Children Come First: Ensuring School Policies, Practices, and Strategies Lead to Positive 3rd Grade Outcomes

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The purpose of this brief is to address the challenge of ensuring equitable student access to high quality early learning environments. The Region 6 Comprehensive Center (RC6) assembled a team of early learning professionals, who determined the need for a statewide collaborative to ensure school policies, practices, and strategies for our youngest learners encompass what research and data tell us is essential to their successful development and learning. This brief includes innovative approaches using research-based, effective practices for working with young children as they navigate their school experiences. These approaches lead to the highlighted recommendations, which are interconnected and intended for administrators and teachers who work with children in preschool, kindergarten, first grade, and beyond.

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The SERVE Center at UNC Greensboro is a university-based research, development, dissemination, evaluation, and technical assistance center. For nearly 30 years, SERVE has worked with educators and policymakers to improve education. Permeating everything we do is our commitment to engaging collaboratively with our clients to do high quality, important, and useful work.

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The SERVE Early Learning Collaborative

Within a variety of contexts, early learning educators across the nation are having conversations about the impact of the pandemic on our youngest—often vulnerable, overburdened, and under-resourced—learners, as well as their families, teachers, and administrators. In response to what we view as an emerging and critical need, the following group of people have focused on using research and data to illuminate and further develop policies and practices that support children's re-entry into, and subsequent success in, school.

We are dedicated early learning professionals working with, and on behalf of, young children as well as those responsible for their learning, including families, teachers, principals, directors, district and state level consultants, researchers, and policy makers across the nation. Our work experiences, which encompass all areas related to the education of young children, include classroom teachers, principals, early learning specialists, program directors, researchers, university professors, professional development providers, and authors. Individually or collectively, we have done long-term work with schools and districts in seven states, are the authors of multiple books and articles, presented at hundreds of conferences, garnered significant levels of funding, have served as board members at the state and national levels of the National Association for the Education of Young Children (NAEYC), and merited the interest of the highest levels of government. Under the auspices of the SERVE Center, located at the University of North Carolina at Greensboro, our group of early learning professionals, who have worked together for decades to support teachers and administrators in their efforts to support young children, offer our expertise, ideas, and support.

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Why is it Important?

Educators are currently presented with an urgent call and a unique opportunity to ensure that school policies, practices, and strategies for our youngest learners encompass what research and data tell us is essential to their successful development and learning. These practices must support the unique needs of young children, as well as be responsive to the unprecedented trauma of the COVID-19 pandemic. We have a powerful opportunity that includes substantial funding and support at state and federal levels to 'hit the reset button.'

Decades of research have provided us with many of the policies and practices that best promote the learning and development of young children. We need to look to the good work that has already been done across the nation, and ensure that the knowledge, skill, and expertise gathered over years of hard work is recognized, illuminated, and prioritized. Equally, we must make the most of new, innovative, and relevant knowledge that becomes available to us. The COVID-19 pandemic, for all of its terror, deep sadness, and loss, also provides educators with a unique and essential opportunity to

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boldly step up and make entry to school a positive and transformative time for children, families, and educators. It is the time for us to control the narrative by making explicit the responsibility of education professionals to broaden their repertoires and hone their skills to create schools and classrooms in which all children maximize their potential.

Leaders at all levels are very much on board for making the most of this time by keeping children central to their thinking. U.S. Secretary of Education, Miguel Cardona emphasized the need and opportunity to "reimagine education" and encouraged all education leaders and stakeholders to leave behind the practices that do not work in education and to use this as an opportunity to move forward (U.S. Department of Education National Safe School Reopening Summit, March 24, 2021). Further, Secretary Cardona stated that we need to use this time "to heal, learn, and grow together" by ensuring that we prioritize being sensitive to the trauma experienced by everyone in the school community. The best equity lever to pull right now is in-person instruction, which sets the stage to "invest in relationships and to engage in authentic collaboration and problem solving in the context of each school culture and their own particular needs" (National Education Association (NEA) Meet Miguel Cardona: A Conversation with the Education Secretary, April 21, 2021).

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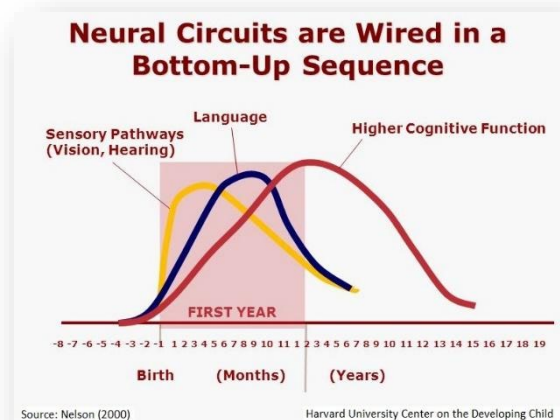
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Chancellor Meisha Ross Porter of the New York City Public School District and Michael Mulgrew, President of the United Federation of Teachers, emphasized the need to address the anxiety and fear many staff, students, and families have been experiencing due to the pandemic. Beyond mitigation strategies, Donna Harris-Aikens (CDC Senior Advisor for Policy and Planning) emphasized several key points and considerations for schools and districts as they plan for reopening. Harris-Aikens urged schools and districts to ensure that equity is applied from the beginning and to focus on those students most marginalized by the pandemic as well as those who benefit most from in-person learning (e.g., students with disabilities, students experiencing homelessness, and students from low-income communities).

…ENSURE THAT EQUITY IS APPLIED FROM THE BEGINNING…

Dr. Kristie Kauerz, Director of the National P-3 Center, and her team understand the significance of the early years and promote the importance of alignment and consistency in Pre-K through 3rd grade by supporting cutting-edge efforts of research, policy, and practice. Throughout the pandemic, in collaboration with The Council of Chief State School Officers (CCSSO) as well as the National Association of Elementary School Principals (NAESP), the National P-3 Center has created and provided resources related to the implications of COVID-19 on the nation's schools, with an intentional focus on equity. Continuing to carry out her steadfast practice of educating and supporting early childhood administrators, Dr. Kauerz announced a 10-month, fully online P-3 Leadership Certificate Program in June of 2021 intended to engage elementary principals, school district administrators, and early care and education leaders in providing timely, intentional professional development to build upon their strategies and abilities (www.nationalp-3center.org).

Early Learning: Pay Attention to the Brain Research

As policy and practice are developed to ensure a safe and effective entry to school, it is important to think about our youngest learners. It is well documented that experiences in the early years of schooling are related to later learning (e.g., National Research Council and Institute of Medicine, 2000). The learning and teaching that takes place in preschool through the early elementary grades sets the foundation for each student's future in education and places them on a learning trajectory. During this time, young children undergo immense changes in their physical, emotional, social, language, and cognitive development. In order to ensure a

Neural Circuits are Wired in a Bottom-Up Sequence

Language
Sensory Pathways (Vision, Hearing)
Higher Cognitive Function

FIRST YEAR

-8 -7 -6 -5 -4 -3 -2 -1 1 2 3 4 5 6 7 8 9 10 11 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

Birth   (Months)   (Years)

Source: Nelson (2000)   Harvard University Center on the Developing Child

positive learning trajectory, educators must learn to navigate these changes and prepare children for a future yet to be determined.

The development of cognitive functions generally peaks by age 3 but remains high until around age 9. This unique developmental window offers teachers vital opportunities to ensure the experiences of young children are of high quality.

THE DEVELOPMENT OF COGNITIVE FUNCTIONS GENERALLY PEAKS BY AGE 3 BUT REMAINS HIGH UNTIL AROUND AGE 9. THIS UNIQUE DEVELOPMENTAL WINDOW OFFERS TEACHERS VITAL OPPORTUNITIES TO ENSURE THE EXPERIENCES OF YOUNG CHILDREN ARE OF HIGH QUALITY.

Cognition and emotion have traditionally been regarded as separate. However, the research drawn on by the science of learning and development over the last two decades shows that thinking, feeling, behavior, and social relationships are all inextricably linked and work together to produce learning.

The SERVE Early Learning Collaborative supports and advocates for this mindset, and these approaches, supported by the provision of resources and experiences focusing on very real day-to-day practices for teachers and administrators working with young children. Our efforts are based on knowledge that presents us with a compelling case to provide classroom and school environments that ensure positive experiences for children. We must heed and respond to this critical research, which has shown that: (1) when students experiencing significant behavioral and emotional problems are placed in classrooms offering high levels of emotional support, they are more successful (Hamre & Pianta, 2005), and (2) children's negative perceptions of competence and attitudes become stronger and harder to reverse as children progress through school (Valeski & Stipek, 2003). There has never been a more important time.

"WE NOW KNOW THAT STRESS CAN HAVE POWERFUL EFFECTS ON OTHER DEVELOPMENTAL PROCESSES, INTERFERING WITH A CHILD'S CONFIDENCE, MOTIVATION, AND CURIOSITY. SIMILARLY, A CHILD'S EARLY LEARNING EXPERIENCES AND SENSE OF MOTIVATION CAN CONTRIBUTE IN MAJOR WAYS TO SELF-CONTROL, SELF-DIRECTION, AND RESILIENCE."

Darling-Hammond, L. et al., 2020

Guidelines

The guidelines that frame our work are grounded in research on improving school experiences for young children. As educators work to address the unique needs of young learners beginning and returning to in-person instruction, the following principles guide our recommendations.

- **Equity** is central. Educators and policy makers must prioritize decisions that ensure school is a place where children find themselves smart, capable, and know they belong. This requires a focus on equitable experiences for children through the questioning of policies and practices that contribute to short and long term problems for children, and the utilization of:
    - professional development, resources, and support necessary to be responsive and supportive to the diverse races, cultures, and class status that comprise the school community and to attend to the needs of each individual child;
    - practices that emphasize strength-based, culturally relevant pedagogy; and
    - strategies to develop a deep understanding of trauma and its impact on learning and development.
- Research and Data guide the work.
- Best practices in the education and development of young children have been established and enhanced over the course of several decades, thus, both past and current research is utilized.
    - Data help us assess the formative experiences and progress of children, teachers, and schools.
    - Data are viewed as a source of information and inquiry and is not used to punish or coerce.
    - Data from a variety of sources are triangulated such that multiple aspects are explored and used in decision making. No one source is prioritized.
- **Parallel Process is clearly visible.** A Parallel Process is one in which the conditions that are considered desirable for one group are the very same as those established for others. That is, if the goal is for children to be collaborative, creative problem-solvers who are valued for their thoughts, feelings, and ideas, by their teachers and their peers, then the goal is also for teachers to be collaborative, creative problem-solvers who are valued for their thoughts, feelings, and ideas by their peers and administrator(s). In concert, the goal is for administrators to be collaborative, creative problem-solvers who are valued for their thoughts, feelings, and ideas by their teachers, peers, and the district.
    - According to the Equitable Learning & Development Group at the UChicago Consortium (2012), children benefit from messages that help them develop attitudes that instill in them beliefs such as:
        - "I belong in this school community."

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- o "My ability and competence grow with my effort."
- o "I can succeed at this."
- o "This work has value for me."
  - ▪ Adults need to experience the same feelings within an environment that supports growth for adults and children alike and is one
    - o in which they feel safe and valued;
    - o where competence and autonomy develop through relationships built on genuine trust and respect; and
    - o excellence is believed possible for each individual and supported to become reality.
- **The push for innovation** is central and constant.
  - ▪ Be courageous. Make choices that are right for children, even when it is not popular.
  - ▪ Take every opportunity to educate yourself and the adults with whom you work.
  - ▪ Use research and data to guide your practice.
  - ▪ Challenge the status quo.
  - ▪ Challenge your beliefs.
- **Practices are aligned with the National Association for the Education of Young Children's Developmentally Appropriate Practice Position Statement** 4th Edition (April 2020), which states that "each and every child, birth through age 8, has the right to equitable learning opportunities that fully support their optimal development and learning across all domains and content areas [and] underscore the importance of social, cultural, and historical contexts" (p. 5). Principles of child development and learning provide implications to inform practice, including:
  - ▪ Development and learning are dynamic processes that reflect the complex interplay between a child's biological characteristics and the environment.
  - ▪ All domains of learning and development are important; each domain supports, and is supported by, the others.
  - ▪ Play promotes joyful learning and is essential for all children, birth through age 8.
  - ▪ Although general progressions of development and learning can be identified, variations due to cultural contexts, experiences, and individual differences must also be considered.
  - ▪ Children are active learners from birth.
  - ▪ Children's motivation to learn is increased when their learning environment fosters their sense of belonging, purpose, and agency.
- Practices are aligned across the early years. The early childhood years encompass ages birth through age 8. Intentionally creating a comprehensive alignment of curriculum, instruction, and assessment practices across the preschool, kindergarten and early elementary years can ultimately strengthen outcomes for young children. The value of

connecting concepts, skills, and learning approaches introduced in one grade to what children learned in the previous grade, and to what will be learned in the following grade is a core tenet of P–3 approaches (Stipek et al., 2017). Since long-term success has been found to be dependent upon the quality of the learning experiences in a child's early years, developing and providing high-quality, appropriate practices, as described above, across those preschool and early elementary years is critical. Children thrive when preschool and early elementary educators have a shared vision, language, and practices that ensure high quality, developmentally based learning across these important years (Bouffard, 2017; Kauerz & Coffman, 2019; Stipek et al., 2017; Phillips, et al., 2017).

- **Effective early learning practices are balanced with state and local mandates.**
  Teachers' plates are very full and the demand upon them and their administrators puts enormous pressure on everyone. Too often this pressure results in resorting to one size fits all programs and an over-emphasis on literacy and mathematics to the detriment of children's exposure to a rich and varied curriculum. Literacy and mathematics are, and should be, part of a child's daily life. However, young children learn best when literacy and math concepts are integrated into routines and other everyday experiences in fun and meaningful ways, and positively impact all domains of development (e.g., physical, social, emotional, linguistic, and approaches to learning). Too many young children do not have access to libraries, museums, zoos, gardens, and planetariums. Without school, they may never get to know about or perhaps visit such places. Science, social studies, and the arts are vital parts of a well-rounded education. Omitting time to explore these areas means ignoring the valuable vocabulary inherent in the subject matter, and depriving children of exploring the physical world, learning of other places and cultures, and exposure to the creative expression offered through music, art, and dance. It is essential that these subjects are woven into the fabric of the school day.
    - Literacy acquisition is complex and requires children's regular exposure to multiple ways to hone their skills. Children need to be read to, read on their own, have opportunities to demonstrate their understanding of content, practice phonics and sight words, develop vocabulary, write creatively, and engage in meaningful conversations with adults and with their peers.
    - Mathematical thinking and understanding are the foundation for, and a predictor of, further academic achievement and has been shown to have an even more significant impact than early reading skills (Fuson, K., Clements, D., and Sarama, 2015). Young children need to have opportunities to focus on problem solving, thinking, talking about their thinking, and using mistakes as ways in which to grow in their understanding of mathematical concepts.

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Frame, Research, and Practice

Frame

Our Framework is based on the Basic Need within Basic Psychological Need Theory (Vansteenkiste, Ryan, & Soenens, 2020), which proposes that **Relatedness, Competency, and Autonomy** are essential for children and adults to thrive. People who feel related to those around them are able to function as productive members of a community. They are able to interact effectively with others, give and accept responsibility, cooperate, have compassion, and show respect. Competent people experience success and have opportunities to demonstrate their skill and expertise. Autonomous people have a sense of themselves as self-governing and are able to effect change. Using these ideas provides the lens to examine the interactions, practices, and experiences of all members of the school community. It helps determine areas of success and challenge by identifying needs that are not being met, and guides decisions about how to improve difficult situations. (See Appendix A for more details.)

Research

In addition to these universal needs, educators must also base instructional practices on research-based predictors of positive 3rd grade outcomes. When making choices about instructional practices that best support the learning of young children, it is important to link them to the research that supports their use and their positive impact on test scores and children's success. Research shows that classrooms in which teachers demonstrate intentionality in their teaching are most likely to promote acquisition of academic skills (Bogner, Raphael, & Pressley, 2002; Pianta, 2003). Specifically, the most effective teachers provide more content to children and are more instructionally engaging. They structure their classrooms to allow for responsive instruction, the development of positive teacher-child relationships, ongoing assessment of children's needs, differentiated and informative feedback, and a repertoire of strategies to advance learning (Burchinal, et al., 2008). Predictors of positive 3rd grade outcomes include:

- scaffolded instruction,
- oral language development (meaningful communication with adults),
- collaboration (meaningful communication with peers),
- vocabulary development,
- mathematics,
- metacognition, and
- small group instruction.

(See Appendix B for more details.)

Practice: Linking a Play-Based and Whole Child Approach to the Education and Development of Young Children

In what ways do young children have experiences that prepare them for success pertaining to predictors for positive 3rd grade outcomes? There is a critical link between an appropriate, engaging, play-based, and whole child approach to the education and development of young children. "NAEYC defines 'developmentally appropriate practice' as methods that promote each child's optimal development and learning through a strengths-based, play-based approach to joyful, engaged learning" (NAEYC, 2020, p. 5). Development for children includes the need to practice and become competent in negotiating relationships, materials, and space.

This gives them opportunities to practice and develop self-regulation through learning how to express their needs, wants, and feelings, and share friends, materials, and space. Children need to be engaged in their learning. Motivation for engagement comes from encountering that which is familiar to them and that which is new and interesting. Children need guidance and support from teachers in order to learn how to do all of these things, as well as the autonomy to develop expertise and skill on their own or with their peers.

Decades of research tell us that play is an essential part of children's healthy growth and development. Early childhood experts have long agreed that young children who are provided with rich play-based learning environments excel in all domains of development and learning. Play helps children increase their memory, critical thinking skills, self-regulation, social skills, oral language skills, literacy skills, mathematical and problem-solving skills, and lays the foundation for all academic learning (Elkind, 2007; Gullo, 2006; Copple & Bredekamp, 2009; Sahlberg & Doyle, 2019; Yogman, et al., 2018). In 2018, The American Academy of Pediatrics stated that "play

> DECADES OF RESEARCH TELL US THAT PLAY IS AN ESSENTIAL PART OF CHILDREN'S HEALTHY GROWTH AND DEVELOPMENT.

is fundamentally important for learning 21st century skills, such as problem solving, collaboration, and creativity, which require the executive functioning skills that are critical for adult success" (Sahlberg & Doyle, 2019, pgs. 4-5). For young children, play "serves not only as a

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means of learning skills but also as a way of expanding and elaborating them" (Elkind, 2007, p. 111). Play is truly the indispensable work of children.

NAEYC defines play as a universal, innate, and essential human activity that children engage in for pleasure, enjoyment, and recreation. Play integrates and supports children's development and learning across cognitive, physical, social, and emotional domains, and across curriculum content areas. Play can be self-directed, guided, solitary, parallel, social, cooperative, onlooker, object, fantasy, physical, and/or constructive. The professions of developmental psychology and of early childhood education have long recognized play as essential for young children's development of symbolic and representational thinking, construction and organization of mental concepts, social expression and communication, imagination, and problem-solving (NAEYC, 2020). Researchers studying the pedagogy of play have identified three key components:

1. Choice (children's decisions to engage in play, as well as decisions about its direction and its continuation);
2. Wonder (children's continued engagement as they explore, gather information, test hypotheses, and make meaning); and
3. Delight (the joy and laughter associated with the pleasure of the activity, making discoveries, and achieving new things).

Play also typically involves social interaction with peers and/or adults. Through an interactive, play-based curriculum, children develop cognitive skills as they "explore, imagine, imitate, construct, discuss, plan, manipulate, problem-solve, dramatize, create, and experiment" NC Department of Public Instruction, 2007, p.215). "Preschool and early elementary students are experiential learners–they learn by doing rather than figuring things out only by thinking about them. This makes shared, physical, play-based activities with educators and peers especially effective opportunities for learning" (National Association of Elementary School Principals, 2021).

 Purposeful and intentional play supported and facilitated by adults offers children opportunities to meet developmental needs and provides opportunities for children to develop skills and knowledge in literacy, mathematics, science, and social studies. Balancing the settings in which children engage in these opportunities ensures that children experience variety across the school day. It is important to note that it is not rigor versus play, but, in fact, an environment in which they peacefully coexist. All children require structure/guidance, frequent change, nutrition, fresh air, and movement. Children optimize their learning in different ways; some have greater or less tolerance for large and small groupings, noise level, and auditory, visual, tactile, or kinesthetic input. Teacher guided and directed times are vital; however, a combination including self-directed play and facilitated play is optimal.

In a recent blog post featured in *Psychology Today* (May 11, 2021), clinical psychologist, Konstantin Lukin, Ph.D., states, "As the world re-opens, it is more important than ever to help

children disconnect from the virtual world and reconnect with the real one. In addition, children need an opportunity to heal from a year of collective loss and grief." For children, play is vital to social and emotional wellbeing. Play allows children the opportunity to externalize the internal world, communicate feelings and experiences, feel connected and safe, regulate emotions, and process difficult life events. The research and evidence presented above supports this mindset that play should be included as an important part of each young child's daily early learning experiences during the preschool and early elementary years.

Recommendations

Based on the information provided in the sections above, we believe that innovative approaches using research-based, effective practices for working with young children are critical in supporting our youngest learners as they navigate school in a post-pandemic world. The experiences children, families, and educators have endured due to COVID-19 are unprecedented and should guide how we move forward as a nation who cares deeply about the success of our children. The following recommendations are interconnected and intended for administrators and teachers who work with children in preschool, kindergarten, first grade, and beyond.

- Ensure that equity is central to all aspects of practice.
  - Ensure instruction is developmentally, culturally, and linguistically appropriate for, and responsive to, the children served.
  - Support children's development in their home language.
  - Differentiate instruction and interaction based on the needs and abilities of each child, particularly those from low-income families, children with disabilities, English learners, migrant students, students experiencing homelessness, and children in foster care.
- Use data to inform, guide and monitor progress.
- Use formative assessment process data to guide decision making and inform instruction.
- Use research to guide practice and advocate for young children.
  - Recognize and provide support for all domains of development (i.e., physical, social, emotional, language, and cognitive), and integrate learning within and across the domains.
  - Understand the purpose and value of play and ensure its daily integration into the curriculum.
  - Ensure instruction is appropriate and effective for young children, not just adapted from what is done in later grades.
- Ensure alignment of policies, curriculum, instruction, and assessment practices throughout the preschool, kindergarten and first grade years.
- Balance early learning best practices with state and local mandates.

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- Collaborate with early learning partners to plan and implement ongoing professional development for early learning educators (i.e., teachers, teacher assistants, administrators).

Conclusion

The challenge for every teacher, administrator and policy maker is to learn and use the best of what research has to offer to create school environments where children are engaged in meaningful learning experiences. These environments provide opportunities for children to be encouraged to talk and move, supported as they safely practice and develop their social skills, provided a variety of hands-on materials and time to explore those materials in playful ways, and appropriately challenged to learn and grow in all areas of development and curriculum. The goal is for all young children to experience a child-centered, play-based, high-quality learning environment that is focused on supporting their developmental needs with a specific emphasis on providing each and every child with the resources, space, time, and support they need to re-connect, emotionally and socially, to the world, their peers, teachers, classrooms, and communities.

As a group of concerned early childhood education experts, we urge our counterparts across the country, as well as educators and policy makers in state and local school districts to listen to the research, listen to the children and families, and listen to the teachers who know and understand young children. We hope that all educators will seek and share support for "re-imagining" learning environments, practices, and curriculum that embrace the authentic needs of young children as the post-pandemic world emerges.

It is the time, actually it is past time, for us to turn our words and talk into action and reality. The future of our children depends on it. The children deserve nothing less than what we know is right for them. We cannot let this unique opportunity become a missed opportunity.

Appendix

A. Framework: Basic Need within Basic Psychological Need Theory
B. Predictors for Positive 3rd Grade Outcomes
C. Resources
D. References

A. Framework: Basic Need Within Basic Psychological Need Theory

The framework that guides our thinking and our hope to influence policy and practice, is based on Basic Need within Basic Psychological Need Theory (Vansteenkiste, Ryan, & Soenens, 2020), which utilizes self-determination theory (Ryan & Deci, 2000) and examines the three universal basic needs of **Relatedness, Competency, and Autonomy** for the ways in which children, teachers, and administrators can all thrive in an environment where individual needs can only be met if the needs of the community are also met.

The Framework is not merely theoretical but rather, serves as a guide for how to respond to the challenges encountered by children and adults. It provides a structure for examining the challenge through the lens of Psychological Need Theory in order to effectively examine interactions and experiences and determine beneficial responses:

- Is the child or adult not feeling cared for or listened to?—Examine the relationship for sensitivity and safety.
- Is the child or adult not feeling acknowledged for their skills, expertise, or efforts?— Examine the situation to ensure that competence rather than failure is the focus.
- Is the child or adult not feeling like they have opportunities to make choices or exercise their own power?—Ensure that each person has a voice in the outcome.

Relatedness

Research identifies the need for relatedness as one of three basic human needs (Ryan & Deci, 2002). Relatedness refers to the need to feel connected to others and to experience a sense of belonging to a larger community. It involves sincere caring about and for others, and having others reciprocate those feelings. Relatedness enables us to interact effectively with others, to give and accept responsibility, to cooperate, to have compassion, and to show respect—all abilities that enable us to function as productive members of a community.

- Factors that include motivation and emotional state play a key role in dictating children's engagement and memory (Deci & Ryan, 2000; Fredricks, Blumenfeld, & Paris, 2004). Therefore, while teachers who focus on content delivery to the detriment of establishing close, personal relationships with their students may *deliver* more content, it defeats the purpose of such a strong content focus if their students fail to remember and adequately understand the information.
- The emotional quality of the classroom, including the warmth of the adult-child interactions and the adults' ability to respond to children in a sensitive and individualized manner, is a consistent predictor of both reading and math skills (Pianta et al., 2008).

- One of the primary functions of a teacher is to build connections between the students' background knowledge and new content, two elements that help ensure student participation and engagement. Curriculum is relevant when it is flexible enough to allow teachers to make meaningful connections between the children's background, interests, lives, and the newly acquired knowledge. Yet, most curricula have not been specifically designed or tested to meet the diverse needs and backgrounds of children nor incorporate their culture (Crocco & Costigan, 2007). Therefore, teachers need to be diligent in their efforts to ensure that the curricula they deliver consider the background knowledge and experiences of all the children in their classrooms.

In the table below we present the parallel experiences vital to the development of relatedness for the full school community: children, teachers, administrators, and families.

Children	Teachers	Administrators	Families
Children experience positive, caring relationships each and every day with the children and adults in their classroom and school.	Teachers experience positive, caring relationships each and every day with the children and adults in their classroom and school. Positive, caring relationships are a significant focus each and every day and involve adult-child, child-child, adult-adult relationships. Teachers give grace to the children, families, and administrators whom they serve.	Administrators experience positive, caring relationships each and every day with the children and adults in their classroom and school. Positive, caring relationships are a significant focus each and every day and involve adult-child, child-child, adult-adult relationships. Administrators give grace to the teachers, children, and families whom they serve.	Family members experience positive, caring relationships with the adults in the classroom and throughout the school. Family members feel welcome and included in the school community.
Children have the opportunity to learn and grow with other children in an environment where they feel safe, nurtured, valued, and free to make mistakes while learning. "Each member of the school community is valued by the others and is recognized for the strengths they bring."*	Teachers have the opportunity to learn and grow with other adults in an environment where they feel safe, nurtured, valued, and free to make mistakes while learning. "Each member of the school community is valued by the others and is recognized for the strengths they bring."*	Administrators have the opportunity to learn and grow with other adults in an environment where they feel safe, nurtured, valued, and free to make mistakes while learning. "Each member of the school community is valued by the others and is recognized for the strengths they bring."*	"Educators demonstrate and model their commitment to a caring learning community through their actions, attitudes, and curiosity."* "Each member of the school community is valued by the others and is recognized for the strengths they bring."*

Children	Teachers	Administrators	Families
			"Educators use their knowledge of each child and family to make learning experiences meaningful, accessible, and responsive to each and every child."*
Children experience a learning environment that is focused on supporting their cognitive needs while providing them with the resources, space, time, and support they need to re-connect (emotionally and socially) with the world.	Teachers have a deep understanding of the impact of trauma (pandemic experiences) on young children and its impact on development, including emotional, social, and physical domains. They prioritize instruction to be responsive to the needs of their students.	Administrators have a deep understanding of the impact of trauma (pandemic experiences) on young children and its impact on development, including emotional, social, and physical domains. They provide resources and support for teachers as they work to be responsive to their student's needs.	School adults convey to family members their understanding of the possible impacts of the pandemic experience on the child's development and learning. Family members feel assured that the needs of their child are being met across all developmental domains.

*Source: https://www.naeyc.org/resources/developmentally-appropriate-practice

Competence

Competence concerns one's experience of effectiveness and mastery. It becomes satisfied as one capably engages in activities, experiences, and opportunities for using and extending skills and expertise. When frustrated, one experiences a sense of ineffectiveness or even failure and helplessness.

- Children with a strong sense of self-efficacy/competence recover quickly from setbacks and disappointments, willingly tackle challenging problems, develop deeper interest in the undertakings in which they participate, and form a stronger sense of commitment to their interests. On the other hand, children with a weak sense of self-efficacy quickly lose confidence, avoid challenges, believe they cannot be successful when things are difficult or challenging, and focus on their failures (Bandura, 1994).
- Research makes it clear that children learn best through active questioning and information-gathering combined with hands-on experiences and direct social interactions. This process of active learning and knowledge acquisition occurs during interaction with materials, ideas, and other people (Chouinard, 2007).
- Connecting new learning to prior knowledge is a key factor in the learning process (Garner & Waajid, 2008). Thus, the more teachers can use the interests and experiences

of the students, the more likely students will be engaged and make sense of new knowledge.

- A culture of competence requires that teachers help their students develop the ability to work with their peers toward common goals. Collaboration is also a culturally responsive approach because Latino and African American students learn more and prefer learning experiences that allow them to interact with others (Boykin & Dill 2000). Students learn more, are more highly motivated to learn, enjoy learning more, feel more positive towards the subject being studied, and are more accepting of one another when they work together with peers as opposed to working competitively or individually (Johnson & Johnson, 2013).

- An essential factor of collaboration is in recognizing that many children come from homes and communities that value a collectivist point of view that fosters and values interdependence, group success through adherence to norms, respect for authority, and group consensus (Trumbull, Rothstein-Fisch, & Greenfield, 2000). Both of these approaches need to be integrated into the learning experience to maximize student success by ensuring that children know that their home cultures are honored and valued.

- Without consistent opportunities to develop self-regulation, it is unlikely that children will be well-prepared for later schooling, which requires them to maintain impulse control, motivate themselves, persist through difficult situations, and utilize effective academic strategies to independently master new information. Students will have rightly come to expect others (teachers) to fill these roles, leaving them ill prepared for later challenges in school and life. (Murray, et al 2015).

In the table below we present the parallel experiences vital to the development of competence for the full school community: children, teachers, administrators, and families.

Children	Teachers	Administrators	Families
Children, especially children of color, experience curriculum, instruction, and assessment that is strength-based and culturally relevant.	Teachers feel confident that they are well-versed in strength-based, culturally relevant curriculum, instruction, and assessment.	Administrators feel confident, informed, and knowledgeable about strength-based, culturally relevant curriculum, instruction, and assessment. Administrators feel confident in supporting teachers' efforts to provide successful experiences for all children.	Family members feel confident that they are valued as important resources for their own child/children. Family members feel confident that they are valued as important resources for teachers and administrators in terms of strength-based, culturally relevant curriculum, instruction, and assessment.

Children	Teachers	Administrators	Families
Children have the opportunity to be part of a learning community where all the developmental domains are supported/integrated. Children demonstrate their content knowledge and developmental abilities through play. "Children who need additional support receive extended, enriched, and intensive learning experiences, always building on the child's current interests, strengths, and cultural ways of knowing."*	Teachers demonstrate that they understand developmentally appropriate practices and can identify current teaching/classroom practices that both support and/or compromise Developmentally Appropriate Practice (DAP). Teachers accept and utilize play as a valuable pathway to children's learning, development, and success. Teachers demonstrate high levels of responsibility and self-regulation in their interactions with other adults. Teachers feel supported and empowered to provide DAP learning communities where all the developmental domains are supported.	Administrators demonstrate that they have background knowledge in DAP and child development, and experience in recognizing learning that happens during play. Administrators demonstrate that they know and believe in the importance of supporting teachers and empowering them to provide DAP learning communities where all the developmental domains are supported. "Administrators demonstrate high levels of responsibility and self-regulation in their interactions with other adults."* Administrators support teachers' intentions and efforts to balance content with the developmental domains.	Family members demonstrate that they understand the value of DAP and the domains of learning. Family members demonstrate that they understand the value of play in relation to the development of executive function skills as well as other social- emotional, physical and academic learning.
		Administrators are the leaders who remove barriers, seek resources for their staff and students, and guide staff to meet the demands of their students to enable them to be able to move forward in the future.	

*Source: https://www.naeyc.org/resources/developmentally-appropriate-practice

Autonomy

Autonomy is when one strives to gain a sense of oneself as a separate, self-governing individual. When a child becomes autonomous, they are able to explore and acquire new skills. Autonomy has two vital aspects: (1) there is an emotional component whereby one relies more

on themselves rather than on adults, and (2) a behavioral component whereby one makes decisions independently by using their judgement.

- Children have a strong need to feel control over themselves and their lives. Teachers need to understand that becoming autonomous is a critical developmental process that must be supported within the classroom.
- Research has shown that children who do not develop autonomy are more likely to be dependent upon adults and excessively influenced by their peers. Therefore, teachers, especially teachers of young children, should intentionally create opportunities for children to grow and learn how to become self-reliant. In doing so, they are helping to increase students' self-confidence along with improving their social, cognitive, and moral development (DeVries, Hildebrand, & Zan, 2000).
- Children need continuous opportunities to develop their decision-making capacity and should not be subjected to arbitrary and unexamined rules. In order for this to happen, adults must adopt a delicate balance between the guidance they provide students as they facilitate socialization and/or learning and an allowance for child preference and independence. Teachers can begin to find this balance by critically examining their own practices with the purpose of clarifying their own need for controlling rules and practices, replacing any that could be accomplished by instead providing students with choices and autonomy. This child-centered approach to learning has long been recognized as a measure of the quality of a classroom.

In the table below we present the parallel experiences vital to the development of autonomy for the full school community: children, teachers, administrators, and families.

Children	Teachers	Administrators	Families
Children have regular, intentional, and integrated opportunities to make choices, and decisions, and develop autonomy and self-regulation skills.	Teachers have regular and intentional opportunities to make choices and decisions. Teachers understand why promoting student choice supports the development of self-regulation and autonomy. Teachers regularly and intentionally provide opportunities for children to develop self-regulation and autonomy.	Administrators have regular and intentional, opportunities to make choices and decisions. Administrators have background knowledge in the importance and value of choice, self-regulation, and autonomy. Administrators support and empower teachers to promote student choice and provide opportunities for children to develop self-regulation and autonomy.	Family members have regular and intentional opportunities to make choices and decisions. Family members understand the need for young children to experience opportunities for choice, self-regulation, and autonomy.

Children	Teachers	Administrators	Families
	Teachers articulate their reasoning behind their instructional choices and can demonstrate child success both anecdotally and through data.	Administrators value teacher expertise and express it by providing teachers with the autonomy to use their knowledge and skill to make autonomous choices about instructional practices.	Educators value family knowledge and experience and utilize it to ensure positive relationships, self-efficacy, and positive identity development for family members and children. School adults value family knowledge and information and utilize it to provide relevant and pertinent instruction.

B. Predictors for Positive 3rd Grade Outcomes

When making choices about instructional practices that best support the learning of young children, it is important to link them to the research that supports their use and positive impact on test scores and children's success. Research shows that classrooms in which teachers demonstrate intentionality of their teaching are most likely to promote acquisition of academic skills (Hamre & Pianta, 2005). Specifically, the most effective teachers provide more content to children and are more instructionally engaging. They structure their classrooms to allow for responsive instruction, the development of positive teacher-child relationships, ongoing assessment of children's needs, differentiated and informative feedback, and a repertoire of strategies to advance learning (Burchinal, et al., 2008).

Scaffolded Instruction

Both teacher-led and scaffolded instructional strategies are important teaching styles and should be incorporated in a balanced fashion throughout the course of a day. Through teacher-led instruction, teachers provide important information, demonstrate concepts, and model application and cognitive processes. Scaffolded instruction involves teachers asking open-ended questions, engaging in feedback loops, and probing more deeply into children's thinking and understanding. This type of instruction enables teachers to: (1) know, specifically, how much the children understood from the teacher-led lesson, and (2) provide just-in-time learning, both for identifying and remediating group or individual deficiencies and elevating student thinking. The bottom line is that when teachers are talking, children are not. Given the pressures put upon teachers, they feel compelled to impart as much knowledge as possible in the limited time frames they are given. Unfortunately, while the amount of information imparted is greatest when teachers lean heavily on teacher-led teaching, retention is not (Zull, 2002).

Oral Language Development (meaningful communication with adults)

For students to positively identify themselves as learners—to know that people will listen to their thoughts, feelings, and interests, to have opportunities to know that their voice is valued, and that they are valuable—is vital to their feeling of competence and their success in school. A classroom emphasis on oral language development has been identified as one of the premier instructional strategies for ensuring the success of children, especially those from low socio-economic communities (Mason & Galloway, 2012).

Collaboration (meaningful communication with peers)

Students learn more, are more highly motivated to learn, enjoy learning more, feel more positive towards the subject being studied, and are more accepting of one another when they work together with peers as opposed to working competitively or individually (Johnson & Johnson, 2013). Importantly, this collaborative learning is responsive to the needs of children who come from more collectivist cultures that value interdependence, group success, and group consensus. Therefore, the classroom more closely resembles, and thus honors, their family and community lives (Trumbull, Rothstein-Fisch, & Greenfield, 2000).

Vocabulary

Vocabulary proficiency is a critical predictor of academic achievement (Storch & Whitehurst, 2002). The development of new words and concepts is vital to children's school success. Part of thinking about vocabulary development for young children includes the necessity to provide a balanced curriculum. Pressures on teachers often result in the majority of the day being focused on literacy and mathematics, too often shortchanging subjects like social studies, science, and the arts, which are rich in vocabulary and highly engaging. When children are using decoding and context clues to help them become capable readers, they need to have heard of, and know about, the words they encounter before they can be expected to recognize them.

Mathematics

Knowledge of early math concepts is the **most** powerful predictor of later learning (Duncan et al., 2007). Mathematical skill development in young learners has thus been identified as a prerequisite for long-term academic success and is a crucial element in all PreK to Grade 5 classrooms. Numeracy skills and concepts are the focus for most early learning standards, but time, geometry, and, in particular, algebraic thought are also essential. In order to learn mathematics, children have to actually do mathematics for themselves

> KNOWLEDGE OF EARLY MATH CONCEPTS IS THE MOST POWERFUL PREDICTOR OF LATER LEARNING.
>
> (DUNCAN ET AL., 2007)

rather than follow along as someone else does it. Young children make sense of mathematical situations in different ways, at different times, and with different materials (Copley, 2010). They learn math concepts through their experiences with the environment, their interactions with adults and other children, and hands-on experiences with manipulatives, natural objects, games, and tools.

Metacognition

The development of metacognitive skills (i.e., awareness & understanding of one's own thinking processes) is critical to children's academic development (Veenman, Kok, & Blote, 2005). Metacognition requires students to be able to think about their thinking with the aim of improving their learning and strengthening their social development. Practicing metacognition supports and develops children's ability to: cite evidence or justification for thoughts and ideas, be aware of their strengths and weaknesses, identify and correct errors or problems, and pick the best plan to accomplish a specific goal or activity.

Small Group Instruction

The richest interactions between children and their teachers tend to occur when teachers interact individually or with small groups of children (Burchinal et al., 2008). These are important times for targeted instruction aimed at the particular needs of the small group by providing practice and ensuring successful experiences for children. Small group instruction is often utilized for literacy, but it also supports children in acquiring mathematical skills and allows for more personal interaction around socialization, friendship, and the development of community. Participation in small groups provides children exposure to the other predictors of success, which include scaffolded instruction, oral language and vocabulary development, collaboration, and metacognition.

C. Resources

NAEYC's Advancing Equity in Early Childhood Education Position Statement

NAEYC's Developmentally Appropriate Practice Position Statement 4th Edition

NAESP's Leading Learning Communities: A Principal's Guide to Early Learning and the Early Grades (Pre-K–3rd Grade)

National P-3 Center's Framework for Planning, Implementing, and Evaluating P-3 Approaches

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