observation: Marquise tells Mr. George that he loves to build with anything he can. He reminds Mr. George that when they got all the new crayons, he saved the empty boxes and built with them. Marquise collects a lot of the empty boxes offered on the science table and successfully builds a bridge.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> F. Solves a familiar problem using procedure(s) and tools learned in previous problem-solving experiences [procedural knowledge: building]. <p>Observation: Siri uses a LOT of masking tape to wrap her popsicle-stick bridge. When Mr. George asks her why she needed so much tape, Siri says, "I've never had to build a bridge to hold something. We have to use lots of tape to hold posters on the wall, so I hope that will be enough to hold the characters!" When Siri tries the goat and troll on the bridge, it collapses, and Siri says, "I don't get it. Using a lot of tape works for posters."</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> G. Attempts to solve a novel problem by using previously learned procedure(s) without demonstrating knowledge of why the procedure is or is not successful [procedural knowledge: items can be held by tape]. |

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| Interpreting the Evidence, continued | <p>Observation: Jackie gathers materials in pairs: two identical rectangular cereal boxes, two round oatmeal boxes, etc. When Mr. George asks her why she has chosen two of everything, Jackie says, "I think that if the bridge is going to stand by itself, it has to be balanced on each side. I remember when we were building towers for Rapunzel, the blocks on the base were different and it collapsed."</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: H. Uses concept knowledge with learned procedures to form a hypothesis [concept knowledge: balance; procedural knowledge: building towers]. <p>Observation: Jarmone builds his bridge with a support at the middle of the bridge. He tests the bridge with the goat and troll figurines, and it works. Mr. George asks Jarmone to tell the class about his bridge. Jarmone says, "When the bookshelf was sagging in the middle from having too many books, the custodian fixed it by adding a board in the middle to support the weight. I decided to do the same thing for my bridge, and it worked!"</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: I. Solves a novel problem by applying the process of solving a familiar problem when certain conceptual patterns exist [conceptual pattern: support needed for the weight of the books, support needed for the goat and troll; procedural knowledge: building support by inserting something in the middle]. <p>Observation: Siri builds a bridge with popsicle sticks and lots and lots of masking tape, but it does not hold the weight of the goat and troll. She tries again using plastic cups, wooden rulers, and masking tape. Her new bridge holds the weight of the goat and troll. When Mr. George asks her what worked with the second bridge that didn't work with the first, Siri explains that the popsicle sticks weren't strong enough, but the rulers are, and that the plastic cups add stability.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: J. Generates and explains a new problem-solving strategy when one is not working (self-monitoring). <p>Observation: Before beginning to build, Joe gets some paper and sketches some ideas. Mr. George checks in with Joe and asks him to explain his ideas. Joe says, "One is rulers laid across the space between two desks. The second one is two chairs back to back, with a big book across the tops. This one is my friends using their bodies to make a bridge for the goat and the troll."</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: K. Invents and explains multiple novel strategies for solving a problem. <p>Observation: Julio builds a strong bridge in a short time; it holds the goat and troll figurines and does not use many materials. When Mr. George asks Julio why he thinks his was an efficient way to solve the problem, he says, "I chose larger materials because they are stronger and more stable, and using smaller pieces takes a lot longer. I used tape instead of glue because I didn't want to have to wait for it to dry."</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: L. Justifies why the strategy used was the most efficient one to solve the problem. <p>Observation: After demonstrating that her bridge holds the two figurines that Mr. George provided, Sandy suggests to Mr. George that the class could build double-decker bridges so that the troll can use the bottom one and all three Billy Goats Gruff could use the top one.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: M. Generates sophisticated problems for others to solve. |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |
| Observational Opportunities | <p>There are many opportunities throughout the day when children can be observed as they are engaged in problem solving in the content areas. While working with math manipulatives, children may sort and then re-sort the materials in a different way, addressing the problem, "How is the best way to sort these to help me make patterns with them?" Or they may solve the problem of having a storyline and dialog for dramatic play. In a bookmaking center, children may solve the problem of how many pages to have in their book, and then which part of their story to illustrate on each page. Students demonstrate problem solving across academic content areas while they are creating artwork, using technology, creating and playing a game, engaging in a writing activity, building, etc.</p> |

SITUATION: *The Cafeteria*

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| Selecting the Learning Target(s) | Understanding: Children understand that there are academic problems and that they can attempt to solve them. | | | | Understanding: Children understand that in order to solve problems, they can use familiar procedures and tools. | |
| | A. Considers a problem without attempting to solve. (This may manifest as a child moving away from the problem.) | B. Attempts to solve a problem by mimicking the motions and procedures of others. | C. Seeks support from others prior to starting to problem solve or very early in the problem-solving process. | D. Attempts to solve a problem using random trial and error. | E. Attempts to solve a familiar problem using procedure(s) and tools learned in previous problem-solving experiences | F. Solves a familiar problem using procedure(s) and tools learned in previous problem-solving experiences. |
| Preparation | <ul style="list-style-type: none"> • Math and writing materials (e.g., graph paper, large chart paper, calculators, counting manipulatives, a variety of writing utensils and paper) • Visual aids to help children support their thinking (e.g., pictures of food from grocery store advertisements, magazines, cookbooks) • A risk-free classroom environment that allows for teacher-student and student-to-student interaction, creativity, and open-ended activities | | | | | |
| General Description | After the teacher introduces/reviews a math concept(s) and related vocabulary, the students complete an inquiry-based math learning activity in which a problem is posed to be solved. As children work individually or in groups, the teacher carefully observes and makes notes about the children's problem-solving abilities, paying attention to attempts and procedures to solve problems. The students then use drawing and writing in their journals to record their findings, new connections made, and other questions they still may have. | | | | | |
| Eliciting Evidence of Learning | <p>The teacher introduces/reviews a math concept (e.g., counting, repeated addition, grouping, multiplication). The teacher pauses throughout the introduction/review to explain related vocabulary and key concepts by relating them to life experiences. The teacher asks the students to share their own connections to the new math concept by relating their personal experiences to a partner. Through modeling and providing examples, the teacher engages the students in the process of making connections to new concepts and procedures. The teacher also provides opportunities across multiple contexts (reading, listening, viewing, and manipulating materials) for students to make connections to the new vocabulary and math concepts.</p> <p>In an effort for students to have an opportunity to use the concepts and vocabulary discussed, the teacher poses the following problem to the students: "Ms. Sampson, our cafeteria manager, needs to know the quantity of supplies for the school picnic. What are some ways that Ms. Sampson could solve this problem?" The teacher shows the students materials that may be helpful as they work (e.g., pictures of food, graph paper, counters) and prompts the students to consider using the concepts and vocabulary discussed today as they think of possible solutions. The students then work individually or in groups.</p> <p>As children work to solve the problem, the teacher carefully observes and makes notes about the children's problem-solving abilities, paying attention to attempts and procedures to solve problems. To allow children the opportunity to demonstrate skills occurring across the construct progression, the teacher asks targeted questions such as: "Tell me about some of the choices that you made." "Why did you decide to solve the problem this way?" By interacting with the students as they work, the teacher gathers information about what the students know and understand about the math concept and math-related vocabulary.</p> <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • Tell me about your plan. • What might help you get started? • What could you do first? • Tell me more about the choices you have made. • Why did you decide to solve the problem this way? • Are there other strategies you could use? • Can you think of other problems you have solved that are similar to this one? • Are there any other tools you would like to use that aren't already here? • What is working well for you? What is not working? <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> • Do you think the items and amounts will be enough? • That's not the right answer. • This will never work. Can you do it a different way? • You should do this the same way we did our project last week. • Look at how your friend is doing it. Why don't you try that? | | | | | |

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| <p>Interpreting the Evidence</p> | <p>Observation: Cory says, “I don’t know how to figure that out. How would we know that?” and starts working on another assignment.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: A. Considers a problem without attempting to solve. (This may manifest as a child moving away from the problem.) <p>Observation: Marissa sees a child making a list on his paper with tally marks beside the words on his list. Marissa mimics the other child by making tally marks all over her own paper, but cannot explain to Ms. Thurgood what or why she is tallying.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: B. Attempts to solve a problem by mimicking the motions and procedures of others. <p>Observation: Xanda asks another child, “Do you know how to figure out this one? I need some help.”</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: C. Seeks support from others prior to starting to problem solve or very early in the problem-solving process. <p>Observation: Kelley gathers materials from the dramatic play center. She begins to make a list of food for the picnic, writing several different numbers beside each one. Ms. Thurgood asks Kelly, “How do you know how many of each?” Kelley tells Ms. Thurgood, “I think I lost count somewhere.”</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: D. Attempts to solve a problem using random trial and error. <p>Observation: When Ms. Thurgood asks Micah how he solved the problem, he says, “Last week, when we were trying to figure out how many lunches we need for three classes before our field trip, we counted how many children there were in all three classes. It worked for us that time.”</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: E. Attempts to solve a familiar problem using procedure(s) and tools learned in previous problem-solving experiences [procedural knowledge: planning for the picnic]. <p>Observation: Ms. Thurgood asks Francine, “Can you explain your strategy for solving the problem you are working on?” Francine explains that she is planning for the picnic, and that she may need to get fewer ketchup and mustard packs than hot dogs and buns, because some people won’t use either ketchup or mustard and some children will have just one of them. She tells Ms. Thurgood that she remembers planning the class party and that they needed more napkins than plates, because people don’t always use the same number of plates as napkins.</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: F. Solves a familiar problem using procedure(s) and tools learned in previous problem-solving experiences [procedural knowledge: planning for a party when you don’t need the same number of each item]. |
| <p>Adapting/ Responding to Learning Needs</p> | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn’t met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |
| <p>Observational Opportunities</p> | <p>There are many opportunities throughout the day when children can be observed as they are engaged in problem solving. While working with math manipulatives, children may sort and then re-sort the materials in a different way, addressing the problem, “How is the best way to sort these to help me make patterns with them?” Or they may solve the problem of having a storyline and dialog for dramatic play. In a bookmaking center, children may solve the problem of how many pages to have in their book, and then which part of their story to illustrate on each page. Students demonstrate problem solving across academic content areas while they are creating artwork, using technology, solving a puzzle, creating and playing a game, engaging in a writing activity, building, etc.</p> |

SITUATION: *Pack for the Island*

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| Selecting the Learning Target(s) | Understanding: Children understand that there are academic problems and that they can attempt to solve them. | | | | Understanding: Children understand that in order to solve problems they can use familiar procedures and tools. | | |
| | A. Considers a problem without attempting to solve. (This may manifest as a child moving away from the problem.) | B. Attempts to solve a problem by mimicking the motions and procedures of others. | C. Seeks support from others prior to starting to problem solve or very early in the problem-solving process. | D. Attempts to solve a problem using random trial and error. | E. Attempts to solve a familiar problem using procedure(s) and tools learned in previous problem-solving experiences. | F. Solves a familiar problem using procedure(s) and tools learned in previous problem-solving experiences. | G. Attempts to solve a novel problem by using previously learned procedure(s) without demonstrating knowledge of why the procedure is or is not successful. |
| | Understanding: Children understand that there are cognitive concepts that connect to problems that need to be solved. | | | | Understanding: Children understand that cognitive concepts and procedural knowledge are used to solve familiar and novel problems efficiently. | | |
| | H. Uses concept knowledge with learned procedures to form a hypothesis. | I. Solves a novel problem by applying the process of solving a familiar problem when certain conceptual patterns exist. | J. Generates and explains a new problem-solving strategy when one is not working (self-monitoring). | K. Invents and explains multiple novel strategies for solving a problem. | L. Justifies why the strategy used was the most efficient one to solve the problem. | M. Generates sophisticated problems for others to solve. | |
| Preparation | <ul style="list-style-type: none"> • Writing materials (e.g., journals, paper, writing instruments, art supplies) • Literature examples relevant to the activity (e.g., picture books, novels, informational texts, sporting goods catalogs) • Familiar grade-level-appropriate books about being lost or taking a long journey (e.g., <i>Are You My Mother?</i> by P.D. Eastman; <i>Polar Bear Night</i> by Lauren Thompson; <i>How I Became a Pirate</i> by Melinda Long; <i>Lost and Found</i> by Oliver Jeffers; <i>Corduroy</i> by Don Freeman; <i>I Lost My Tooth in Africa</i> by Baba Diakite; <i>The Buddy Files: The Case of the Lost Boy</i> by Dori Butler; The Larry Gets Lost Series by John Skewes; <i>A Path of Stars</i> by Anne O'Brien; <i>Mrs. Nelson Is Missing</i> by Harry G. Allard Jr.; <i>Stuart Little</i> by E.B. White; <i>A Wrinkle in Time</i> by Madeleine L'Engle) • A risk-free classroom environment that allows for teacher-student and student-to-student interaction, creativity and open-ended activities | | | | | | |
| General Description | After reading a book with the theme “being lost,” the students work individually or in groups to solve a problem within an open-ended creative writing activity about surviving on a deserted island. During the activity, students use content-specific knowledge and vocabulary. As students work and record their ideas, the teacher carefully observes and makes notes about their problem-solving abilities, paying attention to attempts and procedures to solve the posed problem. | | | | | | |
| Eliciting Evidences of Learning | <p>The teacher reads a book aloud to the class/group of children about “being lost,” pausing throughout the story to explain vocabulary and key ideas from the text by relating them to life experiences. The teacher asks the students to share their own connections to the ideas in the text by relating their personal experiences to a partner (text-to-self). Through modeling and providing examples, the teacher engages the students in the process of making connections to other texts and to the world in general. The teacher also provides opportunities across multiple contexts (reading, listening, viewing, and manipulating materials) for students to make connections to the new vocabulary and ideas.</p> <p>The teacher then poses the following problem to the group: “Think about how the character in our story survived in the woods. Let’s pretend that you are going to be left alone on a deserted island. You have brought your backpack, but all you have with you is what fits inside. What would you hope you had packed?” The teacher identifies possible writing materials to use to record their ideas for this open-ended creative writing activity and encourages the students to use a variety of genres in their writing.</p> <p>Students work individually or in small groups to think about the problem posed, identify items that would fit in their backpack, and records their ideas. As children work to solve the problem, the teacher carefully observes and makes notes about the children’s problem-solving abilities, paying attention to attempts and procedures to solve problems. To allow children the opportunity to demonstrate skills occurring across the construct progression, the teacher asks targeted questions such as: “Tell me about more about some of the choices that you made.” “Why did you decide to solve the problem this way?” By listening and interacting with the students as they work, the teacher gathers information about what the students know and understand about the theme and how they are using related vocabulary in their writing.</p> | | | | | | |

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| <p>Eliciting Evidences of Learning, continued</p> | <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • Tell me about your plan. • What might help you get started? • What could you do first? • Tell me more about the choices you have made. • Why did you decide to solve the problem this way? • Are there other strategies you could use? • Can you think of other problems you have solved that are similar to this one? • Are there any other tools you would like to use that aren't already here? • What is working well for you? What is not working? <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> • Do you think that what you plan to pack will be enough? • What do you need to survive on a deserted island? • That's not the right answer. • This will never work. Can you do it a different way? • You should do this the same way we did our project last week. • Look at how your friend is doing it. Why don't you try that? |
| <p>Interpreting the Evidence</p> | <p>Observation: Raziya says, "I'll never be alone on a deserted island. I don't know why we're doing this." She starts working on another assignment.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: A. Considers a problem without attempting to solve. (This may manifest as a child moving away from the problem.)</u> <p>Observation: Malinda mimics other children who are making lists. But Malinda makes a list that has nothing to do with supplies needed on a deserted island. When Mr. Furr asks, "How will you use those supplies on a deserted island?" Malinda responds, "I don't know. Everybody else was making a list, so I made one too."</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: B. Attempts to solve a problem by mimicking the motions and procedures of others.</u> <p>Observation: Mr. Furr observes Quinan asking another child, "What's on your list? Can you help me with mine?"</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: C. Seeks support from others prior to starting to problem solve or very early in the problem-solving process.</u> <p>Observation: Kennedy begins making a list of everything that she can think of in her bedroom that is small enough to fit in her backpack. She crosses out some items and circles others. Mr. Furr asks Kennedy why she is crossing some items off the list. Kennedy responds, "Right now I am just thinking of everything I can and crossing off what I do not want to bring."</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: D. Attempts to solve a problem using random trial and error.</u> <p>Observation: Mr. Furr sees Jay making a list that reflects what the character in the story needed, but Jay does not include items needed on a deserted island that are not in the story about the woods. Mr. Furr asks Jay about the choices he makes on his list, and Jay responds, "This worked in the book, so I think it will work for me too."</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: E. Attempts to solve a familiar problem using procedure(s) and tools learned in previous problem-solving experiences [procedural knowledge: making a list].</u> <p>Observation: Paris draws a picture of a water bottle, her teddy bear, bananas, and some rope. She also draws a picture of herself building a house with sticks and rope. In response to the Mr. Furr's question, "Can you tell me why you selected these items?" Paris says, "I remember we built a bridge for the Three Billy Goats Gruff using sticks and rope. I plan to build a house, and I think I can use sticks and rope to build it. My teddy bear is going to live in the house with me."</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: F. Solves a familiar problem using procedure(s) and tools learned in previous problem-solving experiences [procedural knowledge: building with sticks and rope].</u> <p>Observation: Santiago explains to Mr. Furr that the real problem is that if he was on a deserted island, he would need to get home. So, Santiago makes a list of what he would need to solve this new problem, including a cell phone. When Mr. Furr asks Santiago if he thinks the cell phone will work on a deserted island, he says, "I don't know. My parents' cell phones always work."</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: G. Attempts to solve a novel problem by using previously learned procedure(s) without demonstrating knowledge of why the procedure is or is not successful [procedural knowledge: we can use a cell phone to call for help].</u> <p>Observation: Alana writes, "I need to take matches to light a fire to cook my food. If I have matches, and can find some wood, then I also can light a bonfire to attract the attention of a boat going by." Mr. Furr asks Alana to tell him more about her writing. Alana responds, "This is my plan. I need to have matches because I can do a lot with matches, like light a fire and be seen if a boat come by."</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: H. Uses concept knowledge with learned procedures to form a hypothesis [concept knowledge: I need to be rescued; I will need something to attract attention; procedural knowledge: matches light a cooking fire, matches light a bonfire].</u> |

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| Interpreting the Evidence, continued | <p>Observation: Chen makes a list of items to take to survive on the island AND to escape from the island. Mr. Furr notices that many items have a slash between them, and asks why. Chen says, "I don't have a lot of space in my backpack, so I need to take things that can be used in different ways." Some of the items on the list are:</p> <p style="text-align: center;"> matches/campfire/rescue fire tarp/roof/rain and sun shelter rope/shelter/raft backpack/pillow pot/boiling water/cooking food flashlight/rescue signal </p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> I. Solves a novel problem by applying the process of solving a familiar problem when certain conceptual patterns exist [conceptual pattern: items need to have multiple uses]. <p>Observation: Gervaise is making a picture list of the items he will take. When Mr. Furr asks Gervaise why he has crossed out his drawing of a flashlight, Gervaise says that he was going to take a flashlight, but realized the batteries could burn out, so a solar-powered lantern is a better choice.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> J. Generates and explains a new problem-solving strategy when one is not working (self-monitoring). <p>Observation: Lily makes a note about ways to use the backpack. She includes hanging it up to catch rainwater, weighting it with rocks to anchor a kite being used as a rescue signal, constructing a trap to catch food, opening it up flat to make a hammock (using the straps to secure it to a tree), and using the straps to make sandals.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> K. Invents and explains multiple novel strategies for solving a problem. <p>Observation: Maggie writes a story about how first she was going to pack cans of food and lots of bottles of water. She decides to take a water filter instead, and when asked why by Mr. Furr, Maggie justifies her decision by saying that she realized that lots of bottles of water would be super heavy to carry, take up valuable space in the backpack, and eventually would run out. She explains that it would be much more efficient to take a water filter, and that she would last longer with a water filter than with a limited number of water bottles.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> L. Justifies why the strategy used was the most efficient one to solve the problem. <p>Observation: Bryant uses magazine pictures to make a poster collage of what he would pack in his backpack. After presenting this to the class and explaining the items he chose, Bryan decides to create another problem for Mr. Furr to post: "What would we need to have at school to survive being snowed in for two weeks?"</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> M. Generates sophisticated problems for others to solve. |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |
| Observational Opportunities | <p>There are many opportunities throughout the day when children can be observed as they are engaged in problem solving in the content areas. While working with math manipulatives, children may sort and then re-sort the materials in a different way, addressing the problem, "How is the best way to sort these to help me make patterns with them?" Or they may solve the problem of having a storyline and dialog for dramatic play. In a bookmaking center, children may solve the problem of how many pages to have in their book, and then which part of their story to illustrate on each page. Students demonstrate problem solving across academic content areas while they are creating artwork, using technology, creating and playing a game, engaging in a writing activity, building, etc.</p> |

Emotion Regulation

DOMAIN: Emotional and Social Development

CLAIM: Students communicate about and use strategies to regulate responses to their own emotions.

RATIONALE

Emotional regulation, or the ability to control one's own emotions, is related to children's success in school (Denham, 2006; Howse, Calkins, Anastopoulos, Keane & Shelton, 2003; Zins, Bloodworth, Weissberg & Walberg, 2007). When children regulate emotions, they are able to work in collaborative groups, play with other students, and engage in behaviors such as asking questions, offering ideas to a group, and investigating an idea that supports academic success and positive relationships. Children who have difficulty managing frustration or maintaining a positive attitude may also have difficulty with tasks that are important for academic learning, such as focusing attention, planning and finishing tasks, and regulating other important behaviors (Blair, 2002; Raver et al., 2007). Learning to regulate one's emotions involves learning a complex set of skills over time that are essential for doing well in school and relationships. Children need support when learning to regulate emotions and are able to employ suggested strategies over time. They move from reactionary behaviors to more reflective behaviors.

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

Goal ESD 6 – Children identify, manage, and express their feelings.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

K.MEH.1 Recognizes feeling and ways of expressing them.

1.MEH.1 Understand the relationships among healthy expression of emotions, mental health, and healthy behavior.

SE.1 Understand the meaning and importance of personal responsibility and self-awareness.

EMOTION REGULATION

| UNDERSTANDING | <p>Children understand that they have a choice in expressing their emotions and that expressing their emotions has external effects for themselves and others.</p> | | | <p>Children understand that external support can be used to help regulate the experience and expression of emotions.</p> |
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| SKILLS | <p>A. Reacts to an experience or stimulus without demonstrating awareness of the reactions of others around them.</p> | <p>B. Shows awareness that a reaction to an experience or stimulus has an impact on others.</p> | <p>C. Shows awareness that one's choice of how to express emotions has an effect on relationships with others and with getting one's needs met.</p> | <p>D. When offered support for regulating the expression of emotions, sometimes uses the strategies offered.</p> |
| PERFORMANCE DESCRIPTORS | <p>Josie is working in the block area to make a tower. The tower collapses, and Josie begins crying, hitting her fist against the floor and throwing blocks. One block almost hits another child, who yells, "You almost hit me!" Josie gets up and stomps away from the blocks, with no apparent awareness of the other child.</p> <p>The class is in the cafeteria when Emmett drops his lunch tray and spills his lunch on the floor. Emmett is both startled and scared by what he has done, and begins to cry. The entire cafeteria goes silent, but Emmett's distress is so great that he appears not to notice that the cafeteria has gone quiet and continues crying at the same volume.</p> <p>Mr. Tao poses a new math problem to the class. Leilani loves math and begins shouting a response before Mr. Tao provides wait-time for others to make sense of and think through the problem. As other children begin to think about the problem, Leilani calls out her idea again, even louder, and then says, "I know! You all are too slow." Mr. Tao has been working with Leilani for several weeks on strategies for how to wait to share her thinking with others and how to choose kind words for her classmates, however she continues to blurt out what she's thinking without recognizing the reactions of others around her.</p> | <p>Harper wants the toy truck that another child is playing with. Harper takes the truck from the other child's hands and says, "I want this!" When the other child begins to cry, Harper looks at the teacher and says, "He can have it back later."</p> <p>When Yolanda's mom shows up early to take her home, Yolanda gets very excited and begins to cheer. The other children in the class all turn and look at Yolanda and begin to cheer as well. Yolanda stops cheering for a moment as she notices the other children have joined her. She then begins nodding "yes" at the other children and begins cheering again.</p> <p>Maggie's teacher, Mrs. Hampton, is working with the whole class on a five-step plan for how to summarize texts. Mrs. Hampton uses the document camera to fill in a class response chart while the students practice each step of the process on their individual dry erase boards. Maggie decides to draw a silly picture on her board and shows it to another student. When the other student giggles, Maggie continues to draw silly pictures and shows them to other students near her instead of following along with Mrs. Hampton's lesson.</p> | <p>Several children have set up a hospital in the dramatic play area. Ronnie tries to give a pretend shot in the arm to another child. Ronnie gets frustrated and pushes when the other child refuses the shot. The other child leaves the dramatic play center and says, "I don't want to play with you anymore." When a teacher tries to help with the conflict, Ronnie says, "He left because he didn't like my shots."</p> <p>Ricky is collecting acorns on the playground. Another child in the class begins to collect also. The other child collects a really big acorn that Ricky wants. When Ricky asks the other child for the acorn, the other child refuses to give it to him, and Ricky gets upset and takes the acorn anyway. The other child stands up to leave. Ricky sees that his friend is upset and tries to give him back the acorn, but the other child refuses the acorn and walks away.</p> <p>Ramon asks Linda for help cleaning the science kits they were using in small groups. Linda stomps her foot on the floor and says, "I will not help because I did not make the mess." When Ramon explains to Linda that he will not work with her again if she does not do her part to clean up, Linda reluctantly starts cleaning up so that she can stay in Ramon's group.</p> | <p>While painting at the easel, Kelly is delighted with the progress on her painting and begins hopping up and down. Her teacher reminds her to work carefully so that the paint doesn't get spilled, and Kelly quickly and carefully returns to painting. In a few minutes, Kelly is again overjoyed and dancing around the easel.</p> <p>Danny likes going to the Computer Lab. Mr. Thomas, the computer teacher, uses a mini-lesson to reinforce computer lab etiquette. At the end of the lesson, Danny opens his favorite computer program and excitedly yells out, "Alright!" Mr. Thomas reminds Danny about using a quiet voice. Danny attempts to contain his excitement, but needs several more reminders.</p> <p>On Fridays, Ahmed's class plays a game to review their History unit. Mrs. Billings has provided strategies for the class to help them remember to have good sportsmanship whether they are winning the game or not. The first time that Ahmed's team gets a correct answer, Ahmed calmly says, "Great!" However, as the game becomes more competitive, Ahmed starts to cheer when the other team gets an incorrect answer, and when his team scores a point, he gets more and more excited and loudly says, "We win. We win!"</p> |

EMOTION REGULATION

| Children understand that external support can be used to help regulate the experience and expression of emotions. (continued) | Children understand that external support can be used to help regulate the experience and expression of emotions. | | UNDERSTANDING |
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| E. When offered support for regulating the expression of emotions, consistently follows directions and/or suggestions offered by teacher, parent or peer. | F. Sometimes uses learned strategies independently to regulate the expression of emotions. | G. Consistently uses learned strategies independently to regulate emotions. | SKILLS |
| <p>When Pierce falls on the playground and hurts his knee, the teacher cleans his cut and suggests that Pierce take a couple of slow, deep breaths to help him calm down. Pierce takes deep breaths and begins to calm down. The teacher notices the next week that Pierce remembers to take deep breaths to calm down when reminded.</p> <p>As the time for the class performance approaches, Rhea moves farther and farther away from the group and sits alone. When Ms. Joyner asks Rhea to rejoin the group for one last practice, Rhea puts her head down and does not respond. Ms. Joyner moves closer to Rhea, and they discuss how Rhea is feeling. Ms. Joyner reminds her about the special sunglasses for brave students to wear when they are on stage, so that the lights can shine very brightly on them without hurting their eyes. Rhea puts the special sunglasses on and rejoins the group for their performance.</p> <p>During PE, Anna often engages in inappropriate verbal comments when either winning or losing a group game or activity. The PE teacher and classroom teacher have been working collaboratively to teach the characteristics of good sportsmanship and offering strategies for how to appropriately express good sportsmanship. When the other team scores a goal, Anna jumps up to yell, but the teacher catches her eye, and Anna gives a compliment to the child that scored and walks back to her team members. She continues to compliment team members and stays calm even though her team is losing.</p> | <p>Gervaise is at the science table doing an experiment with color mixing. He often becomes anxious when he is unsure of himself, and has learned that rechecking his work helps him to calm down. He's not sure the experiment is working like it is supposed to, so he checks two times and then remembers his teacher's suggestion and checks with a friend.</p> <p>During group time, Ella sees that her plant on the window is budding, and she is so thrilled that she impulsively yells, "Yippee!" When the other children say, "SHHHHHHHH!", Ella remembers that her teacher has told her that there are times when it is OK to yell out loud and times when it is not OK. The next day when she checks her plant and sees that it has fully bloomed into a bright red flower, Ella can't contain her amazement and yells "Wow!" She looks at the teacher for confirmation that this was not quiet time, and the teacher gives her a thumbs up.</p> <p>The teacher has offered children the opportunity to share a skill that they know. Yuri is going to teach her class about making jewelry. Martha runs to the table where Yuri is setting up and grabs a necklace Yuri brought to show the class. Yuri remembers what Mrs. Lynn told her about handling conflicts by first trying to talk with a friend before telling the teacher. Yuri asks Martha for the necklace, but Martha refuses to return it. Yuri feels her cheeks getting hot as she gets more and more frustrated. Before losing her temper, Yuri asks Mrs. Lynn for help getting back her necklace.</p> | <p>After returning to school from a three-day absence, Tyrese tells Mrs. Ruiz that his grandfather is very sick and that the family will be traveling again next week to be with their grandmother at the hospital. Tyrese says it is very hard to see his mom so sad. Tyrese shows his teacher that he has been drawing in his journal while he's been gone, and explains how drawing in his journal is helping him, just like the journals they use when they are excited about something that they have learned in class.</p> <p>Maya has been practicing positive self-talk. During PE she has learned to say "I did my best" instead of blaming the other players or talking about giving up. Recently Maya's friend Tanya has been unkind to her. Although Maya's feelings are hurt, she handles the situation by using her positive self-talk strategy. The teacher notices what has occurred and asks Maya, "Tell me what happened and how you handled it." Maya says, "I told myself that I have other friends who like me and maybe Tanya is having a bad day."</p> <p>Caleb used to experience frequent, angry outbursts during the day. While interacting with other children, he would hit or throw objects at them. The teacher talked to Caleb after the outbursts, and he expressed that he could feel himself becoming angry. Caleb told the teacher that his chest felt hot when he got mad. The teacher and Caleb created a "safe space" for Caleb behind her desk. She told Caleb that when he feels himself getting mad, he could go to the safe space to cool down. The teacher encouraged Caleb to use his safe space as soon as he sees a stressful situation. Now Caleb uses his safe space consistently and no longer has outbursts.</p> | PERFORMANCE DESCRIPTORS |

EMOTION REGULATION

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| UNDERSTANDING | Children understand that external support can be used to help regulate the experience and expression of emotions. (continued) | Children understand that reflecting on their emotions, and the connection of self-regulation to their actions, helps them regulate their emotions and actions. |
| SKILLS | H. Uses learned strategies for regulating emotions during transitions, because of interruptions, to accomplish a different or new type of task, or because of changes in the daily routines. | I. Reflects about emotions and the consequences of actions. Demonstrates reflection by changes in behavior, by incorporating feedback into self-regulation strategies, or by displaying compassion. |
| PERFORMANCE DESCRIPTORS | <p>Mark is in the computer lab when the fire alarm sounds. He is in the middle of an activity and feels frustrated because he wants to finish. His classmates start going out the door, but Mark stays in his seat. Mark remembers to take a deep breath when he's frustrated and then asks his teacher, "Will we come back so I can finish?"</p> <p>Gavin's classroom teacher informs her students that they will not be having Technology class because there is a school-wide assembly instead. Gavin was looking forward to going to the computer lab and does not want to go to the assembly. Instead of lining up for the assembly as his teacher has instructed the class to do, Gavin walks toward his desk. Gavin sees the "Cooperation" poster hanging on the wall, and remembers that one way to cooperate is to follow directions even when you are disappointed. He turns toward the door and joins his classmates in line.</p> <p>Deanna's Math group is designing and constructing probability spinners. As the group begins the project, Deanna's grandmother arrives to take her to an appointment. Deanna does not want to disappoint her group members by leaving in the middle of their project. She becomes anxious about leaving and her cheeks flush. Having experienced this feeling before, she has learned to take a deep breath to help think clearly. After taking a few deep breaths, she decides to talk with her group about reassigning group roles so that she can complete her portion of the assignment while she is away.</p> | <p>A child is sharing a story at Circle Time about how his new puppy is sick and his family had to take it to the vet. The child begins to cry and says, "I am afraid my puppy will die." Mary puts her arm around the other child and says, "I was sad when my cat was sick. I hope your puppy gets better."</p> <p>Lucinda enters the classroom with tears in her eyes. She has left her lunchbox in the car for the second time this week. After sitting quietly in her chair for a few minutes, Lucinda says to her teacher, "Mrs. Baker, could you please call my dad and tell him I left my lunchbox in our car? I think that from now on I will put my lunchbox in my backpack so I won't accidentally leave it in the car anymore."</p> <p>Each Friday, during morning meeting, the teacher and students set aside time to reflect on emotions, their consequences, and how to regulate them. The teacher has modeled for students how to create a community of learners where they are safe to talk about their emotions. Students share their personal emotional temperature, or the teacher sets up a scenario that allows for emotional and/or social problem solving.</p> <p>Jacob shares with the group that while he was doing last night's math assignment, he felt scared, his stomach started hurting, and he just wanted to give up. He turned in an incomplete paper. The class discusses the consequences of not finishing the assignment. They also offer Jacob some useful strategies for regulating his emotions when he approaches a stressful learning situation. The teacher asks Jacob to summarize the strategies and to think about how he can use these tools in the future. The next day, the class celebrates Jacob's use of strategies when he turns in a completed assignment.</p> |

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Emotional Literacy

DOMAIN: Emotional and Social Development

CLAIM: Students communicate about and use strategies to regulate responses to their own emotions.

RATIONALE

Emotions serve a very important function in development. They help motivate us to take action, avoid danger, and establish and sustain social relationships (Landy, 2002). There are three aspects of emotion: the subjective experience, the physiological (sweaty palms, racing heart) and the expressive (how we behave or what we say).

Learning to regulate one's emotions involves learning a complex set of skills over time that are essential for doing well in school and relationships. Children first learn to recognize emotion, in their own feelings, thoughts and body experiences, and from the face and body signals of others. Then they learn to pay attention to and respond to emotions. Over time, they come to understand more about how emotions work, and finally, they learn to regulate their emotions – to use them to meet their needs and build relationships with other people (Mayer, Salovey & Caruso, 2000). This is sometimes referred to as *emotional intelligence* (Goleman, 1995).

Language and communication play a very important part of the development of emotion regulation (Raver, Garner, & Smith-Donald, 2007). Children who recognize and communicate about their own emotions more easily manage their own emotions. Learning two languages is not necessarily a disadvantage for learning to regulate behavior and emotions (Luchtel, Hughes, Luze, Richardson Bruna & Peterson, 2010); however it may pose challenges for communicating about them. Children who show delays with language development may have difficulty meeting their needs and connecting with peers, and may express their frustration in challenging behavior.

Children who are able to identify and express their emotions are better able to manage strong emotions, and therefore often have better relationships with children in their classroom and have better social skills with peers, both of which are important competencies for success in school. Children who have difficulty managing frustration or maintaining a positive attitude may also have difficulty with tasks that are important for academic learning, such as focusing attention, planning and finishing tasks, and regulating other behaviors that are important for academic learning (Blair, 2002; Raver, et al., 2007). Identifying and managing one's emotions is essential to personal well-being and happiness and helps children get along better with other people (K-3 North Carolina Think Tank, 2013).

When evaluating a child's emotion regulation, it is important to keep in mind that individual differences among children and cultural expectations may explain variations in children's behavior:

- 1) Children have biologically-based temperamental predispositions that account for how they respond to new things and react to difficult or negative situations.
- 2) Children who have delays in language development may struggle to identify and describe emotional experiences, and often develop emotion knowledge and regulation skills more slowly than their peers.
- 3) Family context may also account for individual differences in children's development. For example, children whose family culture has different expectations for regulating emotions may struggle or be confused while learning two sets of rules.
- 4) Children whose families are experiencing stress may develop emotion regulation more slowly, or show regression of emotion regulation skills in some circumstances.

In these and other circumstances, children often require extra support from teachers to practice and learn about emotion and emotion regulation.

In order for children to learn to identify emotions, a child may need to identify postures and bodily features in others and images (e.g., picture books, illustrations). Label, describe, and describe context and causes of emotion.

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

ESD-1 Children demonstrate a positive sense of self-identity and self-awareness.

ESD-6 Children identify, manage, and express their feelings.

ESD-7 Children recognize and respond to the needs and feelings of others.

HPD-6 Children develop awareness of their needs and the ability to communicate their needs.

LDC-4 Children speak audibly and express thoughts, feelings, and ideas clearly.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

K.MEH.1 Remember the association of healthy expression of emotions, mental health, and healthy behavior

1.MEH.1 Understand the relationships among healthy expression of emotions, mental health, and healthy behavior.

EMOTIONAL LITERACY

| | | | | |
|--------------------------------|---|---|---|---|
| UNDERSTANDING | <p>Children understand that emotions may be experienced in their bodies and expressed in their behaviors.</p> | | | <p>Children understand that emotions may be recognized in themselves and others.</p> |
| SKILLS | <p>A. In response to an experience, expresses a range of emotions. This may manifest as an outburst, change in activity level or facial expressions.</p> | <p>B. Exaggerates expression of emotions to get needs and desires met and/or to get help from an adult or peer.</p> | <p>C. Expresses emotions through language, posture, or gestures suitable to the context.</p> | <p>D. With support from an adult, labels emotions in self and others.</p> |
| PERFORMANCE DESCRIPTORS | <p>While the class is researching reptiles on the computer, Holly sees a picture of a snake, runs to the back of the room and hides under the teacher’s desk.</p> <p>The teacher announces that it’s time to go outside. In her excitement, Kelly knocks over her pencil box and screams, “Woohoo!”</p> | <p>While in the block center, Marshall builds a giant tower. When it falls over, he stomps his feet and yells across the room to his teacher, “My tower fell over!”</p> | <p>Lucas is painting at the easel and is praised by the teacher. His face shows pride.</p> <p>On the playground, Karen’s friend is stung by a bee. Karen shows concern by placing her arm around her friend.</p> <p>When the teacher sees William take something that does not belong to him, the teacher says, “Jovan is missing his show-and-tell item.” William expresses shame by looking away.</p> | <p>Jody is sitting by herself on the playground. Her teacher sits beside her and asks Jody how she is feeling. At first, Jody is not sure how to express how she feels, so the teacher reminds Jody of a book they read about a bear that was far from home. Jody says, “I’m lonely today like the bear.”</p> <p>When Erika entered the classroom she puts her nametag on the “How am I feeling today?” chart under the picture of “Sad.” Later in the morning Mrs. Rice sees Erika laughing with her friends. Mrs. Rice says to Erika, “You were sad this morning when you came in. How are you feeling now?” Erika says, “I’m happy now.”</p> |

EMOTIONAL LITERACY

| Children understand that emotions may be recognized in themselves and others. | | Children understand that emotions have causes and effects and that people may feel and respond differently in similar situations. | | | UNDERSTANDING |
|--|--|--|--|--|-------------------------|
| E. Independently labels emotions in self and others. | F. Labels higher-order emotions (confused, worried, surprised) in self and others. | G. Explains that an event can cause certain emotions. | H. Explains that an event can cause more than one emotion. | I. Explains that the same event can cause different people to experience different emotions. | SKILLS |
| <p>Javier is reading a book to a friend. He says, "Look at how excited the turtle is."</p> <p>Without prompting, Asa tells his teacher, "I am so happy today!"</p> | <p>Langley, the line leader, starts walking the class toward the music room. The teacher reminds Langley that today is PE day. Langley says, "Oh, I was confused."</p> <p>Samantha arrives late to school and says to her teacher, "My dad is worried that he is going to be late for work."</p> | <p>Mrs. Green greets Seth at the door. He says, "When my Mom drops me off at school, I miss her and I feel sad."</p> <p>At the art center, Katie says, "I am so upset. Someone colored all over my project."</p> | <p>After reading the book <i>Peter's Chair</i>, Sawyer explains that Peter is both happy and worried about having a baby sister because babies are fun to play with, but they also take all of Momma's time.</p> | <p>Sam says to his teacher, "Michael is happy because he is the line leader, but that makes me mad."</p> | PERFORMANCE DESCRIPTORS |

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SITUATION: *Using Literature to Label Feelings*

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| Selecting Learning Target(s) | Understanding: Children understand that emotions may be recognized in themselves and others. | | |
| | D. With support from an adult, labels emotions in self and others. | E. Independently labels emotions in self and others. | F. Labels higher-order emotions (confused, worried, surprised) in self and others. |
| Identifying Opportunities for Eliciting Evidence of Learning | <p>Children show emotions and feelings of varying sophistication throughout the day in different situations. When children enter the classroom in the morning they may say, "Hello!" in an excited tone or "I'm happy today." When listening to a story, a child may say, "The boy is sad because the dog is lost." When talking about the day's schedule, a child says, "Yay! We have Art today!" When opening a milk carton, a child says, "I'm so frustrated! Can you open this for me?" The teacher listens to and observes children's language to learn about how a child may label different emotions.</p> | | |
| Eliciting Evidence of Learning | <p>While reading aloud a book (e.g., <i>Caps for Sale</i>), the teacher pauses at the beginning of the book to ask the children, "Show me how you think the man feels when he finds that his caps are gone." The children show different expressions or gestures, such as angry, surprised, confused, and sad faces or stomping on the floor in an angry manner. The teacher then gives different children an opportunity to verbalize how they think the man felt. The teacher listens to the different types of expressions shared, noting basic and higher-order emotions, such as "He's mad." or "Look at his face. He is frustrated." or "He must be scared!" Because some children may not have the precise vocabulary to articulate the feeling, teachers listen for approximations or gestures that convey the same meaning.</p> <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • "How do you think the man feels?" • "How else might the character feel?" • "How would you feel if this happened to you?" • "How do you show it when you feel ___?" <p><i>Students may respond with words, or by using pictures, signs or gestures.</i></p> <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> • "Was the character angry? Mad? Sad?" • "You look sad today. Are you sad?" | | |
| Interpreting the Evidence | <p>Observation: While reading the book, the teacher probes, "How do you think the man feels?" Akash says, "He is sad" and makes a sad face. Then the teacher probes, "How else might the man feel?" Akash answers, "He is mad" and wrinkles her brow to look mad.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> D. With support from an adult, labels emotions in self and others. <p>Observation: Later in the day, after hearing the story <i>Caps for Sale</i>, Maggie comes to the teacher and says, "I don't like those monkeys. They made the man mad."</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> E. Independently labels emotions in self and others. <p>Observation: While reading the book, the teacher probes, "How does the man feel in the book?" Nate responds, "I think he was surprised."</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> F. Labels higher-order emotions (confused, worried, and surprised) in self and others. | | |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> | | |

SITUATION: *On Monday When It Rained*

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| Selecting Learning Target(s) | Understanding: Children understand that emotions have causes and effects and that people may feel and respond differently in similar situations. | | |
| | G. Explains that an event can cause certain emotions. | H. Explains that an event can cause more than one emotion. | I. Explains that the same event can cause people to experience different emotions from one another. |
| Preparation | <p><i>On Monday When It Rained</i>, by Cheryl Kachenmeister</p> <p>The teacher may utilize any age-appropriate book that provides opportunities to discuss a wide range of emotions, specifically about how a character feels.</p> | | |
| General Description | <p>The teacher reads <i>On Monday When It Rained</i> during a small group activity and discusses the boy's experiences as the story progresses. The teacher asks probing questions about the boy's experiences and the experiences of children in the group. Some children may not have the precise vocabulary to articulate the feelings, so the teacher intentionally listens for approximations and looks for gestures that convey the same meaning.</p> | | |
| Eliciting Evidence of Learning | <p>The teacher tells the children that she is going to read a story about a small boy and what happens to him every day for a week. She explains that each day, based on what happens, the boy talks about how these events make him feel. While reading the story, the teacher pauses after reading the day's events (before turning the page to reveal the boy's expression), and asks the children, "How do you think the boy will feel?" Tommy shares with the group, "Mad!" Susie responds, "Unhappy." Johnny says, "I don't know." The teacher then says to the children, "Use your face to show me how you think the boy will feel." The teacher looks out to the group of children and sees Susie making an unhappy face. The teacher then shows the picture of the boy's expression, and asks the children, "How do you think you would feel if the same thing happened to you?" Several children respond, including Yolanda who says, "I would be mad if I couldn't ride my bike." The teacher then says to the children, "Use your face to show me how you think you would feel." Susie and Yolanda are making sad faces. The teacher continues by asking a question about feeling different from someone else in the same situation. "Is there some other way you would feel if the same thing happened to you?" Elisa quietly shares with the group, "I think I would cry if that happened to me," to which Ezekiel responds, "I like when it rains; then I don't have to walk to school."</p> <p>The teacher later relates the book to current experiences, saying to the children, "I remember when it rained last week, how did you feel?" Regan immediately replies, "I remember that we had to miss recess and I was sad." In an attempt to learn about how children would respond to a question that expresses more than one emotion for the same experience, the teacher asks, "Can you think of a time when you were happy and sad at the same time?" Zack tells the group, "I was excited about the pool party for my birthday, but when it rained, I got upset because we couldn't go to the pool."</p> <p>Suggested Probes:</p> <ul style="list-style-type: none"> • "Share a time when you did something that embarrassed you." • "What kinds of things are scary to you?" • "Tell me about a time when someone wouldn't share with you." <p>Probes to Avoid:</p> <ul style="list-style-type: none"> • "Would you feel embarrassed like the boy in the story?" • "Do you feel disappointed when it rains, and you can't do your favorite things outside?" • "Do you get mad when a friend won't share with you?" | | |
| Interpreting the Evidence | <p>Observation: The teacher asks, "How do you think you would feel if the same thing happened to you?" Johnny shrugs his shoulders and says, "I think I would be mad if I couldn't ride my new bike because it was raining."</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: G. Explains that an event can cause certain emotions. <p>Observation: The teacher asks, "Can you think of a time when you were both happy and sad?" Zack tells the group, "I was excited about the pool party for my birthday, but when it rained, I got upset because we couldn't go to the pool."</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: H. Explains that an event can cause more than one emotion. <p>Observation: When the teacher asks, "Is there a different way you would feel if the same thing happened to you?" Ezekiel responds, "I like when it rains, then I don't have to walk to school."</p> <ul style="list-style-type: none"> • Identify Learning Status on Construct Progression: I. Explains that the same event can cause people to experience different emotions from one another. | | |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> | | |

Crossing Midline

DOMAIN: Health and Physical Development

CLAIM: Students can demonstrate competencies in motor skills and movement patterns.

RATIONALE

Piaget (1954) was one of many developmental psychologists who linked motor skill development with improvements in perceptual and cognitive development. Motor and cognitive functions tend to follow a similar timeline with intensified development between the ages of five and ten (Gabbard, 2008). Grissmer et al. (2010) emphasize the importance of motor skill development in children. Their data analyses suggest that fine motor skills are a strong predictor of achievement. When analyzed collectively, "attention, fine motor skills, and general knowledge are much stronger overall predictors of later math, reading, and science scores than early math and reading scores alone" (Grissmer et al., 2010, P. 1008). Recent research stresses the importance of facilitating both motor and academic development as the two continue to be linked in neuroscience research. When comparing gross motor skills of age-matched children with and without learning disabilities, researchers found a specific relationship between reading and locomotor skills and mathematics and object control skills - the greater the learning delay, the poorer the motor skills (Westendorp, Hartman, Houwen, Smith, & Visscher, 2011). Sibley and Etnier (2003) conducted a meta-analysis showing a positive correlation between physical activity and seven categories of cognitive performance (perceptual skills, intelligence quotient, achievement, verbal tests, mathematics tests, developmental level/academic readiness, and other) among school-aged children. Crossing the midline is an important milestone of development, reflecting integration of the bodily midline, which allows for bilateral coordination (Stilwell, 1987). Difficulty crossing the midline has been linked to a cluster of sensory, perceptual and motor difficulties exhibited by some children with learning exceptionalities (Ayres, 1972; Michell & Wood, 1999; Stilwell, 1987; Murata & Tan, 2009). Previous research suggests that failure of children between the ages of three and four to cross the midline could predict later potential problems in development (Michell & Wood, 1999).

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

HPD-4 Children develop the large muscle control and abilities to move through and explore their environment.

HPD-5 Children develop small muscle control and eye-hand coordination to manipulate objects and work tools.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

PE.MS.1 Apply competent motor skills and movement patterns needed to perform a variety of physical activities.

K.CP.2 Understand how to use performance values (kinesthetic awareness, concentration, focus, and etiquette) to enhance dance performance.

K.DM.1 Understand how to use movement skills in dance.

1.CP.2 Understand how to use performance values (kinesthetic awareness, concentration, focus, and etiquette) to enhance dance performance.

2.CP.2 Understand how to use performance values (kinesthetic awareness, concentration, focus, and etiquette) to enhance dance performance.

CROSSING MIDLINE

| | | | |
|-------------------------|--|--|---|
| UNDERSTANDING | <p>Children are learning that crossing the midline with fine and gross motor activities enables them to perform tasks more efficiently.</p> | | |
| SKILLS | <p>A. Isolates movement to one side of the midline (the invisible line running from our head to our toes, dividing the body into left and right halves).</p> | <p>B. Begins to cross the midline in some situations.</p> | <p>C. Consistently crosses midline.</p> |
| PERFORMANCE DESCRIPTORS | <p>Olivia uses her left hand to manipulate and pick up things located to the left of her and uses her right hand for things located on her right side. Sometimes she picks up an object on her left side with her left hand and switches it to her right hand in front of her body in order to place the object on her right side (thus, avoiding crossing her midline).</p> <p>Painting the capital letter 'A,' Noah makes a right slanted line with his right hand. He then switches the paintbrush to his left hand and paints the left slanted line.</p> <p>Alyssa picks up chips while counting each one. She picks up the chips on her right side with her right hand. She picks up the chips on her left side with her left hand.</p> <p>While playing a board game, Huan notices the playing piece(s) located to his left. He turns his body so that he picks up the playing pieces with his right hand without crossing his arm across his torso.</p> <p>Jack places his writing materials at the table. He turns his body so that the paper is located on his right side and begins to write on the paper without extending his arm across his body.</p> | <p>At the beginning of the "Macarena Months" song and movement activity, Ethan crosses his right arm to touch his left shoulder and uses his left arm to his right knee. Towards the end of the song, Ethan no longer crosses the midline and uses his left arm to touch the left side of his body and his right arm to touch the right side of his body.</p> <p>During Writer's Workshop, Martina writes in her journal. She places the paper in front of her and moves her arm across her body to write. Later, when Martina was writing a sign for her structure, she moved the paper to one side of her body and wrote her sign without moving her arm across the center of her body.</p> <p>During yoga Christian swung his arms across his body to make the monkey pose. Later, when they did that pose again, he kept his arms to one side without crossing his body.</p> | <p>Gabriel consistently crosses the midline during a variety of activities and tasks, using his dominant hand (right) for movement and manipulation around his body, not just on the right hand side. He does not manipulate his body, paper or objects in order to avoid crossing the midline.</p> <p>Imani picks up all of her game pieces located in various spaces on the board with her dominant hand.</p> <p>Brandon paints on all areas of a large piece paper with his dominant hand.</p> <p>Brianna brings the racket across her body to hit the ball (instead of switching the racket to her other hand).</p> |

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SITUATION: *Throughout the Day*

| | | | |
|--|---|---|---|
| Selecting Learning Target(s) | Understanding: Children are learning that crossing the midline with fine and gross motor activities enables them to perform tasks more efficiently. | | |
| | A. Isolates movement to one side of the midline (the invisible line running from our head to our toes, dividing the body into left and right halves). | B. Begins to cross the midline in some situations. | C. Consistently crosses midline. |
| Identifying Opportunities for Eliciting Evidence of Learning | <p>The teacher observes children as they participate in activities throughout the day and pays particular attention to their ability to cross the midline. There are many opportunities to observe midline throughout the day. Teachers may observe how children paint on a large piece of paper using one hand to make a stroke from one side to the other and/or paint on both sides. While using writing or drawing materials, the teacher may notice if a child uses one hand to make all strokes of a letter or writes, draws, and colors across the paper. When playing games, the teacher may see if a child stretches from left to right and/or from right to left to pick up a card during a matching game. As a child turns the pages in a Big Book, the teacher may observe whether the child uses his right hand to turn the pages, crossing over the midline, rather than switching hands to complete the page turn. When working with manipulatives (e.g., blocks, coins, chips, counting bears, cubes), the teacher may notice if the child picks up or places manipulatives across the body from left to right and/or from right to left. As children sing songs and play games with body movements that include activities such as “touch left hand to right knee” or “right hand to left shoulder,” the teacher may observe how children make such movements.</p> | | |
| Eliciting Evidence of Learning | <p>During learning stations/centers, the teacher moves around to various stations and observes children using materials. At the math center, the teacher looks for children crossing the midline when picking up and placing objects, such as counting bears, into three buckets placed in front of them for a sorting activity.</p> <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • “Try using one hand.” • “Can you keep your body facing forward?” <p><u>Probes to avoid:</u></p> <ul style="list-style-type: none"> • “Use only one hand.” • “Do not turn your body.” • “Move your arm across your body like this.” | | |
| Interpreting the Evidence | <p>Observation: Mia picks up objects with her right hand to place them in the basket on the right. She picks up objects with her left hand to place them in the basket on the left. Occasionally she picks up objects with her right hand to place them in the basket on the left.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> B. Begins to cross the midline in some situations. | | |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn’t met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> | | |

Fine Motor

DOMAIN: Health and Physical Development

CLAIM: Students can demonstrate competencies in motor skills and movement patterns.

RATIONALE

Piaget (1954) was one of many developmental psychologists who linked motor skill development with improvements in perceptual and cognitive development. Motor and cognitive functions tend to follow a similar timeline with intensified development between the ages of five and ten (Gabbard, 2008). Grissmer et al. (2010) emphasize the importance of motor skill development in children. Their data analyses suggest that fine motor skills are a strong predictor of achievement. When analyzed collectively, “attention, fine motor skills, and general knowledge are much stronger overall predictors of later math, reading, and science scores than early math and reading scores alone” (Grissmer et al., 2010, p. 1008). Recent research stresses the importance of facilitating both motor and academic development as the two continue to be linked in neuroscience research. When comparing gross motor skills of age-matched children with and without learning disabilities, researchers found a specific relationship between reading and locomotor skills and mathematics and object control skills - the greater the learning delay, the poorer the motor skills (Westendorp, Hartman, Houwen, Smith, & Visscher, 2011). Sibley and Etnier (2003) conducted a meta-analysis showing a positive correlation between physical activity and seven categories of cognitive performance (perceptual skills, intelligence quotient, achievement, verbal tests, mathematics tests, developmental level/academic readiness, and other) among school-aged children. Crossing the midline is an important milestone of development, reflecting integration of the bodily midline, which allows for bilateral coordination (Stilwell, 1987). Difficulty crossing the midline has been linked to a cluster of sensory, perceptual and motor difficulties exhibited by some children with learning exceptionalities (Ayres, 1972; Michell & Wood, 1999; Stilwell, 1987; Murata & Tan, 2009). Previous research suggests that failure of children between the ages of three and four to cross the midline could predict later potential problems in development (Michell & Wood, 1999).

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

HPD-4 Children develop the large muscle control and abilities to move through and explore their environment.

HPD-5 Children develop small muscle control and eye-hand coordination to manipulate objects and work tools.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

Fine motor skills enable the use of the small muscles of the hand to work together to perform precise and refined movements. Educators and researchers recognize the importance that these fine motor skills have on a child's success within multiple aspects of learning and development. For example, when a child writes, fine motor skills allow the child to focus on the content of what's being written rather than the mechanics of pencil grasp, letter formation, spacing, and sizing. Research also recognizes the connection between less developed fine motor skills and emotional and social development, including anxiety and depression (Grissmer et al., 2010; Woodward & Swinith, 2002; Skinner & Piek, 2001). In addition, when analyzed collectively, “attention, fine motor skills, and general knowledge are much stronger overall predictors of later math, reading, and science scores than early math and reading scores alone” (Grissmer et al., 2010, p. 1008).

Although the NC SCOS does not directly address fine motor skills, the importance of fine motor skill development influences numerous factors of learning and development, such as:

- (PE) Apply competent motor skills and movement patterns
- (ELA) Write arguments, informative/explanatory texts, narratives, and research projects
- (Arts) Create original art
- (TECH) Use technology tools

FINE MOTOR – GRIP AND MANIPULATION

| | | | | | |
|--------------------------------|---|--|---|---|--|
| UNDERSTANDING | <p>Children are learning to coordinate muscle groups to perform fine manipulation of objects and skilled use of tools, while moving towards fine motor skills performed automatically with a focus on content & outcome.</p> | | | | |
| SKILLS | <p>A. Uses a fist ed grip or palmar grasp to reach, manipulate or hold items (palmar grasp), with whole arm movement.*</p> | <p>B. Uses thumb and fingers to manipulate objects (pincer grip), with whole arm movement and increased stability from the shoulder.*</p> | <p>C. Uses refined wrist and finger movement, beginning to transfer control of movement from the shoulder to the elbow.*</p> | <p>D. Uses hands with minimal elbow movement and primary control from wrist and fingers.*</p> | <p>E. Hand movements are primarily controlled by actions from the wrist and fingers.</p> |
| PERFORMANCE DESCRIPTORS | <p>When observed in a variety of settings, Logan grasps objects (e.g., fork, spoon, paintbrush, marker, crayon, pencil, counters) with her entire hand, fingers pointing down or five-finger grip (palmar grasp), using a whole arm movement (shoulder and elbow), resulting in less precise hand control.</p> <p>When trying to open and close the scissors, Jackson uses both hands, with one hand gripping the top loop and the other hand gripping the bottom loop.</p> <p>While cutting with scissors, Emily inserts her index finger in one loop of the scissors and her middle finger in the other loop.</p> | <p>In a variety of settings, Mateo uses his thumb and fingers (pincer grip) to manipulate or move objects (e.g., fork, spoon, scissors, adaptive scissors, crayon, primary pencils, short pencils, dice, grape, cracker, writing utensil with a tripod grip), with increased stability in shoulder movement resulting in improved finger precision and control.</p> <p>Tripod grip: When buttoning, zipping, and snapping her winter jacket, Francesca uses her thumb and fingers with increased stability in shoulder movement, resulting in improved finger precision and control.</p> | <p>Santiago uses precise finger movement (isolated control of each finger) in a variety of settings, such as when using writing and drawing utensils, building with Lego® toys, tearing paper, picking up chips or coins, opening a bottle or picking up laces of a shoe. Manipulation is controlled and stabilized from the wrist through fingers, allowing for greater accuracy.</p> <p>When helping his classmate button, zip, and snap his bookbag, Anthony uses precise finger movement (isolated control of each finger). Manipulation is controlled and stabilized from the wrist through fingers, allowing for greater accuracy.</p> <p>As Joshua uses scissors, his thumb is in the top loop, and his index finger (or multiple fingers) are in the bottom loop. His elbow is away from his body and elevated, using his whole arm to cut.</p> | <p>Gabrielle uses her thumb and fingers to manipulate or move objects (e.g., writing and drawing utensils, building materials, tearing paper, picking up chips or coins, opening a bottle, picking up a shoelace) in a variety of settings (e.g., writing, drawing, coloring, buttoning, zipping, snapping). Her wrist and fingers move together as a unit with less movement from the shoulder. When writing or drawing, her fingers appear still and close together, resulting in improved efficiency (thus, investing minimal time and effort).</p> <p>When using scissors, Caleb places his thumb in the top loop and his middle finger (or ring finger, depending on size of loop) in the bottom loop. He uses his index finger along the bottom of the blade for stabilization. Sometimes his elbow is close to his body, and his shoulder becomes more stable.</p> | <p>Alejandro uses different tools (including scissors) to complete increasingly complex fine motor tasks (such as buttoning, zipping, snapping, cutting, drawing) with precision and efficiency (investing minimal time and effort) in a variety of settings.</p> <p>Brandon exhibits control when following intricate cutting patterns and cutting different types of materials (card stock, yarn, textiles).</p> <p>Sofia controls the computer mouse or track pad efficiently and with little effort.</p> <p>Juliana manipulates the small electronic motor control box on the arm of her wheelchair when maneuvering through different pathways in the classroom and within the school building.</p> |

* *NOTE: Fine motor activities (e.g. zipping, writing, stringing a bead) are observable representations of using the functions of visual-motor integration together. If a child demonstrates this level with the ability to hold and manipulate the object they are using (scissors, pencil, crayon, etc.), but does not follow the line to cut, stay in the lines to color, or copy a letter correctly when writing, it may be due to visual ability rather than fine motor ability. Talk with your school nurse or occupational therapist for additional information.*

FINE MOTOR – HAND DOMINANCE

| | | | | |
|--|---|--|--|--------------------------------|
| <p>Children are learning to coordinate muscle groups to perform fine manipulation of objects and skilled use of tools, while moving towards fine motor skills performed automatically with a focus on content & outcome.</p> | | | | <p>UNDERSTANDING</p> |
| <p>A. Uses no established dominance for lead/dominant hand (switching still continues).</p> | <p>B. Uses established dominant hand.</p> | <p>C. Performs actions involving mirrored movements with opposing hand.</p> | <p>D. Manipulates with dominant hand with assistance from other hand.</p> | <p>SKILLS</p> |
| <p>When observed in a variety of settings, Harper is inconsistent with regards to which hand is used (e.g., drawing, writing, cutting, tossing a beanbag, using an eating utensil).</p> | <p>Abigail mostly uses the same hand to complete a variety of activities (e.g., color, paint, write, throw a ball, staple, brush hair/teeth, use adaptive technology, use a mouse, scoop items from a jar).</p> | <p>Rather than relying solely on the dominant hand, Luke uses opposing hands in an attempt to accomplish a task (e.g., tearing paper, catching a ball with two hands, snapping cubes, using a Velcro® fastener, playing a drum with a stick in each hand, separating the seam of a milk carton spout, clapping, tapping two sticks together, rolling a ball with two hands, pulling loops of a shoe string to make a bow).</p> | <p>In a variety of settings, Brianna uses one hand for manipulation and one hand for assistance. In a controlled action, her hands perform independent actions (e.g., zipping, screwing a lid on a jar, turning pages, holding food while cutting it with a knife).</p> <p>Jayla holds a piece of paper still with one hand while writing or drawing with her dominant hand.</p> <p>Ethan holds and turns a piece of construction paper with one hand while cutting with his dominant hand.</p> <p>Joseph holds a string with one hand and uses his dominant hand to place a bead on the string.</p> <p>Emma stabilizes the block tower with one hand while adding a block on top with the other hand.</p> | <p>PERFORMANCE DESCRIPTORS</p> |

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SITUATION: *Throughout the Day*

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|--|--|---|---|--|--|--|---|
| Selecting Learning Target(s) | Understanding: Children are learning to coordinate muscle groups to perform fine manipulation of objects and skilled use of tools, while moving towards fine motor skills performed automatically with a focus on content & outcome. | | | | | | |
| | GRIP AND MANIPULATION | | | | | | |
| | A. Uses a fist ed grip or palmar grasp to reach, manipulate or hold items (palmar grasp), with whole arm movement. | B. Uses thumb and fingers to manipulate objects (pincer grip) with whole arm movement and increased stability from the shoulder. | C. Uses refined wrist and finger movement, beginning to transfer control of movement from the shoulder to the elbow. | D. Uses hands with minimal elbow movement and primary control from wrist and fingers. | E. Hand movements are primarily controlled by actions from the wrist and fingers. | | |
| | HAND DOMINANCE | | | | | | |
| Identifying Opportunities for Eliciting Evidence of Learning | A. Uses no established dominance for lead/dominant hand (switching still continues). | | B. Uses established dominant hand. | | | | |
| | C. Performs actions involving mirrored movements with opposing hand. | | D. Manipulates with dominant hand with assistance from other hand. | | | | |
| Identifying Opportunities for Eliciting Evidence of Learning | <p>Grip and Manipulation and Hand Dominance may be observed in various school activities throughout the day. The teacher may observe Grip and Manipulation and Hand Dominance while the children are:</p> <ul style="list-style-type: none"> holding pencils, crayons and/or markers during writing, drawing, and coloring holding paintbrushes during painting zipping and/or buttoning while preparing to go outside holding scissors while cutting holding spoons and/or forks while eating manipulating small objects (e.g., blocks, coins, chips, counting bears, counting cubes, etc.) manipulating a computer mouse rolling dice using an electronic device | | | | | | |
| Eliciting Evidence of Learning | <p>After reading a book aloud and engaging children in a discussion about an idea, theme, or character from the book, the teacher presents the children with a range of materials. The materials include a variety of paper and various types and sizes of scissors, crayons, and pencils. Then, the teacher asks the children to make a collage (or other art project) related to the book (e.g., an idea, theme, or character). While the children work, the teacher prompts them to use the materials and observes their scissors grip and pencil/crayon manipulations. As children reach for and use writing instruments, paper, and scissors, the teacher observes for hand dominance.</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top; padding: 5px;"> <p>GRIP AND MANIPULATION <u>Suggested Probes:</u></p> <ul style="list-style-type: none"> “How else could you hold the scissors when you’re cutting?” “How else could you hold the pencil or crayon when you are drawing or writing?” “Look at these other kinds of scissors. Which would you like to try now?” <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> “Put your fingers in the scissors like this.” “Hold your pencil like I showed you.” </td> <td style="width: 50%; vertical-align: top; padding: 5px;"> <p>HAND DOMINANCE <u>Suggested Probes:</u></p> <ul style="list-style-type: none"> “Would you like to try the other hand? Which hand feels more comfortable?” <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> “This hand is probably the best for you to use.” “Please don’t switch back and forth with your hands. Just use this hand.” </td> </tr> </table> | | | | | <p>GRIP AND MANIPULATION <u>Suggested Probes:</u></p> <ul style="list-style-type: none"> “How else could you hold the scissors when you’re cutting?” “How else could you hold the pencil or crayon when you are drawing or writing?” “Look at these other kinds of scissors. Which would you like to try now?” <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> “Put your fingers in the scissors like this.” “Hold your pencil like I showed you.” | <p>HAND DOMINANCE <u>Suggested Probes:</u></p> <ul style="list-style-type: none"> “Would you like to try the other hand? Which hand feels more comfortable?” <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> “This hand is probably the best for you to use.” “Please don’t switch back and forth with your hands. Just use this hand.” |
| <p>GRIP AND MANIPULATION <u>Suggested Probes:</u></p> <ul style="list-style-type: none"> “How else could you hold the scissors when you’re cutting?” “How else could you hold the pencil or crayon when you are drawing or writing?” “Look at these other kinds of scissors. Which would you like to try now?” <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> “Put your fingers in the scissors like this.” “Hold your pencil like I showed you.” | <p>HAND DOMINANCE <u>Suggested Probes:</u></p> <ul style="list-style-type: none"> “Would you like to try the other hand? Which hand feels more comfortable?” <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> “This hand is probably the best for you to use.” “Please don’t switch back and forth with your hands. Just use this hand.” | | | | | | |
| Interpreting the Evidence | <p>Observation (Grip and Manipulation-Pencil Grip): As Megan writes her name on her collage, she uses a fist ed grip on the pencil. The teacher probes, “How else can you hold your pencil?” Megan attempts the pincer grip, but after writing one letter, she returns to the fist ed grip with whole arm movement.</p> <ul style="list-style-type: none"> <u>Identify Learning Status on Construct Progression:</u> A. Uses a fist ed grip or palmar grasp to reach, manipulate or hold items (palmar grasp), with whole arm movement. <p>Observation (Grip and Manipulation- Scissors Grip): The teacher probes, “How else could you hold the scissors when you’re cutting?” Megan transitions to a scissors grip using the thumb and fingers to manipulate the scissors. She continues to use this grip for the entire duration she works on the collage, with greater control and stabilization from the wrist through the fingers.</p> <ul style="list-style-type: none"> <u>Identify Learning Status on Construct Progression:</u> C. Uses refined wrist and finger movement, beginning to transfer control of movement from the shoulder to the elbow. <p>Observation (Hand Dominance): When illustrating a story, Megan uses her right hand to hold her scissors, reach for a crayon, and hold her pencil. Megan uses whole right arm movement when using the scissors. The teacher observes as Megan twists and turns her right arm to position the scissors for cutting rather than using her left hand to move the paper.</p> <ul style="list-style-type: none"> <u>Identify Learning Status on Construct Progression:</u> B. Uses established dominant hand. | | | | | | |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn’t met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> | | | | | | |

SITUATION: *Friendship Wreath*

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|--------------------------------|--|---|---|--|--|
| Selecting Learning Target(s) | Understanding: Children are learning to coordinate muscle groups to perform fine manipulation of objects and skilled use of tools, while moving towards fine motor skills performed automatically with a focus on content & outcome. | | | | |
| | GRIP AND MANIPULATION | | | | |
| | A. Uses a fist grip or palmar grasp to reach, manipulate or hold items (palmar grasp), with whole arm movement. | B. Uses thumb and fingers to manipulate objects (pincer grip) with whole arm movement and increased stability from the shoulder. | C. Uses refined wrist and finger movement, beginning to transfer control of movement from the shoulder to the elbow. | D. Uses hands with minimal elbow movement and primary control from wrist and fingers. | E. Hand movements are primarily controlled by actions from the wrist and fingers. |
| | HAND DOMINANCE | | | | |
| Preparation | A. Uses no established dominance for lead/dominant hand (switching still continues). | | | | B. Uses established dominant hand. |
| | C. Performs actions involving mirrored movements with opposing hand. | | D. Manipulates with dominant hand with assistance from other hand. | | |
| General Description | <ul style="list-style-type: none"> • A book about friendship* (e.g., <i>Friends</i> by Helme Heine, <i>Just My Friend & Me</i> by Mercer Mayer, <i>My New Friend Is So Fun</i> by Mo Willems, <i>Franklin's New Friend</i> by Paulette Bourgeois & Brenda Clark, <i>The Rainbow Fish</i> by Marcus Pfister) • Construction paper (red, pink, white, purple, etc.) folded with a cutting line in the shape of half of a heart (or pattern for children to trace) • Pencils and markers (of various diameters) • Blunt-tipped left- and right-handed children's scissors <p>*adapt with age appropriate book, topic and fine motor activity.</p> | | | | |
| Eliciting Evidence of Learning | <p>After the teacher reads a book aloud to the children about friendship, the children complete a cutting activity in small groups or individually. The teacher observes as children demonstrate Grip and Manipulation of small objects and Hand Dominance.</p> <p>The teacher reads a book aloud about friends and engages children in a discussion about why the characters were friends, how they became friends, and how they settled arguments. The teacher listens to children's ideas about what they think makes a good friend. After the conversation, the teacher explains that they will work together to create a friendship wreath and states the purpose of the activity (e.g., "You have a classroom of new friends"; "Friends lend a helping hand"; "Our hearts feel happy when we have friends"). The teacher shows the materials available to use and demonstrates the steps of the activity: 1. Choose your paper. 2. Cut on the line. 3. Write your name on the heart.</p> <p>The teacher observes children in small groups and/or individually as they make hearts for the friendship wreath. As the children cut out their heart and write their name on it, the teacher observes for Grip and Manipulation and Hand Dominance while children use the pencils and scissors. The hearts are joined together to create a large friendship wreath and displayed.</p> <p><u>Vignette:</u> The teacher observes Michael holding scissors in his right hand, with the thumb in the top loop and the middle and ring fingers in the bottom loop, with index and pinky fingers sticking out away from the scissors. Michael is unable to open the blades wide, and cutting is ragged. The teacher says, "How else could you hold the scissors when you are cutting?" Michael attempts a new hold and is still unable to open the blades wide, and cutting is ragged. The teacher says, "Look at these other kinds of scissors. Which would you like to try?" Michael tries a different pair of scissors and is still unable to open the blades wide, and cutting is ragged. The teacher observes Michael using whole arm movement while turning/manipulating the scissors as he cuts the paper.</p> <p>The teacher observes Michael writing his name. Michael chooses a fat pencil, and he holds it in the same hand as the one with which he held the scissors. Michael uses a tripod grip with whole arm movement, but the paper slides beneath the pencil as he writes.</p> <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • "How else could you hold the scissors when you are cutting?" • "Look at these other kinds of scissors. Which would you like to try?" <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> • "Put your fingers in the scissors like this." • "Use this hand to write your name." | | | | |

| | |
|---|--|
| Interpreting the Evidence | <p>Observation (Grip and Manipulation-Pencil Grip): Michael holds a pencil with a tripod grip and uses whole arm movement.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> B. Uses thumb and fingers to manipulate objects (pincer grip) whole arm movement with increased stability from the shoulder. <p>Observation (Grip and Manipulation-Scissors Grip): Michael holds the scissors with his thumb in the top loop, with his middle and ring fingers in the bottom loop, turning/manipulating the scissors as he cuts the paper using his whole arm.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> C. Uses refined wrist and finger movement, beginning to transfer control of movement from the shoulder to the elbow. <p>Observation (Hand Dominance): Michael uses the same hand to hold the scissors and the pencil. He manipulates the scissors as he cuts, while twisting and turning his right arm to position the scissors for cutting, rather than using his left hand to move the paper.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> B. Uses established dominant hand. |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |

Gross Motor

DOMAIN: Health and Physical Development

CLAIM: Students can demonstrate competencies in motor skills and movement patterns.

RATIONALE

Piaget (1954) was one of many developmental psychologists who linked motor skill development with improvements in perceptual and cognitive development. Motor and cognitive functions tend to follow a similar timeline with intensified development between ages 5 and 10 (Gabbard, 2008). Grissmer et al. (2010) emphasize the importance of motor skill development in children. Their data analyses suggest that fine motor skills are a strong predictor of achievement. When analyzed collectively, “attention, fine motor skills, and general knowledge are much stronger overall predictors of later math, reading, and science scores than early math and reading scores alone” (Grissmer et al., 2010, p. 1008). Recent research stresses the importance of facilitating both motor and academic development as the two continue to be linked in neuroscience research. When comparing gross motor skills of age-matched children with and without learning disabilities, researchers found a specific relationship between reading and locomotor skills and mathematics and object control skills: the greater the learning delay, the poorer the motor skills (Westendorp, Hartman, Houwen, Smith & Visscher, 2011). Sibley and Etnier (2003) conducted a meta-analysis showing a positive correlation between physical activity and seven categories of cognitive performance (perceptual skills, intelligence quotient, achievement, verbal tests, mathematics tests, developmental level/academic readiness, and other) among school-aged children. Crossing the midline is an important milestone of development, reflecting integration of the bodily midlines, which allow for bilateral coordination (Stilwell, 1987). Difficulty crossing the midline has been linked to a cluster of sensory, perceptual, and motor difficulties exhibited by some children with learning exceptionalities (Ayres, 1972; Michell & Wood, 1999; Stilwell, 1987; Murata & Tan, 2009). Previous research suggests that failure of a child, between ages 3 and 4, to cross the midline could predict later potential problems in development (Michell & Wood, 1999).

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

HPD-4 Children develop the large muscle control and abilities to move through and explore their environment.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

K.CP.2 Understand how to use performance values (kinesthetic awareness, concentration, focus, and etiquette) to enhance dance performance.

K.DM.1 Understand how to use movement skills in dance.

K.MS.1 Apply competent motor skills and movement patterns needed to perform a variety of physical activities.

1.CP.2 Understand how to use performance values (kinesthetic awareness, concentration, focus, and etiquette) to enhance dance performance.

2.DM.1 Understand how to use movement skills in dance.

2.MS.1 Apply competent motor skills and movement patterns needed to perform a variety of physical activities.

3.CP.2 Understand how to use performance values (kinesthetic awareness, concentration, focus, and etiquette) to enhance dance performance.

3.DM.1 Understand how to use movement skills in dance.

3.MS.1 Apply competent motor skills and movement patterns needed to perform a variety of physical activities.

GROSS MOTOR DEVELOPMENT: WEIGHT DISTRIBUTION FOR WALKING

| UNDERSTANDING: Children distribute their weight for walking. | | | |
|--|--|---|---|
| SKILLS | A. Walks* on a flat foot. <i>* Children may or may not walk in a straight line at this stage.</i> | B. Walks by distributing weight from heel to toe with developing balance and control. | C. Walks by distributing weight from heel to toe evenly and demonstrates balance and control. |
| PERFORMANCE DESCRIPTORS | When observed walking in a variety of settings (or asked to walk), Ethan walks with weight received on a flat foot as opposed to striking the ground with the heel and rolling to the toe. Ethan occasionally looks at his feet while walking and uses a wide base of support (wide distance between feet during stepping motion). | When observed walking in a variety of settings (or asked to walk), Camila walks receiving weight on the heel and rolls to toe with each stepping motion. She occasionally watches her foot placement while walking and uses a narrower base of support (smaller distance between feet during stepping motion). Camila can follow a straight line with focus and effort. | When observed walking in a variety of settings (or asked to walk), Cameron walks receiving weight on the heel and rolls to toe with each stepping motion without having to look at his feet. The base of support is narrow (small distance between feet during stepping motion). Cameron follows a straight line with minimal effort. |

GROSS MOTOR DEVELOPMENT: PATHWAYS

| UNDERSTANDING: Children develop spatial awareness as they identify and use appropriate pathways to manipulate space between self and others that include a variety of directions and levels. | | | |
|--|--|---|--|
| SKILLS | A. Navigates a path to avoid obstacles. | B. Navigates varying pathways while maneuvering in different directions. | C. Increases speed and agility while moving through varying pathways. |
| PERFORMANCE DESCRIPTORS | In a variety of movement situations (walking, running, jumping, skipping, hopping, or creative movement), Sophia navigates a straight path followed by a curved path while proceeding from one place to another. She avoids obstacles. | In a variety of movement situations (walking, running, jumping, skipping, hopping, or creative movement), Luciana changes pathways, adjusts to different levels and force, and demonstrates balance while changing directions (e.g., runs in a zigzag pattern). | In a variety of movement situations (walking, running, jumping, skipping, hopping, or creative movement), Samuel is observed making transitions with greater speed and agility, resulting in his ability to move through varying pathways with ease. |

GROSS MOTOR DEVELOPMENT: STAIR CLIMBING

| UNDERSTANDING: Children develop the ability to integrate motor skills and movement patterns to ascend and descend with ease. | | | | |
|--|--|--|--|---|
| SKILLS | A. Walks up and down stairs placing two feet on each step with assistance. | B. Walks up and down stairs placing one foot on each step (alternating gait) with assistance. | C. Walks up and down stairs placing one foot on each step (alternating gait) without assistance. | D. Moves up and down stairs with increased speed and can adjust to higher stair heights. |
| PERFORMANCE DESCRIPTORS | Angel walks up and down the stairs and intentionally places two feet on each step while holding the rail or a hand, or using other human assistance. | Gabriel walks up and down the stairs placing one foot on each step (alternating gait) while holding a rail or a hand, or using other human assistance. | Ethan walks up and down the stairs placing one foot on each step (alternating gait) without holding a rail or a hand, or using other human assistance. | Chloe moves up and down stairs or apparatus (playground equipment, bus steps) of various heights swiftly with ease. |

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SITUATION: *Obstacle Cards*

| | WEIGHT DISTRIBUTION FOR WALKING | PATHWAYS | | | | |
|--|---|--|--|--|---|--|
| Selecting Learning Target(s) | Understanding: Children distribute their weight for walking. | | | Understanding: Children develop spatial awareness as they identify and use appropriate pathways to manipulate space between self and others that include a variety of directions and levels. | | |
| | A. Walks* on a flat foot. * Children may or may not walk in a straight line at this stage. | B. Walks by distributing weight from heel to toe with developing balance and control. | C. Walks by distributing weight from heel to toe evenly and demonstrates balance & control. | A. Navigates a path to avoid obstacles. | B. Navigates varying pathways while maneuvering in different directions. | C. Increases speed and agility while moving through varying pathways. |
| Preparation | <ul style="list-style-type: none"> • Large open space marked with boundaries (e.g., jump ropes [2 or 3], chalk line, or a natural boundary) • Cards (index, card stock) with content appropriate for the grade level* • Any materials that would create an obstacle (e.g., cones, hula hoops, beanbags, sand buckets) | | | | | |
| General Description | <p>The teacher sets up an outdoor game for the purpose of observing children’s gross motor skills (weight distribution for walking and navigating pathways) while integrating relevant content into the activity.** Depending on the identified learning targets, the teacher determines the skill level at which the game is played and if it is played with small groups or the whole class.</p> <p>**<u>Content Examples</u>: letter identification or sounds, names of classmates, sight words, vocabulary words, spelling words, parts of speech, punctuation, numbers, mathematical problems that address shapes, colors, math facts, etc.</p> | | | | | |
| Eliciting Evidence of Learning | <p>The teacher sets up the game by identifying a starting area and finish line (e.g., using ropes end to end to create a finish line) and spreads out the content cards just beyond the finish line. The students sit in a horizontal line facing the finish line at least 10 yards away.</p> <p>The teacher explains to the students that there are a number of cards with different content information on them across the finish line. The object of the game is to walk across the finish line and pick up a card. The child will look at the card, tell the teacher the name of (or answer to) what is on the card, place the card back down on the ground, and walk back to a spot with the rest of the class. After modeling the directions to the class, the teacher purposefully chooses a small group of children (2-4) to play the game based on the learning targets identified. As the children play, the teacher intentionally watches and notices how the students walk.</p> <p>Depending on the students’ needs, the teacher then places two obstacles along two different pathways, placing the first obstacle at least three yards away from where the children are sitting. The object of the game is to walk – navigating around the obstacles – across the finish line and pick a card. The child will tell the teacher the name of (or answer to) what is on the card, place the card back down on the ground, and walk back – navigating around the obstacles again. The teacher strategically calls a small group of students to begin playing the new version of the game.</p> <p>Depending on the information needed, the game may progress to the next skill:</p> <ul style="list-style-type: none"> • Walking around additional obstacles • Hopping, jumping, skipping, or creatively moving around obstacles in the path <p><u>Suggested Probes</u>:</p> <ul style="list-style-type: none"> • Can you walk at a different speed? • Can you walk slower? • Can you move faster? • Is there a different way you can move? <p><u>Probes to Avoid</u>:</p> <ul style="list-style-type: none"> • Can you walk with your heel first? • Can you walk and avoid the obstacles? | | | | | |
| Interpreting the Evidence | <p>Observation: Jasmine and Acee walk the obstacle-free course to the finish line. Jasmine walks with her feet wide apart and on a flat foot. As Jasmine reaches the finish line, she picks up a card with a triangular shape on it, turns to the teacher, and correctly says, “Triangle.” Acee reaches the finish line, picks up a card with a circular shape on it, turns to the teacher, and says, “Circle.” Acee walks back to the start line using heel-to-toe weight distribution in his walk, with a smooth walking pattern without tripping or stumbling. Both children sit down with the class.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression</u>: Jasmine: A. Walks on a flat foot. Acee: C. Walks by distributing weight from heel to toe evenly and demonstrates balance and control. <p>Observation: Along the course are multiple obstacles. Jacob zigzags around the obstacles toward the finish line, without touching or knocking down any obstacles, and picks up a card with “7 X 8 = ” on it. He turns to the teacher and says, “56.” Jacob then hops back to the start line, weaving around the obstacles successfully again and sits down.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression</u>: E. Navigates varying pathways while maneuvering in different directions. | | | | | |
| Adapting/ Responding to Learning Needs | Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn’t met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning. | | | | | |
| Observational Opportunities | There are many opportunities across the day when gross motor skills may be observed in whole group, small group, and individual settings such as: lining up; walking in line; moving in various ways within the classroom, the school, and on the playground (e.g., walking, jumping, hopping, skipping); pacing off the distance or length of an object; or participating in creative movement activities (i.e., music, dance, and drama). | | | | | |

Book Orientation and Print Awareness

DOMAIN: Language Development and Communication

CLAIM: Students can acquire the foundational skills for reading and integrate these skills for comprehending increasingly complex texts in home, school, and community.

RATIONALE

Depending on home and early school experiences with print (bedtime stories and read-aloud books, big book shared reading, shared writing and their very independent adventures with reading- and writing-like behaviors), children come to kindergarten and first grade with different understandings about the conventions used to communicate meaning in print.

Based on the research of Marie Clay (2000) and others, each child develops his/her level of understanding of book orientation and print awareness. By assessing both the child's understanding and misunderstanding of conventions, teachers can address what still needs to be learned. This knowledge enables teachers to design instruction that meets the needs of individuals regarding how print works. Questions posed to students may include: *Where is the front of the book? Where does the story start? Where do I start reading, and where do I go after that? What is a letter? What is a word?* These important literacy understandings can develop through quality hands-on experiences with books and print.

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

LDC-10 Children develop book knowledge and print awareness.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

CCSS RF.K.1 Demonstrate understanding of the organization and basic features of print.

BOOK ORIENTATION

| | | | | |
|--|---|--|--|--------------------------------|
| <p>Children understand that books have pages that may contain pictures and/or words.</p> | <p>Children understand that books contain pages of print that represent language and sometimes there are pictures that help us know what the words describe.</p> | | | <p>UNDERSTANDING</p> |
| <p>A. Holds the book in random ways and flips pages, not looking at pages, nor looking at anything specifically.</p> | <p>B. Turns the book to an upright orientation so pictures and text are right side up.</p> | <p>C. Holds the book upright, opens it from the front cover, and turns pages front to back not always one by one.</p> | <p>D. Holds the book upright, turns the pages in order, front to back one page at a time.</p> | <p>SKILLS</p> |
| <p>When handed an early learning book* with the spine facing toward her, Olivia opens the book from back to front and possibly upside down. She flips the pages randomly, but does not stop long enough to see what is on the pages. When Olivia gets to the last page or set of pages being turned, she closes the book.</p> <p>After selecting a book from one of the classroom book baskets, Santiago examines the book's front and back covers, then opens the book from the back, randomly flips pages, and finally closes the book, and returns it to the basket. Another book is selected and Santiago opens this book from the front and holds it upside down. This is repeated with several books before he moves to another area in the classroom.</p> | <p>When Anthony explores a book he randomly flips pages until the pictures and/or print captures his attention. Then, he turns the book upright to correct the orientation of picture or print and says to the teacher, "Now the house isn't upside down." .</p> <p>When observing Aaliyah sharing a book with a reading buddy, the teacher notices that she flips the pages then changes the position of the book to upright. Aaliyah says to the buddy, "Now the dog is on his feet."</p> | <p>The teacher hands Carl an early learning book* with the spine facing him. The teacher says, "Show me how you would open the book and read it to a friend." Carl holds the book upright, opens the book from the front, and begins turning the pages, but not always one by one.</p> <p>When visiting the school library, the teacher observes Liam "reading" a book, holding the book upright, opening from the front, and turning a few pages at a time.</p> | <p>After the teacher selects an early learning book* (or the book is self-selected by the student), the teacher says to Noah, "Help me read this book." The teacher asks, "Where do I start reading?" Once Noah opens the book upright and opens the book at the front, the teacher asks, "What do we do next to read the book?" He turns the pages one at a time.</p> <p>When provided an opportunity to engage in a classroom library or centers, Sofia selects a book and models reading it to herself and to an audience (e.g., stuffed animals, peers, dolls, or an imaginary audience). She holds the book upright and turns pages from front to back, one page at a time.</p> | <p>PERFORMANCE DESCRIPTORS</p> |

* An **early learning book** is characterized as one that contains two to six lines of text, utilizes familiar content that is concrete and easy to understand, contains strong picture support, and uses mostly simple sentences but may periodically include longer sentences that include high frequency words and possibly dialogue. Note: Punctuation increases with the increase in sentence structure and content. Punctuation may include periods, commas, quotation marks, exclamation marks, question marks, and ellipses (Fountas and Pinnell, 1996).

PRINT AWARENESS

| | | | |
|--------------------------------|---|---|---|
| UNDERSTANDING | Children understand that books have pages that may contain pictures and/or words. | | |
| SKILLS | A. Attends to pictures as the only source of information. | B. Indicates that books can have pictures and/or words. | C. Attends to words on a page by mimicking directionality. |
| PERFORMANCE DESCRIPTORS | <p>While looking at an early learning book,* Isabella attends only to the pictures. For example, during small group instruction or one-on-one, the teacher may say, “I am going to read a story, and I want you to help me.” Isabella points to or looks at the pictures and gives information about the book based on what is shown in the illustrations. She makes no attempt to “pretend to read” the print on the pages.</p> <p>When examining a self-selected book, Brandon flips through the pages, looking at and commenting only on the pictures. He identifies objects (or actions) seen in the illustrations. His eyes scan only the pictures. Brandon appears not to notice the text.</p> <p>He is sitting beside the teacher while the teacher reads a book. As the teacher reads, he points to the pictures on each page. When there is a page with only text, he turns pages until finding a picture.</p> | <p>After the teacher selects an early learning book* (or one is self-selected by the student), Emma is prompted to indicate print or pictures on a page. The teacher says, “Show me the pictures ... [Emma points] ... Now show me the words.” Emma points to a picture and points to the print on a page.</p> <p>The teacher is using technology to read an interactive e-book to the class and asks Diego to point to a picture and then to the words. He comes to the white board and points to the picture and words.</p> | <p>The teacher notices Luis interacting with a book by running his finger along the words on the page in a zigzag manner. The teacher asks Luis, “How does using your finger help you read?” He responds by saying, “When my friend did it yesterday, you said it was good, so I am trying it.”</p> <p>When listening to the narrator of an interactive e-book, Alyssa follows the print by pointing, beginning at the top and moving to the bottom, and occasionally runs her finger from the left-hand side of the page to the right.</p> |

* An **early learning book** is characterized as one that contains two to six lines of text, utilizes familiar content that is concrete and easy to understand, contains strong picture support, and uses mostly simple sentences but may periodically include longer sentences that include high frequency words and possibly dialogue. Note: Punctuation increases with the increase in sentence structure and content. Punctuation may include periods, commas, quotation marks, exclamation marks, question marks, and ellipses (Fountas and Pinnell, 1996).

PRINT AWARENESS

| | | | | |
|--|--|---|---|-------------------------|
| <p>Children understand that books contain pages of print that represent language and that there are sometimes pictures that help us know what the words describe.</p> | | | | UNDERSTANDING |
| <p>D. Distinguishes between the general area of printed words when prompted to show where we read words.</p> | <p>E. When prompted, indicates that the first word on the page is where to begin reading.</p> | <p>F. Distinguishes between letters and words on a page of text (excluding the words a, A, and I).</p> | <p>G. Uses directionality while indicating one word on the page for each word read aloud (concept of word: one-to-one correspondence and voice to print match).</p> | SKILLS |
| <p>After the teacher selects an early learning book* (or one is self-selected by the student) the teacher asks Ava, "Show me where we read words on the page." Ava indicates by pointing or using a hand to show the general area of printed words. She can find words in different areas of the page.</p> <p>When reading a book, the teacher comes to a page with text and pictures and asks Gabriel to point to the words. He uses a finger and touches the text – not the pictures – on the page.</p> <p>Mrs. Carter is administering the mCLASS: Reading 3D Print Concepts formative assessment and says to Sean, "I'll read the book. You help me. Show me where to start reading. Where do I begin?" Sean points to a word in the middle of the page.</p> | <p>During center time, the teacher brings Victoria an early learning book* and a stuffed animal (or puppet "friend"). After the teacher introduces Victoria to her "friend," the teacher asks her to show the "friend" where to begin reading the book. Victoria holds the book right side up, opens to the beginning of the book, and points to where the first word is located on the page.</p> <p>While sitting in the reading center, Brianna is "reading" a familiar book to another child. After joining the group, the teacher asks Brianna to point to where to begin reading. Brianna uses a finger and points to the first word on the page.</p> <p>Mr. Summers is administering the mCLASS: Reading 3D Print Concepts formative assessment and says to Jason, "Show me where to start." Jason shows Mr. Summers where to start reading on the indicated page in the book by pointing to the first word.</p> | <p>During small group time, several children and the teacher are reading a big book. The teacher says, "Show me a letter," and Caleb points to one letter. Next, the teacher says, "Show me a word," and Caleb points to one word.</p> <p>The teacher joins Sebastian who is "reading" a book during center time. She asks Sebastian to point to one letter and then asks him to point to one word. Sebastian does both.</p> <p>Mrs. Montgomery is administering the mCLASS: Reading 3D Print Concepts formative assessment. When prompted, Wrennie slides index cards together to frame one individual letter then two letters side by side. Mrs. Montgomery further prompts, and Wrennie frames one word and then two words side by side.</p> | <p>While reading an early learning book* out loud to Alexandra, the teacher points to the first word on a new page. Before reading, Alexandra is asked by the teacher to "Point to each word as I read this line." Alexandra follows along and matches each word on the page with each word that the teacher reads. Alexandra moves a finger from left to right, one word at a time, as the teacher reads.</p> <p>Chung-Ho interacts with a book. The teacher hears him "reading" the book and walks over to sit with him. The teacher asks Chung-Ho to point to each word as he is "reading." (The child may "pretend" to read the text with a mismatch between the written and spoken words, but is able to point to one word at a time as the child is "reading" the text on the page.) Note: For every word that is called, there should be a shift in the child's pointing that goes from left to right and from one word to the next.</p> <p>Mrs. Rapato is administering the mCLASS: Reading 3D Print Concepts formative assessment and says to Ralph, "Point to each word while I read." Ralph points to each word while Mrs. Rapato reads.</p> | PERFORMANCE DESCRIPTORS |

* An **early learning book** is characterized as one that contains two to six lines of text, utilizes familiar content that is concrete and easy to understand, contains strong picture support, and uses mostly simple sentences but may periodically include longer sentences that include high frequency words and possibly dialogue. Note: Punctuation increases with the increase in sentence structure and content. Punctuation may include periods, commas, quotation marks, exclamation marks, question marks, and ellipses (Fountas and Pinnell, 1996).

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Following Directions

DOMAIN: Language Development and Communication

CLAIM: Students can use and continue to develop effective listening and communication skills (e.g. verbal and non-verbal) for a range of purposes, audiences, and settings/contexts in increasingly complex ways.

RATIONALE

Children need to be able to listen carefully to a variety of language genres, including extended discourse (multiple sentences within a dialogue and narrative with adults and peers), and then children need to be able to communicate in ways that are understandable to both adults and children. These combined skills are foundational for later learning and literacy at home and at school (Snow, Burns, & Griffin, 1998). As most children enter school, these skills are well established within their home and community and must be adapted for the **context of school**. However, some children come to school with rich language at home and in the community that may not be as aligned with the context of school (Heath, 1983; Vernon-Feagans, 1996).

- For instance, some communities value dynamic, overlapping communication, where multiple speakers speak or jump into the conversation at the same time. Yet, school conventions require children to wait their turn, speak one-at-a-time, and often communicate directly to the teacher or adult. Children who do not have extensive practice with such turn-taking routines will benefit from explicit instruction in listening and communicating in order to learn and understand the **conventions of school** (Vernon-Feagans, 1996).

All children need to listen carefully to the details of instruction in the classroom and increasingly be able to ask and answer questions. In particular, children must be able to recognize when they do not understand and find ways to both verbally and nonverbally gain access to the information they need to learn. School should provide the opportunity for all children to communicate at length and complexly with diverse children and adults in a supportive way that provides scaffolding for both listening and communicating.

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

LDC-1 Children understand communications from others.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

SL.K.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.

SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

SL.3.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.

SL.K.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.

SL.1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.

SL.2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.

SL.3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.

FOLLOWING DIRECTIONS

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| UNDERSTANDING | <p>Children understand how to respond to directions, requests, and commands in a variety of settings (one-on-one with an adult, one-on-one with a peer, small group setting, large group setting).</p> | | | |
| SKILLS | <p>A. Responds with silence.</p> | <p>B. Responds non-verbally to simple requests in a variety of ways (nodding, pointing, gesturing, facial expressions, eye pointing, sign language).</p> | <p>C. Indicates when something is not understood by making gestures or asking "what?"</p> | <p>D. When given visual cues, accurately follows an oral one-step direction that includes positional words: 1) on, off, in, out, under 2) in front of, behind, on top of, bottom, before, after 3) next to, between, above, below</p> |
| PERFORMANCE DESCRIPTORS | <p>When Ava hears a direction, request, or command given by the teacher or peer, she does not respond with a verbal or non-verbal answer. When the teacher or peer repeats the same direction, request, or command to ensure Ava has heard the statement, Ava provides a cue (looking/glancing at the speaker, making eye contact) to indicate that the speaker has been heard, but she still does not respond verbally or non-verbally. Ava does not complete the request.</p> | <p>When singing a song in the classroom that involves requests (e.g., "If You're Happy and You Know It"), Brandon does not sing but completes the request in the song (claps hands, stomps feet, etc.).</p> <p>When the teacher says, "Would you please take this note to the office?" Alexandra nods (gives thumbs up, takes the note and smiles, etc.) to indicate to the teacher an intention to take the note to the office. She then completes the request.</p> | <p>When the teacher or peer asks Sebastian a question ("Do you have your lunchbox?" "Is your best friend Erika?" "Do you like apples?" etc.), he responds by asking, "What?" or making a gesture (shrugs shoulders, raises/creases eyebrows and looks at the speaker, signs "what" using sign language, etc.) to indicate to the speaker that he does not understand what was asked or stated.</p> | <p>on, off, in, out, under</p> <ul style="list-style-type: none"> • The <u>teacher points</u> (as a visual cue) and says, "Put the crayon under the paper." William places the crayon under the paper. • When Luciana enters the classroom, the teacher says, "Good Morning. Remember to put your coat on the hook." The <u>teacher walks over and touches</u> the coat hooks in the classroom while providing the directions. Luciana places her coat on the hook. • As children are writing, the <u>teacher holds up</u> Xavier's journal and points to the journal basket and instructs Xavier to put the journal in the basket. He then takes the journal and places it in the basket. <p>in front of, behind, on top of, bottom, before, after</p> <ul style="list-style-type: none"> • The <u>teacher points</u> (as a visual cue) and says, "Put the crayon in front of the box." Destiny puts the crayon in front of the box. • As children are gathering for group time, the <u>teacher walks over</u> to Mason and says (<u>while pointing to John</u>), "Would you please sit behind John?" Mason sits behind John. <p>next to, between, above, below</p> <ul style="list-style-type: none"> • The <u>teacher points</u> (as a visual cue) and says, "Put the crayon next to the box." Lily puts the crayon next to the box. • After the teacher reads <i>The Gingerbread Man</i>, children in a small group are engaged in creating their personal gingerbread man. After finishing with that activity, they bring their gingerbread men to use for a listening activity. The teacher has brought to the lesson some additional small items (hats, shoes, buttons, ties, mittens, etc.). The teacher gives oral directions to the small group of children. <u>While holding the purple</u> hat in one hand and the gingerbread man in the other hand, the teacher says, "Place the purple hat above the gingerbread man." Zoey places the purple hat above the gingerbread man. • Children in a small group are engaged in following the procedure for a science experiment. <u>While holding open the zipper-lock bag containing a paper towel, the teacher points to the paper towel and holds up a seed</u> and says, "Place the seed next to the paper towel." Leonardo places the seed next to the paper towel. |

FOLLOWING DIRECTIONS CONTINUED ON NEXT PAGE

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| <p>Children understand how to respond to directions, requests, and commands in a variety of settings (one-on-one with an adult, one-on-one with a peer, small group setting, large group setting). (continued)</p> | | | | <p>UNDERSTANDING</p> |
| <p>E. Without visual cues, accurately follows oral one-step directions that include positional words: 1) on, off, in, out, under 2) in front of, behind, on top of, bottom, before, after 3) next to, between, above, below</p> | <p>F. Asks simple questions to clarify directions, requests, and commands.</p> | <p>G. With visual cues (if needed), follows two-step directions.</p> | <p>H. Without visual cues, accurately follows two-step directions.</p> | <p>SKILLS</p> |
| <p>on, off, in, out, under</p> <ul style="list-style-type: none"> The teacher says, "Take the crayon and put it under the paper." Rodrigo puts the crayon under the paper. When the child enters the classroom, the teacher says, "Good morning. Remember to put your coat on the hook." Cameron places his coat on the hook. When Kayo is exploring with Unifix® cubes in the math center, the teacher sits down beside her and says, "Can you put the red cube on top of the blue cube?" Kayo places the red cube on top of the blue cube. When Jada is writing a journal entry at the writing center where the teacher is located, the teacher says, "Great writing! Please put your journal in the basket." Jada then takes her journal and places it in the basket. <p>in front of, behind, top, bottom, before, after</p> <ul style="list-style-type: none"> As children are gathering for group time, the teacher walks over to Kiara and says, "Would you please sit behind John?" Kiara sits behind John. <p>next to, between, above, below</p> <ul style="list-style-type: none"> The teacher says, "Take the crayon and put it next to the box." Nathan puts the crayon next to the box. After the teacher reads <i>The Gingerbread Man</i>, children in a small group are engaged in creating their personal gingerbread man. After finishing with that activity, they bring their gingerbread men to use for a listening activity. The teacher has brought to the lesson some additional small items (hats, shoes, buttons, ties, mittens, etc.). The teacher gives oral directions to the small group of children. The teacher says, "Place the purple hat above the gingerbread man." Nevaeh places the purple hat above the gingerbread man. Prior to writing a "how to" book, children work in pairs to practice giving each other oral directions. The teacher observes Carlos accurately following Alyssa's directions that include the words next to, between, above, and below. | <p>The class is sitting together during group time and, the teacher says, "When you get back to your seat, I want you to pull out your magnetic letters and whiteboard for Word Work." Hannah says, "Can you say that again?"</p> <p>When a teacher is explaining how to complete an activity, Makayla asks questions such as the following: "Why are we doing that?" "What is that for?" "What are we doing?" "What do we do after ...?" "Can you say that again?"</p> | <p><u>Teacher gives directions while pointing</u> (as a visual cue), "Take the crayon out of the box and put the crayon under the paper." Madison removes the crayon from the box and puts it under the paper.</p> <p>When Hachiro enters the classroom the teacher says, "Good morning. Remember to put your coat on the hook and put your reading book on your table." <u>(The pictures for the morning routine are posted on a bulletin board. The teacher could point to pictures on the bulletin board if a visual cue appears to be needed.)</u> Hachiro places his coat on the hook and places his reading book on the table.</p> <p>When Isaiah is exploring with Unifix® cubes in the math center, the teacher sits down beside him and says, "I can tell you like exploring with the cubes. It is great how you have connected many colors of Unifix® cubes together to make a tower." <u>Handing Isaiah a red cube and pointing to the blue cube if a visual is needed</u>, the teacher says, "Place the red cube on top of the blue cube, and then put the yellow cube under the blue cube." <u>(The teacher hands Isaiah the yellow cube and points to the bottom of the blue cube – if a visual is needed.)</u></p> | <p>When Manuel enters the classroom before the tardy bell, the teacher says, "Good morning. Please unpack your book bag and bring your lunch money to me." Manuel unpacks his book bag and takes his lunch money to the teacher.</p> <p>When Trinity is exploring with Unifix® cubes in the math center, the teacher sits down beside her and says, "I can tell you like exploring with the cubes. It is great how you have connected many colors of Unifix® cubes together to make a tower. Place the red cube on top of the blue cube and then put the yellow cube under the blue cube." Trinity places the red cube on top of the blue cube and connects the yellow cube under the blue cube.</p> | <p>PERFORMANCE DESCRIPTORS</p> |

FOLLOWING DIRECTIONS CONTINUED FROM PREVIOUS PAGE

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| UNDERSTANDING | Children understand how to respond to directions, requests, and commands in a variety of settings (one-on-one with an adult, one-on-one with a peer, small group setting, large group setting). (continued) | | |
| SKILLS | I. With visual cues (if needed), accurately follows three- to four-step directions at one time, and carries out the tasks over time. | J. Without visual cues, accurately follows three- to four-step directions at one time and carries out the tasks over time. | K. With visual cues (if needed), accurately follows multi-step directions (more than four). |
| PERFORMANCE DESCRIPTORS | <p>While <u>posting a picture schedule</u> for later reference, the teacher gives directions orally, saying, "Finish your math stations, wash your hands, and eat your snack." Tomas accurately follows directions.</p> <p>When the children are sitting together at group time, the teacher provides directions to the class about the tasks to be completed over the next hour. The teacher says, "Class, when I excuse you from the group, you will need to finish the math problems on your table, wash your hands, and eat your snack." Elijah finishes the math problems, washes his hands, and then eats his snack. <u>(If needed, the teacher should post picture reminders in a prominent location for children's reference.)</u></p> <p>When Mia enters the room in the morning, the teacher says, "When you get to your seat, please take out your writing journal, turn to the next clean page, and write something you would like to share. Raise your hand when you are finished." Mia takes out her writing journal, turns to the next clean page, and begins to write an entry. Mia raises a hand when finished. <u>(If needed, the teacher should use prominently displayed visuals by drawing or posting pictures of the writing journal, clean page, a child writing, and a raised hand.)</u></p> | <p>The teacher gives the class directions orally with NO picture schedule: "Finish your math activity, wash your hands, and eat your snack." Zion accurately follows all three steps.</p> <p>When the children are sitting together at group time, the teacher provides four-step directions to the class about the tasks to be completed over time. The teacher says, "Find your partner, gather your math materials, work together to find as many solutions as you can, and place your completed work in the bucket when you are finished." <u>(No Visuals are given.)</u> Eduardo and his partner accurately follow each step of the directions during the work time.</p> | <p>When the teacher provides directions individually, in a small group setting, or a large group setting, the teacher explains the expectations for what is to be completed. After ensuring the children are paying attention, the teacher gives the directions orally while providing a visual to post for the children to refer to later <u>(visuals can be drawn on the board, printed pictures, etc.)</u>.</p> <p>The teacher says, "This activity will be completed with your partner."</p> <ul style="list-style-type: none"> • Gather a handful of shapes from the bucket. • Lay the shapes in front of your partner. • Find a shape that can be partitioned. • Partition the shapes into equal parts. • Raise your hand when you are finished and I will come to you." <p>Catalina refers to the visual cues during the activity and accurately follows the multi-step directions.</p> |

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SITUATION: *Daily Routines with One-Step Directions*

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| Selecting Learning Target(s) | <p>Understanding: Children understand how to respond to directions, requests, and commands in a variety of settings (one-on-one with an adult, one-on-one with a peer, small group setting, large group setting).</p> | | |
| | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; padding: 5px;"> <p>D. When given visual cues, accurately follows an oral one-step direction that includes positional words:</p> <p>1) on, off, in, out, under 2) in front of, behind, on top of, bottom, before, after 3) next to, between, above, below</p> </td> <td style="width: 50%; padding: 5px;"> <p>E. Without visual cues, accurately follows oral one-step directions that include positional words:</p> <p>1) on, off, in, out, under 2) in front of, behind, on top of, bottom, before, after 3) next to, between, above, below</p> </td> </tr> </table> | <p>D. When given visual cues, accurately follows an oral one-step direction that includes positional words:</p> <p>1) on, off, in, out, under 2) in front of, behind, on top of, bottom, before, after 3) next to, between, above, below</p> | <p>E. Without visual cues, accurately follows oral one-step directions that include positional words:</p> <p>1) on, off, in, out, under 2) in front of, behind, on top of, bottom, before, after 3) next to, between, above, below</p> |
| <p>D. When given visual cues, accurately follows an oral one-step direction that includes positional words:</p> <p>1) on, off, in, out, under 2) in front of, behind, on top of, bottom, before, after 3) next to, between, above, below</p> | <p>E. Without visual cues, accurately follows oral one-step directions that include positional words:</p> <p>1) on, off, in, out, under 2) in front of, behind, on top of, bottom, before, after 3) next to, between, above, below</p> | | |
| Identifying Opportunities for Eliciting Evidence | <p>Teachers provide directions to children throughout the day. Directions are provided when children are taking care of daily routines like exchanging a book for at-home reading, cleaning up the blocks area, or getting ready to go to lunch or outside. Teachers also provide specific directions for engaging with materials during a planned lesson, such as preparing for a science experiment, using math manipulatives, and getting ready to write a story. During all of these types of daily situations, there are many opportunities to observe children’s abilities to follow single- and multi-step directions. In order to gather information for making a learning status for all students, it will be necessary to make several observations of this kind during daily routines.</p> | | |
| Eliciting Evidence of Learning | <p>During part of a daily routine, the teacher asks children to follow a one-step direction in order to prepare for book reading with a partner. The teacher has previously assigned partners and asks children to meet with their partners to begin the book sharing activity. The teacher says, “Please sit next to your book reading partner.”</p> <p>As the children transition to meeting with their partners, the teacher observes the children, watching to see which children remember the direction, which children quickly complete the direction without redirection, and which children need support in completing the direction.</p> <p><u>Suggested probes:</u></p> <ul style="list-style-type: none"> • Repeat the direction by saying, “Sit next to your book reading partner.” • Repeat the direction, point to a visual cue (picture), and say, “Sit next to your book reading partner.” <p><u>Probes to avoid:</u></p> <ul style="list-style-type: none"> • Do you remember what you are supposed to do? • Have you done what I asked you to do? | | |
| Interpreting the Evidence | <p>Observation: While observing, the teacher notices that Mia remains in her location rather than joining her partner. The teacher then points to the visual and provides the one-step direction, “Sit next to your book reading partner.” Mia then sits next to her partner.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> D. When given visual cues, accurately follows an oral one-step direction that includes positional words. <p>Observation: After providing the direction, the teacher observes both Pablo and Paula (partners) sit next to each other.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> E. Without visual cues, accurately follows an oral one-step direction that includes positional words. | | |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn’t met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> | | |

SITUATION: *Daily Routines with Two-Step Directions*

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| Selecting Learning Target(s) | <p>Understanding: Children understand how to respond to directions, requests, and commands in a variety of settings (one-on-one with an adult, one-on-one with a peer, small group setting, large group setting).</p> | | |
| | <p>G. With visual cues (if needed), follows two-step directions.</p> | <p>H. Without visual cues, accurately follows two-step directions.</p> | <p>I. With visual cues (if needed), accurately follows three- to four-step directions at one time, and carries out the tasks over time.</p> |
| Identifying Opportunities for Eliciting Evidence of Learning | <p>Teachers provide directions to children throughout the day. Directions are provided when children are taking care of daily routines like exchanging a book for at-home reading, cleaning up the blocks area, or getting ready to go to lunch or outside. Teachers also provide specific directions for engaging with materials during a planned lesson, such as preparing for a science experiment, using math manipulatives, and getting ready to write a story. During all of these types of daily situations, there are many opportunities to observe children’s abilities to follow single- and multi-step directions. In order to gather information for making a learning status for all students, it will be necessary to make several observations of this kind during daily routines.</p> | | |
| Eliciting Evidence of Learning | <p>During part of a daily routine, the teacher asks small groups of children to follow directions in order to prepare for lunch. Using prepared visual displays with pictures that depict the step-by-step directions, the teacher points to the display while giving the directions:</p> <ol style="list-style-type: none"> 1. Place your work materials in the basket. 2. Wash your hands. 3. Line up for lunch. <p>As the children make the transition to lunch, the teacher observes the children, watching to see which children revisit the visual display to help remember the directions, which children quickly complete the three directions without redirection, and which children complete some or part of the directions but need support in completing the full directions.</p> <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • If a child does not complete the directions, repeat the three-step directions using visual cues. Point to each visual and say, “Place your work materials in the basket, wash your hands, and line up for lunch.” • If a child does not complete the directions, create two-step directions and say, “Place your work materials in the basket and wash your hands” or “Wash your hands and line up for lunch.” • If a child still does not complete the directions, point to each visual and separate the directions to create two-step directions and say, “Place your work materials in the basket and wash your hands” or “Wash your hands and line up for lunch.” <p><u>Probes to avoid:</u></p> <ul style="list-style-type: none"> • Do you remember what you are supposed to do next? • Have you done what I asked you to do? • Are you finished? | | |
| Interpreting the Evidence | <p>Observation: While observing, the teacher notices that Mia comes over and hands her work to the teacher rather than putting it in the basket. The teacher then points to each visual and provides two-step directions. “Wash your hands and line up for lunch.” Mia then washes her hands and lines up for lunch.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> G. With visual cues (if needed), follows two-step directions. <p>Observation: After providing three-step directions with visual cues, the teacher observes Pablo putting his materials in the basket, washing his hands, and getting in line for lunch.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> I. With visual cues (if needed), accurately follows three- to four-step directions at one time, and carries out the tasks over time. | | |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn’t met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> | | |

SITUATION: *The Three Little Pigs*

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| Selecting Learning Target(s) | <p>Understanding: Children understand how to respond to directions, requests, and commands in a variety of settings (one-on-one with an adult, one-on-one with a peer, small group setting, large group setting).</p> | | | |
| | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; padding: 5px;">F. Asks simple questions to clarify directions, requests, and commands</td> <td style="width: 33%; padding: 5px;">G. With visual cues (if needed), follows two-step directions.</td> <td style="width: 33%; padding: 5px;">H. Without visual cues, accurately follows two-step directions.</td> </tr> </table> | F. Asks simple questions to clarify directions, requests, and commands | G. With visual cues (if needed), follows two-step directions. | H. Without visual cues, accurately follows two-step directions. |
| F. Asks simple questions to clarify directions, requests, and commands | G. With visual cues (if needed), follows two-step directions. | H. Without visual cues, accurately follows two-step directions. | | |
| Preparation | <ul style="list-style-type: none"> • One or more versions of the story of <i>The Three Little Pigs</i> • Pieces of heavy (corrugated) cardboard or poster board on which to build the houses • A variety of materials that represent materials for building the houses in the story of the three little pigs This might include: straw, Easter basket grass, sticks, and something to represent bricks (such as sugar cubes, Legos®, clay [to make bricks], string, glue, rubber bands, yarn, etc.). | | | |
| General Description | <p>The teacher uses large group time to introduce the task. Building on previous class experiences with the story, <i>The Three Little Pigs</i>, the teacher provides various building materials for students to create houses. The teacher provides the children with two-step directions to follow in order to complete this activity.</p> | | | |
| Eliciting Evidence of Learning | <p>The teacher has been reading different versions of <i>The Three Little Pigs</i> and has made them available for children to browse independently. Discussions during repeated readings of the story have included topics such as which house might be the safest and in which house the children would want to live. There may have also been discussion about how a straw or stick house could be built that the wolf couldn't blow down.</p> <p>During this lesson, the teacher introduces the activity by explaining that they will use different materials to build a house, like the pigs did in the different stories they've been reading. The teacher introduces the building materials, holding up various examples for the children to see. The teacher also shows a large piece of cardboard, which will be used as a base for building each house. Then, the teacher provides specific two-step oral directions for children to follow.</p> <ol style="list-style-type: none"> 1. Choose your building materials. 2. Build your house on top of the cardboard. <p>The teacher observes the children as they select materials, giving them ample time for selection. Students are also observed while building their houses. The teacher notes how each child follows the specific two-step directions provided without providing visual cues. For some children who do not follow the two-step directions, the teacher repeats the directions, and then repeats the directions while pointing to the materials and the cardboard, as visual cues, to determine if the child can follow the directions with visual cues.</p> <p><u>Example:</u> The teacher introduces the activity by saying, "We are going to be building houses like the three pigs did in the stories we've been reading. Here are some of the materials that you can use." The teacher holds up some of the choices of materials so that the children can see them. You'll find these materials on each of our tables. She adds, "You can choose other materials from the classroom or outside if you can think of something else that you might want to use." The teacher then explains that they will be building their house on a piece of cardboard and that the cardboard is needed so their houses can be moved carefully. Then, she gives the children two directions:</p> <ol style="list-style-type: none"> 1. Choose your building materials. 2. Build your house on top of the cardboard. <p>The teacher observes Danielle choosing a piece of cardboard and then selecting materials to build her house (sugar cubes, blue clay, and yellow yarn). After Danielle puts all of her selected materials in a pile, she uses the materials to build her house on top of the cardboard.</p> <p>As the children work, the teacher also observes Dan. He walks toward one of the tables and then looks back to the teacher with his eyebrows raised. He points to the building materials and asks, "What is that for?" The teacher then points to the pile of building materials and says, "Choose what you need to build your house." Then, the teacher points to the cardboard piece and says, "Build your house on top of the cardboard." Dan then chooses materials and begins to build his house on the cardboard.</p> <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • Repeat the directions. • Pointing to the cardboard, "Build your house on top of the cardboard." • Pointing to the materials, "Choose what you need to build your house." <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> • "Did you get your materials?" • "Did you put your house on the cardboard?" | | | |

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| Interpreting the Evidence | <p>Observation: Dan asks for clarification. The teacher provides visual cues along with the directions. After the teacher restates the directions while using visual cues, Dan completes the set of directions.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> G. With visual cues (if needed), follows two-step directions. <p>Observation: While observing Danielle, the teacher notes that Danielle selects her building materials and builds her house on the cardboard as directed.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression:</u> H. Without visual cues, accurately follows two-step directions. |
| Adapting/ Responding to Learning Needs | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |

Letter Naming

DOMAIN: Language Development and Communication

CLAIM: Students can acquire the foundational skills for reading and integrate these skills for comprehending increasingly complex texts in home, school, and community.

RATIONALE

Learning to read is a complex process that requires young children to acquire and continue to develop automaticity with foundational skills, including alphabet knowledge (National Early Literacy Panel, 2009; National Reading Panel, 2000). Alphabet knowledge includes the ability to identify and name letters and hear sounds in words (phonological awareness). These are an integral part of foundational skills and closely correlated to later reading and spelling achievement (Strickland & Shanahan, 2004).

In addition to acquiring alphabet knowledge as a part of foundational skill development, successful readers can integrate the sound, visual, and meaning systems of language to monitor comprehension and repair misunderstandings and apply their understandings to a range of increasingly complex texts in a variety of settings. The National Research Council estimated that if children received exposure and systematic opportunities to develop foundational language, reading, and related skills during early schooling, only about five percent might experience serious reading difficulty later in school (Snow et al., 1998).

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

LDC-12 Children develop knowledge of the alphabet and the alphabetic principle.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

RF.K.1 Demonstrate understanding of the organization and basic features of print.

LETTER NAMING CONTINUED ON NEXT PAGE

| | | | | |
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| Children understand that spoken language can be represented by letters. | | | | UNDERSTANDING |
| A. Recognizes own name in isolation and in context. | B. Makes connections to particular letters in the print environment (one’s name, family members’ names, friends’ names). | C. Locates, talks about, and/or asks questions about letter(s) in the print environment. | D. Discriminates letters from pictures and numbers. | SKILLS |
| <p>During a shared reading* of <i>Who Stole the Cookie from the Cookie Jar</i>, Ms. Lewis asked Alexis to select her name from the 12 name card choices and place it in the poem on the pocket chart. Alexis selects her name and places it in the empty space on the pocket chart.</p> <p>Bryson enters the classroom and completes the morning attendance activity. He uses the wand of the interactive whiteboard and selects his name from the other classmates’ names on the board and drags his name to the picture of the school.</p> | <p>While working in the Read the Room Literacy Center, Paul notices that Pablo’s name has some of the same letters as his name and says, “Look Ms. Graham, Pablo has a ‘P’, ‘a’, & ‘l’ in his name like my name!”</p> <p>Chet is standing in the line with the other students who travel home by car and notices that his George Watts Elementary School folder has a letter that he recognizes. Chet says to Ms. Allen, “Look that’s like the ‘G’ in Grandma,” as he points to the letter ‘G’ in George.</p> | <p>When asked, “Use your pointer to find a letter in the classroom,” Huan uses the pointing device*** and points to a letter and/or letters in the classroom environment.</p> <p>During school day routines, Mason notices letters by gesturing to them and saying, “I see a letter” and “I know that one!” while pointing to letters in the classroom.</p> <p>Throughout the school environment and in print material,* Isabella asks questions about letter names.</p> <ul style="list-style-type: none"> • “What is that letter?” (to identify unknown letters) • “Why does that letter look like that?” and “Is that a ‘g’, too?” (to sort out features of letters, such as different fonts or uppercase/lowercase letters) • When pointing to the letter ‘Q,’ Isabella asks, “What is that little part on that ‘O’?” (to make connections to known letters) | <p>When asked, “Show me some letters (or a letter)” during a shared reading activity, Jacob uses a framing tool and frames letters on the print material.*</p> <p>Chloe has chosen to work at the Interactive Whiteboard Center. The board has visuals of numbers, pictures, and letters. She is prompted by the character on the whiteboard to tap only the letters and drags the letters to Leo, the Letter-Loving Lobster. The character explains that Leo will only grab letters. Chloe selects letters only and drags the letters to Leo.</p> | PERFORMANCE DESCRIPTORS |

* Examples of print material could include poems, stories, word wall, informational text, and digital media.

** Collections of letters could include magnetic letters, large foam letters, cards or paper with letters written on them, or letters on a digital learning device.

*** Pointers could include items such as a finger, pointer, framing tool, highlighter tape, or a dot marker.

LETTER NAMING CONTINUED FROM PREVIOUS PAGE

| | | | |
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| UNDERSTANDING | Children know features of letters. | | |
| SKILLS | <p>E. Accurately selects and names <i>some-to-all</i> of the letters in own name.</p> <p><i>Some-to-all of the letters indicates a range of knowledge. For children with longer names, they may select and name some-to-all of the letters in own name.</i></p> | <p>F. Accurately selects letters when given the letter name.</p> | <p>G. Accurately matches <i>some</i> uppercase to lowercase letters, matching the same letter uppercase to lowercase form.</p> <p><i>Some indicates the child is able to select and accurately name letters throughout printed materials within the following range (8-13) for uppercase or lowercase letters.</i></p> |
| PERFORMANCE DESCRIPTORS | <p>When given a small group of letters,** including the letters in her name, Destiny sorts through the various letters and selects (picks up or points to) the letters in her name. She then names <i>some-to-all</i> of the letters selected.</p> <p>As part of the morning routine, Trumaine walks over to the name pocket chart and finds his picture. He takes the envelope from behind his picture that contains an assortment of letter cards. Trumaine then searches through the letters in attempt to spell his name. He selects the letters 'T' 'r' 'm' 'i' and 'e'. Ms. Lipe, the teacher assistant, says, "Trumaine, tell me the letters you placed under your name." Trumaine points to each letter under his picture with his finger while saying the correct name for each letter, "T r m i e".</p> | <p>When provided letters,** either uppercase or lowercase, and asked to pick up the letter 'T,' Diamond accurately selects the letter. <i>NOTE: The oral prompting would continue until the child accurately selects most of the letters, either uppercase or lowercase.</i></p> <p>During free choice literacy centers, Jamal chooses to work on the interactive whiteboard. Jamal picks up the whiteboard wand, taps the board, and begins the flipchart. Jamal hears the name of a letter (e.g. "uppercase D" or "lowercase f"), and a colored space is highlighted on the board. Jamal uses his wand to tap the correct letter from the letter box at the bottom of the board and drags the letter to the space highlighted on the board. When Jamal hears "uppercase W," he selects 'u,' but this time the 'u' bounces back to the letter box. Jamal is able to place most letters in the correct space on the board when prompted; however, when prompted to select "uppercase W," "lowercase f," "uppercase G," and "lowercase q," the letters do not stay in the correct space and bounce back to the letter box. At the end of the flipchart, the letters that bounced back to the letter box are listed on the next page for Jamal to complete additional lessons with these letters.</p> <p>In print material,* Isaiah accurately selects most letters using a pointing device, when orally prompted with letter names.</p> | <p>Jason Thomas has chosen to work in the Letter Detective Center. Ms. Rodriguez shows Jason Thomas the cube with the uppercase letter 'R' and asks him to find the lowercase 'r.' Jason Thomas looks, using his magnifier*** until he spots the lowercase 'r' and highlights it with the magnifier. Jason Thomas continues his detective work, matching <i>some</i> lowercase letters to the corresponding uppercase letter when prompted by Ms. Rodriguez.</p> <p>While working in Literacy Work Stations, Hunter places the alphabet placemat printed with uppercase letters in front of him and empties the container of lowercase letter tiles. Hunter chooses the lowercase 'r' letter tile and matches it to the uppercase 'R' printed on the placemat. He continues to accurately match <i>some</i> lowercase letter tiles to their uppercase form on the placemat.</p> <p>While working with the letter app on the iPad, Li Ming was able to match the lowercase to the uppercase letter on the screen for <i>some</i> letters.</p> <p>During small group reading, the teacher hands Sara the framing tool, shows her an uppercase letter and asks her to find the same letter in lowercase. Sara accurately frames*** the lowercase letter. When prompted to find additional letters, Sara matches <i>some</i> uppercase letters to lowercase letters.</p> |

* Examples of print material could include poems, stories, word wall, informational text, and digital media.

** Collections of letters could include magnetic letters, large foam letters, cards or paper with letters written on them, or letters on a digital learning device.

*** Pointers could include items such as a finger, pointer, framing tool, highlighter tape, or a dot marker.

LETTER NAMING CONTINUED FROM PREVIOUS PAGE

| Children know features of letters. | | | | UNDERSTANDING |
|---|---|--|--|-------------------------|
| H. Accurately names <i>some</i> letters (uppercase <i>or</i> lowercase). <i>Some</i> indicates the child is able to select and accurately name letters throughout printed materials within the following range (8-13) for uppercase <i>or</i> lowercase letters. | I. Accurately names <i>most</i> letters (uppercase <i>or</i> lowercase). <i>Most</i> indicates the child is able to select and accurately name letters throughout printed materials within the following range (14-25) for uppercase <i>or</i> lowercase letters. | J. Accurately names forms of the same letter for <i>most</i> letters (uppercase <i>and</i> lowercase). <i>Most</i> indicates the child is able to select and accurately name letters throughout printed materials within the following ranges (14-25) for uppercase <i>and</i> (14-25) for lowercase letters. | K. Accurately names all letters of the alphabet (uppercase <i>and</i> lowercase, including different fonts encountered during reading). | SKILLS |
| <p>Lamonte is working in the Word Work Station using cards with classmates' pictures and their names written beside the picture. Each letter of the child's name is written in a box. Below the names are the same number and size boxes, but the boxes are blank. Lamonte chooses the card with Chris' picture and then selects an uppercase 'C' and places it in the blank box under uppercase 'C'. He continues until he has found each letter and placed it in the individual box. Lamonte then takes his finger and points to the uppercase C and says, 'C.' He then places his finger on the lowercase h and says, 'h.' He continues until he has said each letter correctly. He then gets the next picture card of his classmate, Marquis. When Lamonte begins to name the letters he placed on the card, he can only name the letters 'M', 'i' and 's'. He asks another student at the center for help naming the other letters.</p> <p>When using magnetic letters,** Elijah picks up and accurately says the name for <i>some</i> of the letters, either uppercase or lowercase.</p> <p>Jaylen and Charlene use pointers as they read the poem written on chart paper. As Charlene calls out different letters, Jaylen uses the pointer and correctly selects <i>some</i> uppercase and lowercase letters as they are called.</p> | <p>When provided a group of 7 lowercase letters,** Jing accurately selects and says the letter name for 6 lowercase letters (a, e, x, m, q, u). After Jing is successful with this small group, Mr. Hughes gives Jing 7 more letters and Jing accurately selects and names 5 of them (r, n, s, y, i). Mr. Hughes keeps giving Jay groups of 7 letters until all letters have been provided for Jing. After seeing all the groups of letters, Jing selected and named 18 letters, which is in the <i>most</i> range.</p> <p>In print material,* Charlotte accurately selects and says the letter name for <i>most</i> letters either uppercase <i>or</i> lowercase, using a pointing device.</p> <p>When looking at a print storybook, Lucas uses a framing tool to frame letters. He accurately names <i>most</i> framed letters either uppercase or lowercase.</p> | <p>When using magnetic letters, Valentina selects the uppercase and lowercase letters for a small group of letters and says the name for them (A/a, E/e, X/x, M/m, Q/q, U/u, G/g.). After being able to name both the uppercase and lowercase letters for this small group, she continues with another small group of both uppercase <i>and</i> lowercase letters until she names <i>most</i> letters.</p> <p>In print material Gabriela accurately selects, using a pointing device,** and says the letter name for <i>most</i> letters, both uppercase <i>and</i> lowercase.</p> <p>When reading the class name graph, Jeremiah uses a framing tool to frame letters while accurately naming <i>most</i> uppercase <i>and</i> lowercase letters aloud.</p> | <p>While exploring with letter beads, Mackenzie begins stringing all 26 uppercase letters on one string while saying the letter name that appears on each bead. She then strings all 26 lowercase letter beads on a string while saying the letter name on each lowercase letter bead. Mr. Nicholson asks, "Why do you have different letters on different strings?" Makenzie answers, "These are lowercase letters," and points to the string of lowercase letter beads. She then points to the uppercase string of letter beads and says, "These are uppercase letters."</p> <p>While working at the pocket chart in the literacy center, Justin places all the uppercase and lowercase letter cards in the pocket chart and then points to each letter and says the letter name for <i>all</i> letters.</p> <p>While reading the room, Xavier challenges himself to find and name every letter of the alphabet (uppercase and lowercase). Xavier uses a pointing device and finds every letter of the alphabet and says the name of every letter (uppercase and lowercase).</p> | PERFORMANCE DESCRIPTORS |

* Examples of print material could include poems, stories, word wall, informational text, and digital media.

** Collections of letters could include magnetic letters, large foam letters, cards or paper with letters written on them, or letters on a digital learning device.

*** Pointers could include items such as a finger, pointer, framing tool, highlighter tape, or a dot marker.

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Reading Comprehension: Monitoring Meaning

DOMAIN: Language Development and Communication

CLAIM: Students can acquire the foundational skills for reading and integrate these skills for comprehending increasingly complex texts.

RATIONALE

The ability to comprehend a wide range of increasingly complex texts is central to acquiring the capacities of a literate individual. According to Torgesen (1998), “adequate reading comprehension is the most important ultimate outcome of effective instructions in reading” (p.33). Learning to read is a complex process that requires young children to acquire and continue to develop automaticity with foundational skills as well as language processes that together build their capacity to comprehend a variety of written texts (National Early Literacy Panel, 2009; National Reading Panel, 2000). Successful readers can integrate the sound, visual, and meaning systems of language to monitor comprehension, repair misunderstandings and apply their understandings to a range of increasingly complex texts in a variety of settings.

According to Marie Clay (1991), children should be responsible for monitoring their own reading so that it makes sense. Teachers must allow children time to think and problem solve before prompting. “Proficient readers monitor their comprehension during reading – they know when the text they are reading or listening to makes sense, when it does not, what does not make sense, and whether the unclear portions are critical to overall understanding of the piece” (Keene, 2008, p.246). This monitoring for meaning allows for understanding to occur. Children need to be taught to be flexible and adaptable in using strategies independently to improve and maintain understanding.

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

APL-2 Children actively seek to understand the world around them.

APL-9 Children persist at challenging activities.

LDC-3 Children ask and answer questions in order to seek help, get information, or clarify something that is not understood.

LDC-9 Children comprehend and use information presented in books and other print media.

CD-1 Children use their senses to construct knowledge about the world around them.

CD-2 Children recall information and use it for new situations and problems.

CD-3 Children demonstrate the ability to think about their own thinking: reasoning, taking perspectives, and making decisions.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

KINDERGARTEN

RL.K.1 With prompting and support, ask and answer questions about key details in a text.

RL.K.2 With prompting and support, retell familiar stories, including key details.

RL.K.4 Ask and answer questions about unknown words in a text.

RL.K.10 Actively engage in group reading activities with purpose and understanding.

RI.K.4 With prompting and support, ask and answer questions about unknown words in a text.

RF.K.4 Read emergent-reader texts with purpose and understanding

SL.K.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.

GRADE 1

RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson.

RI.1.3 Describe the connection between two individual events, ideas, or pieces of information in a text.

RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.

RI.1.7 Use the illustrations and details in a text to describe its key ideas.

RF.1.4 Read with sufficient accuracy and fluency to support comprehension.

SL.1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.

CONSTRUCT PROGRESSION

GRADE 2

RL.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

RL.2.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.

RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.

RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.

RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

RF.2.4 Read with sufficient accuracy and fluency to support comprehension.

SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

GRADE 3

RL.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

RI.3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.

RF.3.4 Read with sufficient accuracy and fluency to support comprehension.

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READING COMPREHENSION: MONITORING MEANING

UNDERSTANDING: Children understand that text (pictures and print) makes sense.

| SKILLS | A. Listens to a story or informational text and monitors for meaning. | B. Uses a picture or image to monitor for meaning. | C. Pretends to read a familiar book; retells following the story line. | D. Reads without monitoring or noticing when the reading does not make sense. | E. Monitors reading, recognizing that the reading does not make sense without attempting to repair meaning. |
|-------------------------|--|---|--|--|---|
| PERFORMANCE DESCRIPTORS | <p>After hearing <i>There's a Monster Under My Bed</i> [by James Howe] read aloud, Barbara Ann says, "I don't think there's really a monster under there."</p> <p>When discussing the book that Mrs. Murray read about water, Allen describes water, ice, and water vapor as states of matter.</p> <p>Ms. Richardson reads an informational text about adaptation, and Kirk describes the example of how amphibians adapt to winter weather.</p> | <p>Yolanda checks the learning stations board to see what activities are available. She reads the picture of letters and words to mean that the word study station is "open".</p> <p>During a math lesson, Denise learns about bar graphs. As part of the class study of pets, the students make a bar graph of their favorite pets. Denise describes how the graph shows the popularity of different kinds of pets.</p> <p>Billy's interest in monarch butterflies leads him to look at an informational text about them. Without reading the text, he shows that he understands the maps showing the migration paths, since he can locate his home state.</p> | <p>D'Vonne goes to the reading center and chooses the picture book <i>Make Way for Ducklings</i> [by Robert McCloskey]. He sits down with the book and turns the pages, beginning at the front of the book and continuing in the correct sequence through the book. He tells the story from memory, referring to the pictures and including most of the important elements of the story.</p> <p>Mr. Dawes has read <i>Jack and the Beanstalk</i> to the class. Chauncey runs her finger under each line of text on the page retelling most details of the story, even though the text is too complicated for her to read.</p> <p>Kelly is very interested in reading the book about whales that Ms. Wales read to the class. Although the text is too complicated for her to read, she turns the pages in the book, recalling almost every detail, turning the pages at the correct point in her retelling, and reciting much of the text from memory.</p> | <p>Ralph is reading aloud his take-home reader to his teacher, Ms. Byrd. As he reads, he encounters several unfamiliar words. He invents text and continues to read, even though what he is reading does not make sense.</p> <p>As Kent is reading aloud to his teacher, Ms. Poulin, he skips two lines of text. He continues reading, not noticing that the reading does not make sense.</p> <p>Cassie reads aloud a story that includes dialogue but does not attend to any of the punctuation, sometimes decoding words incorrectly, and continues to read without noticing errors that affect meaning.</p> | <p>Sally is reading a book during silent reading. She says out loud, "I don't get this!" She stops reading, without attempting to repair meaning.</p> <p>Remy knows a lot of facts and vocabulary about the Egyptian pyramids. When he is reading aloud a text about the pyramids, he reads that the pyramids "had many chimneys." He pauses in his reading and says, "Huh. Pyramids don't have chimneys." He continues reading without self-correcting.</p> <p>While reading aloud an informational text about the natural environment, Ben reads "population" instead of the word "pollution" and says, "Wait a minute; that doesn't make sense." However, he carries on reading without self-correcting.</p> |

* Because children monitor meaning and learn to self-correct to repair comprehension in a variety of ways, the performance descriptors illustrate some of these ways, including: Cross-Checking Cueing Systems, Phrasing and Punctuation, Making Connections, Visualizing, Predicting, Questioning, Inferring, Context Clues, Determining Importance, Summarizing, Adjusting Rate.

READING COMPREHENSION: MONITORING MEANING

| UNDERSTANDING: Children understand that text (pictures and print) makes sense. | | | | |
|---|---|---|---|-------------------------|
| F. Monitors reading, noticing that the reading does not make sense, and attempts to repair and preserve meaning. | G. Monitors reading, using strategies for self-correction when suggested by the teacher. | H. Monitors reading, using self-correction strategies independently, but does not select the optimal strategy. | I. Monitors reading, using optimal self-correction strategies independently to improve and maintain meaning. | SKILLS |
| <p>During guided reading, Brad is whisper reading as Ms. Collins listens in. As he reads, he makes several errors and realizes that what he is reading does not make sense. He rereads the passage in an attempt to make the text make sense; however, he is unsuccessful and looks at Ms. Collins for help.</p> <p>Alphonse is reading aloud <i>The Blind Men and the Elephant</i> [by Karen Backstein]. The text is: "Although these men could not see." Alphonse reads, "All the these men could not see." Noticing that the reading does not make sense, he rereads the sentence as, "Because these men could not see." He preserves meaning without reading it accurately.</p> <p>While reading a chapter book that has several characters in the story, Malik becomes confused about which character is doing what. He rereads for clarification, asking himself <i>who</i> is doing <i>what</i>. After using this strategy, he is able to continue reading without his previous confusion.</p> | <p>Sue is reading aloud "I like to go to the.. ." and stops when she comes to a word she does not know. Mr. Kissel asks Sue to look at the picture for what would make sense. Sue looks at the picture and says, "Oh, they are at the zoo." Her cross-checking of cueing systems works, and Sue rereads the sentence as "I like to go to the zoo."</p> <p>Before Cora begins reading aloud, Mrs. Huerta asks Cora to retell what she has already read independently. Cora's retell is inaccurate, so the teacher suggests that she reread a small chunk of text and put it into her own words. Cora rereads the small chunk, retells again, and repairs the inaccuracies.</p> <p>Sam is reading aloud instructions for a new board game he wants to play with his friends. When he becomes confused about what he is reading, Ms. Mbalia suggests that he look at the illustrations. By rereading and looking at the illustrations, Sam figures it out.</p> | <p>Harriet is reading aloud and comes to a word for which she does not know the meaning. She checks the classroom word wall, but the word she is looking for is not on the wall. She then continues to read.</p> <p>Sandy is reading a chapter book and states he is having difficulty determining which character is the hero. He uses the strategy of looking at the illustration for help, but the illustration is a simple line drawing, which does not clarify meaning. He then continues to read.</p> <p>Cameron is reading a text about the planets. He uses his knowledge of the order of the planets to infer their names when he encounters the name of a planet that he finds challenging to decode. However, the list of planets in the book is not in the order of the planets from the Sun (they are in alphabetical order), so his strategy does not work.</p> | <p>Jonny is reading to the teacher. He comes to a word and pauses. Jonny says, "'Dog' would make sense, but the word starts with the letter p. 'Puppy' would make sense, and it looks right."</p> <p>During guided reading, Ms. Romance is listening to Jamie read. Jamie reads a sentence, "When the old woman saw the quilt, she got a smell on her face and tears in her eyes." She immediately rereads the sentence as, "When the old woman saw the quilt, she got a smile on her face and tears in her eyes." Ms. Romance says to Jamie, "I like how you fixed that error. How did you know what to do?" Jamie says, "I checked the picture and the old lady was smiling; plus it made no sense for her to have a smell on her face."</p> <p>While reading an informational text about dolphins, Erik doesn't know the meaning of the word "mammals". He keeps reading further and is able to connect the description of the characteristics of mammals to what he knows about farm animals and then remembers that they are called mammals.</p> | PERFORMANCE DESCRIPTORS |

* Because children monitor meaning and learn to self-correct to repair comprehension in a variety of ways, the performance descriptors illustrate some of these ways, including: Cross-Checking Cueing Systems, Phrasing and Punctuation, Making Connections, Visualizing, Predicting, Questioning, Inferring, Context Clues, Determining Importance, Summarizing, Adjusting Rate.

SITUATION: *Reading for Meaning*

| | | | | | |
|--------------------------------|--|---|---|---|--|
| Selecting Learning Target(s) | Understanding: Children understand that text (pictures and print) makes sense. | | | | |
| | A. Listens to a story or informational text and monitors for meaning. | B. Uses a picture or image to monitor for meaning. | C. Pretends to read a familiar book; retells following the story line. | D. Reads without monitoring or noticing when the reading does not make sense. | E. Monitors reading, recognizing that the reading does not make sense without attempting to repair meaning. |
| | F. Monitors reading, noticing that the reading does not make sense, and attempts to repair and preserve meaning. | G. Monitors reading, using strategies for self-correction when suggested by the teacher. | H. Monitors reading, using self-correction strategies independently, but does not select the optimal strategy. | I. Monitors reading, using optimal self-correction strategies independently to improve and maintain meaning. | |
| Preparation | <ul style="list-style-type: none"> • Time during the day, such as Reader’s Workshop or Literature Circles, when the teacher uses modeling, group discussion, and student practice to help students learn about the multiple strategies readers use for self-monitoring and self-correcting meaning during reading • Daily opportunities for students to read texts at their independent levels • Collection of a variety of books for each child at his/her independent reading level (e.g., Book Box, Independent Reading Folder) • Individual reading spaces that support students’ best independent reading (e.g., away from distractions, lying on the floor, sitting in a chair) • Opportunities for one-on-one teacher-child conferences as students read independently | | | | |
| General Description | <p>The teacher provides a lesson that includes teacher demonstration and student practice or group discussion about the multiple strategies readers can use to 1) monitor their reading for meaning and 2) self-correct their reading when meaning breaks down. This is followed by time for students to read from their collection of independent-leveled books and teacher conferencing.</p> | | | | |
| Eliciting Evidence of Learning | <p>The teacher begins by providing a lesson focused on a particular concept(s) and/or incorporating strategies that help the students 1) monitor their reading for meaning and 2) self-correct their reading when meaning breaks down. The lesson includes a demonstration of the skill(s)/strategies(s) discussed and opportunities for students to discuss and practice the strategies that help to monitor meaning.</p> <p>Then, the teacher provides time for students to read from their collection of independent-level books and meets individually and/or with small groups to instruct, ask probing questions to determine the edge of their understanding, and support the students based on their individual needs and learning targets. During this time, the teacher listens to the child reading aloud, observes the child’s reading behaviors, and notices how and/or if the child demonstrates self-monitoring for meaning.</p> <p>Examples</p> <ul style="list-style-type: none"> • Alphonse reads aloud <i>The Blind Men and the Elephant</i> [by Karen Backstein]. The text is: “Although these men could not see.” Alphonse reads, “All the these men could not see.” Noticing that the reading does not make sense, he rereads the sentence as “Because these men could not see.” He crosschecks using meaning, and preserves meaning, while ignoring visual cues. The teacher says, “Alphonse, you reread when you realized that your reading didn’t make sense. That’s what good readers do.” • Jonny reads to the teacher. He comes to a word and pauses. Jonny says, “‘Dog’ would make sense, but the word starts with the letter p. ‘Puppy’ would make sense, and it looks right.” The teacher states, “Jonny, you thought about what would make sense, but when you checked the letters, you didn’t see D for dog. Then you used the letter p to get to puppy. That work made your reading make sense and look right.” • During Guided Reading the teacher listens to Jamie read. Jamie reads a sentence, “When the old woman saw the quilt, she got a smell on her face and tears in her eyes.” She immediately rereads the sentence as, “When the old woman saw the quilt, she got a smile on her face and tears in her eyes.” The teacher says to Jamie, “I like how you fixed that error. How did you know what to do?” Jamie says, “I checked the picture, and the old lady was smiling; plus it made no sense for her to have a smell on her face.” <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • Did what you just read make sense? • I noticed that you stopped reading. Can you tell me why you stopped? • I noticed that you reread. Can you tell me why you reread that? • Are there other strategies you could use to help your reading make sense? <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> • That doesn’t make sense. • Reread it and make it make sense. • Think about the picture when you are reading the story. • Try that again. • Are you thinking about the story? | | | | |

| | |
|---|---|
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Interpreting the Evidence</p> | <p>Observation: Hank uses the pictures in a wordless book to tell a story. The story he tells makes sense.</p> <ul style="list-style-type: none"> Identify Learning Status on Construct Progression: B. Reads a picture or image to monitor for meaning. <p>Observation: As Kent reads aloud to his teacher, he skips two lines of text. He continues reading, not noticing that the reading does not make sense.</p> <ul style="list-style-type: none"> Identify Learning Status on Construct Progression: D. Reads without monitoring or noticing when the reading does not make sense. <p>Observation: Alphonse reads aloud <i>The Blind Men and the Elephant</i> [by Karen Backstein]. The text is: "Although these men could not see." Alphonse reads, "All the these men could not see." Noticing that the reading does not make sense, he rereads the sentence as "Because these men could not see."</p> <ul style="list-style-type: none"> Identify Learning Status on Construct Progression: F. Monitors reading, notices that the reading does not make sense, and attempts to repair and preserve meaning. <p>Observation: Harriet reads aloud and comes to a word for which she does not know the meaning. She checks the classroom word wall, but the word is not on the wall. She then continues to read.</p> <ul style="list-style-type: none"> Identify Learning Status on Construct Progression: H. Uses self-correction strategies independently, but may not select the optimal strategy. <p>Observation: While reading a nonfiction book about dolphins, Erik doesn't know the meaning of the word "mammals." He keeps reading further and is able to connect the description of the characteristics of mammals to what he knows about farm animals and then remembers that they are called mammals.</p> <ul style="list-style-type: none"> Identify Learning Status on Construct Progression: I. Uses optimal self-correction strategies independently to improve and maintain understanding. |
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Adapting/ Responding to Learning Needs</p> | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Observational Opportunities</p> | <p>There are many opportunities throughout the day when children may be observed monitoring their reading for meaning and attempting to use self-correction strategies when meaning breaks down, such as: listening to a book being read aloud (Read Aloud); reading a text at the independent reading level (Reader's Workshop); reading a text with teacher support during small group instruction (Guided Reading); or attempting to read a difficult book of interest. During these opportunities, the teacher observes students' use of reading strategies to 1) monitor their reading for meaning and 2) self-correct their reading when meaning breaks down.</p> |

School-Related* Vocabulary

DOMAIN: Language Development and Communication

CLAIM: Students can acquire and integrate vocabulary, concepts, and the structure of language in increasingly complex ways.

RATIONALE

Research in the field of vocabulary development informs us that a child's knowledge of words' meanings impacts their reading comprehension and future academic success (Chall, Jacobs, & Baldwin 1990). Vocabulary development is particularly critical among English language learners as "English language learners who experience slow vocabulary development are less able to comprehend text at grade level than their English-only peers. . . and are at risk of being diagnosed as learning disabled (Christ & Wang 2010). Additionally, focusing on the improvement of vocabulary development advances educational equity because "a well-developed vocabulary correlates with greater reading comprehension and general academic success" (2010). Therefore, the Think Tank Claim to which this is aligned (*Students can acquire and integrate vocabulary, concepts, and the structure of language in increasingly complex ways*) emphasizes the use of "vocabulary needed in school" and asserts that "given enough time and purposeful instruction," word learning can occur for "all students across academic domains", particularly when emphasis is placed on the conceptual understanding behind the learning of vocabulary rather than the acquisition of specific words.

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning and Development

- APL-2 Children actively seek to understand the world around them.
- HPD-6 Children develop awareness of their needs and the ability to communicate their needs.
- LDC-7 Children respond to and use a growing vocabulary.
- CD-2 Children recall information and use it for new situations and problems.
- CD-9 Children explore concepts connected with their daily experiences in their community.

NC Standard Course of Study (Common Core State Standards & Essential Standards)

- RL.K.1 With prompting and support, ask and answer questions about key details in a text.
- L.K.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
- L.K.5 With guidance and support from adults, explore word relationships and nuances in word meanings.
- L.K.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts.
- L.1.4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on *grade 1 reading and content*, choosing flexibly from an array of strategies.
- L.1.5: With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings.
- L.1.6: Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., *because*).
- L.2.4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies.
- L.2.5: Demonstrate understanding of word relationships and nuances in word meanings.
- L.2.6: Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., *When other kids are happy that makes me happy*).
- L.3.4: Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies.
- L.3.5: Demonstrate understanding of figurative language, word relationships and nuances in word meanings.
- L.3.6: Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., *After dinner that night we went looking for them*).

* The term "school-related" vocabulary, rather than "academic" vocabulary, was purposefully selected for this construct progression. "School related" refers to words that are necessary for school but might not be related to a specific discipline. Additionally, the Think Tank claim emphasizes words that are taught rather than words that children come to school already knowing. By focusing on school-related vocabulary, the disparity between language exposure outside of the school environment is minimized.

SCHOOL-RELATED* VOCABULARY

| UNDERSTANDING: Children understand that a word carries meaning within a specific school-related context. | | | | |
|--|---|--|--|--|
| SKILLS | A. Begins to connect a word to its related concept within a specific context. | B. Uses a word in a specific context and sometimes uses it accurately within that context. | C. Uses a word in a specific context and consistently uses it accurately within that context. | D. Uses a word accurately within a context but uses it inaccurately in a different context. |
| PERFORMANCE DESCRIPTORS | <p>Sheila remembers that Mrs. Smart, the media specialist, has asked her to always sit at the table with a blue shape taped to the middle. She sits at that particular table and points to the <i>blue shape</i> and says “<i>blue</i>.” Mrs. Smart bends down, points to herself, and says to Sheila, “Who am I, Sheila?” Sheila points to the media specialist’s <i>blue shirt</i> and responds by saying, “<i>Blue</i>.” Mrs. Smart then points to herself again and says, “Sheila, what is my name?” Sheila says, “<i>Blue</i>.”</p> <p>When learning about the characteristics of <i>insects</i>, Carrie points to the word <i>thorax</i> on the word list and says, “It has something to do with <i>science and bugs</i>.”</p> <p>During instruction on the topic of <i>change over time</i>, Henry explains the word <i>narratives</i> as a word used in social studies.</p> | <p>Maliyah asks the teacher many times for permission to use the <i>stapler</i> during her book-making process. The teacher asks Maliyah how she is doing. Maliyah holds up the glue and the yarn and says, “I’m <i>stapling</i> hair on the horse.”</p> <p>While signing into the reading program on the computer, Avery asks her partner for the <i>password</i>. Later, when she is engaging in a discussion about habitats, she describes how cows graze in the <i>password</i>.</p> <p>During a unit on natural disasters, Emma’s teacher asks her to complete a Venn diagram comparing and contrasting volcanoes and tsunamis. On one side of the diagram, Emma writes <i>tsunamis</i>; on the other side she writes <i>volcanoes</i>; and in the center she writes <i>both</i>. She accurately lists several characteristics for volcanoes and tsunamis in the correct circles. She puts <i>explosion</i> in the center as a characteristic of both volcanoes and tsunamis.</p> | <p>During Akil’s small group time, his teacher asks him what it means that Goldilocks was <i>trespassing</i> at the Three Bears’ house in the story. Akil says, “She went into their house without asking! She did not follow the rules.” The teacher then asks Akil if he remembers a different fairy tale character that <i>trespasses</i>. Akil answers, “Jack <i>trespasses</i> when he goes up the giant’s beanstalk and into his house.”</p> <p>When learning about what living things need, Sabrina explains that all living things are <i>organisms</i>. Later she draws in her science journal a picture of many living things and labels it <i>organisms</i>.</p> <p>While studying maps, Hassan explains that the <i>key</i> shows symbols on a map. He then draws a map of his bedroom and includes the word <i>key</i> on his map with appropriate symbols.</p> | <p>Makenna explains that plants need a certain amount of <i>space</i> to survive. Later, when learning about the solar system, she questions her teacher about how much <i>space</i> is in the solar system.</p> <p>Navi accurately determines <i>even</i>-numbered groups of objects during math stations. However, when Navi’s teacher uses the word <i>even</i> again and asks him to select books from the <i>even</i>-numbered book bin, Navi says, “I’m not sure what <i>even</i> means,” and asks his teacher for help.</p> <p>During Mr. Lloyd’s science lab on the digestive system, Madison correctly builds a diagram of the <i>intestines</i> with a ribbon and labels it within the body system. However, later in the day when Mr. Lloyd asks the class to describe a <i>clandestine</i> mission that occurs in the novel they recently read, Madison says, “Isn’t that the <i>long thing in your body that absorbs food</i>?”</p> |

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SCHOOL-RELATED* VOCABULARY CONTINUED ON NEXT PAGE

| UNDERSTANDING: Children understand that a school-related word can have the same meaning across multiple contexts. | | UNDERSTANDING: Children understand that they can use many known words to describe the same concept. | | |
|--|---|---|--|-------------------------|
| E. Uses a word accurately within a context and sometimes uses it accurately in a different context. | F. Uses a word accurately within a context and consistently uses it accurately across multiple contexts. | G. Uses a few related known words to make connections to a concept. | H. Uses an expanded collection of related known words with greater precision to make connections to a concept. | SKILLS |
| <p>During math time, Yosh’s teacher is focusing on comparing the size of objects. Yosh has learned to describe a tall tube as <u>enormous</u> and to describe a short tube as small. Yosh tells his teacher during the math lesson that a lion is <u>enormous</u> compared to a spider. However, when Yosh is headed out to the playground, the teacher sees him pat a friend on the back and hears him say, “You are my <u>enormous</u> friend because you are my favorite.”</p> <p>While learning about states of matter, Renee labels a solid and <u>liquid</u> and describes the qualities of each. Later, when she is outside playing in the sand box, she pours sand from one bucket to another, and she describes the sand as a <u>liquid</u>.</p> <p>Marissa is learning about the absolute and <u>relative</u> locations of places in their local region, and she can show the <u>relative</u> location of her town compared to another. She later is writing in her journal about spending the weekend with her cousin, who is her <u>relative</u>. However, in her science report she also describes the squirrels she saw at the park as her <u>relatives</u>.</p> | <p>Caleb uses two figurines on his desk as tactile fidgets during direct instruction. When Caleb’s teacher asks him if the number 12 is greater than the number 12, he holds up his toys and replies, “No. Twelve <u>equals</u> 12. Just like my toys are <u>equal</u>, too. They are the same height.”</p> <p>Larry is learning about nutrient-<u>dense</u> foods in health. He explains that the word <u>dense</u> can also describe forests, as he learned in social studies.</p> <p>Zara has been learning about <u>multiplication</u>. When the class is working on a supply and demand project in social studies, Zara tells her group that if they <u>multiply</u> the products made, then the demand will decrease.</p> | <p>Alejandro goes to the teacher who is standing by the whiteboard and asks, “Can I <u>brush</u> the board?” The teacher then states, “Oh, you want to <u>erase</u> the board.”</p> <p>When reading a book about the ocean, Nancy sees a picture of a child wearing a <u>swim mask</u>. She describes the mask as <u>sunglasses</u>, <u>goggles</u>, and then finally <u>water glasses</u>.</p> <p>During a unit on poetry, the children have been exploring the structure of a range of poems. The teacher has introduced the word <u>stanza</u> as a grouping of lines in a poem. The teacher asks Margaret where she found evidence of her answer. Margaret replies, “In the second <u>paragraph</u> of the poem.”</p> | <p>Kendra lists the words <u>bugs</u>, <u>bees</u>, <u>mosquitoes</u>, and <u>flies</u> to describe <u>insects</u>.</p> <p>Kirk lists <u>air</u>, <u>water</u>, <u>space</u>, and <u>light</u> to describe the <u>environment</u>.</p> <p>When learning about the arctic <u>tundra</u>, Porfirio describes it as <u>cold</u>, <u>snowy</u>, <u>icy</u>, and <u>frozen</u>.</p> | PERFORMANCE DESCRIPTORS |

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SCHOOL-RELATED* VOCABULARY CONTINUED ON NEXT PAGE

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|---|---|--|---|--|--|
| <p>UNDERSTANDING: Children understand that the same school-related word has multiple meanings depending on the context.</p> | | | <p>UNDERSTANDING: Children understand the meaning of a school-related word is related to other words with similar meanings, roots, or affixes regardless of context</p> | | |
| PERFORMANCE DESCRIPTORS | <p>I. Sometimes uses context in order to determine or clarify the correct meaning of multiple-meaning words.</p> | <p>J. Consistently uses context in order to determine or clarify the correct meaning of multiple-meaning words.</p> | <p>K. Uses multiple-meaning words frequently and accurately in writing, and talking.</p> | <p>L. Shows an awareness that the structure of a known word can help clarify the meaning of an unfamiliar word.</p> | <p>M. Sometimes uses knowledge of root words or affixes to create new words.</p> |
| | <p>Polly reads, "The girl said <u>bye</u> to her friends. She left to <u>buy</u> some food from the store <u>by</u> her house." Polly expresses confusion when she asks her teacher why the girl was going to buy food and her house, too.</p> <p>Jacquelyn accurately matches the word <u>ball</u> to a picture of a soccer ball on a field. However, when Jacquelyn tries to match the word <u>bawl</u> to a picture of a girl crying, she asks her teacher if <u>bawl</u> and <u>ball</u> are homophones.</p> <p>During a novel study, Felipe tells his small group that the criminal had to <u>flee</u> from the place where the crime took place so he would not get caught. When Felipe's teacher points to the word <u>flee</u> and asks him what it means, Felipe says that a <u>flee</u> is a small bug that runs away very fast when something bad happens.</p> | <p>During Science stations, Pilar explains that she can <u>plant</u> a <u>plant</u> in the garden and that her mom works at the auto <u>plant</u>.</p> <p>Larry explains to his friends that <u>states</u> of matter are different from the United <u>States</u>. He also writes in his Language Arts journal that the law <u>states</u> that everyone must wear seatbelts.</p> <p>Mr. Wu created a homophone board game for his students. The game uses pictures and sentence cards. The pictures each represent a different multiple-meaning word, and the sentence cards give clues that describe each one of the picture cards. Mr. Wu sees that Laura consistently uses the context on the sentence cards to choose accurately each homophone picture that matches.</p> | <p>Olivia makes a joke using the word <u>behind</u>. She tells the child who has stepped in front of her in the line to "Get <u>behind</u> my <u>behind</u>!"</p> <p>Talya's teacher has asked her students to write a story using the homophones they have been learning. Talya writes her story about a <u>fly</u> that goes to a <u>ball</u>. Talya tells her teacher that in her story, "the <u>fly</u> ate <u>eight</u> pieces of <u>meat</u> after he <u>meets</u> his friend for a <u>date</u>." Talya's teacher then asks her what kind of <u>date</u>, and Talya exclaims, "The kind that grows on a tree!"</p> <p>While learning about the structure of the Earth's surface, Todd is using clay and rocks to create a model of landforms. He laughs as he says, "I will <u>form</u> a mountain and then fill out a <u>form</u> to show what I did!"</p> | <p>During a healthful living activity, Candice navigates between various stations set up throughout the class. At the vegetable station, her teacher asks Candice if she eats <u>cauliflower</u> at home. Candice laughs and says, "We have <u>flowers</u> in our garden, but we don't eat them!"</p> <p>During a science unit, Victor is using his laptop to research and design a comic strip on plants. Victor raises his hand and asks his teacher, "Is <u>photosynthesis</u> something like a <u>photo</u> album?"</p> <p>Catherine learned about caverns while studying landforms. When she sees the word <u>cavernous</u> as she is reading her novel, she knows it might have something to do with <u>caves</u> but is confused because the word <u>cavernous</u> is describing a big house.</p> | <p>Molly knows the word <u>friend</u> and uses it to understand the word <u>friendship</u>. But, when Molly's teacher asks her why she has been <u>unfriendly</u> to her classmates, Molly is confused about the prefix <u>un-</u> and replies, "Because I love them and I am always nice!"</p> <p>Mrs. Hart is teaching a unit on the affixes <u>-less</u> and <u>-est</u>. Charles is able to describe what happens to the word <u>care</u> when <u>-less</u> is added. He also explains what <u>rest</u> means when the affix <u>-less</u> is removed. However, when Charles is asked how to build a word with <u>-est</u> that means gigantic, he exclaims, "The most-<u>est</u>!"</p> <p>Tysa learned that organisms <u>adapt</u> to their environments and uses that knowledge of the word <u>adapt</u> to understand the word <u>adaptation</u> while reading about frogs. She does not know what her teacher means, however, when the teacher asks her students to be <u>adaptable</u> around a schedule change.</p> |

* The term "school-related" vocabulary, rather than "academic" vocabulary, was purposefully selected for this construct progression. "School related" refers to words that are necessary for school but might not be related to a specific discipline. Additionally, the Think Tank claim emphasizes words that are taught rather than words that children come to school already knowing. By focusing on school-related vocabulary, the disparity between language exposure outside of the school environment is minimized.

SCHOOL-RELATED* VOCABULARY CONTINUED FROM PREVIOUS PAGE

| <p>UNDERSTANDING: Children understand the meaning of a school-related word is related to other words with similar meanings, roots, or affixes regardless of context. (continued)</p> | <p>UNDERSTANDING: Children understand that words can be used figuratively and metaphorically.</p> | | | |
|---|---|--|--|--------------------------------|
| <p>N. Frequently uses known words to understand unfamiliar words.</p> | <p>O. Recognizes and explains literal and non-literal meanings of words (e.g., jump ahead; take steps).</p> | <p>P. Uses figurative language by making real-life connections.</p> | <p>Q. Uses word relationships and nuances of word meanings accurately when writing and speaking.</p> | <p>SKILLS</p> |
| <p>During a unit on weather, Zoe sees the word <i>snowmobile</i> on a picture card. When her teacher asks her what a <i>snowmobile</i> is, Zoe says, "<i>snow</i> is cold white rain in the winter, and a <i>mobile</i> is like my car, so I think it's a car for driving in the snow!" Later Zoe makes a winter book with <i>snowshoes</i>, <i>snow clothes</i>, and <i>snowmobiles</i>.</p> <p>While learning about the movement of goods, people, and ideas in social studies, Allan makes the connection to other words in his journal that are related to movement, such as: <i>moving</i>, <i>unmoving</i>, <i>movable</i>, <i>unmovable</i>, <i>mobile</i>, and <i>mobility</i>. He also designs a hospital on wheels and calls it "<i>Mobile</i> Emergency Center."</p> <p>While Mr. Burgess is introducing a new science unit on rocks and minerals, he asks the class to predict in their science journals what a <i>metamorphic</i> rock might be. Consuela writes about <i>metamorphosis</i> being a process that happens when caterpillars change to butterflies, so <i>metamorphic</i> must be about rocks changing, too. When Consuela is reading and comes across the word <i>contraband</i>, she remembers the word <i>contradict</i> means to disagree, so she decides that <i>contraband</i> must be something that someone else disagrees with.</p> | <p>Kelly explains that when her mother says she "<i>flies off the handle</i>," she means that she feels <i>out of control</i>.</p> <p>Mrs. Bradshaw asks Cheryl's math group to draw a poster that explains the <i>necessary steps</i> they must follow in order to solve an addition word problem. Cheryl's friend asks her why he would need to walk and take <i>steps</i> to do math. Cheryl responds that Mrs. Bradshaw means that there are things to do that come one after the other – like <i>steps</i> when you walk – so that they can get the right answer.</p> <p>Alex is joking with his friends on the playground about "<i>pulling his leg</i>" while he's climbing on the monkey bars. He explains that it means that he's <i>joking</i>.</p> | <p>Barack writes a story that includes a description that "<i>the sun is like a ball of fire in the sky</i>."</p> <p>Dahlia is learning about the legend of Johnny Appleseed. During a writer's workshop, Dahlia creates her own book and "reads" it to her teacher. She says, "This is the Legend of Dahlia the Great. She plants flowers everywhere she goes. She is so kind and beautiful that the prettiest flower in the world is named dahlia after the amazing Dahlia the Great."</p> <p>Jami's class has been reading a book about a boy who changes the word <i>pen</i> to the word <i>frindle</i>. Jami's teacher asks the class to write an argument paper about a word they think should be changed to a new word. Jami writes about changing the word <i>teacher</i> to the words <i>instruction workers</i> because her teachers give lots of <i>instructions</i> and they are always <i>building</i> more and more information for their students to learn.</p> | <p>Michelle makes up a song about <i>flying</i> that includes birds, bees, and how time <i>flies</i>.</p> <p>During a "My Hero" writing assignment, Dan writes a story about his older brother who is on the football team. In his writing, he shares that his brother is the team's <i>shining star</i> and runs as <i>fast as a cheetah</i>, with the <i>heart of a lion</i>.</p> <p>Hwan's class created personal narrative books. When it is Hwan's turn to share his book with the class, he points to the first page and says, "I am bright like the stars that shine at night." On the second page, he points to a picture of a boy reading and says, "I like to read red books on really massive meatballs." Finally, Hwan shows them the last page in his book. He reads, "My friends are love to me, and I am love to them."</p> | <p>PERFORMANCE DESCRIPTORS</p> |

* The term "school-related" vocabulary, rather than "academic" vocabulary, was purposefully selected for this construct progression. "School related" refers to words that are necessary for school but might not be related to a specific discipline. Additionally, the Think Tank claim emphasizes words that are taught rather than words that children come to school already knowing. By focusing on school-related vocabulary, the disparity between language exposure outside of the school environment is minimized.

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SITUATION: *Science Investigation*

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|--------------------------------|--|---|--|---|---|---|---|---|
| Selecting Learning Target(s) | Understanding: Children understand that a word carries meaning within a specific school-related context. | | | | Understanding: Children understand that a school-related word can have the same meaning across multiple contexts. | | Understanding: Children understand that they can use many known words to describe the same concept. | |
| | A. Begins to connect a word to its related concept within a specific context. | B. Uses a word in a specific context and sometimes uses it accurately within that context. | C. Uses a word in a specific context and consistently uses it accurately within that context. | D. Uses a word accurately within a context but uses it inaccurately in a different context. | E. Uses a word accurately within a context and sometimes uses it accurately in a different context. | F. Uses a word accurately within a context and consistently uses it accurately across multiple contexts. | G. Uses a few related known words to make connections to a concept. | H. Uses an expanded collection of related known words with greater precision to make connections to a concept. |
| | Understanding: Children understand that the same school-related word has multiple meanings depending on the context. | | | | Understanding: Children understand the meaning of a school-related word is related to other words with similar meanings, roots, or affixes regardless of context. | | Understanding: Children understand that words can be used figuratively and metaphorically. | |
| | I. Sometimes uses context in order to determine or clarify the correct meaning of multiple-meaning words. | J. Consistently uses context in order to determine or clarify the correct meaning of multiple-meaning words. | K. Uses multiple-meaning words frequently and accurately in writing, and talking. | L. Shows an awareness that the structure of a known word can help clarify the meaning of an unfamiliar word. | M. Sometimes uses knowledge of root words or affixes to create new words. | N. Frequently uses known words to understand unfamiliar words. | O. Recognizes and explains literal and non-literal meanings of words (jump ahead; take steps). | |
| Preparation | <ul style="list-style-type: none"> Content-related materials for introducing and demonstrating the meaning(s) of new vocabulary words/terms/concepts that helps students connect the topic of study (e.g., graphic organizers, concrete materials, charts, writing materials) Any necessary science-related investigative tools (e.g., microscope, magnifying glass, magnets, collection of environmental objects) A risk-free classroom environment that allows for teacher-student and student to student interaction to support students' use of content-specific vocabulary that may be new, familiar or known to the student(s). | | | | | | | |
| General Description | After discussing key vocabulary concepts during an introduction to a new science concept/unit, the students use the content-specific vocabulary within a collaborative learning context. At the end of the learning experience, students are provided an opportunity to reflect upon the concepts they are learning in their journals. | | | | | | | |
| Eliciting Evidence of Learning | <p>The teacher provides an introduction to a new science concept/unit by reading a text aloud to the class. While reading the text to the class, the teacher pauses to explain key vocabulary concepts within the unit by relating them to his/her own life experiences. The teacher may then ask the students to share their own connections to the new vocabulary by relating their personal experiences to a partner. Through modeling and providing examples, the teacher engages the students in the process of making connections to new concepts. The teacher also provides opportunities across multiple contexts throughout the unit (reading, listening, viewing, and manipulating materials) for students to make connections to the new vocabulary concepts.</p> <p>Next, the teacher introduces an inquiry-based science learning activity to the students during which they use content-specific vocabulary within a collaborative learning context. The teacher explains the activity and promotes the importance of children working collaboratively with peers and/or the teacher during this activity. The students use and explore the materials to make connections with the topic of study. Then, the students communicate with one another and the teacher during the activity by explaining their understandings, asking questions, justifying their conclusions, responding to the thinking of others, and making connections to new learning. As students are working, the teacher observes, listens and/or asks questions to learn how individuals or groups of students are using content-specific vocabulary as they share what they know and understand about the topic of study.</p> <p>The students then record their findings, new connections made, and other questions they may still have in their science journal In an effort to reflect on the concepts they are learning.</p> | | | | | | | |

| | |
|--|---|
| <p>Eliciting Evidence of Learning, continued</p> | <p>Suggested Probes:</p> <ul style="list-style-type: none"> • Tell me what you are working on? • What did you do first/next/last? • Tell me more about what you learned from this activity. • What did you already know about...to help you work with...? • Was there something that you did to help someone else explain...? • What questions do you still have about...? • How could you explain (content) to a friend? • How would the outcome have been different if...? • I noticed you....Tell me more about that. • How did this activity change the way you think or feel about...? " <p>Probes to Avoid:</p> <ul style="list-style-type: none"> • Why aren't you talking to one another? • Why are you telling your friend what to say? • Why are you not able to explain what you are learning? |
| <p>Interpreting the Evidence</p> | <p>Observation: When inquiring about the characteristics of insects, Carrie points to the word "thorax" on the word list and says, "It has something to do with science and bugs."</p> <ul style="list-style-type: none"> • Identify learning status on construct progression: A. Begins to connect a word to its related concept within a specific context. <p>Observation: During Mr. Lloyd's science lab on the digestive system, Madison explains her diagram and says, "The intestines are the long stuff in your body that absorbs food." Later in the day, when the class is discussing a novel about a "clandestine" mission, Madison says, "The spy is on a 'intestine' mission."</p> <ul style="list-style-type: none"> • Identify learning status on construct progression: D. Uses a word accurately within a context but uses it inaccurately in a different context. <p>Observation: When using print resources to further investigate ocean life, Nancy sees a picture of a child wearing a swim mask. She describes the mask as sunglasses, goggles, and then finally water glasses.</p> <ul style="list-style-type: none"> • Identify learning status on construct progression: G. Uses a few related known words to make connections to a concept. <p>Observation: When learning about the arctic tundra, Porfirio describes it as cold, snowy, icy, and frozen.</p> <ul style="list-style-type: none"> • Identify learning status on construct progression: H. Uses an expanded collection of related known words with greater precision to make connections to a concept. <p>Observation: Victor is using his laptop to help his team design a comic strip on plants. Victor raises his hand and asks his teacher, "Is photosynthesis something like a photo album?"</p> <ul style="list-style-type: none"> • Identify learning status on construct progression: L. Shows an awareness that the structure of a known word can help clarify the meaning of an unfamiliar word. <p>Observation: Tysa learned that organisms "adapt" to their environments and uses that knowledge of the word adapt to understand the word "adaptation" while explaining an example about frogs. However, when she asks her students to be "adaptable" around a schedule change. Tysa says "I don't understand what that means."</p> <ul style="list-style-type: none"> • Identify learning status on construct progression: M. Sometimes uses knowledge of root words or affixes to create new words. <p>Observation: A group of students are working to predict a "metamorphic" rock might be. Consuela writes about "Metamorphosis" being a process that happens when caterpillars change to butterflies so "metamorphic" must be about rocks changing too. When Consuela uses some resources to check his prediction, he comes across the word "contraband" Consuela remembers the word "contradict" means to disagree, so she decides that "contraband" must be something that someone else is against.</p> <ul style="list-style-type: none"> • Identify learning status on construct progression: N. Frequently uses known words to accurately understand unfamiliar words. |
| <p>Adapting/ Responding to Learning Needs</p> | <p>Once the evidence is interpreted the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |
| <p>Observational Opportunities</p> | <p>There are many opportunities throughout the day for teachers to observe students' use of school-related vocabulary in multiple contexts. For example, the teacher may elicit evidence of learning as students: listen to a book read aloud; solve a problem; engage in a writing activity; work on individual projects; create artwork; use technology during an activity; work outdoors in the school garden; and participate in a movement/physical activity.</p> |

Writing

DOMAIN: Language Development and Communication

CLAIM: Students can acquire the written communication skills that empower students to express their ideas, opinions, and knowledge for a range of purposes and audiences.

RATIONALE

“One of the best predictors of whether a child will function competently in school and go on to contribute actively in our increasingly literate society is the level to which the child progresses in reading and writing” (Neuman et al., 2004, p. 1). As children write for everyday, school, and subject- or task-specific purposes, they learn to express ideas, experiences, interests, and emotions and simultaneously have opportunities to learn the conventions of written language. The skills and performance descriptors within this progression include writing to convey meaning, writing with a purpose, and intention to communicate to an audience.

Writing itself is a cognitive process that enables children to explore and to articulate their thoughts, ideas, opinions, and knowledge. From a young age, they demonstrate approximations of appropriate written language genres (Donovan & Smolkin, 2006), such as storybooks (Sulzby, 1985) and informational genres (Donovan, 2001; Kamberelis, 1999). In addition to paying attention to different genres, children also need to consider the content and goals of what they will write. Throughout this progression, children’s genre writing is demonstrated as they express their ideas and choose how to share their thinking (i.e., by labeling a drawing, telling a story, and relating learned content to others). Over time, they learn how to communicate their ideas to an audience, utilizing attention to conventions (such as structure, patterns, style, and word choice).

The mechanics of writing (spelling, punctuation, and capitalization) are not included within this progression. Mechanics are the things that do not exist in oral language. This construct progression focuses specifically on children’s understanding that writing conveys meaning and the connection that what is produced orally is translated to writing as they learn to communicate for a specific audience.

ALIGNMENT TO NC STANDARDS

NC Foundations for Early Learning & Development

LC-13 Children use writing and other symbols to record information and communicate for a variety of purposes.

LC-15 Children use writing skills and writing conventions.

NC Standard Course of Study (Common Core & Essential Standards)

KINDERGARTEN

W.K.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., *My favorite book is ...*).

W.K.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.

W.K.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.

W.K.5 With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.

W.K.6 With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.

L.K.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

GRADE 1

W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.

W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.

W.1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.

W.1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.

W.1.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.

CONSTRUCT PROGRESSION

L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

GRADE 2

W.2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.

W.2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.

W.2.3 Write narratives in which they recount a well-elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.

W.2.5 With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.

L.2.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.

GRADE 3

W.3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons.

W.3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

W.3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

W.3.4 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose.

W.3.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.

W.3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

L.3.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening.

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WRITING CONTINUED ON NEXT PAGE

UNDERSTANDING: Children understand that writing conveys meaning, has a purpose, and expresses the intention of the writer to communicate to an audience.

| A. Communicates thoughts for an adult to write. | B. Communicates using drawings and symbols or letters. | C. Writes single words or phrases to label drawings or express ideas. | D. Uses drawings and writing to compose a variety of short messages. | E. Writes imitating conventions (such as repeated lines, patterns, author styles). | SKILLS |
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| <p>Jerome has finished a picture at the easel. When he comes to tell the teacher that he is finished with his painting, she asks him to tell her about his painting. The teacher takes an index card and writes as Jerome dictates, "My family went to the beach. We are playing in the sand."</p> <p>Katayana has age appropriate motor skills, and is capable of producing written products. However, putting thoughts into written products is difficult. Katanya uses a technological recording device to dictate her story. A teacher then transcribes it for Katanya.</p> | <p>Abby has used markers to draw a picture about fairies. At the bottom of her picture, she has used a pencil to write some letter-like forms and a few recognizable letters, linked together in one linear progression. Abby tells the teacher a story about a fairy princess and her Mushroom Palace. Abby asks the teacher, "Please read my story to me."</p> <p>Susan and her family have been living abroad for the past three years. Susan's family elected to send her to a Chinese school rather than an English school so she could learn the Chinese language. Although she speaks English fluently, when asked to write a short passage describing what she did during the summer, Susan writes a mix of English and Chinese symbols.</p> <p>Tomas's family has recently immigrated to the United States. He is gaining command of the English oral language, but continues to write using drawings and symbols to communicate in print.</p> | <p>After Max has finished painting a pumpkin at the easel, he gets a piece of paper from the writing center and copies the word "pumpkin" from a book in the reading center. When the painting is dry, he asks his teacher to hang the picture and to hang the word "pumpkin" below it.</p> <p>Sally is interested in the study of insects. In her science journal, she draws a picture of the spider and labels the parts.</p> <p>Deon uses the blocks to build Part-Part-Whole diagrams. It's the end of the day, and he is unable to finish his task. Deon makes a sign with a message asking that no one touch his project.</p> | <p>Faye has had an argument with her best friend, Lily, and she is crying. Ms. Dotson notices that Faye is upset, and after she has helped Faye calm down and asked her what she might do to help the situation, Faye decides to write a note to Lily. She draws a big heart and writes, "I'm sorry. I lv U" inside the heart.</p> <p>Jane draws a picture of herself in a car for her story of going to Grandma's house. After conferring with her teacher, Jane goes back to her seat and adds details to show that her car is on a winding road, traveling up a mountain. She adds dotted lines on her road, trees and hills, and a sky with clouds and a yellow sun shining.</p> <p>The class discusses the importance of each staff member at Glyndale Elementary School. Each child writes a thank-you note to someone who works at the school. Patrice draws a picture of Mr. Thomas, the custodian, and composes a note thanking him for cleaning the classroom each night.</p> | <p>Mrs. Schultz has posted a piece of chart paper with three patterned sentence beginnings. One of the patterned sentences is "At the farm we saw: ..."</p> <p>Remy writes on his paper: "At the farm we saw horse.</p> <p>At the farm we saw trcturs.</p> <p>At the farm we saw a hay rid."</p> <p>Shelly writes a poem using repeated lines like the book "When I Was Young in the Mountains." Her poem is called "I Like." She writes five lines all beginning with "I like," followed by ellipses, and ending with the things she likes.</p> <p>Naomi writes a story stating reasons that bike riding is good for our health and the environment. She organizes her paper using a structured pattern of <i>One reason ... Another reason ... A third reason ...</i></p> | <p>PERFORMANCE DESCRIPTORS</p> |

WRITING CONTINUED FROM PREVIOUS PAGE

UNDERSTANDING: Children understand that writing conveys meaning, has a purpose, and expresses the intention of the writer to communicate to an audience. (continued)

| SKILLS | <p>F. Writes a series of generally related ideas or events, beginning to use the conventions of writing (such as repeated lines, patterns, author styles).</p> | <p>G. Writes about an event or topic, choosing a structure that considers audience.</p> | <p>H. Writes with an introduction, related content, and a sense of closure.</p> | <p>I. Adapts writing to provide clarity to the reader by doing things, such as:</p> <ul style="list-style-type: none"> • Writing to build knowledge about a topic. • Writing using descriptive details (i.e., character, setting and events, academic vocabulary). • Writing with attention to the conventions of writing (i.e., word choices, phrasing, sentence structure, length of sentences and paragraphs). • Writing and making changes to strengthen readability & understanding. |
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| PERFORMANCE DESCRIPTORS | <p>Diamond is taking ballet lessons after school two days a week. After her first lesson, she draws a picture of herself in a tutu and writes, "My frst dance leson was the bst thing evr in my lif. The bst thing, the bst thing, the vey bst thing. Do you like pizza, too?" She tells her teacher that she thinks the second sentence will really make people pay attention.</p> <p>Tamera writes a narrative about a time when she went on a picnic. Her focus is on preparing for the picnic, but she writes only one paragraph on the actual picnic. She gets off topic at the ending when she begins writing about playing games at home.</p> <p>As the culmination of a research project on sharks, Frances writes an acrostic poem to inform her classmates about sharks. Frances writes the following:</p> <p><i>Swims slowly in deep water</i> <i>Hears better than humans</i> <i>Are found in all the Earth's oceans</i> <i>Rarely pose a threat to humans</i> <i>Keeps shedding its teeth</i> <i>Sleeps while swimming</i></p> | <p>Cabell's class is engaged in a project where they are exploring different versions of familiar fairy tales by having the stories read to them, acting them out, and watching videos of some stories. Cabell calls the stories "once-upon-a-time stories" and writes his own version of "Jack and the Beanstalk," called "Cabell and the Pumpkin Vine." The story begins with "Once upon a time," and includes Cabell going up the pumpkin vine and coming back with treasure from his favorite video game.</p> <p>Steve has been given the assignment of writing an informational book. He decides to write a book titled "All About Cats." He includes a table of contents and five pages. The pages are "The History of Cats," "How to Care for Your Cat," "What to Feed Your Cat," "How to Groom Your Cat," and "What Cats Like to Do."</p> <p>Isabella begins to write a report about space travel. She reports on the pros and cons of the subject. She jots down information about space travel and what people have said about the advantages and challenges. Isabella begins to write her claim about space travel, including a chart about what would be good about traveling in space and what would be challenging about space travel.</p> | <p>In her daily reading-outloud time with the class, Ms. Rouser has been choosing stories with a clear beginning, middle, and end, and has been pointing out these parts of each story when she reads them. Juanita writes three simple sentences about going with her family to the farmers' market and shows Ms. Rouser that her writing has a beginning, where they get in the car to go, a middle, where they visit the market, and an ending, when they come home and cook the vegetables they bought at the market.</p> <p>When given a writing assignment "Write about a time you were excited," Ronnie writes a story about bear hunting with his dad. He uses a story map to write his ideas. He writes a short beginning and moves the action through specific details and elaboration focused on the main event. His ending reads, "We had fun!"</p> <p>Ruth's class is planning a field trip to the science museum. Ruth decides to write a letter to the principal in order to convince him that even though it will be an all-day field trip, the time spent at the museum will be fun and educational for her class. Ruth organizes her letter using sequencing words (next, then, after, finally) to persuade Mr. Pollack to approve the field trip.</p> | <p>As the concluding activity of a fairy tale project, each student in a class is asked to write and illustrate a fairy tale book. Cabell's illustration for the cover of his story includes the setting, the characters, and an event from the story, and he includes an introduction page with a list of the characters and a description of the setting.</p> <p>During a "My Hero" writing assignment, Dan writes a story about his older brother who is on the football team. In his writing he shares that his brother is the team's shining star and runs as fast as a cheetah, with the heart of a lion.</p> <p>Tamara's teacher talks to her class about using "big school words" in their writing. The teacher has discussed with the class the pitfalls of using the same words too often. Tamara knows she frequently uses the words "said" and "good" in her writing. Prior to beginning to write, she lists other words for "said" and "good," so she has a variety of word choices to include in her writing.</p> |

SITUATION: *Writing Within a Project*

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| Selecting Learning Target(s) | Understanding: Children understand that writing conveys meaning, has a purpose, and expresses the intention of the writer to communicate to an audience. | | | | |
| | A. Communicates thoughts for an adult to write. | B. Communicates using drawings and symbols or letters. | C. Writes single words or phrases to label drawings or express ideas. | D. Uses drawings and writing to compose a variety of short messages. | E. Writes imitating conventions (such as repeated lines, patterns, author styles). |
| | F. Writes a series of generally related ideas or events, beginning to use the conventions of writing (such as repeated lines, patterns, author styles). | | G. Writes about an event or topic, choosing a structure that considers audience. | H. Writes with an introduction, related content, and a sense of closure. | I. Adapts writing to provide clarity to the reader. |
| Preparation | <ul style="list-style-type: none"> • Content-related materials for introducing and demonstrating the topic of study (e.g., photographs, magazines, news articles, historical books, props) • Writing utensils • Notebook, journal, or paper • A risk-free classroom environment that allows for teacher-student or student-to-student interaction through questioning, guided practice, and reflection | | | | |
| General Description | <p>The teacher reviews the directions for the project, including a writing component. Students work independently on the project, using content and writing materials. The teacher moves around the room, conferring with students, providing guidance, and taking notes on students' written work products. The teacher concludes by providing time for students to share and reflect on the work completed thus far and to consider how they have met their personal writing goals.</p> | | | | |
| Eliciting Evidence of Learning | <p>The teacher sets the purpose for the social studies project and reviews the directions and expectations for the project, including a writing component.</p> <ul style="list-style-type: none"> • Content-specific information (e.g., change over time, multiple perspectives through historical narratives) • Information about choices for writing utensils and materials and places in the room to write • Information about the use of materials (e.g., "On your tables, you will find" "Electronic devices are available for") • Information related to the process of students independently working to complete the assigned activity (e.g., "As you think about getting started" "While you are working, you may consider" "When you complete the activity, you may choose to") <p>Before releasing the students to work, the teacher asks the students to identify/recall their current learning goal(s) as it relates to writing (e.g., use pictures and words; write for a particular audience; include an introduction). As the students work, the teacher moves around the room and:</p> <ul style="list-style-type: none"> • Confers with students to support their writing goals as well as the overall project • Uses questions and probes to support increases in content knowledge and to understand what the student knows and is able to do • Reminds students of classroom writing support tools (anchor charts, story starters, graphic organizers, classroom library resources, including dictionaries, thesaurus, etc.) • Takes notes on the written work products and any appropriate content-related goals <p>The teacher concludes with the students sharing their writing (e.g., Author's Chair, with a partner) and providing feedback to one another about the project content and how the content is communicated through written form (e.g., provide two positive feedback comments and one suggestion for improvement; use an exemplar to compare to see how one is achieving his/her writing goal[s]).</p> <p><u>Suggested Probes:</u></p> <ul style="list-style-type: none"> • What graphic organizer might help you get started? • Would a review by a peer help you move to the next step in your writing? • What have you used before that you can use today to help you? • Look at your visual checklist/visual cues. What do you need to do next? • Reread your work. Can you identify a way to help make it clearer? • If you imagine one of your favorite authors, will that help you create good sentences? • As you reread, can you add any information to help it stay connected and flow from beginning to end? • Does it help your writing to think who may be reading this? • How could sequencing support your writing? <p><u>Probes to Avoid:</u></p> <ul style="list-style-type: none"> • Why aren't you working? • Why are you not able to complete the activity? • Can't you remember the components of good writing? • Your sentences are too short; you need to add more words. | | | | |

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| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Interpreting the Evidence</p> | <p>Observation: Raymond chooses and researches about a famous environmentalist. He creates a report on why the rainforest should be preserved. His accommodations include using a technological recording device for writing activities. A peer later transcribes for him so his work can be displayed in the hall with the rest of the class.</p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: A. Communicates thoughts for an adult to write.</u> <p>Observation: Umberto chooses to conduct research about the rainforest. He creates a report on why the rainforest should be preserved. His report has a drawing and one sentence on each page, each beginning with the same pattern: <i>The rainforest should be preserved because it has a lot of animals.</i> <i>The rainforest should be preserved because it has many trees.</i> <i>The rainforest should be preserved because we can make medicine from plants. (etc.)</i> <i>Some pages have a few labels for the drawings.</i></p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: E. Writes, imitating conventions (such as repeated lines, patterns, author styles).</u> <p>Observation: Mandi draws a picture of a one-room schoolhouse and a few horses tied to a tree outside the school. Below that picture, she draws another picture of her current school with the cars outside in the parking lot. Mandi writes: <i>in old daz kidz wnt to 1 rom. (In old days kids went to one room.</i> <i>now we go to skol in a bg blgg. Now we go to school in a big building.</i> <i>thay ust to rid hrs. They used to ride horses.</i> <i>now we rid crz. Now we ride cars.)</i></p> <ul style="list-style-type: none"> • <u>Identify Learning Status on Construct Progression: F. Writes a series of generally related ideas or events, beginning to use the conventions of writing (such as repeated lines, patterns, author styles).</u> |
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Adapting/ Responding to Learning Needs</p> | <p>Once the evidence is interpreted and the learning status is identified on the construct progression, continue to adapt and respond to the learning needs of the student, addressing the same learning target if the student hasn't met it. If the student has met the learning target, work with the student to select a new learning target for teaching and learning.</p> |
| <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Observational Opportunities</p> | <p>There are times throughout the day and across content areas when a teacher can observe students' writing. For example, a teacher can learn about their students' writing skills as they work on/in: a fictional story, a thank-you note, a poem, a nonfiction informational report or story, science observation jotted in their science journals, day books, a note in block center, labeling art work or a diagram, or a letter to a pen pal.</p> |