

NC Pathways to Grade Level Reading Initiative Research Rationale

The measures of success outlined in this research rationale were chosen by the NC Pathways to Grade-Level Reading (Pathways) Data Action Team for their research-based impact on the Pathways top-line result and goals.

Top-Line Result

All North Carolina children, regardless of race, ethnicity or socioeconomic status, are reading on grade-level by the end of third grade, so that they have the greatest opportunity for life success.

Goals

- Health and Development On Track, Beginning at Birth
- Supported and Supportive Families and Communities
- High-Quality Birth-to-Eight Early Learning and Education

Research shows that these measures also impact each other. In addition to outlining the impact of the measures on the goals and result, this research rationale highlights connections among the measures.

GOAL: Health and Development On Track, Beginning at Birth

Outcome: All children have a healthy start

Birth Weight

Infants born weighing less than 2,500 grams (5.5 pounds) are at greater risk for physical and developmental problems than infants of normal weight. Children who are born at a low birthweight are at higher risk for long-term illness or disability and are more likely to be enrolled in special education classes or to repeat a grade

Healthy child development begins with a healthy start to life. Accessible, affordable, on-time and high-quality prenatal care for pregnant women results in healthier births.ⁱ Women with health insurance are much more likely to access prenatal care, and effective prenatal care has been shown to reduce the incidence of maternal smoking and improve maternal nutrition, both of which make for healthier babies.ⁱⁱ Good prenatal care, fewer risky health behaviors like smoking and drinking, and better maternal nutrition also contribute to fewer pre-term births and fewer babies born at low birth weight.ⁱⁱⁱ Both pre-term birth and low birth weight have been shown to contribute to more health problems later, which can impact school and life outcomes.^{iv}

Babies born to teenage mothers are more likely to have low birth weight, poorer health and more limited language and literacy skills.^v

Outcome: All children have access to healthcare

Well-Child Visits

Well-child visits provide an opportunity to monitor children’s physical and behavioral health and development, provide age-appropriate guidance to parents, and screen for maternal depression. Lack of health care or delays in treating children’s health problems can negatively affect cognitive, emotional, behavioral, and physical development, sometimes with lifelong consequences.

Access to comprehensive, integrated, high-quality health care builds on a healthy birth. High-quality health care for infants and children includes regular well-baby and well-child preventive care check-ups, immunizations and oral health care,^{vi} with accelerated well-visit schedules for more vulnerable children, such as children with special health care needs or children in the foster care system.^{vii} Regular health care can help prevent chronic, undiagnosed health issues, and manage chronic conditions, such as childhood diabetes and asthma, which are obstacles to learning.^{viii}

Children with health insurance are more likely to have regular preventive health care and other needed services, more likely to have a medical home (a regular place for medical care), less likely to visit the emergency room, and less likely to have unmet health care needs.^{ix} Parental health insurance coverage has a positive effect on both children’s health insurance coverage and children’s access of needed health services.^x

Outcome: All children are physically and emotionally healthy

Good Health

Parents’ self-reported health status of their children strongly correlates to their children’s actual health, particularly at a young age.^{xi} Healthy children are better able to engage in experiences crucial to the learning process, like regular school attendance.

Good health is important for learning – chronic, untreated health conditions, like asthma, have been linked to decreased educational outcomes, partly because of school absence. A chronic health condition also increases a child’s chances of having emotional or behavioral problems, repeating a grade, or being placed in special education.^{xii} Children who are fully immunized are protected against preventable illnesses that can lead to long-term physical and developmental problems.^{xiii} Children with a medical home tend to be healthier than children who do not have a regular place for medical care.^{xiv}

Healthy Weight

When children are not within their expected height and weight ranges, they may be suffering from malnutrition, impairments in the caregiver-child relationship, or chronic illness. Being obese or underweight in infancy or early childhood can have long-term health and social consequences.

Height and weight that fall outside of expected ranges can indicate malnutrition, child neglect, a food insecure household, an undiagnosed health condition, or chronic illness. Obesity and low weight in

infancy or early childhood can have long-term consequences for health, school and life success.^{xv} Children who live in homes and communities that support healthy outcomes, such as eating nutritiously and being physically active every day, have better outcomes.^{xvi} Breastfeeding provides nutritional and immunological benefits and may improve cognitive ability and school performance.^{xvii}

Social-Emotional Health

Emotional health and social competence enable children to participate in learning and form good relationships with teachers and peers. Research is increasingly finding that self-regulation and social-emotional health are among the most critical building blocks for children's learning.

Emotional, social and behavioral competence of young children is a strong predictor of academic performance in elementary school^{xviii} and beyond, even affecting employment and income in adulthood.^{xix} Children who exhibit self-control,^{xx} have good interpersonal skills with both peers and teachers,^{xxi} and have fewer behavioral problems^{xxii} are more successful in school.

Early and regular behavioral health screenings, with comprehensive assessments as warranted, ensure early detection of behavioral health needs.^{xxiii} Effective behavioral health treatment can often mitigate or eliminate future behavioral health conditions.^{xxiv} Undiagnosed and untreated mental health disorders can have negative effects on children's development across all life domains.^{xxv}

Dental Health

Tooth decay is the most common chronic childhood disease. Untreated dental problems can lead to secondary physical illness, delay overall development, compromise school attendance and performance, and interfere with psycho-social functioning.

Tooth decay is the most common chronic childhood disease. Poor dental care may lead to tooth loss, dental caries (cavities), and gingivitis, resulting in secondary illness, high rates of absenteeism, inability to concentrate in school, and poor speech development.^{xxvi} Tooth decay can delay overall development and interfere with psycho-social functioning.^{xxvii} Dental problems also may impair a child's ability to eat correctly and therefore to achieve good nutrition and health.^{xxviii}

Outcome: All children reach appropriate developmental benchmarks

Early Intervention

Research suggests that the developmental delays that are prevalent among low-income children are significantly under-detected. Timely screenings and assessments, and intervention if needed, can improve children's social competence and cognitive abilities prior to school entry. Without appropriate supports and services in the early years, children with special educational needs are less likely to be ready for school and are at higher risk for poor educational outcomes.

Undetected developmental problems and emotional disturbance may cause delays in acquiring speech and language, inability to maintain relationships, and serious impediments to school learning. Poor peer relationships are associated with later emotional and mental health problems, school dropout, delinquency, aggression, poor social skills, and lack of empathy for peers.^{xxix}

Children who receive early and regular developmental screenings, and early access to high quality early intervention services if needed, demonstrate improved social competence and cognitive abilities in the short-term and often see long-term educational benefits.^{xxx} Early detection and diagnosis helps teachers and parents make appropriate decisions about curriculum and instruction.^{xxxi} Having age-appropriate motor skills and coordination has been shown to have an effect on cognitive and social-emotional development, as well as academic achievement.^{xxxii}

Oral Language Skills

Oral language skills (listening comprehension and oral language vocabulary) are important foundational literacy skills, and early language proficiency is a key predictor of school success. Early literacy skills, like size of vocabulary, are good predictors of children's reading abilities throughout their educational careers. Language and literacy skills enable children to develop cognitive skills and knowledge and to interact effectively with peers and adults.

Oral language is the foundation for literacy development. Oral language provides children with a sense of words and sentences and builds sensitivity to the sound system so that children can acquire phonological awareness and phonics. Through their own speech children demonstrate their understanding of the meanings of words and written materials.^{xxxiii} Oral language skills (listening comprehension, oral language vocabulary), alphabetic code knowledge (alphabet knowledge, phonological/phonemic awareness, invented spelling), and print knowledge and concepts are important foundational literacy skills required for school readiness.^{xxxiv} Early language skills have been found to predict third-grade reading comprehension even more reliably than parent income, ethnicity, or parent educational attainment.^{xxxv}

School Readiness

Assessment of school readiness prior to entering kindergarten is important in order to address delays in any of the five domains of child development: physical health and motor development, social-emotional development, language and literacy, and cognition and approaches to learning.

Being ready for school requires:

- On-track language development, which incorporates communication (listening, speaking and vocabulary) and emergent literacy (print awareness, story sense, early writing, and the connection of letters to sounds);
- Cognition and general knowledge (thinking and problem-solving, including mathematical knowledge, knowledge about objects, abstract thought, and imagination); and
- Positive approaches to learning (inclination to use skills and knowledge, enthusiasm, curiosity, persistence on task).^{xxxvi}

Children who are ready for kindergarten will almost always recognize the relationship between letters and sounds (language development), will recognize basic shapes (cognition and general knowledge) and be able to follow directions without much difficulty (approaches to learning).^{xxxvii}

GOAL: Supported and Supportive Families and Communities

Outcome: All children have safe, stable, nurturing relationships with their caregivers

Child Abuse and Neglect

Child abuse and neglect are linked to language deficits, reduced cognitive functioning, social and behavioral difficulties, and attention deficit disorders. The incidence of child abuse and neglect is reduced when protective factors (such as social support, high quality reliable out-of-home child care, access to treatment of depression, and decent housing) are strengthened and risk factors (such as poverty, social isolation, absence of supportive adults, and violence in the home or neighborhood) are ameliorated.

Children’s brains are built from the bottom up, starting at birth, and strong, nurturing connections with the adults in their lives are critical building blocks of that foundation.^{xxxviii} Children who suffer adverse childhood experiences (ACEs) – physical, verbal or sexual abuse; physical or emotional neglect; a parent who has a substance dependency, a mental illness, is in jail or is otherwise not present; witnessing domestic violence – are often overwhelmed with toxic stress and may not have the opportunity to form the needed connections with caring adults that could mitigate the effects of that stress.^{xxxix} Children in foster care who have multiple placements are especially at-risk, due to the high turnover of primary caregivers in their lives.^{xl}

A stable, secure, nurturing relationship with a competent, caring adult is a key factor in helping young children be ready for school and read on grade level.^{xli} Toxic stress can occur when a child experiences strong, frequent and/or prolonged adversity without adult support, and it has been shown to disrupt the development of brain architecture and other organ systems and increase the risk for stress-related disease and cognitive impairment into adulthood.^{xlii}

Parent and Child Interactions

The opportunity to form secure attachments with sensitive, nurturing caregivers is critical to children’s cognitive and social-emotional growth. Talking to children plays a direct role in building their vocabularies and strengthening their early literacy skills. A “word gap” between children from low-income and middle-income families predicts gaps in academic achievement.

Parents who talk with their infants and toddlers using a wide variety of vocabulary words and sentence structures, initiate conversations, ask questions, prompt responses, listen actively, and discuss events better prepare their children for literacy.^{xliii}

Parental health and well-being affects parents’ interactions with their children and impacts children’s outcomes. Children whose mothers are depressed or involved with substance abuse or domestic violence have lower levels of academic achievement, more behavior problems, lower levels of social competence, and poorer physical health.^{xliv} Factors such as poverty, low education, family stress and neighborhood instability can compromise the quality of parent-child relationships by limiting opportunities for stimulating and responsive interactions, emotional support, and exposure to activities that can enrich children’s health, knowledge, and skills.^{xlv}

Family Meals

Frequent family meals have been associated with achievement of developmental milestones like vocabulary growth, academic achievement, overall better health, and positive behavioral outcomes.

Family mealtimes are associated with a diverse array of indicators of children’s health, risk reduction and overall well-being, including fewer behavioral problems, reduced risk for substance abuse, promotion of language development, academic achievement, and reduced risk for pediatric obesity. Younger children experience family meals more frequently than older children. Regular family meals likely affect child well-being through several different channels, including consistency and routine, nutrition, time spent talking with children, and the family “climate.” The stressors of poverty, including time scarcity and food scarcity, can make establishing and maintaining family mealtimes more challenging.^{xlvi}

Employment and leave policies have a direct effect on the quantity and quality of time parents can contribute to their children’s early learning and development.^{xlvii} Such supports enable parents to contribute time to their children’s learning through activities like sharing family meals and reading to their children.^{xlviii}

Outcome: All children live in families that have the knowledge, skills and social supports to support children’s optimal development

Support for New Mothers

Services and supports that help families obtain basic necessities and that enhance protective factors all contribute to children’s overall well-being and increase families’ abilities to deal with a range of issues. Families connected to supportive networks and services are strengthened in their parenting and their own health and well-being, and are better able to expose their children to activities and educational opportunities that will help them succeed.

Connections to responsive and supportive networks, services, and institutions can buffer the stressful context created by poverty and other risk factors and sources of stress, which compromise the caregiver’s capacity to promote sound health and development. Such connections can help parents improve the manner in which they interact with children, the physical environment of the home, their parenting skills and knowledge of child development, and their emotional health, all of which are associated with a child’s cognitive, social, and emotional development. Mothers with larger social networks are more likely to be involved in their children’s lives, provide stimulating home environments, and a more responsive and accepting parenting style.^{xlix} Certain protective factors – including parental resilience, social connections, knowledge of parenting and child development, concrete support in times of need, and social and emotional competence of children – have been shown to reduce the incidence of child abuse and neglect, build resilience, and mitigate long-term negative effects of adversity in childhood.^l

Summer Learning

Low-income children fall behind during the summer, and the gap grows every year. Recent research has further established the link between summer learning loss and limited reading proficiency among low-income students and provided evidence that summer programs and books in the home can counteract the trend.

Low-income children fall behind during the summer by as much as two months of reading achievement – while their middle-income peers make slight gains.^{li} That gap grows every year, and some research has found that summer learning loss accounts for 80 percent of the income-based achievement gap.^{lii} Researchers attribute the socioeconomic summer learning gap to differences in families’ resources (wealthier families can pay for more educational products and alternate learning experiences while school is out) and in parents’ attitudes toward school and learning. Summer learning programs can help children gain reading skills, but those most likely to gain the most from such programs (children from low-income households) are the least likely to have access to them.^{liii} Some research has found that providing a child with a dozen self-selected books at the start of summer for three years in a row conferred the same benefit as attending summer school for each of the three years – at a fraction of the cost. The benefit was an increase in students’ reading achievement by 35-40 percent of a grade level.^{liv}

Successful schools also work to meet each child where he or she is, ensuring that adequate resources are dedicated to combating summer learning loss.^{lv}

Parent Skills and Knowledge

Parents with greater knowledge of child development and parenting skills better support their children’s early learning and development. Parents who are more educated and have access to high-quality support programs and social networks are more likely have that knowledge and skills.

Higher levels of maternal education are associated with better school readiness among young children, better health throughout childhood and adolescence, and an increased likelihood of finishing high school and going to college. Higher education levels of parents contribute to a more supportive home learning environment and more involvement in the child’s school.^{lvi} Parents with more education talk more with their young children in ways that develop pre-literacy skills and use a broader vocabulary than parents with less education, which contributes to language and cognitive disparities by as young as 18 months.^{lvii}

High-quality home visiting, parenting education, family preservation programs that are coordinated with early learning programs, and other formal and informal supports can help parents learn how to best support their children’s learning.^{lviii} Connections to responsive and supportive networks, services, and institutions can increase knowledge and understanding of child development and parental behavior for parents of infants, which is likely to lead to improved outcomes in social development and school readiness.^{lix}

Reading with Children

Reading with children promotes a child’s cognitive and emotional growth and strengthens parent-child bonding. A positive correlation exists between regular parental book reading and young children’s language development, early reading achievement, and school readiness.

When adults read to young children and engage them in rich conversations, children develop larger vocabularies, learn to read more easily, and grow stronger emotionally.^{lx}

Early literacy is impacted by the availability of age-appropriate books in children's homes. Having books in the home improves children's reading performance, helps them learn the basics of reading, results in children reading more and for longer periods of time, and improves children's attitudes toward reading and learning.^{lxi} Children who have books in their homes and are read to during the first years of life are more likely to learn to read on grade-level.^{lxii}

Family Poverty

Child poverty is linked with a range of negative outcomes including diminished academic achievement, more health problems, lower nutrition, and lower overall well-being. Children from extremely poor families tend to have lower cognitive skills including reading, problem solving, and concentration ability, and experience greater developmental losses during the non-academic year.

Socioeconomic status is a strong predictor of third-grade reading proficiency. Children from low-income families start school behind—even controlling for family demographics (e.g., parents' level of education, marital status, mother's age at child's birth and immigrant status, and child's gender, age and race/ethnicity), low birth weight, preschool attendance and parents' health and behaviors, a school readiness gap still remains between children from poor and non-poor families.^{lxiii} This income achievement gap is growing wider, and income is becoming a stronger predictor of achievement than in the past—family income is now nearly as strong a predictor of children's achievement as parental education.^{lxiv}

Children whose families have incomes below the poverty line face a host of obstacles to school success, including parental unemployment,^{lxv} housing instability or insufficiency,^{lxvi} hunger or inadequate nutrition,^{lxvii} toxic stress^{lxviii} and more. Children in families below the *extreme* poverty line, children living in chronic poverty, and very young children living in poverty are particularly vulnerable. Children from extremely poor families tend to have lower cognitive skills including reading, problem solving, and concentration ability, and experience greater developmental losses during the non-academic year.^{lxix} Racial and ethnic minorities, as well as children living in families headed by single women and grandparents, immigrant families, and families living with disabilities are disproportionately likely to have low socioeconomic status.^{lxx}

Homelessness

Homeless children develop more slowly and may develop serious emotional problems. They are more likely to get sick, have mental health problems, have academic problems, be victims of violence, exhibit delinquent or aggressive behavior, be behind academically and have social and emotional issues that result in poor academic performance, behavior problems, and depression.

Many family stressors can distract children from the task of learning, including housing insecurity and family mobility.^{lxxi} Homelessness and housing instability can cause chronic early absence from school.^{lxxii} Homeless children often live in poor and extremely poor families and face many obstacles to school success, including parental unemployment,^{lxxiii} housing instability or insufficiency,^{lxxiv} hunger or inadequate nutrition,^{lxxv} and more.

Frequent family moves (family mobility) affect children's social capital and ability to learn because of disruptive absences from school, discontinuity of teaching styles, and insecure social relationships. Families that move frequently may be less successful at developing social ties and may be unfamiliar with available resources to help their children.^{lxxvi}

Outcome: All children live in safe, toxic-free, economically-viable communities that support children and families

Neighborhood Crime

Exposure to community violence is associated with negative outcomes for children, including reduced behavioral and social competence. Repeated exposure to violence threatens children's physical, intellectual, and emotional development.

Children who experience toxic stress from early experiences with violence, neglect or abuse in their homes or communities can suffer from changes in the neural circuitry and chemical composition in the brain, making them less resilient over time, more likely to suffer from physical and mental illness, and less likely to meet early literacy goals.^{lxxvii} Exposure to violence puts children at higher risk for psychiatric problems, aggression, emotional distress, immature behavior, and poor school performance. Neighborhood safety and stability can reduce some of the stresses that interfere with good parenting.^{lxxviii}

Safe to Play Outside

Perceived neighborhood safety affects child development because it affects parents' willingness to use available resources such as parks, libraries, and children's programs. When parents feel connected to their neighborhood, their children benefit from community resources and collective socialization opportunities.

Neighborhood conditions that increase stress, such as crime and drugs, may directly affect parents' ability to nurture and protect their children by creating anxieties that interfere with good parenting. In poor communities, the perception of danger has a clear effect on the interactions of families and neighbors. Families are reluctant to gather in parks and playgrounds or venture out after dark with children, and neighbors limit interactions among each other out of fear for personal safety. Perceived neighborhood safety is important for child development since it affects the willingness of parents to take advantage of resources such as parks, libraries, and children's programs. Parents in unsafe neighborhoods may protect their children by restricting their movement, which may affect the child's cognitive stimulation, physical fitness, and ability to establish a sense of autonomy.^{lxxix}

Neighborhood poverty

Children growing up in neighborhoods with high rates of poverty are more likely to attend under-resourced and low-performing schools; have fewer playgrounds, parks and libraries; and have less access to high quality early education programs. Poor children in poor neighborhoods have lower test scores than poor children in middle class neighborhoods.

Economically-viable communities give children the best chance to achieve their academic potential. Communities that are mired in concentrated poverty have been shown to exacerbate the negative

effects of low family economic status for children that impact literacy. Concentrated poverty neighborhoods tend to be more violent, more toxic, have poorer schools, lack positive role models and hope for alternative life pathways, and lack basic services like grocery stores, all of which impacts children's health, development and school success.^{lxxx}

Blood lead levels

Children with elevated blood lead levels are more likely to have a lowered IQ and behavioral problems, academic failure, need for special education services and increased risk of juvenile delinquency. Elevated blood lead levels in the early years are associated with intellectual impairments, attention and behavioral problems, and lower achievement in school.

Children living in neighborhoods with high concentrations of poverty are more likely to have high levels of lead in their blood and are more likely to experience adverse effects as the lead exposure interacts with other risk factors like poor nutrition.^{lxxxi} Lead exposure is associated with intellectual impairments, attention and behavioral problems, and lower achievement in school.^{lxxxii} Early detection and intervention for lead exposure, especially before age five, may prevent long-term neurological damage, related learning and behavior problems and lower school achievement, and may allow a return to normal functioning.^{lxxxiii}

GOAL: High-Quality Birth-to-Eight Early Learning and Education

Outcome: All children have access to high-quality, developmentally appropriate, culturally competent birth-to-eight programs with highly qualified professionals

Child Care Enrollment

Young children, particularly those with multiple risk factors, benefit from the consistency of regular attendance at a high quality early education program, where they learn to work on tasks independently, follow directions and establish good attendance and learning habits.

High-quality child care and prekindergarten programs help prepare all children for school and life success: though children from low-income backgrounds benefit the most, middle-income children benefit substantially from high-quality early education, and benefits outweigh costs for children from both middle- and low-income families.^{lxxxiv}

Enrollment in child care can lend consistency and stability to a child's life, which affects children's social competence, behavioral outcomes, cognitive outcomes, language development, school adjustment, and overall child well-being.^{lxxxv} Subsidies can make high quality early care and education affordable for all families, and child care subsidy policies help determine whether families can access and stay connected to consistent child care and early education.^{lxxxvi}

High-Quality Child Care Enrollment

Children who attend a high quality early education program are better prepared for school—academically, socially and emotionally. Economically disadvantaged 3- and 4-year-olds who participate in high-quality preschool programs have better school achievement, social skills and behavior than children who do not participate in a preschool experience or who are enrolled in a low-quality program. Children in higher quality programs have more advanced language and pre-math skills, more advanced social skills and warmer relationships with their teachers.

Access to high-quality early education programs builds pre-literacy, pre-numeracy and social-emotional skills. Children who participate in high-quality child care and prekindergarten programs have better health, social-emotional skills, and cognitive outcomes than those who do not participate. The gains are particularly powerful for children from low-income families and those at risk for academic failure, who, on average, start kindergarten behind their peers in pre-literacy and language skills.^{lxxxvii}

Elements of high quality programs include well-trained, well-compensated and well-supported teachers and school leaders, language-rich classroom environments, small group sizes, low staff-child ratios and low staff turnover rates.^{lxxxviii} Comprehensive early childhood programs that deliver an integrated system of early education, health services and family supports have been shown to prepare children for kindergarten and school success.^{lxxxix} Children who are most at-risk benefit when programs are comprehensive and work with the family as well as the child.^{xc} High-quality programs are culturally competent, work to fully understand and adapt to the home cultures and languages of the children in their care, and use effective, developmentally-appropriate curricula to build their students' foundational learning skills.

Kindergarten through Third Grade Reading

Student growth in reading over the course of a school year is a proxy measure for quality of the learning environment, leadership and teaching. Children with access to high-quality teachers, principals and schools are more likely to show reading progress in the early years.

Literacy can be assessed very early, and early assessment and diagnosis of obstacles to literacy can lead to better outcomes.^{xc} Strong, effective kindergarten through third grade teachers and principals—who provide students with high-quality classroom learning experiences, tailored to meet each child's needs—are more likely to help their students achieve growth and grade-level reading proficiency.^{xcii}

Teacher, principal and school quality are important factors in determining the quality of students' school-based learning experiences. Elementary schools with effective leaders,^{xciii} acceptable teacher-child ratios,^{xciv} highly skilled teachers,^{xcv} and high-quality curricula^{xcvi} get better outcomes. High-quality, effective teacher and administrator education and professional development can result in strong, effective teachers and principals.^{xcvii} Principals and teachers trained in child development and how children learn oral and written language are best equipped to teach children to read.^{xcviii}

Outcome: All children attend early learning programs and schools consistently

Regular Attendance

Children must be in school in order to learn, and absenteeism is a strong predictor of poor educational outcomes. Consistent school attendance in the early years helps boost children’s academic learning, achievement, and motivation. Early chronic absenteeism is associated with lower academic achievement, truancy in middle school, school dropout, delinquency, and substance abuse.

Chronic absenteeism—missing 10 percent or more of the school year, regardless of the reason for the absence—leads to lower academic performance.^{xcix}

Chronic absence for preschoolers correlates with weaker kindergarten readiness scores, including letter recognition and pre-literacy scores, especially for the children who arrive at preschool with the weakest skills. Students with low attendance in both pre-kindergarten and kindergarten often continue to have low attendance, are more likely to be retained by third grade, and on average have lower academic outcomes than peers with better attendance. Poor children, whose outcomes are most affected by school absence, are far more likely than their peers to be chronically absent.^c

Chronic absence in the early grades has been found to lead to lower third-grade reading and math test scores, absenteeism problems and lower achievement in later grades, retention in grade, dropping out of high school, substance use, and later delinquent and criminal behavior.^{ci} Chronic early absence can signal trouble at home, in school or in the community, and is often caused by family stressors, residential instability, environmental toxins that trigger health problems, and higher rates of suspension and expulsion, which are experienced disproportionately by children of color and children in low-income families.^{cii} Not only are vulnerable children more likely to miss school, but the impact of chronic absenteeism on their outcomes is more significant than for their peers.^{ciii} In addition, the educational experience of regularly attending children may be adversely affected when teachers must divert their attention to meet the learning and social needs of chronically absent children when they return to school.

School Stability

Consistency and stability in early child care and education affects children’s social competence, behavioral outcomes, cognitive outcomes, language development, school adjustment, and overall child well-being. Frequent school changes during the early grades (K-3) are associated with retention in grade, behavioral problems, lower academic achievement, and lower high school graduation and college completion rates.

More effective learning—both for the individual student and the classroom as a whole—occurs when the general student population mobility rate is low.^{civ} Children who change schools frequently over the course of the school year, due to family moves, changing foster care placements, or expulsions, have poorer outcomes. More frequent school changes are associated with retention in grade, behavioral problems, lower academic achievement, and lower high school graduation and college completion rates. The most negative effects of school mobility are found when moves occur during the early grades.^{cv}

Outcome: All children learn in environments that are safe, promote a positive climate, and support social-emotional development

Safe and Supportive Schools

Students show better academic and social-emotional outcomes when they learn in positive school climates, where they feel safe, connected and engaged.^{cxvi} Schools can support children by integrating social-emotional strategies, training teachers in trauma and children’s mental health, and meeting each child where he or she is.

Effective schools intentionally implement and document specific strategies to make the school climate trauma-informed, safe and supportive, such as integrating social-emotional strategies into the curriculum and training teachers on children’s mental health. Easing transitions – systematically involving child care programs and families before transition to kindergarten^{cxvii} and aligning curricula and expectations within the school and with early education programs^{cxviii} – can help support children’s social-emotional development.

Successful schools also work to meet each child where he or she is, ensuring that adequate resources are dedicated to supporting the needs of English-language learners, recent immigrants, and children with disabilities,^{cxix} and providing extended learning opportunities for those children who would benefit from them.^{cx} Schools that effectively address non-academic factors that interfere with children’s ability to learn (hunger, unmet health needs, housing instability, transportation challenges) often show strong results.^{cxii}

Finally, successful schools find ways to engage parents in their children’s education.^{cxiii} Attendance rates are better in schools where parents feel welcomed and engaged and where they trust their children are safe.^{cxiii}

Suspensions and Expulsions

School discipline policies that result in students losing instructional time can cause students to fall behind and be retained in grade. Racial and ethnic minorities and students with disabilities are disproportionately affected by school discipline policies that focus on suspensions and expulsions, and the disproportionality begins as early as preschool.

Effective schools take into account students’ social-emotional development by maintaining positive discipline.^{cxiv} Racial and ethnic minorities and students with disabilities are disproportionately affected by school discipline policies that focus on suspensions and expulsions, and the disproportionality begins as early as preschool.^{cxv} School discipline policies that result in students losing instructional time can result in students falling behind and being retained in grade.^{cxvi}

Retentions

In the early grades, retention in grade is often due to an inability to read proficiently and can be related to home and community factors. A large body of research suggests, however, that students retained in the early years achieve at lower levels, are more likely to drop out of high school, and have worse social-emotional outcomes than similar students who are promoted.

In the early grades, retention in grade is often due to an inability to read proficiently.^{cxvii} Retention in grade also is related to home and community factors, such as parent education. Students whose mothers have less than a high school education are more likely to be retained than students whose parents are more highly educated.^{cxviii} Effective schools carefully consider social-emotional development when determining retention and promotion policies,^{cxix} since retention in grade can result in loss of interest and motivation to succeed in school, which can lead to school drop-out.^{cxx}

Endnotes

ⁱ Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>.

ⁱⁱ Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

ⁱⁱⁱ Zero to Three, *Early Experiences Matter: A Guide to Improved Policies for Infants and Toddlers*, 2009. http://main.zerotothree.org/site/DocServer/Policy_Guide.pdf?docID=8401

^{iv} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^v Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005.

<http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf> and Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{vi} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf> and Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{vii} American Academy of Pediatrics' Healthy Foster Care America Project, "Health Care Standards," <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/healthy-foster-care-america/Pages/Health-Care-Standards.aspx>

^{viii} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf>

and Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{ix} Zero to Three, *Early Experiences Matter: A Guide to Improved Policies for Infants and Toddlers*, 2009. http://main.zerotothree.org/site/DocServer/Policy_Guide.pdf?docID=8401 and Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^x George Washington University School of Health Policy and Health Services, *Parental Health Insurance Coverage as Child Health Policy: Evidence from the Literature*, 2007. http://publichealth.gwu.edu/departments/healthpolicy/CHPR/downloads/Parental_Health_Insurance_Report.pdf

^{xi} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{xii} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf>

^{xiii} Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005.

<http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf>

^{xiv} Zero to Three, *Early Experiences Matter: A Guide to Improved Policies for Infants and Toddlers*, 2009. http://main.zerotothree.org/site/DocServer/Policy_Guide.pdf?docID=8401 and Child Trends, *The Research Base*

for a Birth through Eight State Policy Framework, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{xv} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{xvi} United Way Worldwide, *Recommended Birth to 8 Health Indicators*, <https://app.resultscorecard.com/Scorecard/Embed/7303>

^{xvii} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf> and Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{xviii} Zero to Three, *Early Experiences Matter: A Guide to Improved Policies for Infants and Toddlers*, 2009. http://main.zerotothree.org/site/DocServer/Policy_Guide.pdf?docID=8401

^{xix} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{xx} Zero to Three, *Getting Ready for School Begins at Birth*, 2004. <http://www.zerotothree.org/child-development/social-emotional-development/getting-ready-for-schoolbegins-at-birth.html>

^{xxi} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf> and Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005. <http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf>

^{xxii} Annie E Casey Foundation, *The First Eight Years: Giving Kids a Foundation for Lifetime Success*, 2013. <http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf>

^{xxiii} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{xxiv} Ibid.

^{xxv} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{xxvi} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{xxvii} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{xxviii} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{xxix} Ibid.

^{xxx} Ibid.

^{xxxi} Ibid.

^{xxxii} Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005. <http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf>

^{xxxiii} National Institute for Early Education Research, *Early Literacy: Policy and Practice in the Preschool Years*, 2006. <http://nieer.org/resources/policybriefs/10.pdf>

^{xxxiv} Ibid.

^{xxxv} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf>

^{xxxvi} Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005. <http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf>

^{xxxvii} Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005.

<http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf>

^{xxxviii} Harvard University Center on the Developing Child, Serve and Return overview.

<http://developingchild.harvard.edu/science/key-concepts/serve-and-return/>

^{xxxix} Aces Too High, "Got Your ACE Score?" <http://acestoohigh.com/got-your-ace-score/>

^{xl} Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005.

<http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf>

^{xli} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007.

<http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{xlii} Harvard University Center on the Developing Child, Toxic Stress Overview.

<http://developingchild.harvard.edu/science/key-concepts/toxic-stress/>

^{xliii} Center for Public Education, *Learning to Read, Reading to Learn: Why Third Grade is a Pivotal Year for Mastering Literacy*, 2015. https://www.nsba.org/sites/default/files/reports/NSBA_CPE_Early_Literacy_Layout_2015.pdf

^{xliv} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007.

<http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{xlv} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013.

<http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{xlvi} Fiese, Barbara H. and Marlene Schwartz, "Reclaiming the Family Table: Mealtimes and Child Health and Wellbeing," 2008. <http://www.uconnruddcenter.org/files/Pdfs/ReclaimingFamilyTable.pdf>

^{xlvii} Annie E Casey Foundation, *The First Eight Years: Giving Kids a Foundation for Lifetime Success*, 2013.

<http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf>

^{xlviii} Center for Public Education, *Learning to Read, Reading to Learn: Why Third Grade is a Pivotal Year for Mastering Literacy*, 2015.

https://www.nsba.org/sites/default/files/reports/NSBA_CPE_Early_Literacy_Layout_2015.pdf and Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{xlix} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007.

<http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^l Center for the Study of Social Policy, *The Strengthening Families Approach and Protective Factors Framework: Branching Out and Reaching Deeper*, 2014. <http://www.researchconnections.org/childcare/resources/28802/pdf>

^{li} Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010.

http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf

^{lii} Drs. Richard Allington and Anne McGill-Franzen, *Summer Reading: Closing the Rich-Poor Reading Achievement Gap*, Teachers College Press, 2012. <http://bookharvestnc.org/why-books/statistics/>

^{liii} Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010.

http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf

^{liv} Drs. Richard Allington and Anne McGill-Franzen, *Summer Reading: Closing the Rich-Poor Reading Achievement Gap*, Teachers College Press, 2012. <http://bookharvestnc.org/why-books/statistics/>

^{lv} Campaign for Grade-Level Reading, *Attendance in the Early Grades: Why it Matters for Reading*, 2014.

<http://www.attendanceworks.org/wordpress/wp-content/uploads/2014/03/Attendance-in-the-Early-Grades.pdf>

and Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010.

http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf and Center for Public Education, *Learning to Read, Reading to Learn: Why Third Grade is a Pivotal Year for Mastering Literacy*, 2015.

https://www.nsba.org/sites/default/files/reports/NSBA_CPE_Early_Literacy_Layout_2015.pdf

^{lvi} Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005.

<http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf>

^{lvii} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015.

<https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf> and Center for Public Education,

-
- Learning to Read, Reading to Learn: Why Third Grade is a Pivotal Year for Mastering Literacy*, 2015. https://www.nsba.org/sites/default/files/reports/NSBA_CPE_Early_Literacy_Layout_2015.pdf
- ^{lviii} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf> and Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>
- ^{lix} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>
- ^{lx} Ibid.
- ^{lxi} Learning Point Associates, American Institutes of Research, *Access to Print Materials Improves Children's Reading: A Meta-Analysis of 108 Most Relevant Studies Shows Positive Impacts*, 2010. <http://literacyandbeyond.org/wp-content/uploads/2015/09/Access-to-Print-Materials-Meta-Analysis.pdf>
- ^{lxii} Reach Out and Read, *Research Summary: The Evidence*, 2013. https://www.reachoutandread.org/FileRepository/Research_Summary.pdf
- ^{lxiii} Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010. http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf
- ^{lxiv} Annie E Casey Foundation, *Early Warning Confirmed*, 2013. <http://www.aecf.org/m/resourcedoc/AECF-EarlyWarningConfirmed-2013.pdf>
- ^{lxv} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf>
- ^{lxvi} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>
- ^{lxvii} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf>
- ^{lxviii} Harvard University Center on the Developing Child, *Toxic Stress Derails Healthy Development*, multimedia presentation. <http://developingchild.harvard.edu/resources/toxic-stress-derails-healthy-development/>
- ^{lxix} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>
- ^{lxx} National Center for Law and Economic Justice, "Poverty in the United States: A Snapshot," 2013. <http://www.nclaj.org/poverty-in-the-us.php> and Pew Research Center, "At Grandmother's House We Stay," 2013. <http://www.pewsocialtrends.org/2013/09/04/at-grandmothers-house-we-stay/> and National Center for Children in Poverty, "Immigrant Families," <http://www.nccp.org/topics/immigrantfamilies.html>
- ^{lxxi} Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010. http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf
- ^{lxxii} Ibid. *Early Warning Confirmed*, 2013. <http://www.aecf.org/m/resourcedoc/AECF-EarlyWarningConfirmed-2013.pdf>
- ^{lxxiii} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf>
- ^{lxxiv} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>
- ^{lxxv} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf>
- ^{lxxvi} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>
- ^{lxxvii} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>
- ^{lxxviii} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>
- ^{lxxix} Ibid.
- ^{lxxx} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf> and Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

-
- ^{lxxx} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>
- ^{lxxxii} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>
- ^{lxxxiii} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>
- ^{lxxxiv} United States Department of Education, *A Matter of Equity: Preschool in America*, 2015. <https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf> and Foundation for Child Development, *Investing in Our Future: The Evidence Base on Preschool Education*, 2013. <http://fcd-us.org/sites/default/files/Evidence%20Base%20on%20Preschool%20Education%20FINAL.pdf>
- ^{lxxxv} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>
- ^{lxxxvi} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>
- ^{lxxxvii} United States Department of Education, *A Matter of Equity: Preschool in America*, 2015. <https://www2.ed.gov/documents/early-learning/matter-equity-preschool-america.pdf>
- ^{lxxxviii} Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005. <http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf>
- ^{lxxxix} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf> and Zero to Three, *Early Experiences Matter: A Guide to Improved Policies for Infants and Toddlers*, 2009. http://main.zerotothree.org/site/DocServer/Policy_Guide.pdf?docID=8401
- ^{xc} Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005. <http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf>
- ^{xci} Ibid.
- ^{xcii} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf> and Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010. http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf
- ^{xciii} Harvard Graduate School of Education's *Lead for Literacy Initiative*. <http://isites.harvard.edu/icb/icb.do?keyword=lesa ux&pageid=icb.page541445>
- ^{xciv} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf> and Rhode Island Kids Count, *Getting Ready: Findings from the National School Readiness Indicators Initiative, A 17 State Partnership*, 2005. <http://www.gettingready.org/matriarch/d.asp?PageID=303&PageName2=pdfhold&p=&PageName=Getting+Ready+-+Full+Report%2Epdf> and Center for Public Education, *Learning to Read, Reading to Learn: Why Third Grade is a Pivotal Year for Mastering Literacy*, 2015. https://www.nsba.org/sites/default/files/reports/NSBA_CPE_Early_Literacy_Layout_2015.pdf
- ^{xcv} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf> and Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010. http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf and Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>
- ^{xcvi} Annie E Casey Foundation, *The First Eight Years: Giving Kids a Foundation for Lifetime Success*, 2013. <http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf> and Harvard Graduate School of Education's *Lead for Literacy Initiative*. <http://isites.harvard.edu/icb/icb.do?keyword=lesa ux&pageid=icb.page541445>
- ^{xcvii} Harvard Graduate School of Education's *Lead for Literacy Initiative*. <http://isites.harvard.edu/icb/icb.do?keyword=lesa ux&pageid=icb.page541445> and Child Trends, *The Research*

Base for a Birth through Eight State Policy Framework, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{xcviii} National Governor's Association, *A Governor's Guide to Early Literacy: Getting All Students Reading by Third Grade*, 2013. <http://www.nga.org/files/live/sites/NGA/files/pdf/2013/1310NGAEarlyLiteracyReportWeb.pdf>

^{xcix} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf>

^c Campaign for Grade-Level Reading, *Attendance in the Early Grades: Why it Matters for Reading*, 2014. <http://www.attendanceworks.org/wordpress/wp-content/uploads/2014/03/Attendance-in-the-Early-Grades.pdf>

^{ci} Annie E Casey Foundation, *Early Warning Confirmed*, 2013. <http://www.aecf.org/m/resourcedoc/AECF-EarlyWarningConfirmed-2013.pdf> and Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{cii} Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010. http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf and Annie E Casey Foundation, *Early Warning Confirmed*, 2013. <http://www.aecf.org/m/resourcedoc/AECF-EarlyWarningConfirmed-2013.pdf>

^{ciii} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf>

^{civ} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{cv} *Ibid.*

^{cvi} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf> and the Bazelon Center for Mental Health Law, *Fact Sheet: Positive Behavior Supports and School Achievement*. <http://www.bazelon.org/LinkClick.aspx?fileticket=URI2hc1RS7A%3D&tabid=333> and WestEd and American Institutes for Research, *A Climate for Academic Success: How School Climate Distinguishes Schools that are Beating the Achievement Odds* https://www.wested.org/online_pubs/hd-13-01.pdf

^{cvi} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf> and Annie E Casey Foundation, *The First Eight Years: Giving Kids a Foundation for Lifetime Success*, 2013. <http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf> and Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{cvi} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf> and Annie E Casey Foundation, *The First Eight Years: Giving Kids a Foundation for Lifetime Success*, 2013. <http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf> and Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{cix} Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010. http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf and Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf>

^{cx} Child Trends, *The Research Base for a Birth through Eight State Policy Framework*, 2013. <http://www.childtrends.org/wp-content/uploads/2013/10/2013-42AllianceBirthto81.pdf> and Center for Public Education, *Learning to Read, Reading to Learn: Why Third Grade is a Pivotal Year for Mastering Literacy*, 2015. https://www.nsba.org/sites/default/files/reports/NSBA_CPE_Early_Literacy_Layout_2015.pdf

^{cx} Schorr, L., *Pathway to Children Ready for School and Succeeding at Third Grade*, 2007. <http://first5shasta.org/wp-content/uploads/2013/07/PathwayFramework9-07.pdf>

^{cxii} Annie E Casey Foundation, *The First Eight Years: Giving Kids a Foundation for Lifetime Success*, 2013. <http://www.aecf.org/m/resourcedoc/AECF-TheFirstEightYearsKCpolicyreport-2013.pdf>

^{cxiii} Campaign for Grade-Level Reading, *Attendance in the Early Grades: Why it Matters for Reading*, 2014. <http://www.attendanceworks.org/wordpress/wp-content/uploads/2014/03/Attendance-in-the-Early-Grades.pdf>

^{cxiv} Georgia Family Connection Partnership, *Building a Path to Reading Proficiency*, 2015. <https://www.greatstartgeorgia.org/sites/default/files/readingproficiency.pdf>

^{cxv} US Department of Education Office for Civil Rights, *Civil Rights Data Collection (CRDC) Snapshot: School Discipline*, March 2014. <http://ocrdata.ed.gov/Downloads/CRDC-School-Discipline-Snapshot.pdf> and *Snapshot: Early Childhood Education*, March 2014. <http://www2.ed.gov/about/offices/list/ocr/docs/crdc-early-learning-snapshot.pdf>

^{cxvi} Council of State Governments Justice Center and Texas A&M University Public Policy Research Institute, *Breaking Schools' Rules: A Statewide Study on How School Discipline Relates to Students' Success and Juvenile Justice Involvement*, 2011. <https://csgjusticecenter.org/youth/breaking-schools-rules-report/>

^{cxvii} Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010. http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf

^{cxviii} Annie E Casey Foundation, *Early Warning! Why Reading by the End of Third Grade Matters*, 2010. http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf

^{cxix} Ibid.

^{cxx} Ibid.