



Children Come First: Using Research to Guide Practice: 7 Predictors for Positive 3rd Grade Outcomes

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July 2023

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. For all of its terror, deep sadness, and loss, the COVID-19 pandemic also provides educators with a unique and essential opportunity to boldly step up and make school a positive and transformative time for children, families, and educators.

The long-term goal is to increase the number of early childhood programs and early grade classrooms with high quality learning environments that contribute to reducing inequities, closing achievement and opportunity gaps, and supporting young learners.

Effective and equitable instructional practices and curricula ensure that all children regardless of ability, ethnicity, language, or income are responsive to and respectful of their lives, both inside and out of the classroom. Such practices also have personal relevance and convey high expectations and a belief that all children can and will succeed. Having high expectations for students is one of the defining characteristics of all comprehensive school reform programs. When teachers have high expectations for students and provide tasks that are engaging and of high interest, students build self-esteem, increase confidence, and improve academic performance (Brophy, 2010). Student confidence is critical because it is linked to their willingness to tackle challenging learning activities.

Instruction that emphasizes predictors of positive 3rd grade outcomes is considered essential to optimal learning and development. The cost of the pandemic to the education of young children makes this even more important.

When making choices about instructional practices that best support the learning of young children, it is important to link practices to the research that supports their use and positive impact on test scores, and most importantly, support children’s development and learning. Aligned practices are demonstrated within a dynamic coordinated continuum where physical environments, instructional approaches, learning and behavioral expectations, and content change gradually and seamlessly in response to children’s learning needs and developmental competencies. This means that appropriate practices in PreK–3rd grade where development and content are present, must be considered as vital, and that learning and development in each grade builds on the grade before.

Research shows that classrooms in which teachers demonstrate intentionality in 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). At a time where the pressure of testing and accountability are ever present, educators must provide these types of opportunities for young children to experience a child-centered, play based, high quality learning environment resulting in positive 3rd grade outcomes. The following seven instructional practices best support the learning of young children and are predictors of positive 3rd grade outcomes.

1 Scaffolded Instruction

Both teacher-led (didactic), and interactive 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:

- know, specifically, how much the children understood from the teacher-led lesson, and
- 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 frame they are given. Unfortunately, while the amount of information imparted is greatest when teachers lean heavily on teacher-led instruction, retention is not (Zull, 2002).

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2 Collaboration (meaningful communication with peers)

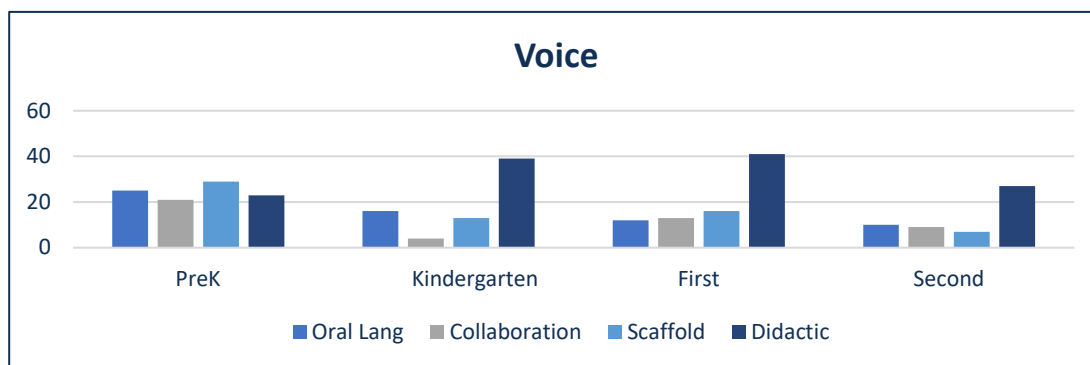
Students learn more, are more highly motivated to learn, enjoy learning more, feel more positive towards the subject being studied, and are more accepting of one another when they work together with peers as opposed to working competitively or individually (Johnson & Johnson, 2013). Importantly, this 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 life (Trumbull et al., 2000).

3 Oral Language Development (meaningful communication with adults)

In order to positively identify themselves as learners, students need to know people will listen to their thoughts, feelings, and interests. Students also need opportunities to know their voice is valued, and that they are valuable. These components are 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).

Figure 1 shows the percentage of time PreK–2nd grade children have the opportunity to engage in meaningful conversation with adults (oral language), and peers (collaboration). Figure 1 also shows the benefit from interactive instruction (scaffold) versus teachers talking and children listening (didactic) across each grade level. Each percentage point represents four minutes of their instructional day. For example, In PreK, 25%/100 minutes of their day provides them the opportunity to engage in meaningful conversation with adults. In Kindergarten, children engage in meaningful conversation for 4%/16 minutes of their day. In 1st grade, children engage in interactive instruction with their teacher for 16%/64 minutes per day, while 41%/164 minutes of their day is spent with their teacher doing the talking.

Figure 1: Who is doing the talking?



These data come from nationwide studies using the EduSnap Data Collection Tool. For more information visit <https://firstschool.fpg.unc.edu/using-data-create-culture-collaborative-inquiry.html>

4 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. This focus too often shortchanges subjects like social studies, science, and the arts that are rich in vocabulary and highly engaging. When children use decoding and context clues to help them become capable readers, they need to have heard and know about the words they encounter before they can be expected to recognize and retain them.

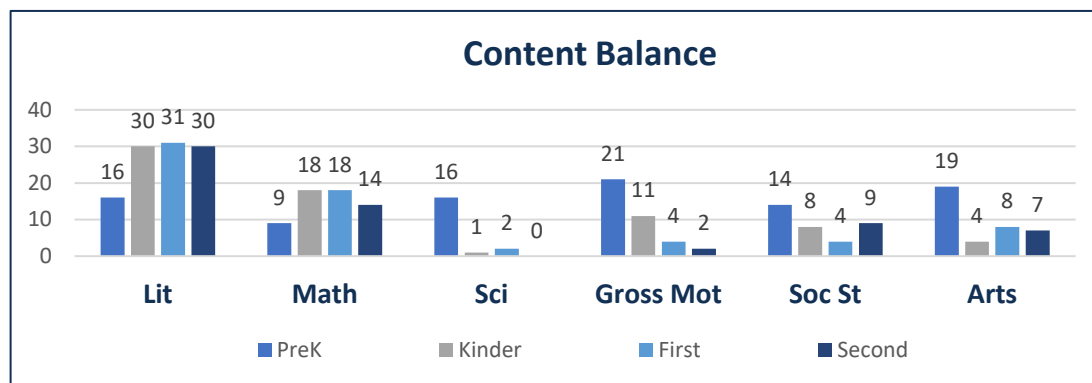
Observations in hundreds of classrooms across the nation reveal similar stories. Children in preschool have notably more opportunities to interact in meaningful ways with peers and adults, as well as use their voices to demonstrate their knowledge, ask questions, and express feelings than they do as they progress through elementary school. Preschool children have access to more and varied subject matter that helps them more fully develop in all areas. It is essential to examine the poor alignment of children’s experiences and to reconsider instructional practices and priorities to ensure that children’s experiences are broad and rich.

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Figure 2 shows the amount of time per day children in grades PreK–2nd spend across the various areas of the curriculum. For example, in PreK, 16%/64 minutes of their day provides them the opportunity to engage in literacy practices, while in Kindergarten that time nearly doubles. In PreK, children engage in science (weather, animals, rocks, experiments, and so forth) 16%/64 minutes per day, while in 1st grade, on average, children experience 2% or 8 minutes per day of science.

Figure 2: How are we currently supporting the whole child through instructional practice?



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5 Mathematics

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– 5th grade classrooms. Numeracy skills and thoughts are also essential. In order to learn mathematics, children have to actually do mathematics for themselves 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.

“Knowledge of early math concepts is the most powerful predictor of later learning.”

(Duncan et al., 2007, p. 1428)

6 Metacognition

The development of metacognitive skills (i.e., awareness & understanding of one’s own thinking processes) is critical to children’s academic development (Veenman et al., 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;
- pick the best plan to accomplish a specific goal or activity; and
- reflect upon the successes and challenges they encountered.

When teachers ask children open-ended questions such as, “Can you tell me more about why you think that?”, they not only provide children with relevant opportunities to reflect, reason, analyze, and make connections to their learning, they also provide chances for children to self-regulate when faced with challenges.

7 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 well-designed small groups provide children exposure to the other predictors of success, which include scaffolded instruction, collaboration, oral language and vocabulary development, and metacognition.

INQUIRING INTO POLICIES, PRACTICES, AND STRATEGIES

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HOW DOES THIS APPLY TO YOUR LEARNING ENVIRONMENT?

- ✓ Which of these predictors of 3rd grade success are most evident in your classrooms?
 - Scaffolded instruction
 - Collaboration
 - Oral language development
 - Vocabulary
 - Mathematics
 - Metacognition
 - Small group instruction
- ✓ How do priorities vary across the PreK–3 experience?
- ✓ What types of professional development and/or supervision could bolster the use of these instructional practices?
- ✓ How can these practices be integrated into current curriculum?

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Garrett, C., Ritchie, S., Phillips, E.C. (2023). Children Come First: Using Research to Guide Practice: 7 Practices for Positive 3rd Grade Outcomes. SERVE Center at UNC Greensboro.

Acknowledgements: The authors are grateful to the members of the SERVE Early Learning Collaborative for their contributions to, and review of the final document.

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This brief was prepared by the Region 6 Comprehensive Center under Award #S283B190055 for the Office of Program and Grantee Support Services (PGSS) within the Office of Elementary and Secondary Education (OESE) of the U.S. Department of Education and is administered by the SERVE Center at UNC Greensboro. The content in this document does not necessarily reflect the views or policies of the PGSS or OESE or the U.S. Department of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government. © 2023 SERVE Center at UNC Greensboro.