

**STRONG
START.**



EARLY EDUCATION IN ARIZONA

103RD ARIZONA TOWN HALL | NOVEMBER 2013 | GRAND CANYON, ARIZONA



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The 103rd Arizona Town Hall, which convened in November 2013, developed consensus on the topic of Early Education in Arizona. The full text of these recommendations is contained in this final report.

An essential element to the success of these consensus-driven discussions is the background report that is provided to all participants before the Town Hall convenes. Northern Arizona University and the Arizona K12 Center coordinated this detailed and informative background material and it provided a unique resource for a full understanding of the topic.

Special thanks go to the following individuals for spearheading this effort and marshaling many talented professionals to write individual chapters: Pamela Powell, Chair, Teaching and Learning, College of Education, Northern Arizona University; and Kathleen Wiebke, Executive Director, Arizona K12 Center.

The 103rd Town Hall could not have occurred without the financial assistance of our generous Professional Partners, which include Premier Partner APS; Catalyst Partners Helios Education Foundation and the Virginia G. Piper Charitable Trust; Consensus Partner Salt River Project; Collaborator Partners Arizona Commerce Association, Blue Cross Blue Shield of Arizona and Freeport McMoRan Copper & Gold Foundation; and Civic Leaders Boeing Company, Cox Charities, and First Things First.

The consensus recommendations that were developed during the course of the 103rd Town Hall have been combined with the background information prepared by Northern Arizona University and the Arizona K12 Center into this single final report that will be shared with public officials, community and business leaders, Town Hall members and many others.

This report, containing the thoughtful recommendations of the 103rd Town Hall participants, is already being used as a resource, a discussion guide and an action plan for early education in Arizona.

Sincerely,

J. Scott Rhodes
Board Chair, Arizona Town Hall

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STRONG START. EARLY EDUCATION IN ARIZONA

103RD ARIZONA TOWN HALL

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Introduction

Early childhood care and education is the foundation of children’s later success. Through First Things First and a broad range of stakeholders in early childhood education we have begun to develop a strong, effective, regionalized infrastructure with built in accountability. To continue to affect change in early childhood education, we should build on this infrastructure. We have come a long way, have a strong vision, and have a long way to go.

Early childhood – that stage in human development spanning from birth to 8 years of age – is a pivotal time in an individual’s physical, cognitive, and social-emotional growth and development. Early childhood care and education has traditionally been viewed as a means to provide a safe place for children to be cared for before entering formal schooling, or an environment within which young children could develop social skills. Recent developments in neuroscience, research, practices and theory have indicated, however, that early childhood learning (birth to 8) is the most important predictor of a child’s future success in school and in the workplace. The field of early childhood care and education has transitioned from one focused primarily on custodial care to a systematic approach of teaching and learning.

Fundamental changes in the economy, family life, public awareness, public support, and public demand for high-quality preschool programs have had a profound effect on early childhood education. The opportunity to access high-quality programs is largely dependent on income, which has resulted in a significant gap in school readiness test scores between low income children and their more affluent peers. Arizona is at the epicenter of change, with rapid growth in the population of young children 0 to 5 years of age, a greater diversity in this population than the rest of the country, and a much larger share of its young children in state care (child protective services) growing up in poverty.

The recognition of the importance of early childhood development to an individual’s future success raises critical questions about the roles of families, the government, early childhood care and education providers, private enterprise, and philanthropy, among others, in making available those resources necessary to ensure that high-quality early childhood care and education is accessible to all of Arizona’s young children.

A diverse cross-section of Arizona residents from various communities and walks of life all interested in giving Arizona’s young children a strong start through high-quality early childhood care and education met as the 103rd Arizona Town Hall for three days of facilitated discussions.¹

This report captures the consensus that emerged from those discussions. Although not every Arizona Town Hall participant agrees with every conclusion and recommendation, this report reflects the overall consensus achieved by the 103rd Arizona Town Hall.

I. Setting the Stage

A. The Current State of Early Childhood Care and Education in Arizona

The current state of early childhood care and education in Arizona is one of emergence. Voters showed their understanding of these needs by approving the First Things First initiative in 2006 and then by overwhelmingly rejecting an attempt to repeal it in 2010. The initiative created the first dedicated funding stream for building a system of early child development programs in education, health and wellness, and family support. Notable among these programs is Quality First. Quality First is an effort that significantly improved the quality of many – but not all – early childhood care and education centers and family childcare homes, through a rating system, increasingly sophisticated feedback and incentives. The program also uses scholarships to make early care affordable for some youngsters.

However, this funding stream is inadequate to the overall needs. Part of the progress made has been undercut by subsequent cuts to programs for young children that were previously funded by the state. Individual programs are isolated from one another, communication among them needs to improve to better serve all families and children, and access is unequal. Many children who live in disadvantaged economic situations, with transient families, or in rural or tribal areas are not receiving the benefits of these much-needed early childhood educational programs either due to affordability of services or geographical constraints. Arizona must address this inequality of access so that all children have access to high-quality early childhood education programs that meet their individual needs.

Support of early childhood educators is also lacking. Early education is not simply “daycare” – it is truly an important component of a child’s education, as cognitive, physical, and emotional development occur most rapidly during these years. Parents, legislators, and the community-at-large must understand that education begins at birth. Further, early childhood educators, as well as all educators, should receive greater professional respect, professional compensation, and wider access to professional development.

¹ As part of the gathering, participants heard from an internationally-recognized expert in early child development and an economist with the Federal Reserve. Participants felt it important that all Arizonans have access to these presentations. Accordingly, the PowerPoint presentations from Dr. Adele Diamond and economist Rob Grunewald can be found on Arizona Town Hall’s website and are included as an appendix to this report.

B. The Effect of the Quality and the Availability of Early Education on Arizona

The quality and availability of early education in Arizona has a profound impact on our communities in the sense that we either pay some now or pay a lot more later. We can either invest in teachers and provide students with the early education foundation they need for future success, or we can spend more resources on intervention and remediation, human and social services, access to healthcare, and the criminal justice system. Lack of a strong educational foundation creates dysfunction that ripples across generations – negatively affecting individuals, their families, and the greater society.

Studies robustly demonstrate that children who have access to high-quality education from birth to age 8 enjoy greatly enhanced avenues for social and economic success. Without a strong educational foundation, however, children struggle to catch up with their peers. Starting behind from an early age has a negative cumulative effect on young children. Many children from lower socioeconomic backgrounds enter school academically disadvantaged, averaging six months behind their affluent peers. By the end of fourth grade they are a full two years behind their affluent peers. As a result, many of the children facing these barriers are discouraged in school, are unable to catch up, and eventually drop out, which contributes to delinquency issues.

A poor early education foundation also has a profound impact on our state’s elementary and secondary educational institutions, which have to dedicate a large portion of their time and resources remediating rather than advancing children to the next level. Being required to retain – or hold back – large numbers of students who did not receive the benefits of early childhood care and literacy may have unintentional economic consequences. The problem of poor early education comes full circle when students without strong fundamentals enter our state’s higher education programs as college students, because these programs then have to spend their time and resources teaching missing skills to ensure the cycle does not continue.

Limited access to high-quality early education in Arizona also impedes economic development, both at the state and local levels. The state needs a high-quality education system – which includes high-quality early childhood care and education – to retain a strong, highly educated workforce and to attract new business. Arizona’s rank of 48th in preschool education and 45th in 4th grade reading proficiency stigmatizes our state’s reputation. Right now, Arizona is experiencing a “brain drain,” with parents leaving the state to raise their families in states with better education systems. A lack of high-quality early education also impacts Arizona’s ability to attract large businesses, because those businesses know that high-quality early education and care directly impact their own recruitment and retention efforts. Moreover, companies are discouraged by Arizona’s high drop-out rates and high school students’ lack of college readiness. Companies simply do not want to ask their employees to relocate to Arizona with its lack of high-quality education, much of which stems from a lack of high-quality early education.

When it comes to funding for education, we need to stop talking about “spending,” and focus on “investing.” It is time to recognize the “return on investment” the state will receive when it properly recognizes and nourishes early childhood development. The money we invest now has an impact on our economy that justifies the investment in providing affordable early childhood care and education

in Arizona. Several longitudinal evidence-based research studies have all essentially reached the same conclusion: The return on investment in early childhood development programs that focus on at-risk families yield significant long-term positive developmental outcomes. Cost-benefit analyses of these studies show returns ranging from \$3 to \$17 for every dollar invested and suggest an annual rate of return between 7 and 8 percent. Continuing to invest in large-scale early childhood programs requires long-term assurance and stability from state funding. Given the impact early childhood education provides and the long-term consequences for developmental outcomes, we must strengthen partnerships between the education sector and the business community.



C. The Effect of the Attributes of Children and Their Families on Early Education

Currently, Arizona’s early education system is a fragmented patchwork of programs. Attributes of children and their families such as geographic location, access to transportation, socioeconomic status, and language challenges often create barriers to early education resources, programs, and information. For example, though a library may be nearby, a lack of a bus route may prevent a family from utilizing that resource. The transiency of many families is a factor that creates gaps in a child’s education as the child moves from school to school. As these factors demonstrate, the early childhood educational system cannot be “one-size fits all.” We must be sensitive to cultural differences, diverse value systems, and socioeconomic variances when determining the needs of Arizona’s children.

Families need to be engaged and have the resources to negotiate the early education system. Families’ access to information is critical for understanding available resources and their role in developing their child’s education. Yet, access to this information is a challenge. Arizona must find a way to provide greater access to vital information about the early education resources and programs available to families and early childhood educators. Further, as a child’s entire well-being affects his or her educational opportunities and ability to learn, access to support programs that assist with nutrition and healthcare is also crucial. Similarly, behavioral health has a large impact on children, and counseling should be available to students. Screening, assessment, and intervention for behavioral, as well as physical, issues before kindergarten are imperative to minimize any negative impact on the early learning experience.

D. Measuring the Success of Arizona’s Early Childhood Care and Education Programs and Institutions

There are key things Arizona can do to allow the state to (1) better measure the success of Arizona’s early childhood care and education programs and institutions, and (2) more effectively disseminate information about the best ways (“best practices”) to achieve desired outcomes.

First, Arizona needs to establish continuity among early education programs, rather than relying on the existing “patchwork” system. Arizona has recently worked to develop a shared statewide definition of school readiness and is vetting this document for feedback across the state. In addition, the Arizona Department of Education has developed and adopted a comprehensive set of Early Learning Standards and Infant Toddler Guidelines to support quality across all environments. These standards should be further disseminated and professional development provided to support implementation. Defining readiness is important to setting benchmarks and measuring outcomes moving forward. The First Things First Board approved an excellent list of “readiness indicators” developed by multiple stakeholders (see the Background Report at page 27), but these readiness indicators have not been adopted statewide. Arizona also needs to develop a standardized system of metrics to measure early childhood care and education – applied to all children in all communities, whether from urban, rural, or home-schooled communities – to provide the state with a tool to use in tracking data in the assessment and improvement of children’s performance. Additionally, we need greater alignment and continuity between early education programs and the K–12 school system.

Second, Arizona must provide sufficient funding to fully implement assessment programs already in place.

Third, the state and communities need to do more with the information already being gathered through assessments. The education community constantly strives to develop and improve assessment tools – which is admirable – but we also need to focus on what we do after the assessments take place. The state needs to “stay the course” and consider the long-term payoff of maintaining a benchmark to measure progress. Unless Arizona does more with the results of existing assessment tools, we will never change the quality of our schools. Quality First is a success story. Thanks to Quality First, Arizona now measures the quality of some early childhood education programs and provides program assessments, coaching, and mentoring to improve the care that young children receive. First Things First and Child Care Resource and Referral (CCR&R) provide information regarding high-quality child care, but more can be done.

Fourth, Arizona needs to focus on accountability at all levels. Using multiple data sources, we should evaluate center, program, and teacher effectiveness; provide professional development opportunities; and fully prepare an early education workforce that can effectively educate our young children. We also should involve parents in the assessment of their children, and make tools available for parents to help improve child outcomes.

Fifth, Arizona needs more effective systems for sharing information among early childhood care and educational programs and institutions. It is difficult to track student progress – especially over time – because not all children enter the system at the same time or at the same level and existing data systems within the state are not well aligned. Using a uniform system, such as the Arizona Education and Learning Accountability System (AELAS), would help providers, schools, and social services better communicate and track student progress. Having a uniform system would support desired outcomes, create a common framework for all students, provide clear outcome goals, and perhaps ultimately allow educators to use one common assessment tool.

Sixth, we need to educate the public about the long-term importance of early education programs and efforts, and develop communication systems that allow the public to understand whether dollars are being spent effectively. A method of doing this would include a publicly accessible “dashboard” that monitors progress over the long term (perhaps 25 years or beyond). The dashboard could include monitoring system progress over time, including metrics such as kindergarten readiness skills, success in reaching state-mandated third-grade reading requirements, graduation rates, and whether students choose to continue with higher education.

Finally, in our efforts to measure the success of early childhood care and education programs and institutions, we need to remember that early childhood education should be focused on early childhood development, not just testing and assessment. Standardized tests have their place. Any measure of success needs to recognize the fluid nature of student progress, including the use of ongoing, authentic assessment.

II. Content, Caregivers, and the Classroom

A. Optimal Early Learning Experiences for Young Children in the Home

We recognize that families and parents are a child’s first and most important teachers. Strong families are the cornerstone of strong communities. Whether they are in early childhood education centers or home-based care, children, parents, and families need access to culturally relevant support and information. Several factors affect the ability of family members, friends, neighbors, and hired caregivers to provide optimal early learning experiences to young children. Many of these individuals lack adequate knowledge regarding early childhood care and education and have no special skills to elevate the care beyond basic “daycare.” Often, they do not see themselves as educators, nor do they focus on providing an educational experience. Many are not aware of what the latest research indicates is the optimal learning experience for children today. This is coupled with limited availability of and access to resources and information about early childhood education. Often, limitations on these caregivers’ time, financial resources and physical space prevent them from developing a greater depth of knowledge. Other variables in the environment – including factors such as familial relationships with the child, instability at home, the caregiver’s patience level, and the inability to afford quality early education and care – also impact the optimality of the early learning experience of children.

Additionally, in the case of family, friend, and neighbor care and unregulated care, there are large disparities among providers. Many lack access to professional development and have very limited resources. Many also lack basic knowledge of child development and responsive caregiving.

In all cases, additional support systems, particularly training and informational resources, are needed. Adequate information that provides caregivers access to knowledge about optimal educational experiences will assist caregivers in gaining awareness about what activities are appropriate for different stages of childhood development. Such support does not replace in-home care, but supplements it, delivering information about best-practice methods that encourage intuitive experiences through informal, interactive activities such as storytelling, socialization, and learning through play. A central clearinghouse that allows parents and caregivers access to information and “best practices” is critical to develop awareness of the available resources. Information can be

disseminated through established avenues such as home visitors, directed media campaigns, social networks, community organizations, faith-based organizations, cultural and arts organizations, schools, libraries, and pediatricians.

B. High-Quality Early Education for Young Children From Childcare Providers

Numerous factors affect the ability of organizations like professional childcare centers and preschools to provide high-quality, early education, including:

- **Focus on Early Childhood Development.** High-quality education centers recognize that their purpose is to provide high-quality, early education rather than to warehouse children at the lowest possible cost. High-quality centers require their providers to prioritize early childhood development.
- **Shortage of High-Quality Staff.** Organizations face a shortage of educated, high-quality staff, at both the director and teacher level, particularly in rural or less populated regions. Career and Technical Education Programs found on school campuses throughout Arizona train and involve high school students in preschool programs that are effective, locally based, offer an interactive learning opportunity, and can develop a generation of future childcare providers and informed parents and families. The restoration of funding for Career and Technical Education can help these organizations to continue to grow and expand.
- **Employing Professionals.** High-quality early childhood programs respect their early childhood care and education providers and view them as professionals.
- **Providing Better Pay.** High-quality early childhood programs adequately and fairly compensate teachers as professionals. The increased licensing rates and educational requirements now placed upon providers are not commensurate with pay. Teachers should also be compensated for the time they spend improving the profession (e.g., mentoring).
- **Encouraging Professional Development.** Funding, coaching, and professional development should be available across the field and not just within certain schools. Good program directors invest in staff professional development and provide quality feedback. Arizona needs defined professional development standards for early childhood teachers.
- **Teacher Retention.** Organizations struggle to retain teachers because of low pay, lack of benefits, incentives that entice teachers to leave a school once they develop the skills that will make them more money elsewhere, and the perception that teaching early learners is a “dead end job.”
- **Teacher Input.** More teacher input into policy-making will help ensure that policies are grounded in actual practice.
- **Effective Student/Teacher Ratios.** High-quality education centers have low student/teacher ratios, and when necessary adjust the ratios based on the classroom makeup (e.g., to assist children with special needs or to provide potty-training). They also recognize, however, that continuity of care is

important for children and do not constantly adjust teachers and assistants from one classroom to the other just to meet ratios.

- **Intra-School Teamwork.** High-quality education centers reject the “silo mentality” and operate as a community rather than a collection of individuals who happen to work in the same building.
- **Accreditation and Rating Programs.** High-quality education centers are accredited and achieve high ratings. To ensure ratings and accreditations have meaning, though, there needs to be appropriate checks and balances put into place, starting with incorporation of feedback from the parents whose children attend the schools. The tools currently used to rate or accredit schools may not take into account all of the important factors that make up high-quality early education, such as the importance of the emotional environment at the school (i.e., whether a child is feeling loved and nurtured such that he or she wants to learn).
- **The Quality/Affordability Trade-Off.** Currently access to high-quality early education is determined by the ability of a child’s caregiver(s) to pay for high-quality care (i.e., “you get what you pay for”). Neither poor families nor many middle income families can afford to send their children to accredited, five star rated child care centers. We need scholarships and grants to make early education and care more affordable for all families and we need to extend current tax credits available to preschools, not just kindergarten and above. Additionally, providers have limited ability to access funding and services like Quality First. We must expand and enhance funding to bring these quality services to all of Arizona’s children.
- **Geography and Accessibility.** High-quality childcare centers simply are not available in some geographic areas, especially rural communities.

C. Providing High-Quality Early Education in Arizona Schools

Arizona provides limited early education, and the quality of these programs varies widely. State-supported pre-kindergarten programs are limited mostly to students with special needs, and full-day kindergarten attendance is neither statutorily required nor universally accessible. The dominant factor preventing high-quality education is inadequate and inconsistent funding. No mandate exists at the state level to provide consistent early childhood education from birth to age 8. This failure to support early education has led to unequal access among various constituencies, disparities between schools, and inconsistencies between the programs that do exist. Without steady funding, schools often cut pre-kindergarten programs when space or funds are needed elsewhere. Further, though kindergarten is offered in the schools, the statutory funding formula no longer includes all-day kindergarten. Also, unfunded mandates and limited resources hinder teachers. As such, there is not enough early education offered or available.

The current measurement standards of individual student success largely negatively affect the delivery of early education in schools. The concern is that teachers will “teach to the test,” which often harms the educational process by removing the enriching garden of play that is early childhood education and failing to focus on the whole child. Programs such as music and art are

often removed, which are just as important in developing life skills as reading and math. Further, standards from upper elementary school are forced down to early childhood educators (academic escalation/ curricular shove-down), and such high stakes academics are harmful. Test performance pay incentives do not improve education.

Though accountability and results are important, we must agree on how to properly measure success and what are the appropriate desired outcomes. The pedagogy of fourth grade, for example, is not the pedagogy of preschool, but current measurement standards do not allow this difference. Developmentally appropriate assessment rather than the current high stakes methods would better serve early childhood development and more accurately capture performance.

III. Roles and Resources

A. Important Resources and Their Availability

The State of Arizona dedicates insufficient resources to make high-quality early childhood care, education, and support accessible to Arizona families, and there must be greater alignment, coordination, and more equitable allocation of existing resources (especially across urban and rural areas of the state). In particular, we need to focus on *funding* and *coordinating partnerships*, which are discussed in greater detail below in Sections III (C, D &E). In addition, we need to develop the following:

Shared Understanding and Commitment. We need to educate *all* Arizonans about the critical importance of early childhood care and education to the success of our children, our communities, and our state. We need commitment to and engagement from citizens, families, volunteers, nonprofit organizations, the business community, community colleges, universities, civic organizations, faith-based communities, schools, and elected officials (at the local, state, tribal, and federal level). Collectively we all must communicate to the legislature and the private sector that now is the time to be bold and do *more*, not less, for our young children.

Human Capital. Arizona needs a call to action to attract additional, high-quality human capital into early childhood care and education. We should provide education and development opportunities to early educators including family, friends, and neighbors who provide early education and care; and families that choose to educate their children at home. We should support families who choose to benefit from home visiting services. Although professional development standards for early childhood educators exist, more technical assistance needs to be provided such as coaching, mentoring, and role models to help providers meet those standards.

B. Role of Government in Early Childhood Care and Education

Government has an important role to create an aspirational environment of leadership for the overall system of high-quality early care and education by providing regulatory oversight, coordination, vision, and funding. Ideally, federal, state, county, school district, city, and town governments and tribal governments work together to set goals for early childhood education in the state in order to sew Arizona's patchwork system into a cohesive quilt. The Arizona Constitution requires that the Legislature provide a general and uniform public education system. As such, the government should

prioritize early childhood care and education, striving to make it accessible to all residents, and the community should encourage these goals and stress their importance. Overall, a more targeted role is needed at all levels of government to create a full continuum of care from pre-birth to adulthood.

One of government's current primary roles is one of regulation, as it is responsible for protecting the health and safety of children. Although the government is not required to provide the actual early education and care services for early education and care, it should have a role in assessing the quality of the education and care and requiring certain standards. Quality standards already exist (e.g., ADE's Arizona Early Learning Standards, Head Start/First Things First) that can be widely utilized, and the state should identify and broadly promote clear, acceptable standards. Further, the state already imposes licensing requirements and certifies teachers, but this oversight should be broadened to include more early education and care providers, particularly those that currently operate without licenses, and those that serve more than one family. Finally, Arizona should restore funding for all-day kindergarten, revise state law to mandate kindergarten, and establish a firm entry age of 5 by August 31. Also, it should consider other mandates to reach more children, such as providing early education and care, particularly for children under age 6.

Coordination between all levels of the government must improve; currently, it is quite limited. Collaboration helps to eliminate redundancy, facilitate coordinated learning opportunities, and support under-served areas, such as Arizona's tribal and rural communities. For example, many library systems and parks and recreation programs offer after-school programs, and, if they were to coordinate with local schools, such programs could be adapted to better align with the curriculum. Also, in another example, the Bureau of Indian Education could collaborate with local and state government to deliver cultural education.

The local level of government – cities, towns, school districts, and counties – and tribal governments are often the first line providers, running the Head Start programs and offering other health and literary resources. Often, local communities can innovate to support unique local needs, particularly because the local communities most acutely suffer the consequences of poor education. Local officials can push the goals of education and key education initiatives up to the state level in order to move the needle at the state legislature. For example, city mayors can provide leadership on particular programs, such as Phoenix's "Read On Phoenix" initiative.

C. Role of Government in Funding Early Childhood Care and Education

To define the current role of the government in funding early childhood care and education, we must identify (1) what the state has mandated for early education; (2) the associated funding available – or additional funding necessary – to fulfill that mandate; and (3) the appropriate agencies or organizations to administer the funds.

The state has mandated reading readiness standards for third-graders. As documented throughout this Report and the associated Background Report, this mandate cannot be fulfilled without high-quality early childhood care and education programs. To fulfill the state mandates and ensure that Arizona's children have the educational foundation that they need, the state should provide adequate funding for the following:

- All-day kindergarten;
- Early intervention programs;
- Home visiting;
- Preventative health education;
- Expanded access to high-quality early care and education programs for children ages 0–5.
- Childcare subsidies;
- Kindergarten Plus or other extended-day and school break programs for young children;
- Improving the transition from pre-K and Head Start programs to kindergarten;
- Early childhood block grants, which includes preschool funding and reducing class sizes in grades 1–3;
- Professional development, particularly continuing education for professionals who may not be able to attend full-time programs;
- Pay for early childhood educators that represents a livable wage, and that reflects respect and appreciation for early childhood professionals;
- Establishing lab schools in partnership with universities and community colleges, which provide training for educators, high-quality education for children, and ongoing research concerning child development; and
- Improving available equipment and facilities.

Providing high-quality early childhood programming requires money, certainly more money than the state currently dedicates to early education. Within the past decade, significant cuts were made to early childhood care and education due to a variety of factors, including the recent economic downturn and the political climate. These funds must be restored.

To make high-quality early childhood care and education accessible, the state must also identify new funds and new funding sources for education. The current state and federal education funding system is archaic and pits stakeholders against each other. We need to develop a system that encourages stakeholders to work together. For example, invite private investors to invest in “Social Impact Bonds²,” “Pay for Performance Bonds,” or other public-private partnerships; establish an endowment for early childhood care and education in Arizona; extend existing tax credits to include quality early childhood education programs; and give tax incentives, particularly in rural areas, to open or support early education and care programs, or to provide money for employees to cover the costs of their children’s early education and care.

² Social Impact Bonds create a contract between a private investor, government body, and a highly effective social service provider. This public-private partnership is designed to foster innovative ideas that are designed to have high social impact, provide cost savings to the state, and, if successful, provide the private investor with a return on their investment.



As noted in Section I (D) above, the state needs to take concrete steps to measure the success of Arizona’s early childhood care and education programs and institutions (which will require some state funding), and our limited resources need to be directed toward programs and services that work. Arizona’s Quality First is a good example: this program ties scholarship funding to high-quality care.

Against this backdrop, Arizona’s current funding is administered through a complex, fragmented, state system that ultimately does not meet Arizona’s needs. There are multiple agencies involved that both provide and contend for resources and regularly duplicate services. This complexity and duplication creates a system that inefficiently expends administrative funds. This system *must* be simplified.

Additionally, there is a lack of uniformity in funding. We need to assess and evaluate funding mechanisms to ensure equitable delivery. We need to level the playing field when it comes to allocation of funds for early childhood care and education so that there is equitable access to early education regardless of the educator’s income, type of school, geographic location (urban vs. rural), or special needs of the child.

D. Private Enterprise, Philanthropy, and Others

Private enterprise, philanthropy, community and faith-based organizations, and individuals can support early child care and education through both financial and other support. By leveraging the private sector’s financial and human resources, we can supplement and advance Arizona’s current early child care and education system. Though it is not expected nor feasible for the private sector to fully fund the system, the private sector can support grass-roots community efforts that garner broader support for change.

Private enterprise and philanthropies can facilitate better system coordination to create a state-wide early education system in Arizona. For example, BUILD Arizona is part of a national initiative that works to align programs, policies, and services to support the creation of a comprehensive early childhood system. We should “build” on BUILD Arizona.

Also, private enterprise and philanthropy can serve a critical funding role for early childhood education and care. Early childhood education is relevant to the private sector as an investment in the economic and workforce development of the state. Philanthropy is a catalyst for high-quality

education. Investment in the form of scholarships and other assistance is important, especially in rural areas and for families that could not otherwise afford high-quality early childhood education. In addition, creative new approaches to private investment should be explored, such as providing seed money to incubate and innovate early education programs.

Additionally, private funds can be used to change the message concerning early childhood education through a cohesive media strategy that utilizes tools such as public service announcements. These financial resources can be used to leverage support for, provide political advocacy on, and educate government and families on the importance of the issue. Other private opportunities include private financing (such as was the case in the privately-financed capital improvements in the Higley Unified School District), private endowments of schools, and support of research, studies, and professional development of educators.

Supplemental educational opportunities can be provided by recruiting the skills and talents of Arizona's private sector. Such individuals can enhance school curriculum by teaching real-life skills, relating unique experiences, and supplementing arts and culture lessons.

E. Coordination, Collaboration and Partnership Among Families, Providers, and Others

Communication is key to encourage and improve coordination, collaboration, and partnership among Arizona's families, early childhood care and education providers, and other relevant organizations. We must improve communications across sectors, increase transparency at schools, educate voters on spending outcomes, and better communicate with families on available choices and resources. For example, real data and results such as First Things First Regional Partnership Councils' Needs and Assets Reports need to be better communicated and then used to attract additional resources and create sustainable funding.

To further encourage communication, we recommend organizing stakeholder conversations – perhaps even following the Arizona Town Hall model – about the goal of improving early childhood care and education to build bridges among stakeholders. Currently, stakeholders worry that if they do not compete for resources they will be left behind. Stakeholders need to view each other as allies, not competitors. The goal of these conversations would be for stakeholders to take an inventory of what resources are available, understand what is already being done and by whom, review data to identify what works and where there are gaps, identify steps to make accessing resources less overwhelming and confusing, and identify strategies for future success.

To further encourage coordination, collaboration, and partnerships, we support tasking a backbone organization with a proven track record, like First Things First, with coming up with a long-term strategy for early education in our state and to provide a “North Star” to follow and ensure effective collaboration. The state's long-term coordination plan should include elements such as further dissemination of the Early Learning Standards and Infant Toddler Guidelines; further aligned and streamlined systems and processes; one-stop shopping websites that assemble information from various organizations; use of social media to increase awareness and build momentum; branding; and “megaphone collaborators,” or champions for messages.

In addition to developing a statewide strategy, we need to foster collaboration and partnerships among public institutions, communities, civic organizations, faith-based organizations, non-profits, private industry, and volunteers. Arizona’s higher education network of community colleges and universities are critical partners that both assist in developing best practices and then teaching teachers those practices so that they can be brought to life in the classroom. Public libraries and the public library system also provide a great resource, particularly in rural areas, for families as well as educators. Many libraries provide social and emotional development opportunities. Finally, early childhood education must continue to foster a strong volunteer base, perhaps focusing on retirees and networked non-profits (e.g., Arizona Alliance of Nonprofits).

In the end, it is important for us to recognize that collaboration takes tremendous effort. It is easy to say we need to collaborate more, or that we need to collaborate better. It takes significant resources and a personal commitment to collaborate and to align our systems. We need to acknowledge what it will take to have the type of collaboration we want, and then we need to provide the funding and set the example to accomplish it.

IV. Getting There: Setting Priorities and Taking Action

The 103rd Arizona Town Hall strongly believes that the education of children from birth to age eight should be treated as a continuum, rather than the existing “patchwork” approach. As such, participants recommend taking the following cohesive set of actions, which have been identified as having the most potential beneficial impact on early childhood education and care:

Restoring and/or increasing funding to increase affordability and availability of early childhood care and educational programs.

- Restore state funding for full-day kindergarten and early education and care subsidies, including incentives for quality;
- Restore funding for the early childhood block grant, home visiting programs, and family literacy programs, and established but currently unfunded mandates;
- Expand Head Start programs, and comparable other public and private initiatives, to provide universal, voluntary early care and education, including pre-kindergarten;
- Expand tax credits to include high-quality early childhood education;
- Revise current education tax credits to equalize public and private school contribution amounts and timelines;
- Establish sustainable, dedicated funding sources and other creative funding strategies;³

³ For example, one proposed option is “Highway to Success” funding: Reduce driver’s license and state identification renewal intervals to four years and raise the fee from \$10 to \$40, dedicating 75% of the increased revenue to fund early childhood education initiatives.

- Fund, through the state and private sources, collaborative efforts to streamline and support the education system;
- Explore alternative, non-traditional financing, like social impact bonds, endowments, service taxes, national resource taxes, and public-private partnerships, as well as private investment in program seeding;
- Create scholarships through public-private partnerships for families paying for early education and for the professional development of educators and caregivers; and
- Modify public policy to include children birth through five years of age in Average Daily Membership (ADM) calculations of needed educational resources.

Focusing on the quality of educational opportunities and care through a cohesive vision and consistent standards.

- Early childhood educators must understand and incorporate practices of actively engaged learning based on the critical evidence of early brain development and positive developmental outcomes for young children;
- Expand on current, successful initiatives such as First Things First, and programs such as First Things First's Quality First, Expect More, BUILD Arizona, and new initiatives such as Read on Arizona, to create best practices and reach all areas of the state, including underserved, rural, and tribal areas;
- Utilize the Arizona Early Learning Standards and Infant Toddler Guidelines to create a developmentally and culturally appropriate curriculum;
- Restore music and arts programs to all kindergarten through third grade classrooms;
- Require that K–3 pre-service teachers in training complete coursework in early childhood education and early brain development, including recognition of and strategies for working with children with special needs, before receiving a teaching certificate;
- Require that all professional early educators be credentialed with formal preparation that includes college-level early childhood coursework;
- Encourage providers to participate in self-study opportunities and work towards accreditation; and
- Provide additional supports for unregulated providers such as family, friends, and neighbors.

Encouraging collaboration and coordination across the early childhood community.

- Support BUILD Arizona to advance policy recommendations to integrate and coordinate early childhood education programs and services.
- Continue to support the Arizona Ready Education Council K–3 recommendations, and explore the development of a Governor's Council focused on the coordination of birth-through-age-eight education;

- Vertically align the education continuum so that participants in the system – from healthcare providers to home visitors to families to educators to libraries to cultural organizations – coordinate efforts to most efficiently develop children; and
- Collaborate with parents and families to develop partnerships among schools, libraries, museums, health services, faith-based and community organizations (i.e., Mothers of Preschoolers (MOPS), etc.), so that children not enrolled in programs have additional opportunities.

Engaging in a comprehensive media, branding, and outreach campaign to communicate the importance of early childhood education and care and the availability of resources.

- Emphasize the critical and positive economic development that accrues from investment in early childhood education;
- Convey the message that early childhood care and education is not just “daycare,” but rather a vital component of a child’s education;
- Conduct outreach to families and caregivers to explain the availability of programs and provide resources in educating children;
- Create a message about the importance of early childhood education at the BUILD Arizona level to then share and distribute within new avenues, those already in place, and circles of influence, utilizing sponsorships and media partnerships;
- Involve governmental agencies, programs (e.g., First Things First, Expect More Arizona), and private enterprises and philanthropies (e.g., United Way, Chambers of Commerce) to have a consistently delivered message;
- Utilize the media to advocate for greater funding;
- Create public relations, social media, and media-based campaigns to raise awareness to create widespread public support; and
- Engage lobbyists and all stakeholders to advocate for change at the legislature.

Recruiting, developing, and retaining qualified early childhood educators.

- Increase pay to a livable wage for early childhood professionals;
- Develop apprenticeship programs, lab schools, and mentoring opportunities through collaboration between stakeholders;
- Create a pathway for professional development, starting with career programs in high school and continuing to the highest level of advanced degree, and National Board Certification in Early Childhood or exceptional education, through partnerships with universities and nonprofits (e.g. the Arizona K12 Center); and
- Support and expand existing scholarship opportunities for early childhood educators, such as T.E.A.C.H. Arizona and PCCP (Career Pathways).



Individual Call to Action

Individual Arizonans must commit to doing all we can to ensure that Arizona fulfills these goals and remembers that early childhood is the stage in human development of the whole child and is a pivotal time in an individual's physical, cognitive, and social-emotional growth and development. First and foremost, the 103rd Town Hall's participants must serve as ambassadors and share what we learned so that we can change the conversation about early childhood care and education: circulate the final report within our own circles of influence and post or link to the report on our social network sites; volunteer to speak to school districts, governing boards, charter associations, and community organizations and groups (e.g., Kiwanis and Rotary Clubs); write op-eds or letters to the editor; and participate in the follow-up discussion on early education throughout the state.

Politically, individuals can advocate and lobby for early education; educate themselves about how the budget and pending bills in the Arizona Legislature may impact early education (the Arizona School Boards Association and AEA provide this information upon request); reach out to their legislators and advocate for early education; get involved in local legislative district races and encourage everyone to vote, especially in the primaries; and endorse and donate to candidates and organizations that further the goals of early childhood care and education.

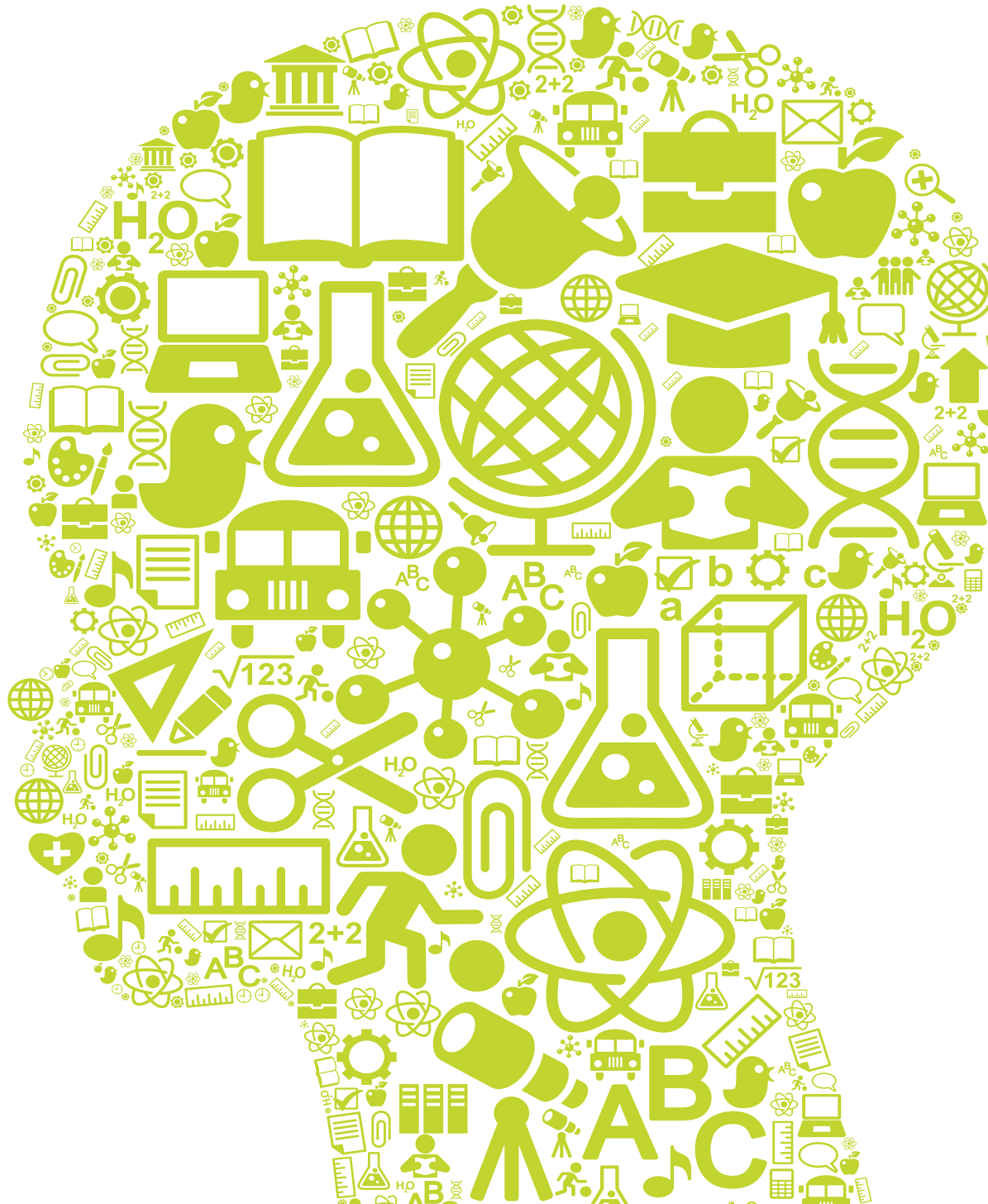
And in their "backyards," individuals can look for opportunities to volunteer, coach, teach, tutor, or mentor in schools; work within their local school districts to bridge the gap between early education and kindergarten; start discussions regarding preschool programs on their elementary school campuses; support and promote awards for early childhood caregivers and teachers; educate parents about early education options and resources; and recruit and encourage friends and colleagues entering the early childhood profession.

Our children are the future of our country and our state. Therefore, it is incumbent upon us to act wisely and with vision on their behalf. To move forward in this way, we must ensure that our children are first healthy and safe, as well as empowered and equipped to thrive in the global economy.

INTRODUCTION

Nadine Basha, Founding Board Member, First Things First

Cheryl Foster, Past President, Arizona Association for the Education
of Young Children



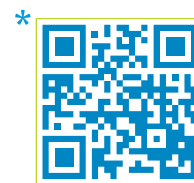
Introduction

The development of human capital is our future and depends on a strong foundation during early childhood. Babies are born learning, and the engagement and experiences provided from birth have a profound impact on a child's success well into adulthood. Parents, grandparents, and early childhood professionals know intuitively what neuroscience advances have now concretely indicated – the early years are a pivotal time of development. The attitudes, approaches, and activities taken by adults with and for young children during this crucial time can make the difference between a strong start and a faltering start.

In this chapter, you will be introduced to the definition and history of early childhood, a chronology of events, public policy, and current trends and directions in the early childhood field.

Early Childhood and Early Childhood Education Defined

Early childhood is a stage in human development, and according to the [National Association for the Education of Young Children](#)^{*}, early childhood spans human life from birth to age 8. The simultaneous development stages include physical growth and development, cognitive growth and development, and social-emotional growth and development. Early childhood education refers to the formal teaching of young children by people outside the family or in settings outside the home, or sometimes by parents and others within the home. “Early Care and Education” is another common term for the programs and services provided for children from the very young to school age. Many of these terms are used interchangeably and may vary from state to state or from program to program. The diversity of settings and delivery systems in early childhood education and the advances in the science of learning create both a complex challenge and a remarkable opportunity.



History of Early Childhood Education

Many theories for educating young children were put forth before the practice actually took place. Martin Luther (1483–1546) encouraged public support for universal education of children in 1524. John Amos Comenius (1592–1628) advocated an educational model that followed various laws of nature and would begin in a child's early years. In his book *Emile*, Jean-Jacques Rousseau (1712–1778) supported using a child's interests to educate him. Rousseau believed that the child engages his environment, using it to suit his interests. He actively solves problems through play and by testing and exploring in order to construct knowledge.

The history of early childhood education shows a movement from private charity to public-sponsored programs in the early 19th century through the 20th century. While Great Britain led the way in private nursery school programs in the 19th century, the first public kindergarten programs were founded in Canada, the United States, and Germany. Friedrich Froebel (1782–1852), a great influence on the kindergarten (“child garden”) movement, set up his first kindergarten in Germany in 1837. Horace Mann (1796–1859) began work for the Massachusetts Board of Education in 1837. He would continue to be a major factor in the public elementary schools in the United States through the common school movement. John Dewey (1859–1952) began studies of how children learn through

life experiences at his laboratory school in Chicago in 1896. Maria Montessori (1870–1952) opened a school based upon the theory that children learn best by themselves in the proper environment in 1907. She theorized that the teacher’s task is not to talk, but to prepare and arrange a series of motives for cultural activity in a special environment made for the child.

Further theories, pioneers, and movements in early childhood education are too numerous to mention here. The more recent history of early childhood education in America is best understood if we begin with two key organizations. The National Association for the Education of Young Children was formed in 1926 with a focus on the improvement and delivery of quality child education programs. Head Start was formed in 1965 as an outcropping of the Department of Health and Human Services. Originally, Head Start was formed to provide assistance to lower-income children, but as the years have progressed, the program has become much more universally involved in supporting and modeling early childhood education programs.

Early Childhood Education Teacher Preparation

A major theme endures throughout the history of early childhood education: Because young children learn differently than older children, their schooling must be different. Thus, their teachers require specialized training. Degree programs for teachers of young children are available at colleges, universities, and community colleges in Arizona and across the United States. In addition, college degrees in early childhood education are now offered online through many hundreds of colleges. The development of early education theory and practices over the years has transformed how we view the education of today’s child. The effective utilization of the most useful teaching tools and proper application of learning theories is setting the course of our children’s futures. When we put the importance of a successful early childhood education into perspective, it becomes apparent that the learning of the past has paved the road to how we now teach our children.

Early Childhood Education and Policy – Awareness Renewed

Although the importance and value of education in the early years of life have been acknowledged for more than 2,000 years, relatively recent factors have brought early childhood education and early childhood policy to the forefront of public awareness. Fundamental changes in the economy, family life, public awareness, and public support have had a profound effect on early childhood education. Changes in family life including the need for dual-income families have brought about a greater need for child care outside the home. These changes also include many complex factors such as a rising cost of living, an increase in single-parent families, an increased number of teenage parents, greater mobility as families move more readily to different parts of the country, and a decrease in the impact of the extended family. The demand for quality preschool programs, for many sectors of the population, has also influenced the current state of early childhood education. But most significant has been the growing understanding that the first years of life are the foundation for success in school and later in life. So, one may ask: Who is responsible for creating quality environments for the care and learning of our children? It may not be enough to have quality home environments when many children are spending their early years away from their homes.

CHILDCARE: AN IMPORTANT PART OF AMERICAN LIFE

Families rely on a patchwork of child care services to meet their work and family needs.

Data from the Survey of Income and Program Participation (SIPP) helps us understand child care usage among families.

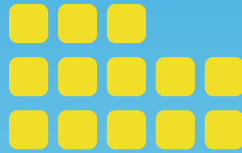
32.7
Million

Children in Care Arrangements

In 2011, 32.7 million children were in a regular child care arrangement while their parents worked or pursued other activities outside of the home.

12.5M

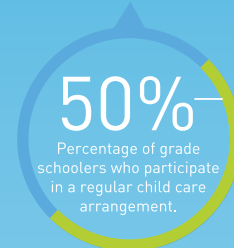
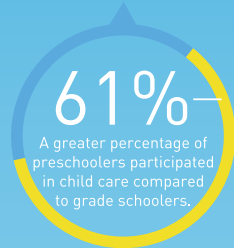
Preschoolers
(ages 0-4)



One block represents approximately one million children in a regular care arrangement.

20.2M

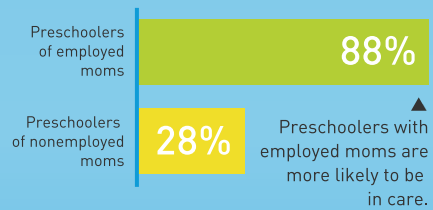
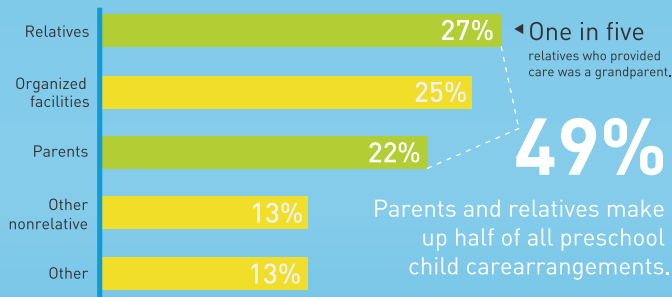
Grade Schoolers
(ages 5-14)



Who's Minding the Kids?

Increases in the number of working mothers and the desire to provide young children with educational opportunities have driven up the demand for various types of child care.

Relatives regularly provide care for preschoolers.



Definitions

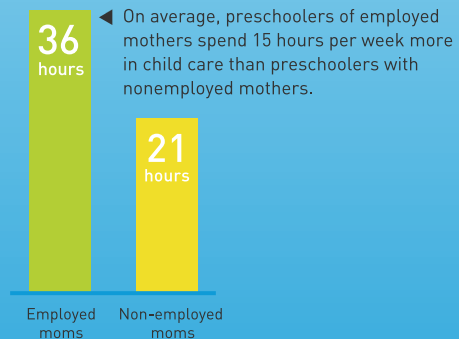
Relatives – grandparents, siblings, and other relatives.

Organized Facilities – day care or child care centers, nursery schools, preschools, and Head Start programs.

Parents – fathers who provided care while the mother worked or mothers who provided care while working.

Other nonrelative – in-home babysitters, neighbors, friends, and family day care homes.

Other – school, self care, and no regular arrangement.



2012 CHILDCARE in the STATE of ARIZONA

How many children under age 6 potentially need child care? ¹	Arizona	United States
Children in two-parent families, both parents in labor force	169,383	8,880,195
Children in single-parent families, parent in the labor force	148,677	6,179,945
Total children under age 6 potentially needing child care	318,060	15,060,140
How many working mothers are there? ¹	Arizona	United States
With infants under one year	48,580	2,654,396
With any children under age 6	198,186	10,255,358
With children under age 6 only	105,644	5,670,755
With both children under age 6 AND children age 6 to 17	92,542	4,584,603
With children under 18		
Married working mothers	295,650	16,622,231
Single working mothers	140,120	6,954,018
How many centers/family child care homes are available? ²	Arizona	United States
Number of centers	2,084	117,000
Percent of centers that are nationally accredited	6%	10%
Number of family child care (FCC) homes	1,200	209,000
Percent of FCC homes that are nationally accredited	1%	1%
Number of other child care programs	310	4,200
Total spaces/slots	224,543	11.7 million
Percent of spaces in centers	1%	83%
Percent of spaces in FCC	3%	16%
Percent of spaces in other programs	1%	1%
What kind of child care is requested? ²	Arizona	United States
Percent of requests for referrals received by CCR&Rs		
For infant/toddler care	46%	51%
For preschool-age care	31%	29%
For school-age care	23%	21%
For full-time care	98%	89%
For part-time care	2%	11%
For before/after school care	11%	10%
For nontraditional hours care	5%	15%
Families receiving referrals from CCR&Rs (annual)	23,096	1.1 million
How expensive is child care? ³	Arizona	United States
Average annual fees for full-time care in a center		
Infant	\$8,946	\$4,591–\$20,178
4-year-old child	\$7,263	\$3,911–\$15,437
School-age child (before/after-school care)	\$6,191	\$1,954–\$10,962
Average annual fees for full-time care in a family child care home		
Infant	\$6,567	\$4,020–\$12,329
4-year-old child	\$6,220	\$3,840–\$9,620
School-age child (before/after-school care)	\$6,186	\$1,788–\$9,506
Compare with:		
Average annual tuition and fees for public four-year college (in-state) ⁴	\$9,428	\$8,244
Affordability (cost of full-time child care as percent of median family income):		
Infant in center, percent of income for Married Couples	13%	7%–16%
Infant in center, percent of income for Single Mothers	35%	26%–80%

¹ Unless otherwise noted, statistics in these sections are from the American Community Survey, U.S. Census Bureau, 2008–2010 three-year estimates factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml.

² Data are provided by the State CCR&R Network and are derived from CCR&R data, or are provided by state licensing offices. National totals are rounded estimates. National number of families receiving referrals is based on 41 states reporting this figure. Percentages of slots by facility type may not total to 100 percent due to varying state definitions of provider types. Number of centers and/or FCC homes includes previous year's figures for Louisiana and West Virginia.

³ Data are provided by the State CCR&R Network and are derived from CCR&R data, or are provided by state licensing offices. National totals are estimates. Some states reported cost of care based on their state's most recent market rate survey. Rates from prior to 2011 are converted to 2011 dollars.

⁴ Average price of 2011–2012 in-state tuition and fees for public four-year colleges by state, from the College Board Annual Survey of Colleges, Trends in College Pricing 2011 (http://trends.collegeboard.org/sites/default/files/College_Pricing_2011.pdf).

Chronology of Early Childhood Policy and Services

The public support for quality early childhood education programs and services has evolved over the past five decades. It is currently in a stage of resurgence due to the needs of our population, scientific research about the importance of the early years, and recent investment data from economists.

These shifts, particularly in the past decade, have brought about a significant sea change in attitudes. Early childhood care and education had previously been viewed as providing a safe place for children to be cared for while parents worked or providing a pre-school experience for social interaction. Today, early learning is regarded as an important component of basic education. This shift has resulted in an increasing focus on factors that influence early learning, such as poverty and demographics. Concomitantly, the field of early childhood education is undergoing a transition to address the expansion and redefinition of the early years as a significant link to formal education.

To bridge the history of early childhood education and policies in the United States and Arizona over the past five decades with the current position and challenges for Arizona, it is helpful to examine a chronology of events and milestones, which can be found in Appendix A. It is also helpful to define poverty. The following links describe how the Census Bureau defines [poverty](#) and [poverty thresholds](#). Additionally, the United States Department of Health and Human Services looks at poverty in its [poverty guidelines](#) in this manner.

2012 Poverty Guidelines

48 CONTIGUOUS STATES AND THE DISTRICT OF COLUMBIA

ALASKA

HAWAII

Household Size	Poverty Guideline	Household Size	Poverty Guideline	Household Size	Poverty Guideline
1	\$11,170	1	\$13,970	1	\$12,860
2	\$15,130	2	\$18,920	2	\$17,410
3	\$19,090	3	\$23,870	3	\$21,960
4	\$23,050	4	\$28,820	4	\$26,510
5	\$27,010	5	\$33,770	5	\$31,060
6	\$30,970	6	\$38,720	6	\$35,610
7	\$34,930	7	\$43,670	7	\$40,160
8	\$38,890	8	\$48,620	8	\$44,710
each additional person, add \$3,960		each additional person, add \$4,950		each additional person, add \$4,550	

Note: These poverty guideline figures are NOT the figures the Census Bureau uses to calculate the number of poor persons. The figures that the Census Bureau uses are the poverty thresholds.

Source: U.S. Department of Health & Human Services. hhs.gov

Source: *Federal Register*, Vol. 77, No. 17, January 26, 2012, pp. 4034–4035. aspe.hhs.gov/poverty/12poverty.shtml

Current Issues and Trends

The Growing Gap in School Readiness

All parents may want to provide their child with the best chance to succeed in school and later in life. Parents tend to want to provide their children with the high-quality early learning experiences that make a profound difference in their readiness for kindergarten. However, in the United States, and particularly in Arizona, the opportunity to access these high-quality programs, if desired outside the home, is largely dependent on income.

Today, income has become the most significant predictor of success and the most significant difference factor in the achievement gap. Over the past three decades, test scores of children from higher-income families have increased very rapidly. Before 1980, middle class students demonstrated parity with higher-income students, with the greatest disparity being between the middle class and the poor. Now, the greatest disparity is the widening gap between the middle and upper class, which is as significant as the difference between the middle class and the poor. The temptation is to blame the decline in test scores and schools, when in reality, the National Assessment of Educational Programs (NAEP) has found the national average score for math has increased significantly and the average score for reading is slowly rising. Despite this rise, there is still a significant gap in school readiness test scores between poorer children and their more affluent peers.

Economists have found that affluent families increasingly spend more on enrichment activities for their children, as well as spending more time with their children. The result of these economic factors is a growing achievement gap for lower and middle class children.

Arizona is at the epicenter of change, with rapid growth in the population of young children 0–5 and with a greater diversity in this population than in the rest of the country. Arizona also has a much larger share of its young children growing up in poverty. A recent assessment conducted by First Things First and St. Luke’s Health Initiative found that in Arizona, “... young children are much more diverse than the country as a whole and live in families with fewer resources and lower educational backgrounds.” Without opportunities for this population of children, the result of these demographics will be an increasingly widening gap in school readiness for young children in the years ahead.

Shifts in Early Childhood Education

Early childhood learning is increasingly viewed as the most important predictor of later success in school. The result has been a shift from what was previously custodial care to a more systematic approach to learning. Today, the focus is on learning standards, accountability systems, alignment [“the degree to which standards, assessments, and other important elements of an education system are complementary and work together to effectively guide student learning” (Webb, 1997)] of Pre K to grade 3, and a greater emphasis on early literacy. As a result of this change, new partnerships and greater collaboration are occurring, for example, between First Things First and the Arizona Department of Education around early learning.



Early Learning Standards

Early learning standards describe desired results, outcomes, or learning expectations for children below the age of 5. Head Start has developed the Head Start Child Outcomes Framework identifying learning expectations in eight domains.

Arizona has adopted a set of [Early Learning Standards](#), as well as moving toward the [Common Core Standards](#) that are currently being implemented across the country.

Accountability Systems

In 2009, Arizona's First Things First launched a Quality Improvement and Rating System called [Quality First](#), which provides a systematic approach to learning as well as information for parents regarding the quality of early learning settings through a star rating system. There are 31 states in the country that have undertaken a similar effort.

Quality First partners with child care and preschool providers to improve the quality of early learning across Arizona.

Quality First funds quality improvements that research proves help children thrive. And through its website, Quality First offers parents information about the importance of quality early care and education and what to look for in child care and preschool settings that promote learning (AZFTF, 2013).

Assessment is an integral part of the system and uses two tools. The first, the Classroom Assessment Scoring System™ (CLASS™), is an observational instrument that assesses interaction between children and teachers in three broad areas: emotional support, classroom organization, and instructional support. The result of this focus is to create more intentional teaching than in the past in the early childhood classroom.

CLASS™ is an observational instrument developed at the [Curry School Center for Advanced Study of Teaching and Learning](#) to assess classroom quality in PK–12 classrooms. It describes multiple dimensions of teaching that are linked to student achievement and development and has been validated in more than 2,000 classrooms. The CLASS™ can be used to reliably assess classroom quality for research and program evaluation and also provides a tool to help new and experienced teachers become more effective (CASTL, 2013).

The second tool is a set of environment rating scales that assess the quality of components of early learning environments such as health and safety, building positive relationships, and opportunities for stimulation and learning from experience.

A new assessment tool, The Kindergarten Developmental Inventory (KDI) (currently in development) is a collaboration between First Things First, the Virginia G. Piper Charitable Trust, and the Arizona Department of Education. The purpose of the inventory tool is to understand a child’s social and emotional development, physical development, approaches to learning, language development, and cognitive development upon entering kindergarten. This tool is aligned with the [Arizona Early Learning Standards*](#) and [Arizona’s Common Core Standards](#) for kindergarten.



Alignment of Pre K to Grade 3

There has been an increasing interest in the expansion and involvement of public, private, charter, and parochial schools across the United States and in Arizona in the education of 3 and 4-year-olds. Many educators view the education of young children, ages 3 to 8, to be the cornerstone of successful education. This trend is the least developed in the field, but one that is coming to the forefront. It supports the importance of shared responsibility and accountability in order to achieve positive outcomes for children.

Including young children in elementary schools requires a major shift in policy and practice in integrating Pre K–3rd grade education. Typically, Pre K and elementary teachers exist in isolation from one another, work in different buildings, and have different accountability structures and different preparation for working with children.

The challenge is to strengthen teaching and learning by connecting the dots from one early childhood year to the next and from Pre K–3 to later schooling. The caution of the inclusion of younger children in the public school system is the temptation to begin to push academic work or inappropriate assessments down into the early years.

The use of developmentally appropriate practice at all levels of education will assist all who work with children to meet those children where they are.

Developmentally appropriate practice, often shortened to DAP, is an approach to teaching grounded in the research on how young children develop and learn and in what is known about effective early education. Its framework is designed to promote young children’s optimal learning and development.



DAP involves teachers meeting young children where they are (by stage of development), both as individuals and as part of a group; and helping each child meet challenging and achievable learning goals (NAEYC, 2013, para. 1–2).

Developmental appropriateness honors the developmental needs of children. It calls for high expectations without the need to escalate curricula or expectations beyond the limits of the child. Likewise, it calls for meeting the needs of all children, the precocious as well as those who may be delayed in their development.

Alignment of Pre K to K–3 involves tender transition points for children and their families. Although interface does occur, more communication between preschool and K–3 teachers and venues may be desirable as more and more children enter preschool before formal schooling begins.

Early Language and Literacy

Early language and literacy does not mean early reading. Rather, it involves the interactions that young children have with books, paper, crayons, and most importantly, the adults in their lives who model language and help to build vocabulary. Young children’s development does not occur in isolation and is strongly interconnected. As a result, literacy is dependent on early learning in a wide range of domains including cognitive, social, emotional, physical, and language development. Children gain significant knowledge of language, reading, and writing long before they enter school; these early experiences can be indicators of future success. Children who come from low-income households are less likely to hear the breadth of vocabulary that children of middle and professional class families hear. This immense word gap that can exist by age 3 results in poorer school performance by the age of 9.

For many early childhood experts, the push for early reading is a “red flag” and potentially symptomatic of pushing a K–3 curriculum downward, ignoring how young children learn.

In Arizona, children’s ability to read at grade level has just achieved a new, high-stakes position. Move On When Reading is a law instituted by the Arizona State Legislature that requires all children in 3rd grade to be reading at that level. Children who are not will be retained beginning in the 2013–2014 school year. Implementation of this law projects retention for many students, adding an extra year in school for them and adding millions of dollars to the cost of schooling each year for Arizona’s children.

Summary

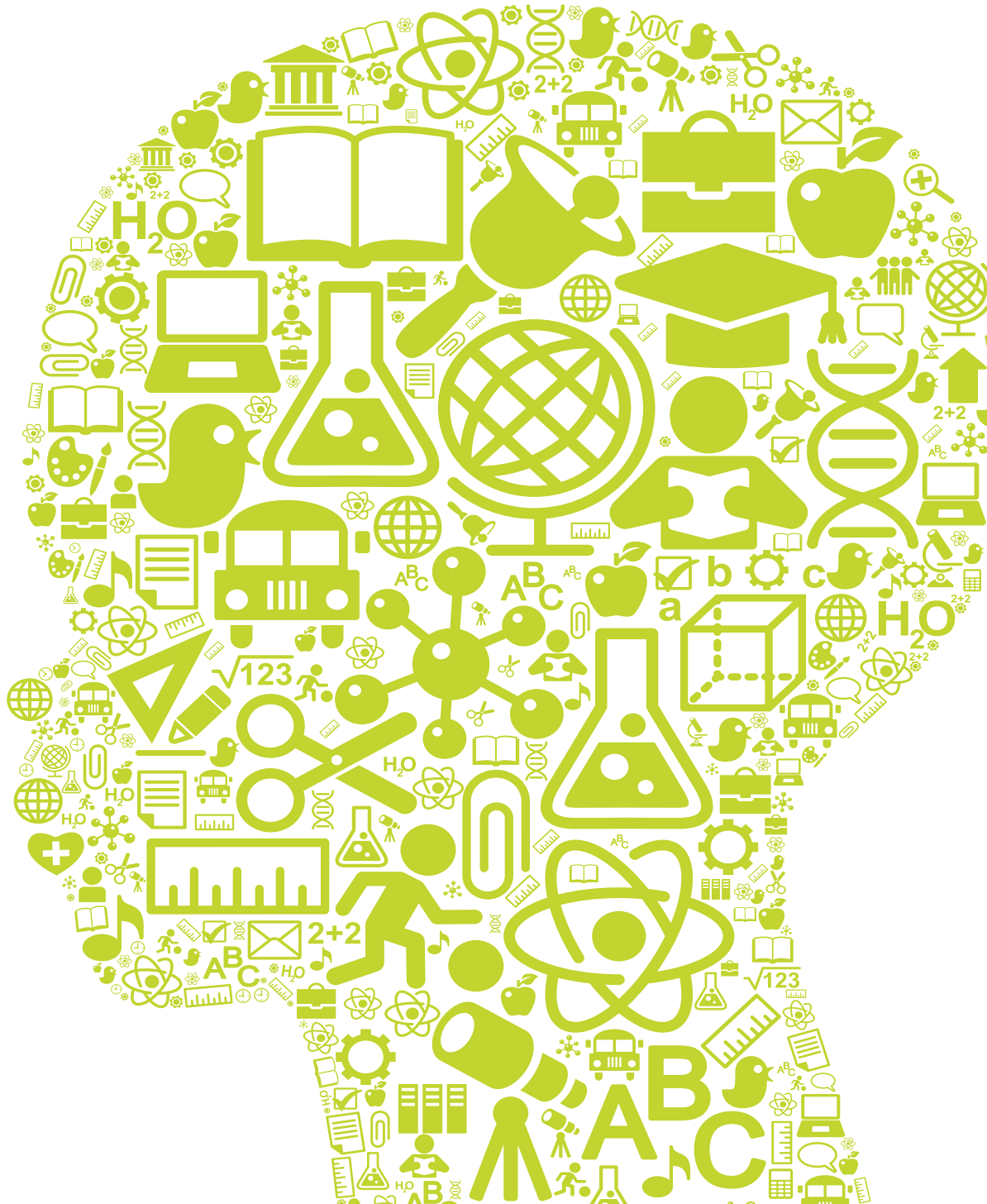
Although the study of early childhood has historical roots dating back to the 19th century and beyond, the importance of development in the early years has only recently come to the forefront. Based on advances in brain development theory, rising expectations of our children in the primary grades (K–3), and the advent of more children in child care out of their homes, the quality of environments for children, assessment of their needs and assets, and the shifting trends in the field impact many more children than ever before.

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THE STATUS OF EARLY CHILDHOOD IN ARIZONA

Rhian Evans Allvin, Executive Director, National Association for the Education of Young Children (NAEYC), Former Chief Executive Officer, First Things First



Introduction

Nearly 100,000 children started their academic careers this summer when they walked into their first day of kindergarten. They entered an Arizona school system of increased standards and higher stakes – including that they be able to read at grade level by the end of 3rd grade or risk being held back. Some children began this much-anticipated day ready to meet the new rigor that awaited them; sadly, many did not.

The good news is, we have the opportunity to change that scenario for future generations of kindergarteners. More than a decade of scientific research has allowed us to see inside the developing brain and tells us with certainty what works to help children arrive at school prepared to succeed. Numerous studies demonstrate that early experiences lay the foundation for success in school and in life. For example, if children are exposed to rich language and books starting at birth, they are more likely to become proficient readers. If pregnant women get prenatal care, and infants, toddlers, and preschoolers have consistent well-child visits and early developmental screening, they have a far better chance of walking into school without health or learning problems that could hinder their success. Parents who understand the importance of early childhood and who feel supported in making the best decisions for their children are more likely to feel empowered in their role as their child's first teacher. And, finally, for children who spend their days learning in an out-of-home setting (child care or preschool), we know that quality is extremely important in early care environments. Early learning settings rich in interaction, conversation, and inquisition will stimulate the positive brain development necessary to meet our state's high standards and expectations, such as the [Arizona Common Core Standards](#)*.



This chapter details some of the major milestones in the creation of Arizona's early childhood system. It also provides an update on the implementation of one of those major milestones – the voters' creation of [First Things First](#). In addition, it describes some of the collaborations and partnerships across the state that are helping to build, nurture, and maintain a quality early childhood system.

Arizonans Show Commitment to Young Kids

Historically, Arizona's early childhood system has been fragmented, with little coordination among agencies and funding streams. As part of Arizona's bold early childhood reform agenda, over the last decade, the state has made substantial progress in building a unified early childhood system. In early 2001, the Smart Beginnings project engaged a community-based steering committee to plan a coordinated, public/private family support system ([Children's Action Alliance](#) & [Southwest Human Development](#), 2001). The following year, a Governor's Executive Order created the State Board on School Readiness to reduce duplication and fragmentation, leverage public and private investments, and advise the governor and legislature on ways to ensure children with high needs start school ready to succeed. The School Readiness Board developed a five-year action plan ([Arizona State Board on School Readiness, Governor's Office for Children, Youth and Families](#), 2004) laying out the vision for a well-funded, collaborative statewide system for early childhood education and health.

One of the most significant milestones to date was achieved not by government, but by the citizens of Arizona themselves. In 2006, citizens, educators, and advocates banded together to create an

early childhood ballot initiative whose overall guiding principle would be to balance statewide accountability and system development with local flexibility and innovation. The initiative had three primary objectives:

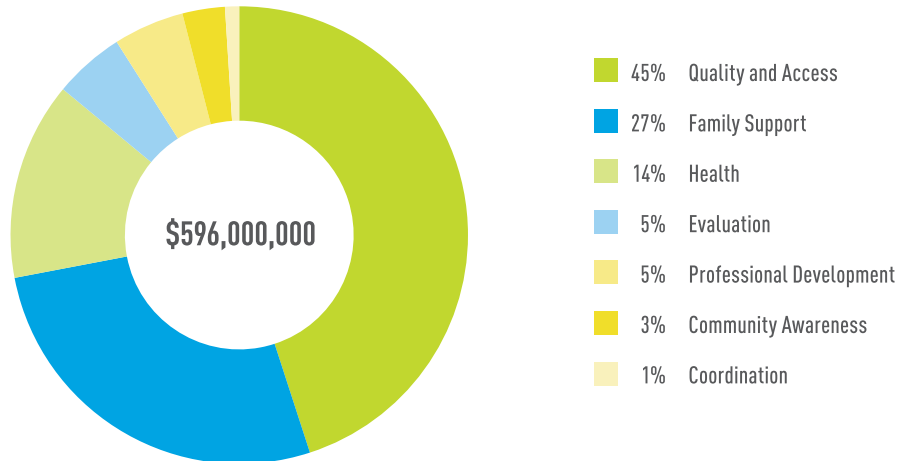


- **Create a dedicated revenue stream:** A tobacco tax generates approximately \$130 million annually. Ninety percent of the funds are deposited in a program account to be used for programs that benefit the education and health of kids from birth to 5 years old (9 percent on statewide initiatives; 81 percent on regional priorities). No more than 10 percent of revenue collected can go into the administrative account.
- **Establish a governance structure:** A 12-member statewide Board has ultimate responsibility for ensuring the early childhood funds achieve the improved outcomes for young kids intended by Arizona voters. The Board includes nine gubernatorial appointees in staggered six-year terms, representing various areas of the state and varied political parties. The remaining three members are ex-officio, non-voting members and include the State Superintendent of Public Instruction, the Director of the Department of Economic Security, and the Director of the Department of Health Services.
- **Establish a delivery mechanism:** The state Board has the authority to create local regional councils. Federally recognized tribes can create their own regional council or partner with an existing council (19 of the 22 tribes in Arizona participate in First Things First). There are 31 councils total statewide, 10 of which are tribal. Each regional council has 11 members representing various early childhood stakeholders, including parents, educators, health professionals, business, philanthropy, and the faith community. The regional councils submit annual funding plans for Board approval that reflect the needs of kids ages 5 and younger and the spending priorities of their area. The regional councils historically have invested in statewide programs (e.g., the Child Care Quality Improvement and Rating System, home visitation, etc.) as well as local initiatives (e.g., Native language enrichment, family resource centers, etc.).

The funds generated by the initiative must be spent in the following areas:

- Improving the quality of early childhood development and health programs;
- Increasing access to quality early childhood development and health programs;
- Increasing access to preventive health care and health screenings for children through age 5;
- Offering parent and family support and education concerning early child development and literacy;
- Providing professional development and training for early childhood development and health providers; and/or,
- Increasing coordination of early childhood development and health programs and public information about the importance of early childhood development and health.

Fig 1 Total Commitment to Young Kids
SFY 2009–2014 \$596 Million



First Things First, in six short years, has made progress in building a system of early childhood health and development. Figure 1 shows the total amount of funds spent in each of the core funding areas since First Things First began. Those investments have made a difference for tens of thousands of children statewide. Some examples from SFY2013 include:

Supporting Families in Their Role as Their Child’s First Teacher

- 73,833 parent kits were distributed.
- 6,795 Arizona families enjoyed stronger, more supportive parent-child relationships through home visitation.
- 62,865 caregivers attended voluntary classes in community-based settings on topics such as parenting skills, child development, literacy, and nutrition.
- 75,652 families accessed early childhood information, training, or referrals through Family Resource Centers.

Improving the Quality of and Access to Early Education

- 14,121 infants, toddlers, and preschoolers received scholarships to access early education programs.
- 46,228 children have access to a higher standard of child care through Quality First.
- 696 teachers received scholarships to expand their skills working with infants, toddlers, and preschoolers.
- 1,692 stipends were given to reward longevity and continuous learning and keep the most experienced teachers working with our youngest kids.

Preventing Learning Challenges Later on Through Health and Developmental Screenings

- 37,833 oral health screenings were administered to children statewide.
- 35,599 fluoride varnishes were applied to protect against dental decay.
- 16,367 screenings were completed to detect vision, hearing, and developmental issues in young kids.
- 5,352 children benefited from trainings for child care providers to help them meet the social-emotional needs of kids in their care.

First Things First also shows its continued commitment to partnering with the state to improve educational opportunities for young kids through a Memorandum of Understanding (MOU) with the Department of Economic Security (DES) that allows DES to count First Things First spending in early childhood as the state's match for federal Child Care and Development Funds. As a result of this agreement, it is estimated that the state will be able to claim \$57.5 million in federal child care assistance during federal fiscal year 2014. This is in addition to the more than \$120 million in federal child care assistance the state has been able to claim through prior years of the agreement.

Building An Early Childhood System

In 2010, First Things First convened stakeholders from across Arizona to design a vision for the model early childhood system. The intent was to envision and articulate a system of early childhood supports that encompassed various agencies and community partners to promote school readiness and improve outcomes for young kids. In this system, First Things First acts in a variety of roles, including convener, policymaker, advocate, and funder of specific early childhood programs. Additional information on the model early childhood system can be found in [*Ready for School. Set for Life: Creating the Model Early Childhood System*](#)* (First Things First, 2010).



The Arizona Department of Health Services (DHS), Arizona Department of Economic Security (DES), Arizona Department of Education (ADE), and Arizona Health Cost Containment System (AHCCS) play a large role in ensuring young children are afforded every opportunity to be successful. Much of the state funding for these pieces of the system has been drastically cut or completely eliminated. This fragile infrastructure is supported primarily by federal funds, including, but not limited to: the Child Care and Development Fund, which provides access to child care to low-income working families; Head Start, which provides access to preschool for children in low-income families; Medicaid, which provides access to health care to many young children, as well as services to children with developmental disabilities; Women, Infants and Children (WIC) and the Supplemental Nutrition Assistance Program (formerly known as food stamps), which help families with children access food; and Temporary Assistance to Needy Families (TANF), which provides financial assistance to the neediest families and also funds many services and supports for abused or neglected children.

Although resources are critically important, creating the building blocks of early learning goes beyond programs, services, and financing. There are system developments that are equally important to improving outcomes for children and families. Such developments include:

■ **Early learning standards:** The Arizona State Board of Education adopted the [Arizona Early Learning Standards](#) in 2005 to provide a framework for the planning of quality learning experiences for children ages 3 to 5. With these standards, Arizona has a comprehensive early learning framework in all essential domains of school readiness that is developmentally, culturally, and linguistically appropriate for planning high-quality early learning experiences. The standards are aligned with Arizona’s academic standards for kindergarten and Head Start standards, and will be further aligned with English language arts and math Common Core State Standards in kindergarten. [Arizona’s Infant and Toddler Developmental Guidelines*](#) are also available and aligned to the early learning standards and Quality First – Arizona’s quality improvement and rating scale for early learning.



■ **Quality improvement and rating:** Research demonstrates that children exposed to high-quality early learning experiences are more prepared for kindergarten, do better in school, and are more likely to graduate and go on to college. Quality First, Arizona’s early childhood quality improvement and rating system, uses two validated classroom and program assessment tools, the Early Childhood Environmental Rating Scale (ECERS) and Classroom Assessment Scoring System™ (CLASS™) to determine where child care programs are ranked on a five-star scale. The program includes a variety of supports to help child care providers improve the quality of their early learning programs in areas proven to help young children thrive. Currently, there are more than 850 center- and home-based child care providers participating in Quality First, with funding available to expand to 1,000 providers statewide. In August 2013, First Things First launched [QualityFirstAZ.com](#) – a website that gives parents and providers information about the importance of early learning and its components. The website also includes tools parents can use when making child care decisions, including a checklist and a searchable database of providers participating in Quality First.

■ **Health promotion practices:** National organizations, including the [Center for Law and Social Policy](#) and the [National Center for Children in Poverty](#), have recognized Arizona for its progressive models of health promotion, including care coordination models, commitment to infant/toddler mental health, and movement toward a more comprehensive medical home model. Children with undetected developmental delays and untreated childhood illnesses are at risk for learning challenges later on. For example, dental issues caused by untreated tooth decay can lead to speech impediments and increased school absences. Overweight or obese preschoolers are more likely to miss class or repeat a grade later on. And children with undetected developmental delays are more likely to need special education services when they reach kindergarten. First Things First funds a variety of programs to improve health outcomes for young kids. Child care health consultants and mental health consultants provide technical assistance to child care staff, providing information and guidance on the health, safety, and social-emotional development of the children in their care. In FY2013, child care health consultants and mental health consultants provided assistance to 796 and 368 providers statewide, respectively. In addition, First Things First funds efforts to improve oral health, detect health or developmental challenges, and prevent obesity in young kids; in FY2014, funding for those programs totals almost \$7 million.



Early childhood stakeholders are continuously looking to increase collaboration and find innovative approaches to challenges facing young children, including dental disease. For example, given that children in tribal communities are at greater risk for oral health issues, the Arizona American Indian Oral Health Initiative held its first Summit in 2011, bringing together tribes, service providers, and policymakers from around the state to address this problem.

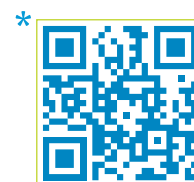
Arizona is part of the prestigious Irving B. Harris infant mental health professional development network, and home to one of only 17 intensive Harris training programs for mental health clinicians and other professionals working with young children. Finally, the Arizona High Risk Perinatal Program has received national acclaim for having contributed to an infant mortality rate that is lower than the national average (St. Luke's Health Initiatives, 2011). Throughout this work, Arizona is connecting the health system to the early learning system through initiatives including Reach Out and Read, which engages pediatricians' offices in early literacy efforts and provided 240,000 books to more than 124,000 children from birth to age 5 in FY2011.

- **Family engagement strategies:** Strong families are the cornerstone of strong communities. Arizona offers a continuum of services – across state agencies and in partnership with hundreds of community-based organizations – that provides culturally relevant and inclusive family support, from community-based family support centers to intensive home visiting. These programs stress the importance of early education and health, teach parenting skills such as positive guidance strategies, and promote early literacy skills by teaching parents evidence-based family literacy strategies designed to strengthen young children's language and literacy acquisition. On tribal lands, Native language enrichment programs help families preserve heritage and culture for their children. For example, First Things First funds a backpack for new parents on the Navajo reservation, which includes books in the Dine language, a CD of Dine lullabies, and a tribal resource guide. In addition, the First Things First White Mountain Apache Regional Partnership Council funded a Fathers Project to develop a pilot intervention for fathers with young children.

Arizona also has a robust and highly regarded home visitation system, which includes evidence-based programs like Healthy Families, Nurse Family Partnership, Parents as Teachers, and Early Head Start, among others. In FY2013, First Things First, state, and federal funding provided more than \$38 million for Arizona’s network of home visitation programs. This includes funding from the Arizona Department of Health Services, which in September 2011, was awarded a \$36 million home visitation grant from the Maternal, Infant, and Early Childhood Home Visiting (MIECHV) Program to develop a systematic approach for planning, funding, and collaborating to provide accessible, high-quality home visiting services. This grant is helping to build a high-quality statewide system, as designed by the Arizona Home Visiting Task Force in their recent five-year action plan.

- **Development of early childhood educators:** To ensure an integrated, statewide approach, [BUILD](#) (a public/private collaborative) is leading a cross-system effort to develop a comprehensive and well-articulated professional development system for Arizona’s early childhood professionals. This system will ensure that more early care and education professionals have access to education and training to achieve degrees, credentials, and specialized skills to promote children’s cognitive, social, emotional, and physical development. Current efforts are underway to increase access to early childhood certificates and degrees, and retain these highly trained professionals in the field. T.E.A.C.H. Early Childhood Arizona is a scholarship program, funded through First Things First, that gives staff in child care centers and homes access to higher education coursework and supports the cost of tuition and books, as well as a travel stipend and time off from work to attend classes. Through FY2013, more than 2,000 scholarships have been awarded to teachers and caregivers statewide. T.E.A.C.H. Arizona also is committed to statewide access, investing the highest percentage of funding on direct scholarship costs of any T.E.A.C.H. state in 2011, and is the only state to concentrate efforts on removing barriers to participation for tribal communities (T.E.A.C.H, 2010). The Professional REWARD\$ program, funded by First Things First, promotes retention of high-quality early care and education professionals by providing financial awards based on educational achievement, wages earned, and hours worked per week. Through FY2013, 4,907 stipends have been awarded to REWARD\$ participants. Both programs require a commitment from staff to continue working in their current program to promote workforce stability and continuity of care for children.

- **Assessment:** As mentioned earlier, the [Arizona Department of Education](#)*, First Things First, and the [Virginia G. Piper Charitable Trust](#) are spearheading an effort to establish and implement a statewide kindergarten developmental inventory (KDI), which is expected to be piloted in the 2014–2015 school year. Voluntary for local school districts, the KDI will be developed with the following purpose:



To provide a kindergarten developmental inventory tool that allows parents, teachers and administrators to understand the extent of a child’s learning and development at the beginning of kindergarten to provide instruction that will lead to the child’s academic success. The tool that is developed or adopted will align with the Arizona Early Learning Standards and Arizona’s Common Core Standards for kindergarten, cover all essential domains of school readiness (physical and motor development, social and emotional development, approaches to learning, language development and cognitive development) and will be reliable and valid for its intended use (AZ First Things First, 2013).

- **Effective data practices:** Since its inception in 2006, First Things First has had the luxury of building data systems from the ground up – not being hampered by decades of legacy systems. To date, First Things First has invested \$7 million in building a comprehensive data warehouse system that facilitates grant management, finance and accounting, and the storage and use of Quality First participation and rating data. Additionally, First Things First has invested more than \$16.7 million in comprehensive research and evaluation on studies including a statewide, longitudinal external evaluation, a child care demand and capacity study, a child care compensation and credentials survey, an early care workforce study, and regular statewide and regional needs and assets assessments. Arizona’s Statewide Longitudinal Data System (SLDS) houses a small amount of early childhood data (those data associated with ADE’s targeted preschool programming) and data on children from kindergarten through high school graduation, with links to higher education data systems. The next step is to align data on children starting in preschool.

Measuring Success

After a year of extensive, statewide stakeholder input, including a formal tribal consultation, the First Things First Board in August 2011 approved 10 school readiness indicators. In August 2012, the First Things First Board established benchmarks in an effort to measure progress over time on the 10 school readiness indicators.

- 1 (number and percent of) children demonstrating school readiness at kindergarten entry in the development domains of social-emotional, language and literacy, cognitive, and motor and physical.
- 2 (number and percent of) children enrolled in an early care and education program with a Quality First rating of 3–5 stars.
- 3 (number and percent of) children with special needs/rights enrolled in an inclusive early care and education program with a Quality First rating of 3–5 stars.
- 4 (number and percent of) families that spend no more than 10 percent of the regional median family income on quality care and education with a Quality First rating of 3–5 stars.
- 5 (percent of) children with newly identified developmental delays during the kindergarten year.
- 6 (number and percent of) children entering kindergarten who are exiting preschool special education to regular education.
- 7 (number and percent of) children ages 2–4 at a healthy weight (Body Mass Index – BMI).
- 8 (number and percent of) children receiving at least six well-child visits within the first 15 months of life.
- 9 (number and percent of) children age 5 with untreated tooth decay.
- 10 (percent of) families who report they feel competent and confident about their ability to support their child’s safety, health, and wellbeing.



Public/Private Partnerships

Arizona's philanthropic community is deeply committed to investing substantially in early childhood development. Major philanthropic foundations that have made early childhood a priority include: the Virginia G. Piper Charitable Trust, which has invested more than \$36 million in support of early childhood health and education since its inception in 2000; the [Helios Education Foundation](#), which to date has invested more than \$10.4 million in early childhood projects in Arizona; the [Arizona Community Foundation](#), which has supported early childhood efforts totaling almost \$3.5 million; and the [Nina Mason Pulliam Charitable Trust](#), whose contribution to efforts benefiting children from birth to age 5 has totaled approximately \$4 million since 1998.

A collaboration of early childhood funders was brought together in 2005 as part of Governor Janet Napolitano's School Readiness Action Plan to build local capacity, raise private funds, galvanize the business community, and build an early education infrastructure. In recognition of this successful partnership between the Governor's office and Arizona's philanthropic community, Arizona was one of 11 states profiled in a 2008 report by the [National Governor's Association Center for Best Practices](#) on successful early childhood public/private partnerships (NGA Center for Best Practices, 2008).

The newest [Educare](#) site (there are 14 currently in operation nationally) opened in Phoenix in 2011. Educare focuses on closing the achievement gap for children with high needs in at-risk communities. Each Educare program combines private funding, which supports the capital campaign, with federal Head Start dollars to fund program operations. More than 40 foundations, corporations, and private donors, all supportive of Educare's mission to serve as a platform for change, supported Educare Arizona's \$10 million capital campaign. The [United Way of Tucson and Southern Arizona](#) was critical to an early pilot, funded by local philanthropic dollars and federal dollars, of what is now Quality First, the statewide, publicly-funded quality improvement and rating system.

Arizona foundations are also committed to system-building efforts at both the state and national levels. Arizona is a member of the BUILD Initiative, which is a national movement of state-based foundations committed to comprehensive early childhood development system building. BUILD helps participating states coordinate and integrate early childhood policies, programs, and services, and requires substantial financial commitment from foundations in participating states.

In 1995, the [National Board for Professional Teaching Standards](#)* adopted standards for accomplished early childhood educators. Since 1996, the National Board has been recognizing accomplished teachers throughout the United States in the area of early childhood. Today, Arizona has 192 board-certified teachers in early childhood education. This number represents approximately 20 percent of Arizona’s National Board Certified Teachers. In 2012, the [Rodel Foundation of Arizona](#) added a new early childhood category to its Rodel Exemplary Teacher Awards. This was an important milestone in recognizing the value of early childhood professionals in the P–20 continuum.



Most recently, many philanthropic organizations have invested in [Read on Arizona](#), which is a statewide, public/private partnership of agencies, philanthropic organizations, and community stakeholders committed to determining the gaps, identifying solutions, and implementing a collaborative early literacy approach to create an effective, systematic continuum of supports to improve language and literacy outcomes for Arizona’s children ages birth to 8 years old. Recently, Read On Arizona has developed a [strategic literacy plan](#) for the state.

Recent Developments

With a recovering economy and a growing chorus of Arizonans understanding and embracing the value of high-quality early learning experiences, there is reason to be optimistic about the state’s future potential. While the passage of First Things First was a watershed moment in the early childhood movement, it is widely recognized that there need to be many voices and enhanced public support in order to ensure every young child in Arizona starts kindergarten ready to succeed. In that vein, the 2013 legislative session marked a new beginning when both the Arizona State Senate and House of Representatives supported the Governor’s proposal to include \$9 million in child care support in the FY2014 budget to ensure that low-income working families did not lose access to child care as DES tries to deal with an increasing number of kids in foster care who need child care.

Summary

The whole child – his cognitive, social-emotional, physical, and other abilities – develops at a skyrocketing pace during the crucial early years. This time of life lays the foundation for future learning, health, and success. Young children have many champions throughout the state, and significant progress has been made over the past decade in building an efficient and effective early childhood system in Arizona. Now, there are exciting opportunities to leverage the early childhood resources established by voters through First Things First, as well as those of other early childhood system partners, to build public/private partnerships that further enhance or expand programs that help children arrive at kindergarten prepared to be successful. These solutions must be implemented in ways that meet families where they are and give caregivers choices when it comes to the education and wellbeing of their children. These early childhood efforts also must engage the entire community – parents, providers, educators, businesses, philanthropy, and policymakers – as partners in helping young children achieve their full potential. Every facet of our state has the opportunity and the responsibility to be part of efforts to ensure school readiness for all Arizona children, because everyone benefits when kids arrive at kindergarten prepared to be successful.

Introduction

Most people would agree that it is important for children to learn to read and write as well as to count, add and subtract, and so on. Much emphasis is given to these goals in the early years of schooling, and rightly so. At the same time, we need to keep in mind that young children are thinking, feeling, moving, exploring, interacting human beings. Their physical, cognitive, social, and emotional development and learning are *all* vital. Moreover, these domains (physical, cognitive, social, and emotional development) are closely interrelated. How children develop in one domain affects how they develop and learn in the other domains. So even in our efforts to help them attain academic goals in math, literacy, and other curriculum areas, we will be far more successful if we keep in mind the whole child.

Considering children as whole, multifaceted people and meeting each child where he or she is – this approach is key to enabling children to gain new understanding and skills and to sustain their eagerness for learning. Moreover, this whole-child, developmental approach is critical to helping children achieve long-term life success rather than short-term, narrowly targeted achievement.

This chapter assists the reader in understanding multiple terms in the early childhood field. It lists key principles and demonstrates the meaning of the “whole” child by discussing multiple “domains” in regard to a child’s development.

Key Principles of Child Development and Learning

The National Association for the Education of Young Children (NAEYC), in its position statement on developmentally appropriate practice, identifies 12 principles of learning and development that are grounded in research. These generalizations about development and learning are confirmed in extensive syntheses of the knowledge base (for example, Bransford, Brown, & Cocking, 2000; Shonkoff & Phillips, 2000; Bowman, Donovan, & Burns, 2001). We will highlight several of these principles here.

As noted above, one key principle is that all the developmental domains – physical, cognitive, social, and emotional – are important and interrelated (NAEYC, 2009). For example, a child’s social skills and self-concept affect how much she talks with others, and this, in turn, influences her language and cognitive development.

Another core principle is that development and learning proceed at rates varying from child to child, as well as at uneven rates across different areas of an individual child’s functioning (NAEYC, 2009). Because of the marked individual differences among children, education cannot employ a one-size-fits-all approach and succeed. We can take into account children’s varying strengths and the areas where they need more support and stimulation.

A third major theme in the NAEYC position statement and throughout the literature is the importance of relationships in children’s lives and development. Children learn and develop best when they have secure, consistent relationships with responsive adults and opportunities for positive relationships with peers (Shonkoff & Phillips, 2000; Bowman, Donovan, & Burns, 2001; NAEYC, 2009). Specifics about the role of social and emotional development appear in the section on “Characteristics of High-Quality Learning Environments.”



Making Developmentally Appropriate Teaching Decisions

While the term “developmentally appropriate practice” is used pervasively in early childhood education, it is sometimes misunderstood to mean that we should keep children’s experiences easy and unchallenging. This is not the case; experiences are developmentally appropriate when children are challenged to achieve at a level just beyond their current mastery, providing a stretch for the child, though not an impossible one. Providing children with learning goals and experiences that are both challenging and achievable is the essence of developmentally appropriate practice. In their efforts to determine what experiences are developmentally appropriate for the children they are working with, teachers need to consider the following three questions.

What Does Age Appropriate Mean?

Knowledge about child development helps teachers understand, in general terms, what the children in an age group will be like and what will benefit them. This knowledge enables them to make some preliminary decisions for the children and be confident that their plans will be an appropriate starting point for that group. Age matters – it gets us started in gauging what approaches and experiences will be most effective for children in a particular age range. Yet, each individual and group is different, which brings us to the second question.

What is Individually Appropriate?

To be effective, teachers must get to know the individual children in a group and observe them closely. From those observations, teachers can make more specific plans and adjustments to accommodate children’s varying rates of development and learning within and across various domains. In addition to their developmental differences, children also vary in many other respects – their likes and dislikes, interests, personalities and learning styles, and knowledge and skills. Responding to each child’s individual needs and abilities is fundamental to developmentally appropriate practice and certainly applies to children with special learning needs as well as to children who do not have special needs. Good teaching can never be the same for all.

What is Appropriate to the Social and Cultural Contexts in Which the Children Live?

Considering all of the children’s social, linguistic, and cultural experiences is part of planning the daily environment and curriculum. Effective teachers work to discover and incorporate the components that make children feel safe, comfortable, and at home in the learning setting. Hearing and seeing their home language is important for young children. Welcoming all children into the classroom means communicating and partnering with families to gain an understanding of their social, linguistic, and cultural contexts.

The responsibility for learning about children’s social and cultural contexts lies ultimately with the teacher. She can become more familiar with the backgrounds of the children in her class in a variety of ways, including talking with families, visiting children’s homes, and enlisting the help of community volunteers familiar with the children’s home cultures. Creating true partnerships with families through two-way communication is a critical component of building positive relationships between school and family.

To summarize, effective teachers start by thinking about what children of a given age and developmental level are like. This knowledge provides a general idea of the activities, routines, interactions, and curriculum that are engaging and beneficial for them. Teachers also look at children within the context of their family, community, culture, social group, past experience, and current circumstances, and they consider each child as an individual. Only with all these considerations in mind are teachers able to make decisions that are developmentally appropriate – age appropriate, individually appropriate, and culturally and linguistically appropriate.

Characteristics of High-Quality Learning Environments

In this section, we consider what constitutes those settings that promote children’s learning and development. A number of important aspects of quality learning environments are evident in the literature.

Class Size and Adult-Child Ratios

Two factors clearly related to positive child outcomes are class size and teacher-child ratio. Low adult-child ratios are associated with more extensive interaction with children, more individualization, and less restrictive and controlling teacher behavior (Bowman, Donovan, & Burns, 2001). Group size also matters. A smaller group size means more opportunities for teachers to work on extending language, mediating children’s social interactions, and encouraging and supporting exploration and problem solving (Bowman, Donovan, & Burns, 2001). State licensing, quality rating and improvement systems, and accreditation by professional organizations such as the National Association for the Education of Young Children (NAEYC) and the National Association for Family Child Care (NAFCC) also have requirements in regard to class size and adult-child ratios.

Relationships and Development of Social-Emotional Competence

From the beginning of life, children’s cognitive, social, emotional, and physical development depends on relationships with others. The quality of young children’s relationships with teachers predicts

social and academic performance in school (Hamre & Pianta, 2001; Lerner, Lerner, & Zabski, 1985; Pianta, 1999). Positive teacher-child relationships allow children to develop and use effective social skills to negotiate and navigate challenges. Such relationships also provide children with school support systems that act as safety nets in academic and social situations, and promote children's positive perceptions of school (La Paro, Pianta, & Stuhlman, 2004; Pianta, 1999; Rubin, Bukowski, & Parker, 1998). If they lack these social supports, children are more likely to display low levels of academic and social competence (Birch & Ladd, 1997; Pianta, Nimetz, & Bennett, 1997).

In settings that actively promote emotional and social dimensions, children are more likely to develop independence, responsibility, self-regulation, and cooperation, which in turn enable them to make the transition to school successfully and fare well in the early grades and beyond (Boyd et al., 2005; McClelland, Acock & Morrison, 2006; McClelland et al., 2007; Raver, Garner & Smith-Donald, 2007). To launch children on a successful path, a significant body of evidence suggests, essential learning goals must include not just academic skills but social, emotional, and self-regulatory capacities for learning and working well individually and in groups (Kagan, Bredekamp, & Moore, 1995; Boyd et al., 2005; Pitcl, Provance, & Kerslake, 2006).

Curriculum

Based on an extensive literature review on effects of curriculum in early education, the National Research Council's panel report stated: "While no single curriculum or pedagogical approach can be identified as best, children who attend well-planned, high-quality early childhood programs in which curriculum aims are specified and integrated across domains tend to learn more and are better prepared to master the complex demands of formal schooling" (Bowman, Donovan, & Burns, 2001, p. 307).

The importance of a coherent, well-designed curriculum is echoed in the joint position statement of the NAEYC and the National Association of Education Specialists in State Departments of Education. The statement's central recommendation is that programs should "implement curriculum that is thoughtfully planned, challenging, engaging, developmentally appropriate, culturally and linguistically responsive, comprehensive, and likely to promote positive outcomes for all young children" (NAEYC & NAECS/SDE, 2003, p. 2).

Teaching Strategies

An engaging, active classroom environment is essential for young children's optimal development and learning. Young children do not learn well when they have to be passive and sedentary for extended periods of time (Copple & Bredekamp, 2009). Different learning modes and teaching practices are suited to different goals. To give children the challenge and support they need, teachers employ a variety of strategies – for example, asking questions, scaffolding (or supplying supports to assist children in their learning), modifying the level of challenge, direct instruction, and planning opportunities for children to learn on their own – and they are intentional in selecting which strategy to use in a given situation (Epstein, 2007; Copple and Bredekamp, 2009; Dean et al., 2011). For example, asking open-ended questions is a strategy suited to finding out what children think and know about a topic before beginning to investigate it, while direct instruction makes sense for letting them know what an unfamiliar word means.

Choosing the best strategy to use at any given moment depends on the learning goal, specific situation, and characteristics of the child or group. The teacher may try one strategy, see that it does not work, and try something else. At other times she may use multiple strategies to address a learning goal. What is important is to have a variety of research-based strategies at the ready and remain observant and flexible in determining when to employ them.

Besides being intentional about the strategies they use and the support they provide, teachers carefully think about which learning context or format is best suited to a particular learning goal. Frequently used learning formats include large groups, small groups, learning centers, and daily routines. Each has its own characteristics, functions, and value (Bowman, Donovan, & Burns, 2001; Copple & Heroman, 2006; Epstein, 2007).

To do all the things described above – and many others not detailed here – teachers need good preparation and professional development, as we will see in the next section.

Teacher Education and Professional Development

We know that next to families, well-prepared early childhood teachers are key ingredients in young children’s successful learning and development. Before young children enter kindergarten, they should have experiences and opportunities that lay the foundations for early language and literacy, positive social-emotional interactions, mathematics reasoning, and other higher-order language and cognitive skills. There are dozens and dozens of concepts, skills, and vocabulary words, as well as social competencies and emotional controls, which young children need to acquire before they come to kindergarten if they are going to be successful in school. It is up to family members and teachers to provide young children with ongoing activities and experiences that will build and reinforce all of these skills.

Evidence suggests that if young children are enrolled in high-quality and developmentally appropriate programs, they have higher school readiness scores, get along better with their peers, are less likely to be retained in grade, and are more likely to graduate (Espinosa 2002; Schweinhart et al. 2005; Barnett 2008). However, program quality is highly dependent on the education and competencies of individual classroom teachers.

In addition, according to a recent First Things First essay, *Arizona’s Unknown Education Issue* (2013):

Research has shown that well-educated and highly skilled early childhood teachers are strongly linked with children successfully transitioning to kindergarten. Highly qualified early childhood teachers can significantly affect a child’s cognitive outcomes, specifically early literacy and language development, letter knowledge, and writing skills. Furthermore, in a recent study, researchers found that children’s experiences in positive relationships with teachers may also have a positive effect on behaviors such as aggression, hyperactivity, non-compliance, depression and anxiety. Children appear capable of learning new positive behavioral strategies through their relationship with their teacher (p. 2).



In Arizona, for many years we have had deeply entrenched, systemic issues, listed below, that have been barriers to improving the quality of early childhood teacher education, which would result in the growth of high-quality programs/classrooms for Arizona’s young children. Some of these issues include: 1) low wages, compensation of family child care providers, and benefits; and 2) a lack of clearly stated competencies with *explicit content that early childhood teachers have to attain*. Embedded within the latter challenge is the fact that there is a lack of coordination and alignment across preschool and kindergarten through 3rd grade.

Young children tend to learn better when the teacher turnover rate is low. This type of consistency in relationships tends to lead to secure, positive attachments and uninterrupted learning. Conversely, high turnover rates can cause problems for children across one or more developmental domains (First Things First, *Arizona’s Unknown Education Issue*, 2013, p. 2).

A severe impediment to building and maintaining high-quality programs is the fact that low salaries and a lack of work-related benefits drive teachers from early childhood education classrooms. The lower the wages and benefits, the higher turnover rates tend to be. This is a persistent, serious problem in Arizona, as well as across the country. When young children are subjected to changing teachers throughout the year, the inconsistencies and fractured relationships in their lives impede cognitive and social-emotional growth, both of which are necessary for success in school. In addition, the effects of teacher professional development are continually lost with this churn in the teaching force.

A second issue is the fact that college programs for education and child development need to be structured so that increased attention is paid to issues directly related to professional content. According to *New Teachers for a New Century: The Future of Early Childhood Professional Preparation* (U.S. Department of Education, 2001; pp. 24–27), early childhood teacher preparation programs place a strong focus on child development and learning, with little attention paid to the need for a strong early childhood curriculum. This results in young children having fragmented learning experiences due to the fact that whatever curricula might be used are disconnected from what children need to know. In short, according to Stott and Bowman (1996), many early childhood teacher education programs spend a disproportionate amount of time on teaching teachers about child development

knowledge and less time on teaching teachers to understand how to apply this knowledge to planning a curriculum that will support children's diverse learning styles as well as their strengths and needs. Making sure that teachers understand how to connect child development and curriculum may begin to be a high priority in teacher education colleges. In addition, teachers need to become excellent observers of children's skills, behaviors, and interactions with each other and with adults as they pertain to different aspects of a curriculum.

This is a challenging array of tasks. Today's teachers need to be experts in how children learn and develop skills in early reading, mathematics, and other subjects; know how concepts are developed and deepened; know how to discern differences between developmentally appropriate behaviors and serious social-emotional issues; teach a very diverse group of children; and the list could go on and on. Too many teachers who spend their days with large numbers of vulnerable young children have not been exposed to the *explicit content* that needs to be in an early childhood curriculum. This becomes all the more critical when one considers the language and cultural diversity among Arizona's children. Teachers have to know how to use a well-developed curriculum and effective teaching strategies to reach all children and enable them to be successful learners.

An example of this issue is the fact that many early childhood teachers have not taken courses related directly to early literacy and reading. Arizona now has legislation, Move On When Reading, which mandates that 3rd graders who score significantly below grade level in reading will be retained. Every early childhood teacher needs to have a solid base of coursework in the development of language, literacy, and early reading so that strong foundations are taught to young children well before they enter 3rd grade. Early childhood educators can be the prevention and intervention sources who prepare children to be successful. Yet there are some colleges in Arizona that offer early literacy as an elective. Teachers need to know what the explicit content of early childhood teacher preparation courses should be. The faculty members need the skills to be able to analyze and strengthen early childhood teacher education courses to ensure that teachers *are* prepared to guide children to become successful in school and beyond.

Summary

Each child's development is unique. Although some similarities exist across ages and stages, this chapter reminds us that each child is developing across multiple domains concurrently, and that development is not neat and tidy. It is incumbent on skilled caregivers and teachers to be cognizant of child development and to meet children where they are to assist them in their growing development.

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Introduction

Some contend that there are a large number of children identified as vulnerable in our state. It is important to assess the causes of this vulnerability. The phrase “children at risk” is widely used but has no consistent definition and can be viewed as stigmatizing certain groups of children and families. This phrase tends to blame children for their own vulnerabilities. Some advocate looking beyond the child to the community, state, and national context (Heydon & Iannacci, 2008; Swadener & Lubeck, 1995). This chapter addresses key sources of vulnerability, and describes some promising practices and initiatives.

Commonly used descriptors of “risk,” such as single-parent status, race, or ethnicity, tend to pathologize, or make abnormal, and assign deterministic labels to families and children. This can discount the rich “funds of knowledge” that children possess from their families, homes, and cultures and the strengths families contribute to their child’s physical and social-emotional development (González & Amanti, 1992; Moll, Amanti, Neff, & González, 1992). This perspective does not dismiss the very real threats that children face or difficult circumstances they must overcome, but takes a more hopeful and positive view of *all* children and their potential.

Thus, we acknowledge the challenges faced by many of Arizona’s young children growing up in an environment of poverty, while describing examples of promising practices for the future of our children. The importance of investing in young children and supporting their families is well documented. Preschool and quality child care are associated with better school performance, lower dropout rates, and general wellbeing. The impacts of Head Start and other family-centered early childhood approaches have been shown to be positive, and President Barack Obama recently suggested universal access to preschool as a national goal.

This chapter addresses challenges that young children in Arizona face. Poverty and a lack of needed services, such as access to quality child care, are two such examples. The chapter also notes “bright spots and positive practices” that are supporting young children in the state, as well as collaborative efforts to assist Arizona’s most vulnerable children.

The State of Arizona’s Children

At the time of this writing, The [Annie E. Casey Foundation’s](#) annual [Kids Count](#) report ranked Arizona 47th in the nation in terms of wellbeing and educational outcomes of children. This has begun to change, with efforts underway to align, coordinate, and integrate resources and programs that make a difference for Arizona’s children and families. Yet there is still difficulty in prioritizing children’s issues and supporting families with young children, particularly as reflected in state policy.

The following is a brief portrait of the state of Arizona’s children.

- Twenty-seven percent of Arizona’s children live in poverty, with greater rates for Native American children (Poverty Rates for Selected Detailed Race and Hispanic Groups by State & Place, 2007–2011).

- With fewer than one in three children accessing quality preschool or child care, Arizona ranks 48th in preschool education.
- Reflecting national trends, Arizona’s implementation of the Common Core Standards has increased the rigor of curriculum beginning in kindergarten. Yet, preschool resources are not equally available to all Arizona children.
- More than 22,000 3rd grade students are potentially at risk for not being at grade level (number reflects students in the categories of “falls far below” and “approaching,” based on 2012 AIMS 3rd grade reading scores).
- The latest National Assessment of Educational Progress (NAEP) reports that 75 percent of Arizona 4th graders are not proficient in reading, making Arizona 45th out of 50 states.
- With 14,600 children in the foster care system, Arizona is the only state in which the number of children in foster care is rising. Without child care assistance, low-income working families are forced to choose between quitting work, reducing hours of work, applying for state assistance, or leaving their children in unsafe care.

Children in Arizona’s tribal communities have the highest rates of poverty in the state. These children also face challenges of Native language loss and high school dropout rates.

Quoting a recent [Children’s Action Alliance](#) (2013) report:

Arizona stands at a crossroads when it comes to budget policies for poor children. First, the state has abandoned most of the tools it once had to move families from welfare to work. Second, the state has also dramatically cut back on basic cash assistance to help poor families survive from day to day and month to month.

Between 2009 and 2012, funding for jobs programs was cut nearly in half and low-income working families were shut out of child care assistance. Quality, affordable child care is critical to help low-income parents find and keep jobs. The [Department of Economic Security](#) (DES), which is charged with provision of temporary assistance to low-income working families, froze access to child care tuition subsidies in 2009 for these families, creating hardships for families already faced with many challenges.

Throughout the past four years, working families seeking child care for their child(ren) have been told that there currently is no way to access the tuition subsidy, even though their income level meets the state’s eligibility requirements. They instead are placed on a waiting list in hopes of receiving future assistance. Families then must make difficult choices – continue to work and place their children in care that may be substandard or potentially leave their young children in self-care and at times also in charge of caring for their toddler or infant sibling(s).

Poverty also affects access to health care and often impacts a child’s ability to succeed in education. A high percentage of parents receiving federal and state assistance have physical or mental



impairments and face barriers to work. Many grandparents in Arizona also care for their grandchildren and have little support. Recent research has shown that poverty is the most significant factor in a child's educational outcomes. While health care is beyond the scope of this chapter, we do want to take a closer look at child care for children in poverty in Arizona.

Access and Affordability of Child Care

For decades, Arizona has assisted eligible families with a portion of the cost of child care through a voucher program that the Legislature established under welfare reform

in the late 1990s. Assistance is provided to three categories of families: 1) CPS and foster care related; 2) Welfare to Work; and 3) low-income working families struggling to support their children and stay off welfare.

In February 2009, the State began turning away all eligible low-income working families by placing them on a waiting list (ACCA, 2013).

- Subsidy was cut by \$81 million, a 40 percent reduction overall
- 22,300 fewer children are being served than were served before
- More than 33,000 children have been denied child care subsidy
- For children from low-income working families, child care has been reduced 70 percent
- 7,000 children are on the waiting list for child care subsidy – and this does not reflect the total need
- 2,800 jobs have already been lost in the child care field – teachers are no longer employed due to budget cuts

Loss of Early Childhood Block Grant (ECBG)

The Early Childhood Block Grant system was another resource that supported the enrollment of economically disadvantaged children in high-quality preschool programs (ages 3–5) in public school districts and in selected community-based child care programs. The block grant also was used to promote student achievement in grades K–3. Block grants were awarded to public school districts and charter schools that could choose to target funds toward preschool or K–3 programs. Private child care programs had to be state licensed and accredited by a State Board of Education-approved organization that provides preschool accreditation, such as the [National Association for the Education of Young Children](#) (NAEYC).

The ECBG programs received funding solely from the Arizona General Fund. Beginning in SFY2009, the Legislature began reducing this appropriation and finally eliminated all General Fund appropriations in SFY2010, including public preschool services for 4,328 children. The loss of this funding required many families to renegotiate their child care arrangements and to locate dollars to pay for a preschool program when already faced with limited income.

Emergent Literacy

Implementation of the [Arizona Common Core Standards](#) includes increased course content rigor with accountability for student achievement beginning in kindergarten. Literacy is a key focus and is integrated throughout all the standards. With these new standards and accompanying accountability measures, the access to high-quality early learning environments for children aged birth to 5 becomes a contributing factor for children's proficiency with emergent literacy skills, which develop prior to and are foundational to conventional literacy.

Development and understanding of both emergent literacy skills and language acquisition differs with each child. To help children maximize their own unique growth and understanding of early literacy, language acquisition, and inventive writing, they need to have access to resources such as books and opportunities to engage in conversations with their peers and adults about topics that are familiar to them and also stretch their imagination and current vocabulary. Opportunities to ask and answer questions, to integrate new words into their play activities, and to have access to paper and writing tools that allow for free expression – whether that be a drawing, simply letters, or words – create interactions that allow for individualized expression and a sense of curiosity to develop.

A child's literacy development is not solely dependent upon her own abilities or her family's contributions. The availability of critical community resources such as libraries, home visiting programs, and a school system that includes before- and after-school programs contributes to the child's early literacy success. Often, lower socioeconomic communities are devoid of such resources.

Move On When Reading

Taking effect in the 2013–2014 school year, [Move On When Reading](#) (ARS-15-701) requires schools to retain 3rd grade students who, through the current state reading assessment, receive a “falls far below” designation, and do not qualify for an exemption. In all, more than 22,000 3rd grade students are potentially not reading at grade level (2012 Arizona 3rd Grade AIMS Reading Scores). Research on the impact to the child retained is mixed. A number of research studies show that children who are retained in grade have somewhat higher school dropout rates. Powell (2010) cites the work of Anderson, Whipple, and Jimerson (2002), who found “retention to be one of the most powerful predictors of high school dropout, with retained students 2 to 11 times more likely to drop out of high school than promoted students” (p. 2). Powell argues that standardized testing does not fit with child development: “We need to remember that children do not develop neatly across domains. If the typical child retained is young for grade and small for age, he may not be at the same developmental level of his peers. At all grade levels, in fact, children are at different places. This is the nature of child development” (Powell, 2010, p. 2).

To further highlight the mixed results of the research on grade retention, we reviewed a recent research study (West & Schwerdt, 2013) that used data collected since the enactment of Florida's test-based promotion policy. This study finds that the 3rd grade retention policy implemented in Florida has substantial positive effects on reading and math achievement in the short run, has no detrimental effects on the limited set of outcomes that can be measured, and generates educational and opportunity costs well below a full year when subsequent grade progression is taken into account. To the extent that early grade retention is more beneficial than later grade retention (as suggested by the results of Jacob & Lefgren, 2004, 2009), students who were retained in 3rd grade and would have been retained later clearly benefited from the introduction of the Florida policy. However, they also do not provide definitive evidence that early grade retention is beneficial for students in the long run. Test-based promotion policies also aim to provide incentives for educators and parents to improve the skills of low-performing students prior to 3rd grade. There are also a variety of potential mechanisms, such as the creation of grade cohorts that are more homogenous in ability, which could influence outcomes of higher-performing students. With few exceptions (e.g., Babcock & Bedard, 2011), the broader consequences of policies influencing retention rates have received little attention and deserve further scrutiny.

Child Protective Services, Foster Care

The number of children in foster care has dramatically risen based on a noticeable increase in abuse and neglect reports, from 10,124 in August 2008 to more than 14,600 in June 2013. Having the fastest-growing number of children in the foster care system, as mentioned earlier in this chapter, while other states are lowering this figure, could warrant attention, advocacy, and funding.

There is a domino effect for parents faced daily with stressful life choices and few options to improve their daily living regimen. In recent years, lower-income parents who must work have often not been able to access support services including child care tuition assistance, health care, or even locate full-time employment, leading to a decline in a healthy family structure and oftentimes a lack of safe, permanent housing. Prevention services including respite care, parent education and support, and Early Head Start are underfunded and often not available to assist in breaking this cycle. The family as a whole feels the impact of such life decisions, and stress relief is sought in different ways. Many times, such choices produce angry outbursts leading to domestic violence and neglect or abuse of children, and ultimately [Child Protective Services](#) (CPS) is notified and intervenes.

The primary purposes of Child Protective Services are to investigate allegations of abuse and neglect, promote the wellbeing of the child in a permanent home, and coordinate services to strengthen the family and prevent, intervene in, and treat abuse and neglect (ARS Section 8-800).

CPS reports that of their cases, 68 percent are neglect, 28 percent are physical abuse, 3 percent are sexual abuse, and 1 percent are emotional abuse (CAA, January 2013). Of the children in care, approximately 43 percent are between the ages of birth and 5. Of the children in care, 43 percent are placed into a family foster home, while 38 percent are living with unlicensed relatives.

Some strides toward addressing this issue were made with passage of the 2014 state budget in June 2013, including an increase in child care needed for children in the Child Protective Services system and the addition of 150 caseworkers and related staff, in addition to the 50 staff added in the FY2013 supplemental. Other services funded were shelters and group home placements for foster children, support services, a grandparents' stipend providing \$75 per month for qualified grandparents raising grandchildren, and intensive family services, to help parents keep children safely at home.



Immigration

Latino students in Arizona may be either U.S. citizens or “dreamers” who came to the U.S. with their families as young children. These students face a number of issues and have been the subject of federal court rulings regarding learning English. Arizona policies targeting undocumented immigrants also impact young children in several ways. These include exclusion from some state services that their families might otherwise qualify for, fear of parents’ possible deportation, and lower attendance in preschool. To quote a recent report (*Dropped? Latino Education and Arizona’s Future*, 2012, p. 21):

Many Arizona Latinos enter the education system already beset by critical disadvantages that have contributed to their relatively small progress during the past decade. One is economic well-being. The latest figures from the Census Bureau show that the poverty rate among Arizona Hispanics has been more than twice that of non-Hispanics over the past two decades.

Rather than a more limited focus on English-only instruction for Latino and other immigrant students in Arizona, some (e.g., Garcia, 2013) are arguing for an “additive” educational approach, in which bilingualism and multilingualism are emphasized. For example, for the current global economy, being fluent in English, Spanish, and Mandarin (Chinese) could be very beneficial for students and for our state.

There are also many documented benefits to young English language learners attending Head Start or other quality preschools, including entering kindergarten better prepared for school success. There is growing evidence that children who are strong in their first language do better in learning their second or additional language(s). In the 2008 publication *Challenging Common Myths About Young English Language Learners*, Linda Espinosa notes:

Scientific studies suggest that young ELL children are quite capable of learning subject matter in two languages. In fact, they may benefit cognitively from learning more than one language. Transitioning from their first language to English before they have a firm grasp of their first language may be detrimental in the long run. Early literacy skills learned in the home language do transfer to English (Espinosa, 2008, p. 2).

Positive Practices/Bright Spots

While Arizona continues to struggle with supporting families living in poverty and children suffering from abuse and neglect, there have been some initiatives and partnerships in recent years that deserve brief discussion. While not all focus on vulnerable children, they can be viewed as part of growing prevention and early education efforts for our children.

First Things First (FTF)/Early Childhood Development and Health Board

On November 7, 2006, Arizonans passed a ballot initiative creating a funding source (cigarette tax) and state agency focused on early childhood services for our youngest children. The initiative created the statewide [Early Childhood Development and Health Board \(First Things First\)*](#) and 31 regional partnership councils that share the responsibility of ensuring that these early childhood funds are spent on strategies that will result in improved education and health outcomes for children 5 and under and their families.



First Things First is one of the critical partners in creating a family-centered, comprehensive, collaborative, and high-quality early childhood system to support the development, health, and early education of Arizona’s children. It is not, however, the only partner. Early childhood education has decades of strong research and experiences to aptly identify programs and services that need to be available to children and their families from birth to age 8. A major challenge in the U.S. is that there is no apparent early childhood “system” with a clear understanding of the points of intersection, integration of services, and opportunities. There is no stable federal or state influx of dollars to support a child’s healthy physical, cognitive, and emotional development – all critical for the child to have the best chance of success in the early grades and in tackling more rigorous subject content in the later grades.

The need to provide a more systemic approach to the identification, alignment, and coordination of services, programs, curriculum, quality teachers, and high standards leading to quality early learning environments, interactions, and instruction has led a diverse and broad group of stakeholders to build upon the work of First Things First. These stakeholders’ mission is to create such opportunities for children and their families through the development of an early childhood system that clearly aligns in an appropriate and meaningful way with the K–12 educational system.

Early Childhood Education System Building

Arizona’s early childhood programs and services for children birth to age 8 are provided in multiple settings and delivered by individuals whose education levels range from a high school degree to a graduate degree. For those individuals who have achieved a degree, the majority do not have a degree in early childhood education and also have had limited access to early childhood development coursework. The settings for early childhood programs are offered to families by a variety of small business owners – some operating out of their homes, some as small centers, and others operating through a corporate entity.

State agencies such as the [Department of Health Services](#), the [Department of Economic Security](#), and the [Arizona Department of Education](#), guided by statutes and policies, are all involved in providing

some element of regulatory oversight, but none are required to provide any element of monitoring of the various programs regarding the quality of the teacher/child interactions or the richness of the environment related to language development and early literacy, nor are they required to use developed early childhood standards. Thus, oversight regarding these elements is often relegated only to those environments that choose to seek further accreditation or credentialing.

[Quality First](#) is Arizona's quality rating and improvement system, which provides a range of coordinated, targeted strategies to increase quality in early learning environments. These strategies include coaching and incentive programs that address early language and literacy development, age-appropriate learning materials, and expanding teachers' skills in engaging infants, toddlers, and preschoolers in learning activities. The program also includes tuition assistance scholarships for children participating in Quality First programs (Quality Early Learning Brief, BUILD, May 2013).

Early childhood services in Arizona are duplicative in some areas and nonexistent in others and are not aligned, coordinated, or leveraged with existing resources, funding, data banks, or other educational systems, such as the K–12 system and higher education. Funds spent on this redundancy could potentially be reassigned to other needs, and identification of these aforementioned needs and assets could help further build the early childhood system in the state. By sharing a message of the value of early childhood education, families can both have a better understanding and be aware of their options, and the public can become versed in the importance of the early years.

Family, Friend, and Neighbor Care/AFFNCC Network

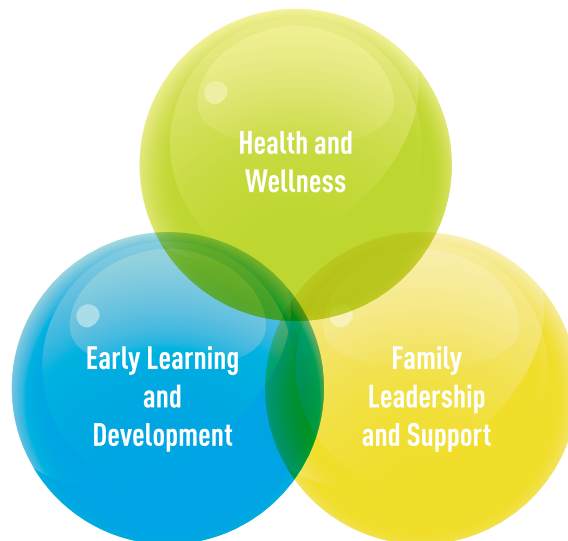
Family, friend, and neighbor (FFN) child care (also referred to as informal care, home-based care, kith and kin care, kin care, relative care, legally unlicensed, and license-exempt care) is increasingly recognized as home-based care – in the practitioner's or child's home – provided by individuals who are relatives, friends, or neighbors. In Arizona, this type of service is not regulated and it is very difficult to assess the number of practitioners working within this definition of child care service. Recent national and local research has shown that kith and kin providers, particularly in low-income communities, care for more than 50 percent of children with working parents. Many families prefer this form of care due to cultural and language considerations, yet there is little support or education available to these practitioners. However, in Arizona as of 1999, the [Association for Supportive Child Care](#) has provided professional development to the individuals providing such care in the various counties of Arizona.

The [Alliance for Family Friend and Neighbor Child Care](#) (AFFNCC) was formed in August 2011 to build a collaborative Alliance of family, friend, and neighbor partners with the interest and commitment to serve this population of child care providers and the children they look after through an integrated system of services. The Alliance members share a passion for serving children, a commitment to long-term collaboration and cooperation, and a focus on engaging and empowering the early childhood community and the community at large about issues surrounding family, friend, and neighbor care. The Alliance has a bias for action – especially those actions that directly result in improving the outcome for children in *all* early care settings (Alliance for Family Friend and Neighbor Child Care, 2013).

[BUILD](#), a national initiative created in 2002 by the Early Childhood Funders Collaborative (ECFC), is a national consortium of private foundations that helps state leaders develop an early childhood system of programs, services, and policies tailored to the needs of the state’s unique young child population. This work focuses on connecting programs and services that may have functioned in isolation, been redundant, lacked resources to meet critical needs, and/or operated at cross-purposes.

Arizona is currently working with the BUILD Initiative to provide a framework that aligns existing programs and services, implements programs and services recognized as appropriate and effective practices for specific ages of children, and identifies gaps in critical programs and services in communities throughout Arizona. BUILD Arizona is supported by a group of Arizona funders. Components of an early childhood system such as Quality Early Learning and Development, Professional Development, Emergent Literacy and Language Maintenance and Learning, Health and Wellness, and Family Leadership and Support fall within and across the framework in Figure 1. As Figure 1 illustrates, a child’s healthy physical, cognitive, and social-emotional development is not dependent solely on the family, but on three broad social spheres. The quality of the learning environment, whether child care, preschool, or grades K–3, impacts a child’s health, as does the availability of community resources which contribute to a family’s ability to be aware and advocate for their child, and the opportunity for the family to have access to a constant medical provider who can provide developmental and nutritional guidance. All spheres impact a child’s ability to be engaged, curious, and poised for early grade success and all intersect to support the “whole child.”

Fig 1 Components of an Early Childhood System



[Read On Arizona](#) is a statewide, public/private partnership of agencies, philanthropic organizations, and community stakeholders committed to determining the gaps, identifying solutions, and implementing a collaborative early literacy approach to create an effective, systematic continuum of supports to improve language and literacy outcomes for Arizona’s children ages birth to 8.



Read On Arizona is building a statewide integrated and coordinated early literacy system that aspires to increase the number of early literacy opportunities in after-school and summer learning environments, increase the percentage of students reading at or above grade level by 3rd grade, and improve the classroom instructional teaching practices for children birth to age 8.

Summary

Children are often referred to as “voiceless” in public policy, but are increasingly having a voice through the efforts of coalitions and individuals working to make sure that none of our children are left behind. Attention to our most vulnerable children can strengthen not only their lives, but the future of our state.

Arizona has many resources. Some are identified as economic drivers and others, such as our children, are waiting for our guidance, support, and recognition of their value. We are rich in resources of cultural and ethnic diversity. Combining our desires with incremental, responsible action steps may help get us the results we want: for all children to have equal opportunities to succeed and lead fulfilling lives.

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For well over 30 years, government leaders at the state and local levels have been deeply engaged in efforts to promote economic development. Unfortunately, many economic development schemes using public dollars are at best a zero-sum game. In the name of economic development and creating new jobs, virtually every state in the union has a history of trying to lure new companies with public subsidies.

Previous studies have shown that the case for these so-called bidding wars is shortsighted and fundamentally flawed. From a national perspective, jobs are not created – they are only relocated; the public return is at most zero. And the economic gains that seem apparent at state and local levels are also suspect because they would likely have been realized without the subsidies. In other words, what often passes for economic development and sound public investment is neither.

Persuasive economic research indicates that there is a far more promising approach to economic development with government assistance. It rests not on an externally oriented strategy of offering subsidies to attract private companies, but rather on government support of those much closer to home – quite literally: our youngest children. This research shows that by investing in early childhood education, governments – in partnership with private firms and nonprofit foundations – can reap extraordinarily high economic returns, benefits that are low-risk and long-lived.

We would like to put forth a pragmatic proposal for economic development at the state and local levels that capitalizes on the high returns that investment in early childhood education can yield. We don't pretend to have all the answers to economic development, but we're quite certain that investing in early childhood education is more likely to create a vibrant economy than using public funds to lure a sports team by building a new stadium or to attract an automaker by providing tax breaks.

Careful academic research demonstrates that tax dollars spent on early childhood development provide extraordinary returns compared with investments in the public, and even private, sector. Some of these benefits are private gains for the children involved, in the form of higher wages later in life. But the broader economy also benefits because individuals who participate in high-quality early childhood development programs have greater skills than they otherwise would, and they're able to contribute productively to their local economies.

The promise of early childhood programs is based on fundamental facts about early human development. A child's quality of life and the contributions that child makes to society as an adult can be traced to his or her first years of life. From birth until about the age of 5, a child undergoes



tremendous development. If this period of life includes support for growth in language, motor skills, adaptive abilities, and social-emotional functioning, the child is more likely to succeed in school and to later contribute to society. Conversely, without support during these early years, a child is more likely to drop out of school, depend on welfare benefits, and commit crime – thereby imposing significant costs on society. Early childhood development programs recognize this potential – and this risk – and seek to nurture healthy development from the earliest years.

Several longitudinal evaluations all reach essentially the same conclusion: the return on early childhood development programs that focus on at-risk families far exceeds the return on other projects that are funded as economic development. Cost-benefit analyses of the Perry Preschool Program, the Abecedarian Project, the Chicago Child-Parent Centers, and the Elmira Prenatal/Early Infancy Project showed returns ranging from \$3 to \$17 for every dollar invested. This implies an annual rate of return, adjusted for inflation, of between 7 percent and 18 percent.

These findings, promising though they are, pose a challenge: small-scale early childhood development programs have been shown to work, but can their success be reproduced on a much larger scale? There are reasons to be skeptical; some recent attempts at scaling up early childhood development have been disappointing. But based on a careful review of past and current programs, we believe that large-scale efforts can succeed if they incorporate four key features: careful focus, parental involvement, outcome orientation, and long-term commitment.

Achieving these characteristics in large-scale early childhood development programs requires the flexibility, innovation, and incentives that are inherent in markets, as well as the long-term assurance and stability that government backing provides. To establish a successful, large-scale early childhood development program, therefore, we propose a permanent scholarship fund for all families with at-risk children. Similar to endowments in higher education, earnings from an endowment for early childhood development would be used to provide scholarships for children in low-income families who aren't able to afford a quality early childhood program.

The scholarships would cover child tuition to qualified programs plus the cost of parent mentoring to ensure parental involvement. Scholarships would be outcomes-based, meaning that they would include incentives for achieving significant progress toward the life and learning skills needed to succeed in school. Parent mentoring would include parent education; information about available financial, health, and human services resources; and guidance on selecting an early childhood development program. Research shows that reaching children with multiple risk factors as early as

possible is essential; even age 3 may be too late. So we suggest that while scholarships would pay tuition for a child to attend an early childhood development program beginning at age 3, the parent-mentoring program could start much earlier.

Through parent decisions and provider responses, the market would determine the structure of the early childhood development industry. Market participants would include early childhood providers from the public and private sectors, which represent a mix of preschools, child care providers, and home visiting programs. The market structure, however, would be influenced by standards set by an executive board that manages the early childhood development endowment. Providers would have to comply with these standards in order to register the scholarship children. The standards would be consistent with the cognitive and social-emotional development needed to succeed in school. We envision a diverse mix of providers competing to serve at-risk children, leveraging the existing early childhood development infrastructure and opening the door for new providers.

Based on costs used in previous studies and current programs for at-risk children, we estimate that total resources needed to fund an annual scholarship for a high-quality early childhood development program for an at-risk 3- or 4-year-old would be about \$10,000 to \$15,000 for a full-day program that included parent mentoring. The scholarship either would cover the full cost of tuition or would be layered on top of existing private and public funds, such as child care subsidies, to enhance quality features that correlate with school readiness outcomes. The endowment's board could vary the amount of the scholarship to reach children in families just over the poverty line on a sliding scale, or increase the amount of the scholarship for children facing multiple risk factors.

To derive an approximate dollar amount for the endowment, a state would have to estimate the number of children to be covered, multiply that by the average scholarship, and calculate the investment return for the interest derived from investing the endowment funds in low-risk government or corporate bonds.

In Minnesota, for example, we estimate that to ensure that all 3- and 4-year-olds living below the poverty line receive high-quality early childhood development, the state needs about an additional \$90 million annually. For children who aren't already involved in an early childhood program, the scholarship would provide access. For children who are enrolled in a child care center or preschool, the scholarship would ensure that the quality is at the necessary level to meet school readiness goals.

A one-time outlay of about \$1.5 billion – about the cost of two professional sports stadiums – would create an endowment that could provide scholarships to the families of children in Minnesota living below poverty on an annual basis. With the endowment's funds invested in corporate AAA bonds, earning about 6 percent to 7 percent per year, we estimate that \$90 million in annual earnings would cover the costs of scholarships, pay for program monitoring and assessments, and supplement existing revenue sources as needed for early childhood screening and teacher-training reimbursement programs.

The evidence is clear that investments in early childhood development programs for at-risk children pay a high public return. Helping our youngest children develop their life and learning skills results

in better citizens and more productive workers. Compared with the billions of dollars spent each year on high-risk economic development schemes, an investment in early childhood programs is a far better and far more secure economic development tool. Now is the time to capitalize on this knowledge.

To fully achieve the benefits of early investments in children, they need to be followed up with quality education in the K–12 school system. However, if we are successful in getting most at-risk kids ready for school, K–12 will be more successful.

In our view, the case is closed for why we must invest in early childhood development. Now it is time to design and implement a system that will help society realize on a large scale the extraordinary returns that high-quality early childhood programs have shown they can deliver.

Does preschool have long-term educational and economic benefits? Research suggests the answer may be YES.

Intensive preschool interventions targeting disadvantaged children have been shown to yield significant gains that may last well into adulthood. Longitudinal studies have been conducted to evaluate the enduring outcomes of several well-known preschool programs.

- Michigan’s Perry Preschool program served 123 4-year-olds for two years. Participants have been tracked to age 40.
- North Carolina’s Abecedarian preschool served 111 children from age 4 months to 5 years. Participants have been followed to age 21.
- Illinois’ Chicago Child-Parent Centers served 1,500 children. Participants have been followed to age 30.

How did children served by these programs fare later in life?

- They were more likely to stay in the regular classroom and out of special education.
- They were more likely to go through school without repeating a grade.
- They were more likely to complete high school without dropping out.
- As adults, they were more likely to be employed and to have higher earnings.

Although long-term benefits of such interventions have been demonstrated, the costs of some exemplary programs can be quite high. On an annual per-student basis, the Perry Preschool and Abecedarian programs, respectively, spent about \$9,000 and \$10,500 (adjusted to \$2,000). As a result, some have questioned the cost-effectiveness of such programs and the extent to which they can serve as models for larger-scale interventions.

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Introduction

Young children’s health is vital to their growth and future success – and to the future of Arizona. Although health is not the only factor that ensures school readiness, it plays an integral, frequently overlooked, role.

Educators, health care providers, and policymakers often work in silos, viewing a child’s health as separate from education, rather than a key part of comprehensive early learning strategies. But the evidence supporting the impact of children’s health on their schooling is compelling. Untreated health problems lead to more serious illnesses, more school absences, and even long-term disabilities.¹

Children with untreated vision problems have trouble tracking letters and learning to read. And oral disease is responsible for more than 51 million lost school hours nationwide each year.²

A child’s healthy development and readiness for school go hand-in-hand. Access to health care and the continuity of that care are essential in securing a strong start for Arizona’s children. Health care – encompassing everything from oral health and nutrition to early interventions that “catch” developmental delays – is at the forefront of conversations about early education.

Health Care Factors

Arizona currently falls below the national average when it comes to what is reported for children’s physical and oral health, health insurance coverage, and attachment to a “medical home,” e.g., having a regular, long-term medical provider.³ Plus, with a lower rate of employer-based coverage in Arizona compared to other states, public programs here are called on to do more, especially for low-income children. In Arizona, poverty and disadvantaged populations are big parts of the equation, as well. In fact, the highest rates of poverty in Arizona occur in children from birth to age 5.⁴

All children need good health care in order to thrive in school. However, many Arizona families, especially those living in poverty, do not have the resources to provide for their children’s overall wellbeing. Those with limited resources need access to health care the most, and Arizona has a disproportionate share of this need.

Access to Health Care

Currently, there are an estimated 200,000 uninsured children in Arizona (12.7 percent of all Arizona’s children), putting Arizona’s coverage markedly below the national norm (7.5 percent).⁵ Most of Arizona’s uninsured children come from families with incomes below 200 percent of the poverty level, which translates to a family of four earning less than \$44,000 per year.⁶

Uninsured children have a much lower likelihood of having a regular source of medical care, routine or well-child check-ups, and dental visits compared to insured children. In short, insurance coverage leads to more regular, preventive health and dental care services, which contribute to children’s healthy development.



Preventive Screening and Assessment

Proper and regular health screenings are strongly recommended by the American Academy of Pediatrics and are critical to identify and address any potential developmental, behavioral, or environmental issues that can affect young children. During these visits, health care providers assess children for good health, diagnose any medical problems or developmental delays, and provide treatment for identified conditions. Parents also receive guidance about how to support their child's health and development.⁷

It is most effective to identify and respond to certain physical conditions very early in a child's life. Routine well-child visits and developmental screenings are the path to early diagnosis, treatment, and ultimately lead to higher levels of school readiness and elementary success. One in eight children ages 6 months to 2 years has an identifiable disability or delay,⁸ and children who exhibit developmental delays before age 3 are at higher risk of school failure.⁹ Fortunately, many conditions can be effectively treated if diagnosed early.

Early Intervention

In many ways, pediatric providers play the role of "first responder" to a variety of issues that affect young children's school readiness. Preschool and kindergarten teachers can also play an important role in identifying developmental delays early on. The first years of school are critical periods for interventions and get children on track for school success.

A child is considered to be developmentally delayed when s/he has not reached one or more of the developmental milestones expected at her or his chronological age. With the right services, young children who have or are at risk for developmental delays do better in their physical, social, and emotional development. These services can also strengthen a child's language and communication skills, improving school performance. Families benefit from early intervention by being able to better meet their children's special needs from an early age and throughout their lives. Society also reaps benefits by reducing the economic burden through a decreased need for special education and remedial services.

Early intervention is essential to providing sufficient supports and equipping children with the development they need to be ready for school. Optimally, Arizona benefits from a robust and integrated system of services and supports for young children and their families. Yet compared with other states, Arizona serves fewer children with services designed to identify and respond to challenging childhood conditions.¹⁰

Medical Homes

Families with limited financial resources do not enjoy continuity of medical care; instead, children in these families frequently get care in emergency rooms and clinics. However, young children benefit from having a “medical home” – meaning that the best outcomes in children’s health care come from being “connected” to a regular medical provider. A patient-centered medical home is not a building, hospital, or home-based health care service. It is a model of care that replaces sporadic care with a more personalized, long-term relationship.¹¹ It is health care that is accessible, continuous, comprehensive, family-centered, coordinated, and culturally effective.

Studies show that having a medical home improves a child’s access to health care, reduces medical costs,¹³ and enhances the overall quality of care due to the increased communication and trust that develops over time between patients and providers.¹⁴

Oral Health

Another fundamental piece of children’s health is oral health. Without it, kids can suffer from impaired speech; difficulty chewing and swallowing; school absence; inability to concentrate; and low self-esteem.

Half of Arizona children ages 0–4 have never visited a dentist.¹⁵ And nearly one out of every 10 Arizona kids has early childhood caries, a rampant and progressive form of tooth decay that strikes at any age after teeth develop.¹⁶ By the time Arizona kids reach 3rd grade, two-thirds of them have experienced tooth decay.¹⁷

Arizona has substantial disparities in oral health. Low-income and minority children have more untreated tooth decay and visit the dentist less frequently.¹⁸ Education also plays a role. Children who come from families where parents have a high school education or less are almost twice as likely to have untreated tooth decay as children who come from families with parents who have more than a high school education.¹⁹

The notion that oral health is somehow separate from general health has persisted for a long time. But left untreated, tooth decay can lead to other very real – and serious – health issues, not the least of which is pain. Children in pain are simply at a disadvantage to learn.²⁰

Nutrition

Good nutrition is essential for everyone’s wellbeing, but it has an even greater impact on children, whose bodies and brains are still developing. Whether kids are well nourished early in life can greatly affect their health, as well as their cognitive abilities.²¹

A healthy diet starts at birth, with breastfeeding playing a critical role by offering health benefits to both mother and child.²² Breastfeeding also plays a role in preventing obesity, while contributing to other positive health outcomes.²³

Currently, more than one-third of Arizona children ages 10–17 are overweight or obese, higher than the national rate.²⁴ To combat this disparity and the health implications that come with it, it is important to teach kids the methods and benefits of a healthy lifestyle and provide them access to nutritious foods.



For many families in Arizona, acquiring nutritious foods is a challenge. According to the U.S. Department of Agriculture, more than one in 10 Arizonans lives in what is known as a “food desert,” a low-income area without easy access to a grocery store, most notably lacking access to fresh fruits and vegetables. This is more than twice the national average.²⁵ Once low-income children enter school, gaining access to healthy foods becomes easier. Many children eat at least half of their meals at school – and for some children, these may be their only regular meals.²⁶

As any teacher can attest, a healthy diet and regular meals help kids stay alert, energized, and focused. As such, good nutrition can leave its mark on a child for life, on their bodies *and* in their minds. From infancy to elementary school, helping kids acquire eating habits that sustain them at every stage of childhood, and enable them to learn to their potential, is a pressing challenge for Arizona.

Summary

In order for Arizona to thrive, the relationship between young children’s health and their school readiness is important to understand. Just as a child’s early years set the stage for healthy development throughout childhood, they also play a part in determining lifelong approaches to, and prospects for, learning.

Young children’s health is essential to learning. And it impacts not only school readiness, but also their prospects for all future formal education. Having the foundational pieces for learning in place – with health at the base – ensures that all kids get a fair shot at success.

A child who has not had an eye exam and can’t see the teacher is at a huge disadvantage, as is one who hasn’t had hearing screenings and doesn’t know she is hearing impaired. And children absent from school for chronic health issues risk falling behind. Learning draws on all of the senses – on mind and body – making its connection to health care impossible to ignore. It is clear that medical care and early learning are integrally linked, and working on both is critical for ensuring that all of Arizona’s children start school healthy and ready to learn.

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Introduction

Quality learning environments are important in the multiple venues of a child's life. From their first teachers – parents and family – to the school environment, intentional environments of quality assist a child in developing advantageously. This chapter assists us in understanding developments in the state of Arizona which underscore the need for such environments and what measures the state already has in place to welcome young learners into their learning opportunities.

Creating quality early learning environments is a critical component to addressing the educational needs of young learners. Indeed, environments are a tool used by adults to help facilitate quality learning and engaging curriculum, and a means of collecting data about students. Learning environments are composed of not only the physical nature of the classroom, but include both the necessary activities required for learning, and the social and emotional environments necessary to support future learning. Early learning environments for young learners look and feel differently than the environments necessary for older students. Creating and sustaining quality early learning environments is an essential skill mastered by those who have specialized training and education in young learning pedagogy and practice. A quality early learning environment sends the message that young learners are scholars, researchers, authors, apprentices, scientists, and historians.

Based on research and evidence-based practices, Arizona's early childhood community has successfully defined quality early learning environments for our state. The early childhood education field recognizes the Arizona Department of Education resource entitled, [Program Guidelines for High Quality Early Education: Birth through Kindergarten](#) as the outline of quality for early learning programs. In addition, Arizona's local quality improvement and rating system, [Quality First](#), evaluates programs and provides the supports necessary for programs to improve along a rating scale. Quality First, as well as local improvement processes, utilize two essential types of assessment tools when determining quality. One is an Environmental Rating Scale (Early Childhood Environmental Rating Scale – ECERS-R – or the Infant and Toddler Environmental Rating Scale) and the other is a tool that looks at teacher and child interactions, the Classroom Assessment Scoring System™ (CLASS™).

Partnering with Families

Families are recognized as the first and primary educators of young learners. It is important for early childhood educators to work diligently to intentionally build what the National Association for the Education of Young Children refers to as “reciprocal relationships” (2009). With the implementation of ARS-15-701, [Move On When Reading](#), partnering with families to increase language and literacy development has become a key priority. More than ever before, early childhood educators have been focusing on building reciprocal relationships to share the responsibility in creating strong readers. Educators are sharing data and evidence with families and giving them the knowledge they need to support their children in the home environment.

Quality early learning programs have evolved from using parents as chaperones to truly engaging them as partners in their child's education. High-quality programs have family meetings to outline learning expectations, unwrap the state standards, and provide education on effective learning strategies for the home. In addition, the families are provided with opportunities for individualized

meetings to discuss assessment data and their child's growth and development.

Intentional Learning Opportunities

In the year 2000, the National Research Council Institute of Medicine released a seminal piece of work about early childhood entitled, *From Neurons to Neighborhoods: The Science of Early Childhood Development* (2000). This text recognizes early learning environments as an essential component to young students' success and growth. Because young children are eager learners, it is incumbent upon adults to provide

an environment that supports them in becoming adept learners. Quality environments are best when they support the natural inclinations and abilities of young learners. Quality learning environments are not about accelerating learning, nor about expensive toys, but rather focus on quality interactions with adults that intentionally create opportunities to engage with materials and participate in activities with children that support and foster early learning.



The [National Association for the Education of Young Children](#) recognizes the importance of early childhood educators as key decision makers (NAEYC, 2009). In order to intentionally create quality environments and learning opportunities, early educators reflect on what they know about a child's ability, temperament, personality, their likes, dislikes, physical age, developmental age, and learning goals. From that information, early childhood educators can intentionally create active and concrete learning opportunities. Planned activities are intentionally based on the individual, unique needs of each child, as well as related to the standards. Any single activity may demonstrate children's awareness and levels of ability on several different standards or concepts.

Engaging Curriculum

In Arizona, the continuum of learning outcomes for young learners is outlined in various documents, beginning with the [Arizona Infant and Toddler Developmental Guidelines](#), continuing with the [Arizona Early Learning Standards](#), and ending with the [Arizona Common Core Standards Kindergarten through Grade 3](#). Although the learning expectations are outlined, it is left to the professionalism of the educator and a comprehensive, effective curriculum to determine how the standards will be taught. Curriculum is intended to give children access to the Infant and Toddler Guidelines, Arizona Early Learning Standards, or the Common Core Standards for Grades Kindergarten through 3. A curriculum is more than a set of learning opportunities. It provides the framework for a cohesive set of learning experiences that will intentionally help children access the learning goals. At best, any chosen curriculum will be comprehensive and address all developmental domains appropriate for the age and grade level of the students. A curriculum for young learners will be interrelated and focus on teaching and learning within all the developmental domains through a common theme, problem, or project.



An effective early learning curriculum for young learners is based on the interrelationship and sequence of ideas. A young learner's future abilities and understandings are built upon the knowledge that they acquire during their early years (NAEYC, 2009). Sequence matters in curricula because many concepts and skills logically build upon one another. New learning is introduced when prior learning has prepared a child for it through the acquisition of skills and knowledge. A written curriculum supports the early childhood educator, as well as families, in the planning and implementation of learning experiences. Curricula are guides and may need to be modified based on previous learning experiences or individual student abilities. An effective curriculum has learning goals in points of intersection and alignment with the Arizona Infant and Toddler Developmental Guidelines, the Arizona Early Learning Standards, or the Arizona Common Core Standards for Kindergarten through Grade 3.

Student Assessment

Student assessment involves the process of gathering information about children from several forms of evidence, then organizing and interpreting that information. Assessment is the process of finding out what young children in early learning environments, individually and as a group, know and can do in relation to optimum development and to the goals of the program or individual. With knowledge about individual children, early childhood educators can plan appropriate curriculum, effective instructional strategies, and quality learning opportunities to help young learners develop and learn (McAfee, Leong, & Bodrova, 2004). In quality learning environments, early childhood educators are collecting evidence for decision-making on an ongoing basis. Assessment as a process involves many approaches to gathering information. During the process, educators will collect evidence of children's development in varying forms that may include observational notes, pictures of the child, pictures or drawings done by the child, writing samples by or for the child, language samples, or even tape or video recordings of the child.

Physical Nature of the Classroom

The physical blueprint of a classroom is intentionally created to support maximum learning opportunities. Any quality learning environment will recognize key elements of learning in both an indoor and an outdoor space. In best-case scenarios, every early childhood classroom environment

will be designed for the learning of the children and not the convenience of the teachers. As a result, materials will be easily accessible to all children. Space and furnishings will be created specifically to recognize the age and size of young learners. Materials and furnishings not only ensure child safety, but are utilized to support classroom routine, play, and learning. Quality early learning environments have at least five different learning centers, which are clearly defined through intentional placement of materials and furnishings and are protected learning spaces available for substantial portions of the day. For example, a classroom may be comprised of a designated center for blocks, dramatic play, library, inquiry (math and science), and art. Quality environments will recognize the need for furnishings that support relaxation, comfort, and privacy for children who need support in social and emotional development (Harms, Clifford, & Cryer, 2005).

Effective Instructional Strategies and Activities

According to the *Program Guidelines for High Quality Early Education: Birth through Kindergarten*, effective instructional strategies are ways in which early childhood educators present information to children to make concepts concrete and allow children to make connections to their prior knowledge. To meet this challenge, early childhood educators become cognizant that young children do not distinguish learning between subject areas. Instead, a child's progress in one domain continues to influence and *be* influenced by progress in other domains. Healthy brain development of children in this age range requires meaningful connections.

An effective instructional strategy for engaging young learners is the utilization of a balanced schedule that allows for intentional whole group, small group, and child-centered instruction. Whole group instruction is a precious commodity in an early childhood classroom. It is reserved for common instruction of new knowledge, intentional story time, or whole group experiments and investigations.

Small groups are organized based on evidence and data collected through an ongoing progress-monitoring assessment system. Based on the abilities and learning goals of the children, small groups are organized to address specific learning. In order for teachers to be able to successfully sustain small groups and provide individualized learning supports, a teacher intentionally plans for active, engaging learning centers. Learning centers, or "designated areas of the classroom where students congregate in small groups to accomplish given learning tasks" (Lewis, 2013), are created to sustain learning from whole or small group activities and provide additional practice. Learning centers may also be intentionally purposed to address learning goals in appropriate ways, such as the case of a dramatic play center. Child-centered instruction will look a lot like play. And indeed it is, as play is an effective instructional strategy for young learners that allows for 100 percent student engagement. Utilizing play in early learning environments sustains learning time, which allows for more meaningful, integrated, and in-depth learning and practice of skills introduced in a whole or small group. For example, through dramatic play, teachers can support oral language development, comprehension, and concept development. In addition, children who participate in dramatic play are able to practice adjusting to varying audiences and try out new vocabulary words.

Other effective instructional strategies that can optimally be evidenced in any early learning environment include connecting learning to previous knowledge, directing and supporting

students' use of academic language and key vocabulary emphasized throughout the day, interactions, discussions, and conversations, immediate feedback to students, opportunities for problem solving and reasoning, explicit modeling, and explaining.

A key to a successful early learning environment revolves around a teacher's ability to support the evolution of a child's thinking. Any quality learning environment will intentionally infuse modeling and conversations throughout the learning.

Approaches to Learning

The desired outcome of any early learning environment is to help children thrive in their learning. The intent of early childhood education is to create a climate where children will thrive and, through relationships with the adults in their lives, learning and education will become rich, deeply rooted, and flourishing.

The Common Core Standards aim to create college and/or career-ready students. Early childhood education directly supports the Common Core and recognizes its role is more than just the acquisition of knowledge. Successful Common Core acquisition is about having the skills necessary to put that knowledge to use. Teaching young children goes beyond just information and content. It requires giving multiple opportunities to practice and become efficient in skills that will open the door to Common Core and to lifelong success. Early childhood education is laying the foundation for children to lead successful lives.

As early childhood educators strive to create high-quality early learning environments, they intentionally observe and support how a child approaches a new learning situation. Approaches to learning are observable behaviors that indicate ways children become engaged in social interactions and learning experiences. They enable children to acquire new knowledge, learn new skills, and set and achieve goals for themselves. Approaches to learning lead to the necessary higher levels of executive functioning required by the rigor in the Common Core standards.

Executive functions are neurologically based processes that involve managing oneself and one's resources in order to achieve a goal. These functions are recognized by a young learner's ability to remember, follow multi-step instructions, avoid distractions, control responses, adjust when rules change, and persist at problem solving. This is how one's brain organizes itself. In *Mind in the Making* (2010), Ellen Galinsky calls it "the ability to do among chaos." The goal of executive function is to pull together feelings and thinking in order to reflect, analyze, plan, and evaluate. In Arizona, the [Early Learning Standards](#) identify the strands of *Approaches to Learning* as Initiative and Curiosity, Attentiveness and Persistence, Confidence, Creativity, Reasoning, and Problem-Solving.

The first strand in *Approaches to Learning* is initiative. Young learners with initiative demonstrate self-direction while participating in a range of activities and routines. Initiative includes exhibiting cognitive flexibility, imagination, and inventiveness. For example, when young children are allowed the freedom to create art or perform art of their choosing, it supports the use of their imagination and creates opportunities for them to be inventive. When they ask intentional questions about

children's art, early childhood educators are helping young learners stretch their cognitive muscles. Cognitive flexibility is required for learners to articulate their own ideas, construct effective arguments, and make their reasoning clear.

Another strand of the *Approaches to Learning* is curiosity. Curiosity is evidenced by an eagerness to learn about and discuss a range of topics, ideas, and activities. It includes interest in things, experiences, and people. This can be likened to what children do through exploration and investigation. Young learners want to learn about what they don't know yet. It may be something new or different. Other times, though, young learners are seeking to find out *why* or *how* something they expected to happen didn't, in fact, happen. In *Mind in the Making*, Ellen Galinsky calls this, "the clash between what we expect and what actually happens." This clash can prompt children to dig for more information or to investigate further so they may find an answer.



Early childhood educators present information and are available to help children make sense of what they are discovering. Being present and available does not mean giving young learners answers outright or giving interpretations of their findings, but rather it means being present in the moment of the child's curiosity and being available to provide clarity that promotes the child's critical thinking.

An additional *Approaches to Learning* strand is attentiveness. Attentiveness refers to the young learner's ability to focus on an activity with deliberate concentration despite distractions. Early childhood educators will use clear and specific directions or questioning techniques to help children think critically and dig deeper in their quest for knowledge.

Persistence refers to a young learner's ability to maintain and sustain challenging tasks and pursue new challenges. Evidence of this skill can be observed through the young learner's ability to cope with frustration or disappointment, establish goals, generate plans, and follow through to completion.

Confidence and self-assurance, another *Approaches to Learning* strand, is required of young learners. In order for successful learning to occur, young learners must be willing to take reasonable risks, to express or defend ideas, try new experiences, and engage in challenging tasks. It is not one specific, discrete skill, but a mindset that no matter what they encounter – even the rigor that will be expected with the Common Core – they *will* do it.

Creativity refers to a young learner's ability to express his/her own unique way of seeing the world. In addition to the arts, creativity involves coping with new situations, seeing things from different perspectives, and appreciating humor.

Reasoning is defined as a young learner's ability to analyze information and situations in order to form judgments. It involves the ability to use prior knowledge and information to generate an appropriate decision. For example, one of the *Standards for Mathematical Practice* states that:

Younger students construct arguments using concrete referents, such as objects, pictures, drawings, and actions. They also begin to develop their mathematical communication skills as they participate in mathematical discussions involving questions like “How did you get that?” and “Why is that true?” They explain their thinking to others and respond to others’ thinking.

How early childhood educators ask children to think affects how deeply children learn. Common Core Standards are asking children to provide evidence and explanations about how they come to conclusions. As a result, even in preschool, early childhood educators must ask open-ended questions to best understand how children are learning, clarify their learning, and determine how to best scaffold their learning to the next level.

Young learners need skills in problem-solving. Problem-solving is the final *Approaches to Learning* strand and refers to a young learner’s ability to seek solutions to problems. It involves the ability to look for or find multiple solutions to a question, task, or problem. It is based on the ability to build on prior knowledge and integrate new information.

It is incumbent upon early childhood educators to give children the tools they need to conduct their own research. Early childhood educators can provide both real and manufactured problems to model problem-solving, as well as support children in creating their own solutions. It is beneficial for young learners to be provided with personal attempts to solve the problem, as well as opportunities to experiment with problem-solving. One of the *Standards for Mathematical Practice* states:

In Kindergarten, students begin to build the understanding that doing mathematics involves solving problems and discussing how they solved them. Students explain to themselves the meaning of a problem and look for ways to solve it. Younger students may use concrete objects or pictures to help them conceptualize and solve problems. They may check their thinking by asking themselves, does this make sense? or they may try another strategy.

Young learners require prompting and support. However, with experience and practice, early childhood educators will be able to remove that scaffolding, leading to young learners *independently* actuating their ability to persist when things are challenging. In the Common Core Standards, the 1st and 2nd grade standards do not use the term “with prompting and support.” Thus, by giving young learners much-needed support in the early years, early childhood educators are preparing them for the next step to independence.

Social and Emotional Development

Children learn and thrive in environments where relationships are strong and where they feel emotionally secure and physically safe. Social and emotional development is the foundation of cognitive development and lifelong learning. Both the Infant and Toddler Developmental Guidelines and the Arizona Early Learning Standards purposefully place the Social and Emotional standard first,



to recognize the importance of these skills to any early learning foundation. In kindergarten, social and emotional skills and knowledge are identified within the Health and Physical Education standards.

Research has established a persuasive and compelling link between social and emotional development and school success (Raver, 2002; Smith, 2006). Academic achievement in the first few years of school appears to build on a foundation of emotional and social skills. Social skills identified as essential for school success include: getting along with others, following directions, identifying and regulating one's emotions and behavior, conflict resolution strategies, persistence, engaging in social conversation and cooperative play, feeling good about oneself, and correctly interpreting behavior and emotions in others (Fox & Smith, 2007). Research conducted by Raver & Knitzer (2002), found social, emotional, and behavioral competence in young children predicts academic performance in the 1st grade. A Rand research brief states, "Investments in the development of nonacademic school readiness skills may not only raise overall achievement, they may also narrow the achievement gap ..."

High-quality early learning environments that will close the learning gap and improve early learning outcomes for all students cannot be achieved without first creating environments where children feel welcome and recognize themselves as critical parts of the learning community. Early childhood educators intentionally create caring and responsive learning environments that support children along the continuum of social and emotional development. In quality learning environments, a community of learners is created that includes the instructional staff, families, and the young learners themselves. The foundation for any successful community of learners is consistent relationships and high-quality interactions within those relationships. Relationships have emotional connections, endure over time, have special meaning between the two people, and create memories and expectations in the minds of the people involved. Learning communities in early childhood education reflect sensitive and responsive care for the emotional and social needs of the young learners. Clear, consistent, developmentally appropriate expectations and supervision are implemented. High-quality environments are characterized by warm, positive, and responsive verbal interaction. In addition, young learners are seen as unique individuals in places where early childhood educators reflect on their own feelings and responses to each child.

Summary

The early childhood educators in any early learning environment (i.e., parents, caregivers, teachers, etc.) are key to creating strong learning foundations for children and eliminating learning gaps through quality early learning experiences. Creating a quality early learning environment is not an easy task, as it requires specialized knowledge in child development, special pedagogy for young learners, curriculum, effective instructional strategies, family dynamics, creating and sustaining relationships, and child outcome goals. Success comes through the early childhood educators' ability to create learning communities that support the social and emotional development of young learners, as well as the physical environment which represents the materials and learning centers that support active learning opportunities and engage young learners. It also encompasses the adults' abilities to implement a curriculum with fidelity, as well as adjust teaching based on evidence collected about a child's learning and development. Lastly, a quality early childhood environment is set in the foundation of the early childhood educators' ability to support the evolution of a young learner's thinking.

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LITERACIES AND THE 21ST CENTURY CHILD

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Introduction

Literacy is touted as the best determinant of future educational achievement. There are, however, multiple literacies, and these continue to increase as we advance technologically. This chapter examines how we acquire language, how language assists us in multiple literacies, how the subsets of language intertwine, and the importance of language. Additionally, other reports of import regarding “literacies” will be examined, and implications for preschool and kindergarten classrooms discussed.

Almost everyone agrees – literacy is the key to academic success in schools, and literacy learning begins at birth. But what is literacy – is it simply reading and writing? Or is it more?

Loris Malaguzzi, the key leader in creating the world-renowned Reggio philosophy of early childhood, says that children have “One Hundred Languages” (Edwards, Gandini, & Forman, 2012). By this, he means children have multiple means of self-expression, including the languages of art, music, drama, and technology. There are multiple literacies, and exposing children to multiple literacies and allowing them to play and improvise is foundational to academic growth and success.

To begin, let us understand that literacy is much more than reading and writing, and that the foundation of literacy involves “reading” one’s environment.

Walt Whitman expresses the impact of environment in his poem “There Was A Child Went Forth ...” (Whitman, 1900). In poetic refrain, Whitman comments that, “the first thing the child looked upon, he became.”

THERE was a child went forth every day;
And the first object he look’d upon, that object he became;
And that object became part of him for the day, or a certain part of the day,
or for many years,
or stretching cycles of years ...

In truth, the experiences children have in life make them what they are. The literacies they are exposed to, the books that are read to them, the musical or sporting event they attend, all become part of the child. As humans, what we experience creates the foundation for interpretations and extension of our own ideas and the ideas of others. Thus, it is essential that we provide our children rich and varied experiences that involve multiple literacy encounters.

Let's now consider multiple literacies, where they reside, and how parents can help children experience and engage with them.

Primary Reading

Many parents believe that reading is saying the words on a page. The reading of print is in fact a secondary literacy that comes only after primary literacies are achieved.

For example, Spencer (1970) explains that letters and words are maps for ideas but not ideas in themselves. These symbols must be linked to meanings that have origins in direct experiences. These concrete experiences must precede or accompany the reading of symbols. Spencer terms this environmental reading *primary reading*, and states that it is foundational to successful *secondary reading*, or the reading of printed materials. It is futile to begin teaching reading until children have these prerequisite experiences.

We must provide for and make use of primary reading both as a way of behavior and as a source of meaning and of judgments of significance. Word symbols are impotent to supply these. Consequently, a program for reading development which is concerned only with skills of word recognition and the analysis of word patterns is inadequate (Spencer, 1970, p. 16).

Primary sources are among the non-alphabetic reading that children encounter normally and naturally. These sources include numerals in many forms and in many places, such as clocks, dials, and price tags. They include the reading of maps and graphs and also the reading of meaning into photographs, computer images, and paintings. They also include music and dance, iPhone® apps, television, and even the taste of foods.

Language

Language learning seems to be a miracle. Going back to our Walt Whitman example, it's easy to understand that children become what their environment contains. Not every child learns a foreign language because they are not exposed to one. But they do learn many of the other "hundred languages" if the parent or caregiver includes those languages in the child's environment.

The move to a more cognitive perspective on language and its acquisition was led by Noam Chomsky (1965). He described language as being present in some potential form at birth, and stated that language develops innately as children interact with their environments. This nativistic perspective demonstrates that children learn language when they encounter it and as they need to understand and communicate with others.

Chomsky describes this inductive process through the analogy of an imaginary “device” that children have within them. This language-acquisition device (LAD) receives information from the environment in the form of language. The language is analyzed and rules generated. These rules are then applied as expression takes place through language communication. The LAD continues to operate as a generating rule system for language as children pass through the levels of maturation. Thus children are able to organize incoming characteristics of language, including rules, grammar, categories, and other linguistic structures. This internal learning is viewed as developing in a natural manner in communication-rich environments. Simply expressed, children learn to talk by being immersed in a world of language. They will speak the language of their models and will speak with their grammar and dialect. Educational pioneer and children’s literature author Bill Martin, Jr. describes this initial talk or speech of children as “home-rooted language” (Martin, 2001). This first language is precious to the child – it is the language of their mother and father and brothers and sisters. But to operate in the world outside the home, children need more avenues of expression. Parents recognize this and lead children to the language expressions of others, or what Martin calls “literary level language,” using books and music and media. We will discuss several sources of literary level language next.

Television

A major source of a child’s content information and language exposure is television. But all parents do not understand this, nor agree – for example, it is common to hear parents say, “We do not have a television in the house.” They mean well, undoubtedly thinking that their children might spend hours in front of the TV, watching mindless programs and neglecting human interaction. But what they don’t realize is that there are many educational and entertainment programs their child is missing out on, and that missing exposure to these programs is retarding their child’s learning. TV can be conducive to learning when parents make thoughtful viewing decisions for their children. Here are a few examples of educationally sound programs:

Octonauts (Disney)

The Octonauts (The Octonauts, 2013), based on the children’s books by Vicki Wong and Michael Murphy, originated as a British BBC children’s television show. It had its US premiere on the Disney Channel in January 2012, with many of the characters’ voices redubbed to give them American accents. The show stars an underwater crew of eight explorers who live in an underwater base, called the Octopod. The heroes research and save two exotic sea creatures per episode, all accompanied by high-quality music and graphics. Mueller (2013) shares that the series is “reminiscent of *Star Trek* and *Thunderbirds* blended with Jacques Cousteau.”

What is the educational value of the show for young children? They learn science by watching the show – the exotic marine sea creatures are real and are shown in their natural habitats and locations.

Sofia the First (Disney)

Another educational TV show for young children is *Sofia the First* (Sofia the First, 2013). It stars a young girl who becomes a princess overnight. The value of the show is that it models perseverance



and self-confidence, as it teaches the lesson that one can “do anything,” as evidenced by the words of the theme song, “Anything”:

I can be anything.
I can see anything.
You can teach anything.
I can reach anything.
I can do anything.

So can you.

Anything that you try,
Look and see,
You can be anything.

And whatever it takes,
I’ll learn from my mistakes.
I’ll get up when I fall,
And never stop giving it my all.

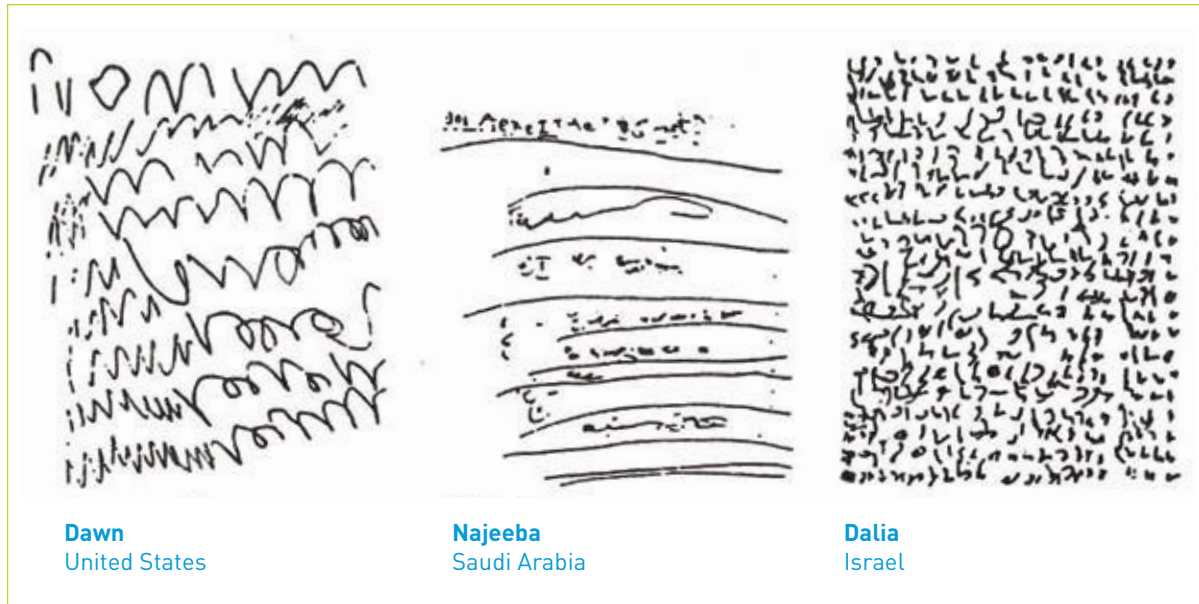
The show is a source of story structure and literary level language, but most of all it teaches young children that the sky is the limit in terms of what they can achieve in life.

Writing

Another one of the hundred languages of children is writing. At a very early age, children begin to write or scribble as they experiment with putting art and language on paper. Research shows that children represent meaning with their scribbles (Harste, Woodward, & Burke, 1984; Vygotsky, 1978) and show their growing awareness of print. They may seem meaningless to an adult, but they show the child’s experimentation with the concept that scribbles convey meaning in a concrete way. All children write with the “intent to mean” (Harste, Woodward, & Burke, 1984).

To demonstrate that these markings do show an interaction with print, consider the cultural impact of the following samples of 4-year-old children from Israel, the United States, and Saudi Arabia (Harste & Carey, 1979):

Figure 1



As you can see, children make their scribbles look like the print of their culture. Such research reinforces the concept that a child's perception of their surroundings includes a strong realization that print is a vital, valuable, and useful part of the adult world. That is why the goal of parents and preschool teachers is to provide opportunities for children to play with language and meaning with paper and markers, and then to ask the young child what their masterpiece "says." Perhaps you can read this note from 4-year-old Josh:

Figure 2



It says, according to Josh, "I love you 5 times!"

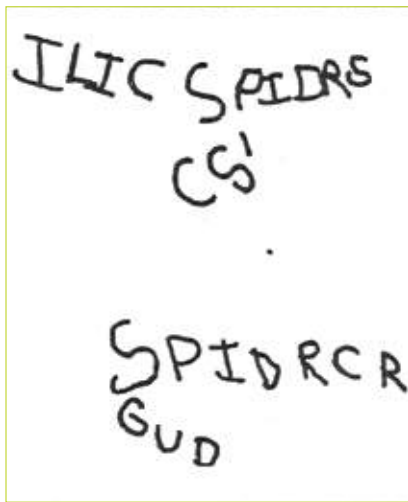
Clearly, children are interested in "writing" from an early age, and when given the opportunity, will explore ways to communicate through print. Parents might encourage their child to write something every day, and then listen as the child "reads" their masterpiece to them.

Exploratory Spelling

As we just discussed, young children's scribbles are a form of communication and self-expression. This early writing is a process that evolves as the child matures, so parents are patient with these letter-like forms that look only a little bit like writing. Literacy experts know that

children can write before they can read; both reading and writing are simply representations of language, or speaking. Children use “invented spellings” as they represent speech with symbols in their writing (Camburne & Turbill, 1988). I’ll use the term “exploratory spelling,” which fits what children are doing as they write. In fact, they are exploring how language works in print and not inventing anything. As an example of exploratory spelling, 5-year-old Caleb wrote “I LIC SPIDRS CS’ SPIDRCR GUD” (I like spiders because spiders are good). His actual print is shown in Figure 3.

Figure 3



Caleb’s writing shows that he understands that print may be used to express feelings and to record thoughts and opinions. He has started the process of becoming a writer.

From time to time, parents do not understand the developmental nature of literacy and want to criticize invented or exploratory spelling. However, learning to spell is a process that is associated with development and exposure to print. Figure 4 explains the five stages of spelling development, and how children move from scribbles to standard spelling.

Figure 4

Stage	Characteristics	Examples
Pictorial-Scribble Letter	Draws pictures; scribbles	Pictures children draw
	Recognizes that words are made up of letters	RD for Read
Phonetic	Spells words the way they sound Uses some vowels	“sekunt” for “second”
Approximal	Many words correct Some words spelled phonetically	“wondering” for “wondering”
Standard	Spelling is usually accurate Some spelling errors made	

e-Learning

Everywhere you look, you see a familiar scene – children engrossed with their parent’s iPhone or iPad® as they play games and solve puzzles, tapping on the screen and sliding tiny fingers on the glass. Parents often apologize about their child’s “addiction” to technology. But electronic media is also a language, and 3- and 4-year-olds learn it quickly. Hundreds of thousands of apps await young children, and range from pure entertainment to learning activities and games. For example, Aronin & Floyd (2013) used iPads with preschool classrooms to introduce STEM concepts, and found significant positive effects from the instruction.

Some parents criticize children using these, saying it takes time away from conversations, reading, and human interaction. However, there is time in the day for all of these, and interacting with technology proves to be a very important developmental activity.

The language of technology is indeed a language that has been shown to benefit young children. This is yet another example of how literacy learning is expanding for the 21st century child.

Predictable Books

Of all the languages of children, the one that has the most impact on beginning reading success is the language of books. Book language is finely crafted by authors and features literary level language, which we discussed earlier. One form of books for young readers is a genre called predictable books. Such books feature rhyming patterns that enable young children to read aloud as they predict the language on the page. Reading begins through the ears and through the eyes as children hear the melody of language and see the beauty of the picture book art. The key is not to rush the child, but to realize that with each repeated reading, the child is depositing the literary structure and sentence patterns in his or her linguistic storehouse.

Consider the language and pattern of the classic text for young children by Bill Martin, Jr. – *Brown Bear, Brown Bear, What Do You See?* (1972). Predictability comes from the inclusion of rhyme, rhythm, and repetition of phrases or sentences in a text.

Brown bear brown bear, what do you see?
I see a red bird looking at me.
Red bird red bird, what do you see?
I see a yellow duck looking at me (Martin, 1972).

The text continues through a variety of animals of various colors, moving into a preschool classroom, past the goldfish to the teacher, who says, “I see children looking at me!” Children as early as age 3 can “read” the text using the picture cues and memory of the predictable stanzas.

But how does a child move from being read to, to reading the book independently? They learn in the same way they learn to talk from listening and interacting with other language users. In learning to read, children begin the process through inputting language through the ear. Reading has its beginning behind the eye, in the brain, and not in front of the eyes (Smith, 1978). Later, after they

have internalized language and stories, they begin to equate what is in the mind to what is on the page. As they read these phrases and words, they realize that letters, sounds, and patterns of letters are repeated in words, and the child begins to internalize phonics. This knowledge is then applied to new words, and the child soon bursts into independent reading.

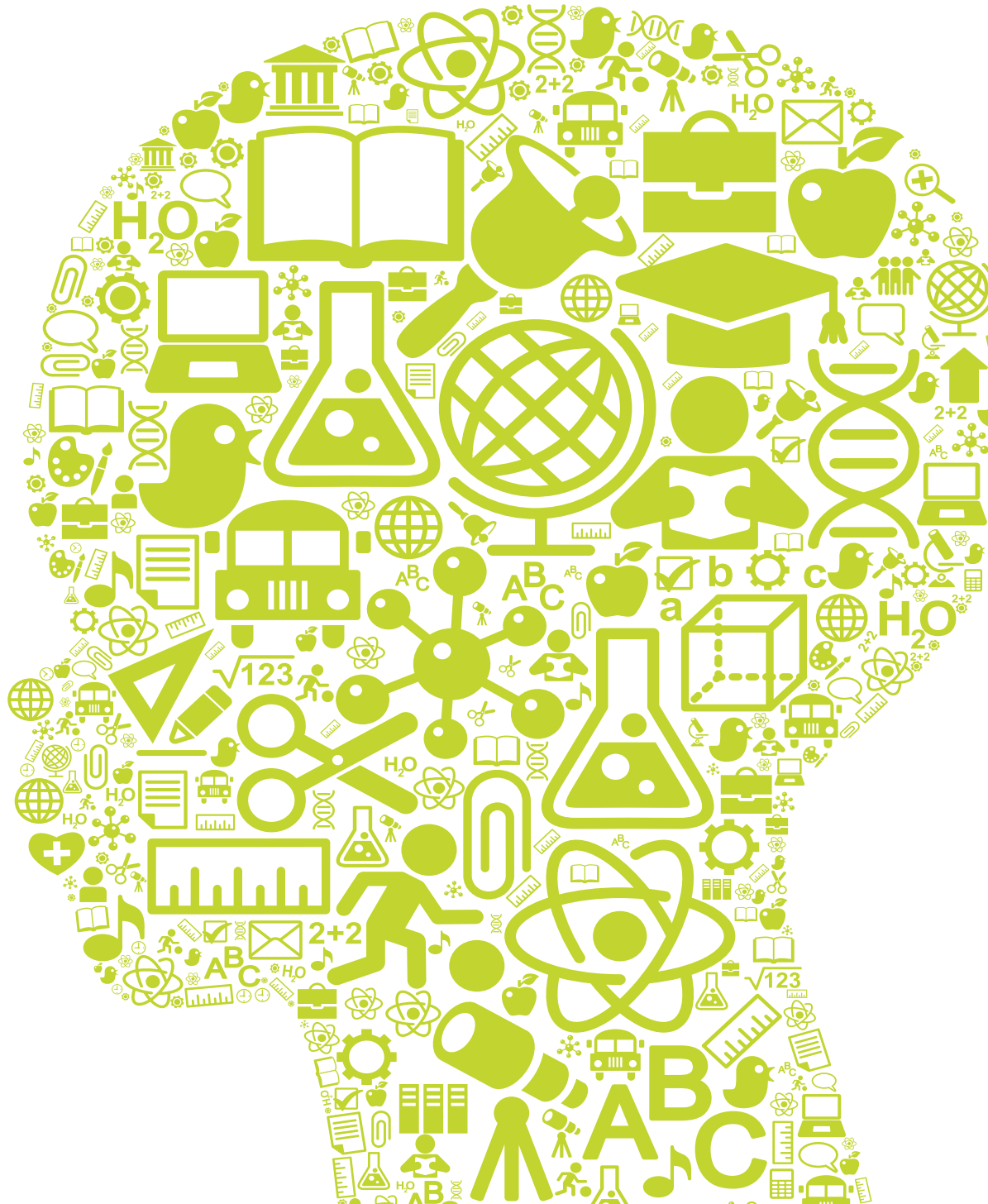
Summary

The natural way for children to learn is through exploration and discovery, as described in this article. We need to consider resisting current efforts to make preschool more formal and for curriculum to be forced upon children. Half a century ago, Gerber wrote that we show “respect for, and trust in the baby to be an initiator, an explorer, and a self learner” (Magda Gerber, 2012). This is also true for children in preschool and kindergarten; thus, we can rethink calls to get children “ready for kindergarten.” Instead, our preschool and kindergarten classrooms need the flexibility to allow children to direct their own learning as they explore the “one hundred languages” in creative settings.

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APPENDIX A: CHRONOLOGY OF EARLY CHILDHOOD EVENTS AND MILESTONES



The 1960s

- **1965:** Head Start began as an anti-poverty program serving children aged 3 to 5.
- **1968:** First Mary Moppet's opened, started era of "chain"-type centers in Arizona.
- **1969:** Upgrading Preschool Programs (UPP) was started by a Phoenix group interested in the quality of care and evaluation facilities. UPP was a prototype for the National Association for the Education of Young Children when they developed their program accreditation model.

The 1970s

- **1970:** The White House Conference endorsed the Comprehensive Child Development Act; in 1971, President Richard Nixon vetoed.
- **Mid-1970s:** The Arizona Department of Economic Security (DES) started providing child care subsidy payments on behalf of low-income families.
- **Mid-1970s:** The Phoenix and Tucson area early childhood professionals formed local affiliates of the National Association for the Education of Young Children (NAEYC).
- **1975:** The Comprehensive Child Development Act passed Congress but was again vetoed.
- **1976:** A 20 percent Dependent Care Tax Credit replaced the child care deduction on federal taxes. Child care was seen as an employment-related expense.
- **1976:** Arizona regulations for child care centers were developed and signed by Governor Raúl Castro. Responsibility for child care licensing was placed in the State Health Department.

The 1980s

- **1985:** Governor Bruce Babbitt created the Arizona Child Day Care Task Force to examine current licensing regulations and to produce recommendations. The result was improved staffing ratios in child care centers.
- **1986:** Governor Babbitt made children's issues the sole topic of his State of the State speech.
- **1987:** The Arizona Self Study Project, a partnership between several state agencies (DES, DHS, and ADE and the School for the Deaf and Blind), was formed to support early childhood programs through the self-study component of the accreditation process for the National Academy of Early Childhood Programs, a division of NAEYC.

- **1987:** Advocacy organizations pushed for the federal Act for Better Child Care. In 1988, the Senate refused to consider it.
- **1988:** Congress authorized the Family Support Act of 1988, which offered the first open-ended entitlement for child care in U.S. history.
- **1989:** SB 1449 Appropriation was made to the Arizona Department of Education for grants to local school districts for at-risk programs for preschoolers.

The 1990s

- **1990:** The National Child Care Study showed widespread shortages of infant and toddler care.
- **1990:** DES implemented the Family Support Act of 1988, which assisted families during the transition from welfare to work.
- **1991:** A state affiliate of the National Association for the Education of Young Children was established. This professional association for early childhood educators in Arizona (Arizona AEYC) included local affiliates across the state.
- **1991:** Child Care and Development Block Grant (CCDBG) funds were made available to improve the affordability, availability, and quality of child care.
- **Early 1990s:** The Arizona Child Care Resource and Referral (CCR&R) Project was established with leadership by the Children’s Action Alliance.
- **Early 1990s:** Arizona-based companies provided start-up funds to establish sick child care options for employees.
- **Early 1990s:** Success by Six began under the auspices of the Children’s Action Alliance. It was a collaborative effort to improve program quality and to ensure all Arizona children were ready for success in school by age six – funded by US West, Honeywell, and Phoenix Newspapers.
- **1994:** President Bill Clinton signed the Family and Medical Leave Act.
- **1994:** The Carnegie Corporation released the publication *Starting Points*, showing the critical importance of good care in the first three years of life.
- **Mid-1990s:** The Arizona Child Care subsidy program was in the state statute for the first time.
- **1994:** Success by Six – State funding was provided for three effective early childhood support programs: Healthy Families, Health Start, and Family Literacy.

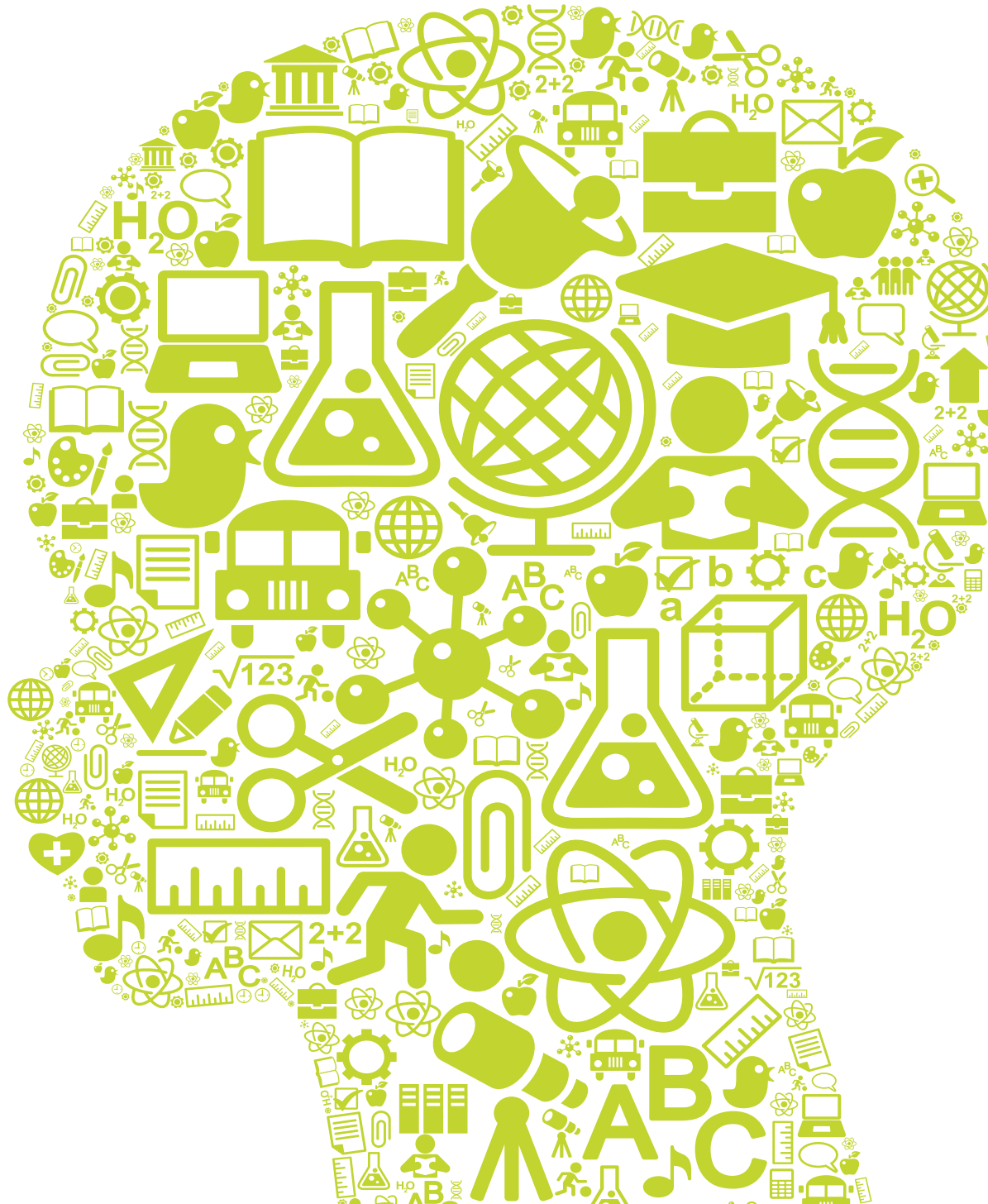
- **1996:** Improved Head Start Performance Standards included children from birth to age 5.
- **1997:** Arizona's Kids Care program (Arizona's version of the State Children's Health Initiative Program) became effective with state matching funds from the Tobacco Tax Fund.
- **1998–99:** DES Child Care rates to providers were improved by the Arizona State Legislature for the first time since 1989. They were still below the actual market rate.
- **1999:** The Arizona State Legislature appropriated funding for an enhanced rate for accredited providers.

2000–2013

- **2000–01:** State increased child care subsidy to the 75th percentile of the cost of child care based on the cost of child care in 1998.
- **Mid 2000s–present:** Increase in international and national research and publications related to educational neuroscience in the early years.
- **2001:** White House Summit on Early Childhood Cognitive Development hosted by Mrs. Laura Bush.
- **2002:** The Arizona School Readiness Board was created by executive order to develop a plan to establish a comprehensive system of early care and education.
- **2004–05:** State funded the first year of a five-year phase-in of full-day kindergarten.
- **2005:** State Board of Education approved Arizona Early Learning Standards for 3–5-year-old children.
- **2005:** State eliminated the child care waiting list by allocating an additional \$11.2 million to the child care subsidy program.
- **2006:** Voters passed Proposition 203 (First Things First), a dedicated funding stream, governance model, and delivery mechanism for early care and education of children birth through age 5.
- **2006–07:** State increased the child care subsidy rate to the 75th percentile of the cost of child care in 2000 based on the 2000 market rate survey.
- **2006–07:** State rolled funding for full-day kindergarten into the K–12 formula, completing the phase-in ahead of the original 2009–10 target.
- **2007–08:** State added \$1 million to federal Reading First Initiative to be distributed as grants to schools.

- **2007–08:** State appropriated \$9 million to provide a 5 percent increase to child care subsidy rates.
- **2009:** In order to reduce a \$1.2 billion budget deficit, the Arizona Legislature eliminated the state funding match for federal Child Care Development Fund monies, placing child care subsidies for low-income working families at risk. A waiting list for Child Care Subsidy grew to 20,000+ families by the end of 2010.
- **2009:** Arizona legislature eliminated state funding for all-day kindergarten.
- **2009:** First Things First Board approved Early Childhood Emergency Response Program to help 15,011 children access or remain in child care programs.
- **2010:** Voters defeated Proposition 302, which would have taken away the dedicated funding for First Things First. It was defeated with a 70 percent statewide vote and a sizeable majority in every county and legislative district.
- **2010:** First Things First launched Quality First, Arizona’s comprehensive child care quality improvement and rating system.
- **2010:** Arizona defunded the Early Childhood Block Grant, eliminating support for preschool.
- **2010:** First Things First provided the state’s match to save the child care subsidy for low-income working parents.
- **2011:** First Things First leads the state application for federal Race to the Top/Early Learning Challenge Grants. Arizona did not receive the award but new collaborations were established for next funding round.
- **2012:** Arizona joins the national BUILD initiative with a focus on broadening the comprehensive systems building efforts in for early childhood programs and services in Arizona.
- **2013:** The U.S. Department of Health and Human Services proposes new standards to promote the health, safety and school readiness of children in federally-funded child care.
- **2013:** President Barack Obama proposed an early learning plan that would provide universal preschool for low-income and middle-income young children.

APPENDIX B: ARIZONA STATISTICS





Basic Facts About Low-income Children *Children Under 3 Years, 2011*

Sophia Addy | William Engelhardt | Curtis Skinner

January 2013

Children represent 24 percent of the population, but they comprise 34 percent of all people in poverty.¹ Among all children, 45 percent live in low-income families and approximately one in every five (22 percent) live in poor families. Our very youngest children, infants and toddlers under 3 years of age, appear to be particularly vulnerable, with 49 percent living in low-income families, including 26 percent living in poor families. Being a child in a low-income or poor family does not happen by chance. There are a range of factors associated with children's experiences of economic insecurity, including race/ethnicity and parents' educational attainment and employment. This fact sheet describes the demographic, socio-economic, and geographic characteristics of children and their parents. It highlights important factors that appear to distinguish low-income and poor children from their less disadvantaged counterparts.



National Center for Children in Poverty

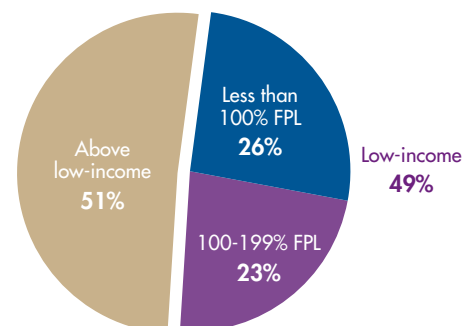
Mailman School of Public Health
Columbia University

How many infants and toddlers under 3 years old in the United States live in low-income families?

There are more than 11 million infants and toddlers under 3 years old in the United States.

- ◆ 49 percent – 5.6 million – live in low-income families.
- ◆ 26 percent – 3 million – live in poor families.

Infants and toddlers by family income, 2011



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What was the federal poverty level (FPL) in 2011?²

- ◆ \$22,350 for a family of four.
- ◆ \$18,530 for a family of three.
- ◆ \$14,710 for a family of two.

Is a poverty-level income enough to support a family?

Research suggests that, on average, families need an income equal to about two times the federal poverty level to meet their most basic needs.³ Families with incomes below this level are referred to as low income:

- ◆ \$44,700 for a family of four.
- ◆ \$37,060 for a family of three.
- ◆ \$29,420 for a family of two.

These dollar amounts approximate the average minimum income families need to make ends meet, but actual expenses vary greatly by locality. In 2011, the cost of meeting basic family needs was about \$64,000 per year in Los Angeles for a family of four. In 2010, the cost was \$57,000 in Newark, N.J., \$47,000 in Billings, Mont., and \$42,000 in Jackson, Miss.⁴

What is the 2012 federal poverty level (FPL)?

- ◆ \$23,050 for a family of four.
- ◆ \$19,090 for a family of three.
- ◆ \$15,130 for a family of two.

Has the percentage of infants and toddlers living in low-income and poor families changed over time?

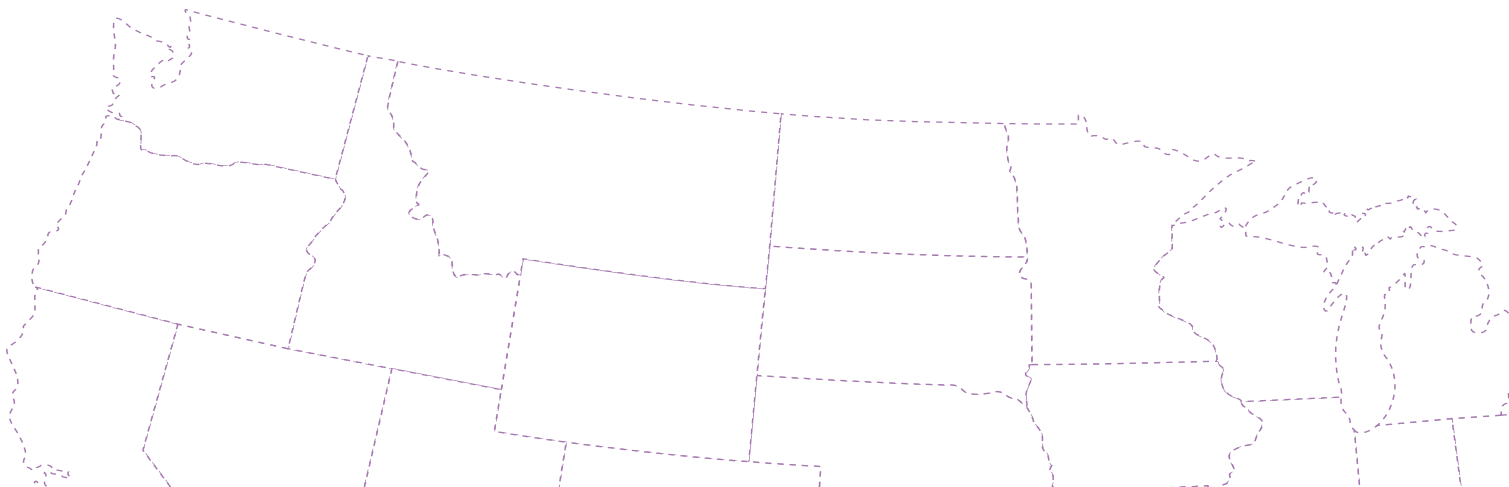
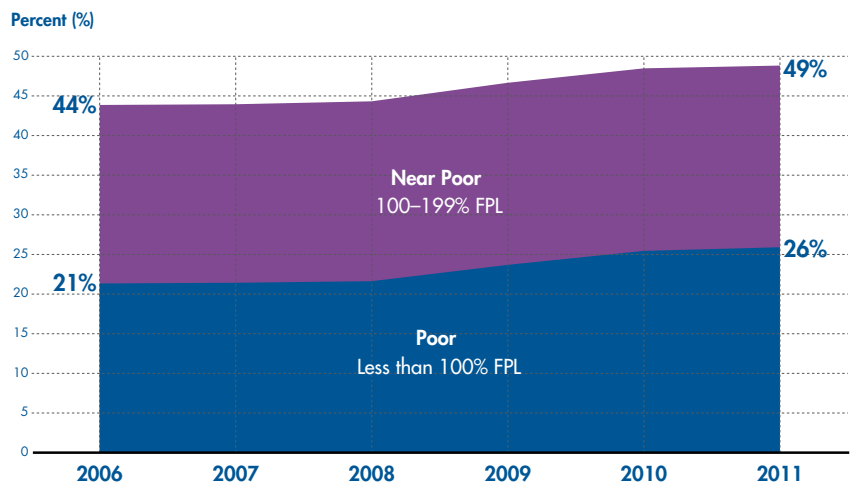
The percentage of infants and toddlers living in low-income families (both poor and near poor) has been *on the rise* – increasing from 44 percent in 2006 to 49 percent in 2011. During this time period, the

overall number of the very youngest children (children under 3 years old) decreased by 4 percent while the number who were low-income and poor increased by 7 percent and 17 percent, respectively.

Percentage change of infants and toddlers living in low-income and poor families, 2006–2011

	2006	2011	Percent change
Low-income	5,211,591	5,592,674	7%
Poor	2,535,419	2,967,444	17%

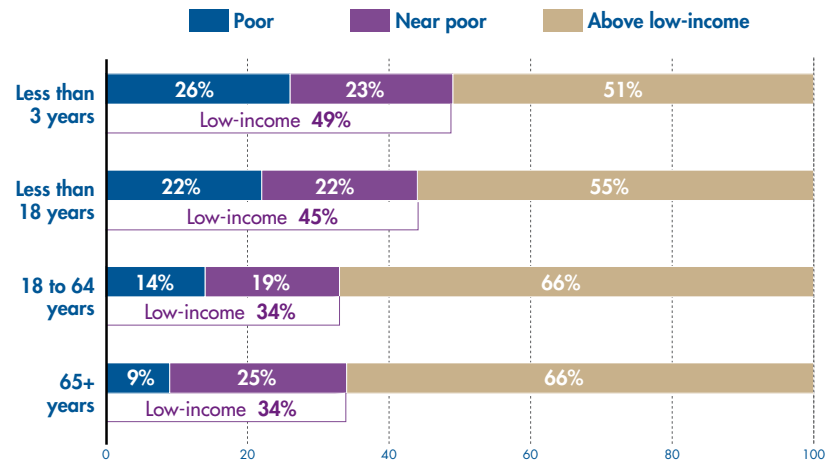
Infants and toddlers living in low-income and poor families, 2006–2011



How do infants and toddlers compare to the rest of the population?

The percentage of infants and toddlers in low-income families surpasses that of adults. In addition, children less than 3 years old are nearly three times as likely as adults 65 years and older to live in poor families.

Family income by age, 2011



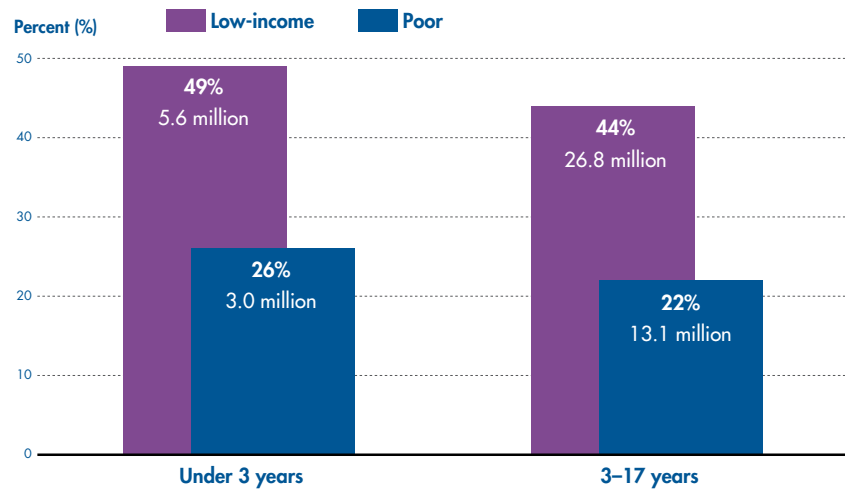
Percentages may not add to 100 due to rounding.

Does the percentage of children in low-income families vary by children's age?

The overall percentages of children living in low-income and poor families mask important variations by age. Although children under 3 years of age represent 16 percent of the population under 18 years, they are disproportionately low income.

- ◆ 49 percent of children under 3 years old – 5.6 million – live in low-income families.
- ◆ 44 percent of children ages 3 through 17 years old – 26.8 million – live in low-income families.

Percentage of children in low-income and poor families by age, 2011

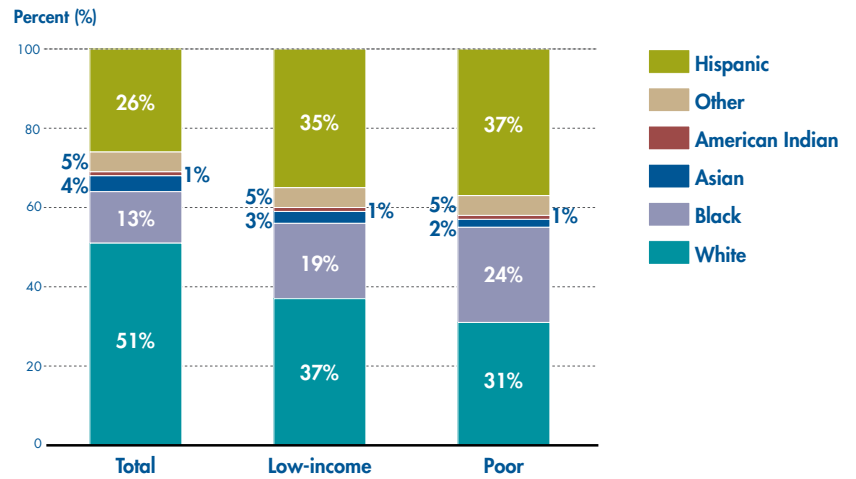


Does the percentage of infants and toddlers in low-income families vary by race/ethnicity?⁵

Although black, American Indian, and Hispanic infants and toddlers are disproportionately low income, whites comprise the largest group of low-income infants and toddlers (37 percent).

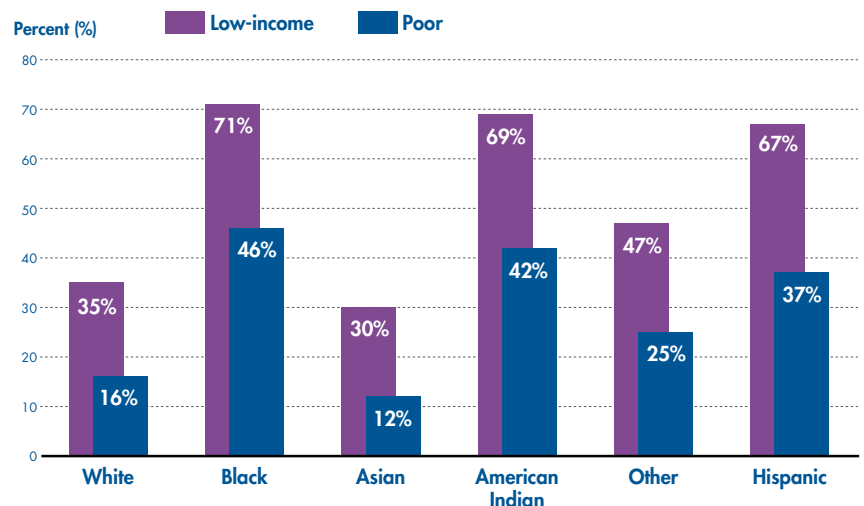
- ◆ 35 percent of white infants and toddlers – 2.1 million – live in low-income families.
- ◆ 71 percent of black infants and toddlers – 1.1 million – live in low-income families.
- ◆ 30 percent of Asian infants and toddlers – 0.1 million – live in low-income families.
- ◆ 69 percent of American Indian infants and toddlers – about 62,000 – live in low-income families.
- ◆ 47 percent of infants and toddlers of some other race – 0.3 million – live in low-income families.
- ◆ 67 percent of Hispanic infants and toddlers – 2 million – live in low-income families.

Race/ethnicity among infants and toddlers by family income, 2011



Percentages may not add to 100 due to rounding.

Percentage of infants and toddlers in low-income and poor families by race/ethnicity, 2011



Does the percentage of infants and toddlers in low-income families vary by parents' country of birth?⁶

- ◆ 65 percent of infants and toddlers with immigrant parents – 1.3 million – live in low-income families.
- ◆ 46 percent of infants and toddlers with native-born parents – 4 million – live in low-income families.

What are the family characteristics of low-income and poor infants and toddlers?

Parents' Education⁷

Higher levels of parents' education decrease the likelihood that a child will live in a low-income or poor family. Yet, nearly one-half (46 percent) of low-income and over one-third (38 percent) of poor infants and toddlers have a parent with at least some college.

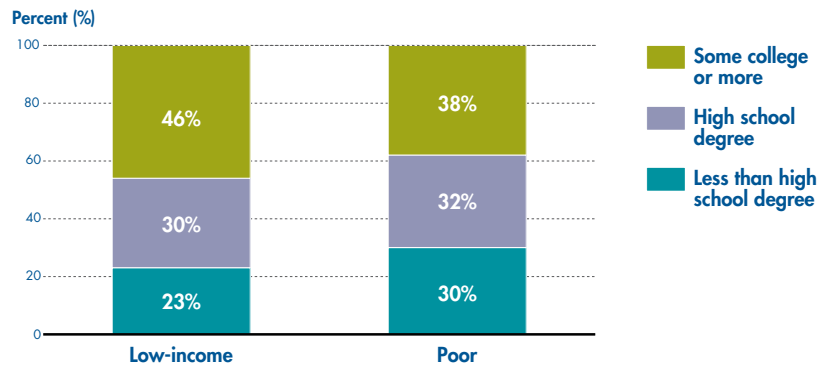
- ◆ 88 percent of infants and toddlers with parents who have less than a high school degree – 1.3 million – live in low-income families.
- ◆ 73 percent of infants and toddlers with parents who have a high school degree but no college – 1.7 million – live in low-income families.
- ◆ 34 percent of infants and toddlers with at least one parent who has some college or more education – 2.6 million – live in low-income families.

Parents' Employment⁸

Although infants and toddlers with a full-time, year-round employed parent comprise about 43 percent of the low-income population, they are less likely to be living in a low-income family, compared to infants and toddlers with parents who work part-time/part-year or who are not employed.

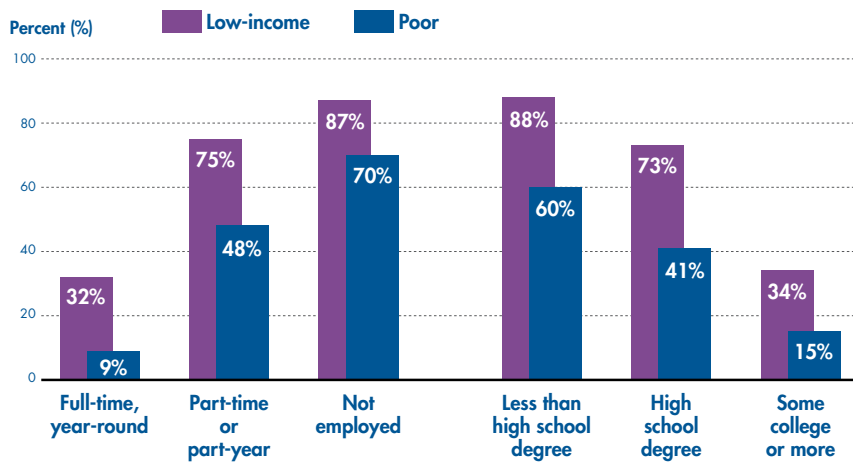
- ◆ 32 percent of infants and toddlers with at least one parent who works full-time, year-round – 2.4 million – live in low-income families.
- ◆ 75 percent of infants and toddlers with at least one parent who works part-time or part-

Parents' education among infants and toddlers by family income, 2011



Percentages may not add to 100 due to rounding.

Percentage of infants and toddlers in low-income and poor families by parents' employment and education, 2011



year – 2 million – live in low-income families.

- ◆ 87 percent of infants and toddlers with no employed parents – 1.2 million – live in low-income families.

Family Structure

Forty-six percent of children under 3 years of age in low-income families – 2.5 million – and 34

percent of children under 3 years old in poor families – 1.0 million – live with married parents.

- ◆ 34 percent of infants and toddlers with married parents – 2.5 million – live in low-income families.
- ◆ 76 percent of infants and toddlers with a single parent – 3 million – live in low-income families.

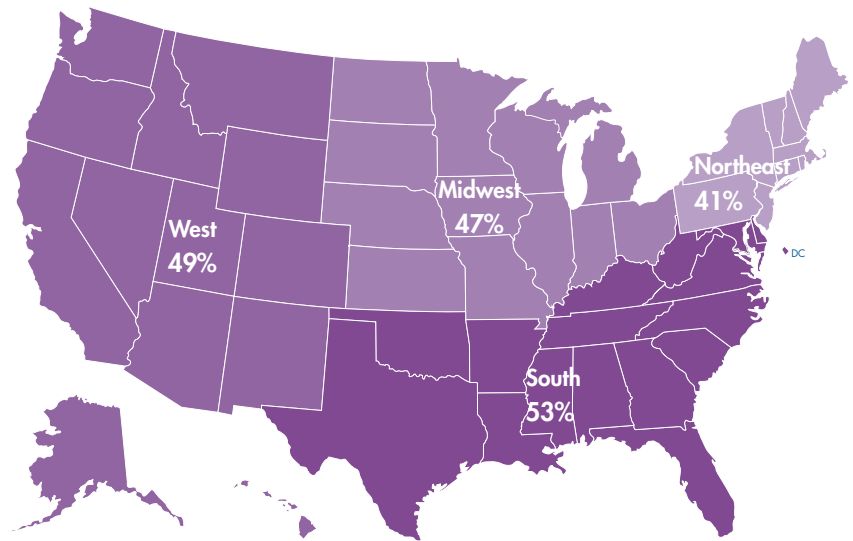
Does the percentage of infants and toddlers in low-income families vary by where they live?

Region

The percentage of infants and toddlers in low-income families varies substantially by region.

- ◆ 41 percent of infants and toddlers in the Northeast – 0.7 million – live in low-income families.
- ◆ 47 percent of infants and toddlers in the Midwest – 1.2 million – live in low-income families.
- ◆ 53 percent of infants and toddlers in the South – 2.3 million – live in low-income families.
- ◆ 49 percent of infants and toddlers in the West – 1.4 million – live in low-income families.

Percentage of infants and toddlers in low-income families by region, 2011

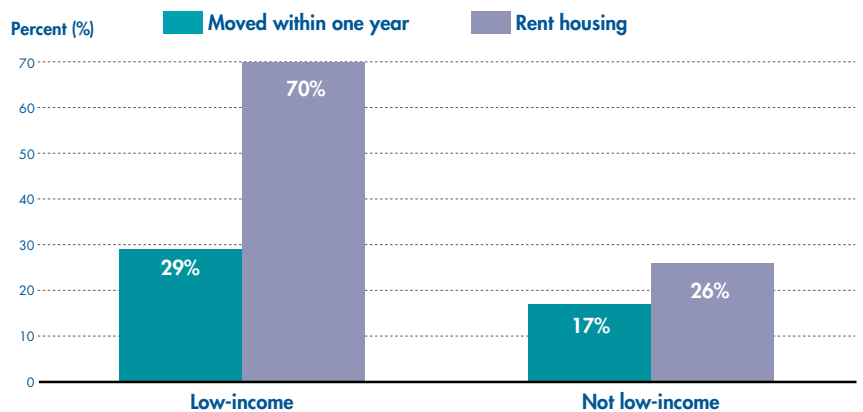


Type of Area

Similarly, infants and toddlers living in rural areas are more likely to live in low-income families compared to those living in urban areas.

- ◆ 47 percent of infants and toddlers in urban areas – 4.3 million – live in low-income families.
- ◆ 58 percent of infants and toddlers in rural areas – 1 million – live in low-income families.

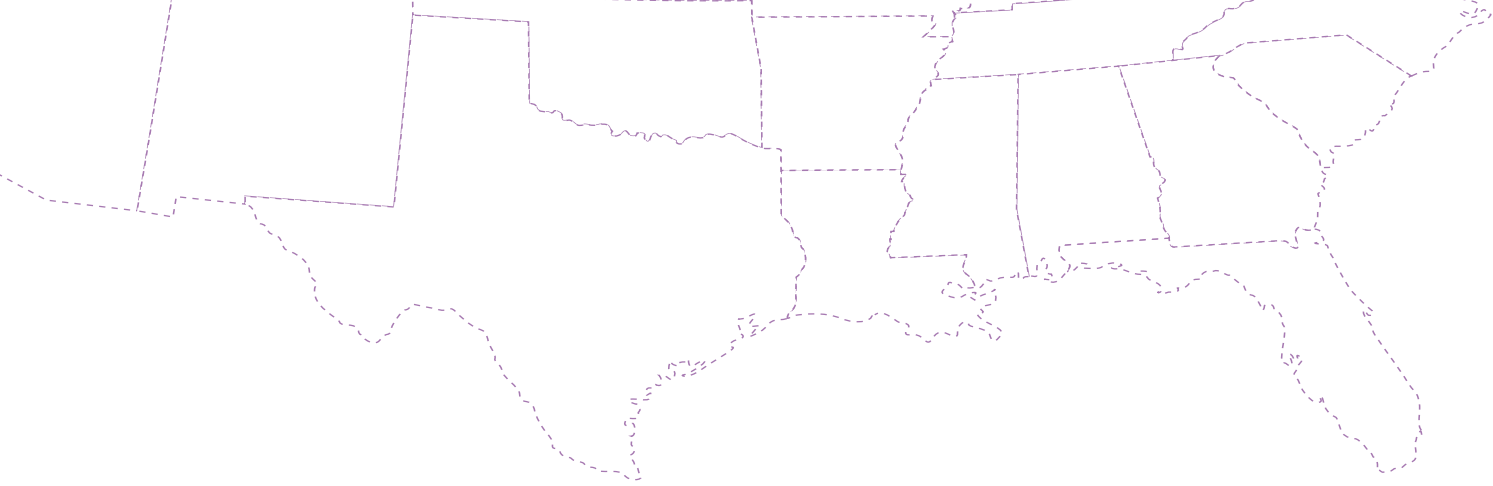
Residential instability and home ownership among infants and toddlers by family income, 2011



Residential Instability and Home Ownership

Research suggests that stable housing is important for healthy child development.⁹ However, infants and toddlers living in low-income families are more likely than other children to have moved in the past year and to live in families that rent a home.

- ◆ 29 percent of infants and toddlers in low-income families – 1.6 million – moved in the last year.
- ◆ 70 percent of infants and toddlers in low-income families – 3.9 million – live with a family that rents a home.
- ◆ 17 percent of infants and toddlers in families with higher income – 1 million – moved in the last year.
- ◆ 26 percent of infants and toddlers in families with higher income – 1.5 million – live with a family that rents a home.

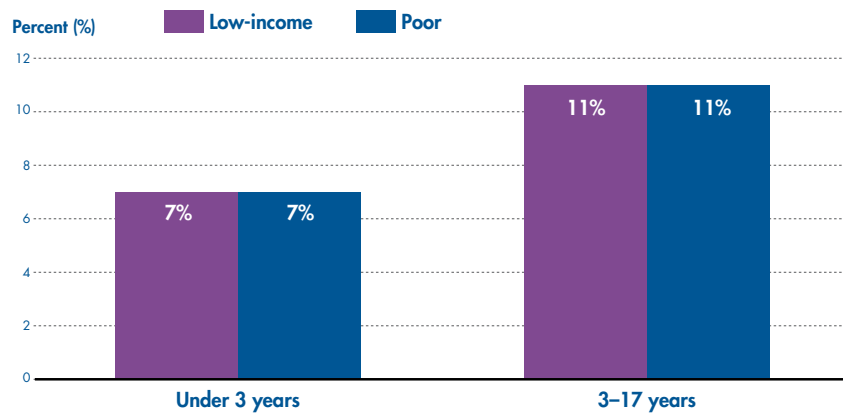


Are infants and toddlers in low-income families covered by health insurance?¹⁰

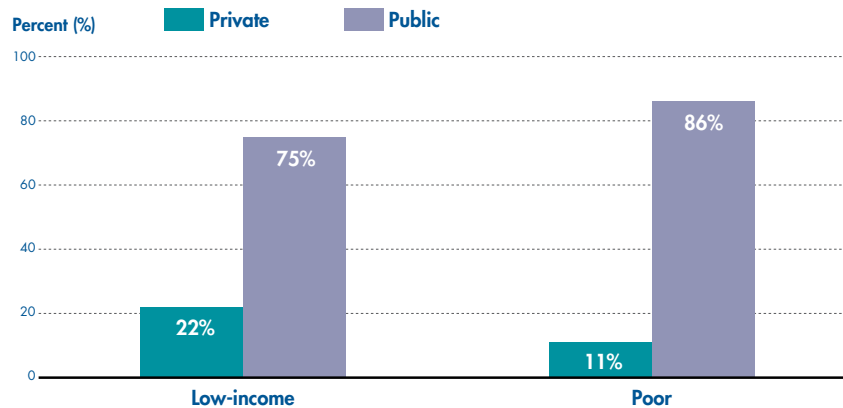
Among all infants and toddlers, approximately 7 percent in low-income families and 7 percent in poor families are uninsured. Consistent with research suggesting older children are particularly at risk of being uninsured, infants and toddlers are less likely to be without health insurance coverage compared to older children.¹¹ Public insurance reaches the largest share of economically disadvantaged infants and toddlers, covering about three-fourths (75 percent) of these children in low-income families and 86 percent of these children in poor families.

- ◆ 7 percent of infants and toddlers living in low-income families – 0.4 million – are uninsured.
- ◆ 22 percent of infants and toddlers living in low-income families – 1.2 million – are covered by private insurance.
- ◆ 75 percent of infants and toddlers living in low-income families – 4.2 million – are covered by public insurance.

Percentage of children uninsured in low-income and poor families by age, 2011



Type of health insurance coverage among infants and toddlers by family income, 2011



For comparable information about all children, see *Basic Facts About Low-income Children: Children Under 18 Years, 2011*, or about young children, see *Basic Facts About Low-income Children: Children Under 6 Years, 2011*, or *Basic Facts About Low-income Children: Children Aged 6 through 11 Years, 2011*, or about adolescent children, see *Basic Facts About Low-income Children: Children Aged 12 through 17 Years, 2011*.

Endnotes

This fact sheet is part of the National Center for Children in Poverty's demographic fact sheet series and is updated annually. Estimates published in this year's fact sheet are directly comparable with last year (2010) but not with earlier years, as the data analyzed changed from the Current Population Survey (used in years before 2010) to the American Community Survey (ACS). Unless otherwise noted, analysis of the 2011 American Community Survey (ACS) was conducted by Sophia Addy of NCCP. Yumiko Aratani provided feedback that contributed to the analysis. Estimates include children living in households with at least one parent and most children living apart from both parents (for example, children being raised by grandparents). Children living independently, living with a spouse, or in group quarters are excluded from these data. Children 14 years old and under living with only unrelated adults were not included because data on their income status were not available. Among children who do not live with at least one parent, parental characteristics are those of the householder and/or the householder's spouse. Special thanks to Morris Ardoin, Amy Palmisano, and Telly Valdellon.

1. In this fact sheet, poverty is defined as family income less than 100 percent of the poverty threshold; low income is defined as family income less than 200 percent of the poverty threshold.
2. These numbers are from the federal poverty guidelines issued annually by the U.S. Department of Health and Human Services. The demographic findings in this fact sheet were calculated using more complex versions of the federal poverty measure – the thresholds issued by the U.S. Census Bureau. Please see <http://aspe.hhs.gov/poverty/11poverty.shtml> for the 2011 poverty thresholds. For more information on measuring poverty and the differences between the federal poverty guidelines and the thresholds, see the U.S. Department of Health and Human Services website.
3. Cauthen, Nancy K.; & Fass, Sarah. (2008). *Measuring income and poverty in the United States*. New York, NY: National Center for Children in Poverty, Columbia University, Mailman School of Public Health.
4. These figures were derived from NCCP's Basic Needs Budget Calculator.
5. In the most recent ACS, parents could report children's race as one or more of the following: "White," "Black," "American Indian or Alaska Native," or "Asian and/or Hawaiian/Pacific Islander." In a separate question, parents could report whether their children were of Hispanic origin. For the data reported, children whose parent reported their race as White, Black, American Indian or Alaska Native, or Asian and/or Hawaiian/Pacific Islander and their ethnicity as non-Hispanic are assigned their respective race. Children who were reported to be of more than one race were assigned as Other. Children whose

parent identified them as Hispanic were categorized as Hispanic, regardless of their reported race.

6. Children living in households with one immigrant parent and one native-born parent (approximately 0.8 million) are not included in these estimates.

7. Parent's education is the education level of the most highly educated parent living in the household. Parents can either have no high school degree; a high school degree, but no college; or some college or more.

8. Parent's employment is the employment level of the parent in the household who maintained the highest level of employment in the previous year. Parents can either have no employment in the previous year, part-year or part-time employment, or full-time, year-round employment. Part-year or part-time employment is defined as either working less than 50 weeks in the previous year or less than 35 hours per week. Full-time, year-round employment is defined as working at least 50 weeks in the previous year and 35 hours or more per week for more than half the year.

9. Aratani, Yumiko. (2009). *Homeless children and youth*. New York, NY: National Center for Children in Poverty, Columbia University, Mailman School of Public Health.

10. People can report more than one type of insurance coverage. Children not covered by private or public health insurance at the time of the survey are considered uninsured.

11. Schwarz, Susan Wile. (2009). *Adolescent mental health in the United States*. New York, NY: National Center for Children in Poverty, Columbia University, Mailman School of Public Health.



Basic Facts About Low-income Children *Children Under 6 Years, 2011*

Sophia Addy | William Engelhardt | Curtis Skinner

January 2013

Children represent 24 percent of the population, but they comprise 34 percent of all people in poverty.¹ Among all children, 45 percent live in low-income families and approximately one in every five (22 percent) live in poor families. Young children under 6 years of age appear to be particularly vulnerable, with 49 percent living in low-income families and 25 percent living in poor families. Being a child in a low-income or poor family does not happen by chance. There are a range of factors associated with children's experiences of economic insecurity, including race/ethnicity and parents' education and employment. This fact sheet describes the demographic, socio-economic, and geographic characteristics of young children and their parents. It highlights important factors that appear to distinguish low-income and poor children in this age group from their less disadvantaged counterparts.



National Center for Children in Poverty

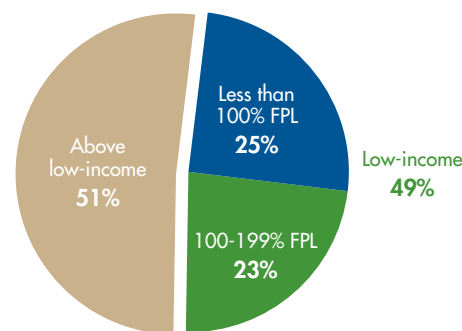
Mailman School of Public Health
Columbia University

How many young children under 6 years old in the United States live in low-income families?

There are nearly 24 million young children under 6 years old in the United States.

- ◆ 49 percent – 11.5 million – live in low-income families.
- ◆ 25 percent – 6 million – live in poor families.

Children under 6 years old by family income, 2011



Percentages may not add to 100 due to rounding.

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New York, NY 10027-4426
Ph. 646-284-9600

www.nccp.org

What was the federal poverty level (FPL) in 2011?²

- ◆ \$22,350 for a family of four.
- ◆ \$18,530 for a family of three.
- ◆ \$14,710 for a family of two.

Is a poverty-level income enough to support a family?

Research suggests that, on average, families need an income equal to about two times the federal poverty level to meet their most basic needs.³ Families with incomes below this level are referred to as low income:

- ◆ \$44,700 for a family of four.
- ◆ \$37,060 for a family of three.
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These dollar amounts approximate the average minimum income families need to make ends meet, but actual expenses vary greatly by locality. In 2011, the cost of meeting basic family needs was about \$64,000 per year in Los Angeles for a family of four. In 2010, the cost was \$57,000 in Newark, N.J., \$47,000 in Billings, Mont., and \$42,000 in Jackson, Miss.⁴

What is the 2012 federal poverty level (FPL)?

- ◆ \$23,050 for a family of four.
- ◆ \$19,090 for a family of three.
- ◆ \$15,130 for a family of two.

Has the percentage of young children living in low-income and poor families changed over time?

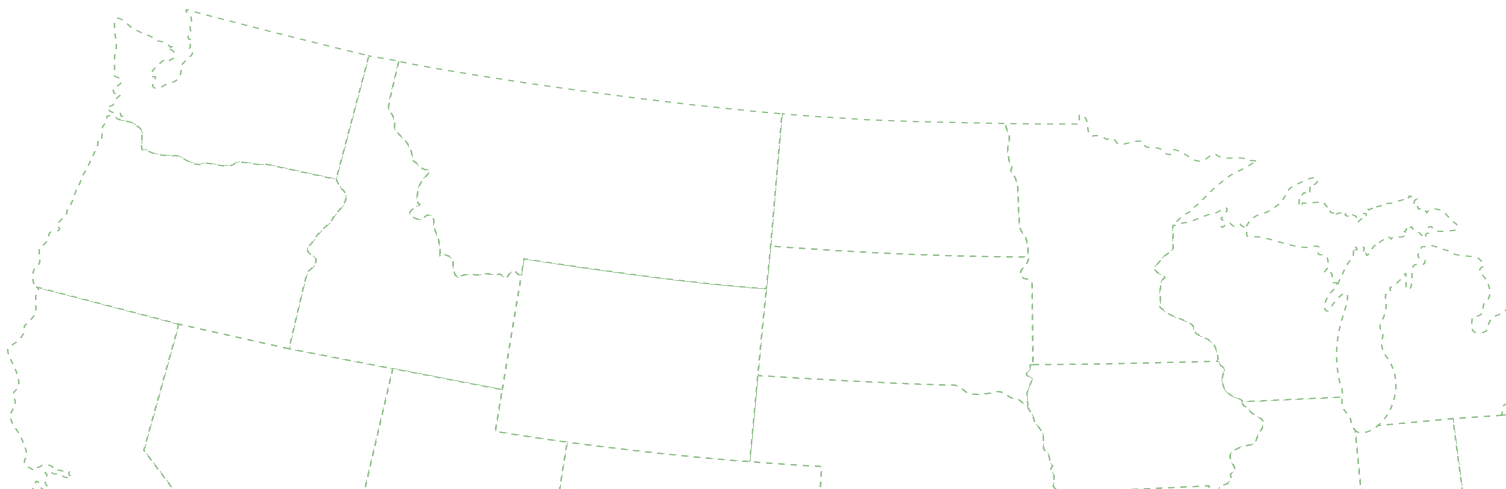
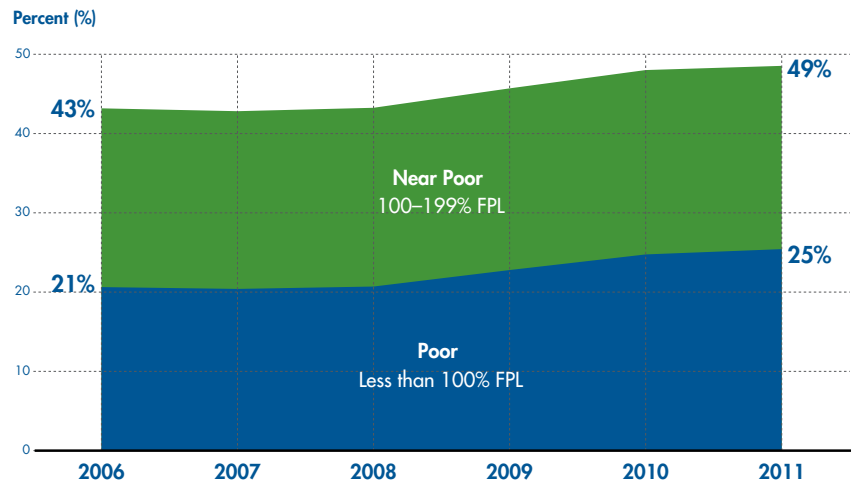
The percentage of young children living in low-income families (both poor and near poor) has been *on the rise* – increasing from 43 percent in 2006 to 49 percent in 2011. During this time period,

the overall number of young children under 6 years old remained relatively constant, while the numbers who were low income and poor increased by 12 percent and 22 percent, respectively.

Percentage change of children under 6 years old living in low-income and poor families, 2006–2011

	2006	2011	Percent change
Low-income	10,329,019	11,533,628	12%
Poor	4,934,758	6,039,500	22%

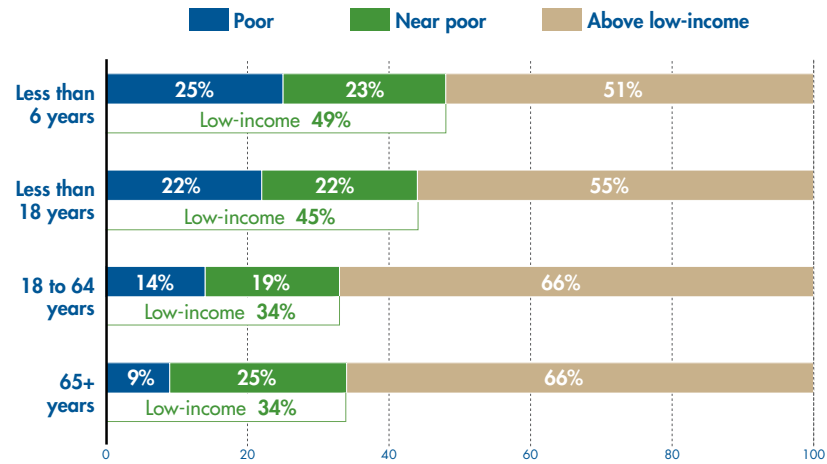
Children under 6 years old living in low-income and poor families, 2006–2011



How do young children compare to the rest of the population?

The percentage of young children in low-income families surpasses that of adults. In addition, children under 6 years old are more than twice as likely as adults age 65 years and older to live in poor families.

Family income by age, 2011



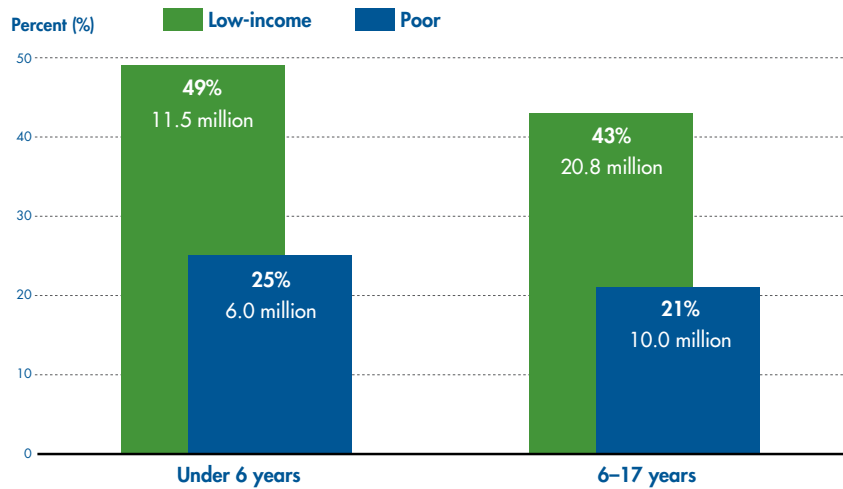
Percentages may not add to 100 due to rounding.

Does the percentage of children in low-income families vary by children's age?

The overall percentages of children living in low-income and poor families mask important variations by age. Although children under 6 years of age represent 33 percent of the population under 18 years, they are disproportionately low income.

- ◆ 49 percent of children under 6 years old – 11.5 million – live in low-income families.
- ◆ 43 percent of children 6 through 17 years old – 20.8 million – live in low-income families.

Percentage of children in low-income and poor families by age, 2011

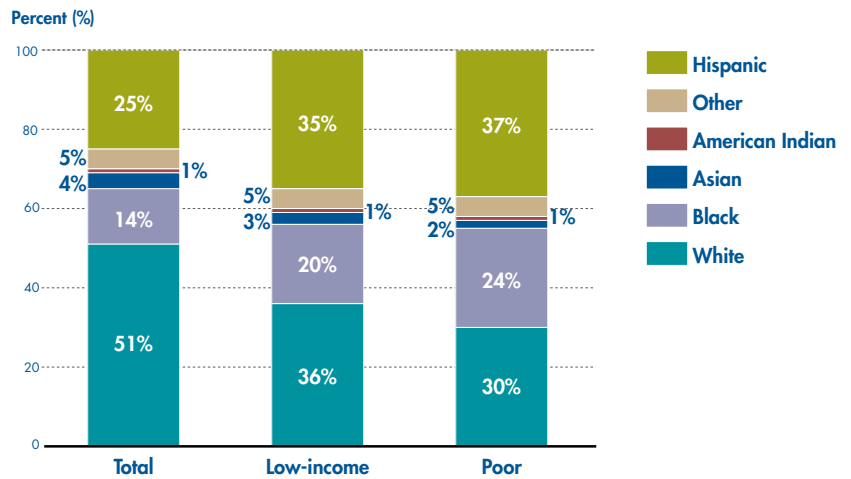


Does the percentage of young children in low-income families vary by race/ethnicity?⁵

Although black, American Indian, and Hispanic children under 6 years of age are disproportionately low income, white children comprise the largest group of low-income young children, and children of Hispanic origin make up the largest group of poor young children.

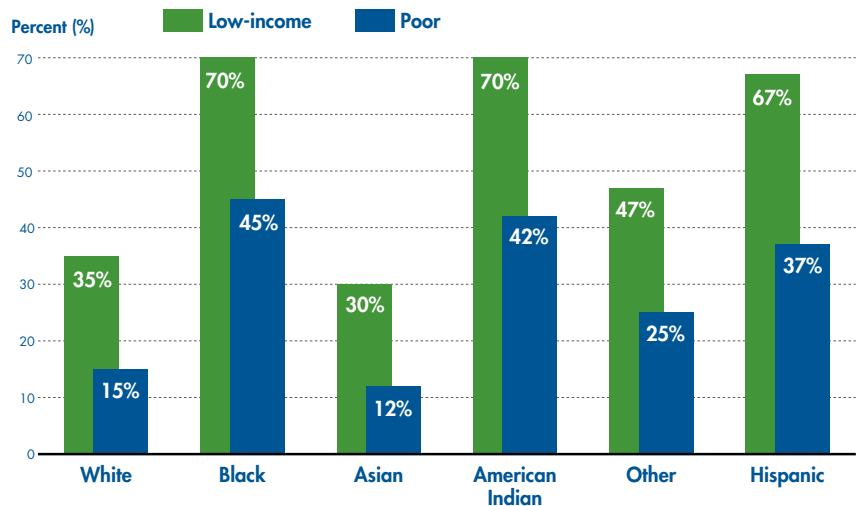
- ◆ 35 percent of white children under 6 years old – 4.2 million – live in low-income families.
- ◆ 70 percent of black children under 6 years old – 2.3 million – live in low-income families.
- ◆ 30 percent of Asian children under 6 years old – 0.3 million – live in low-income families.
- ◆ 70 percent of American Indian children under 6 years old – 0.1 million – live in low-income families.
- ◆ 47 percent of children under 6 years old of some other race – 0.6 million – live in low-income families.
- ◆ 67 percent of Hispanic children under 6 years old – 4.1 million – live in low-income families.

Race/ethnicity among children under 6 years old by family income, 2011



Percentages may not add to 100 due to rounding.

Percentage of children under 6 years old in low-income and poor families by race/ethnicity, 2011



Does the percentage of young children in low-income families vary by parents' country of origin?⁶

- ◆ 65 percent of children under 6 years old with immigrant parents – 2.8 million – live in low-income families.
- ◆ 46 percent of children under 6 years old with native-born parents – 8.2 million – live in low-income families.

What are the family characteristics of low-income and poor young children?

Parents' Education⁷

Higher levels of parents' education decrease the likelihood that a child will live in a low-income or poor family. Yet, nearly one-half (47 percent) of low-income and over one-third (38 percent) of poor young children have a parent with at least some college education.

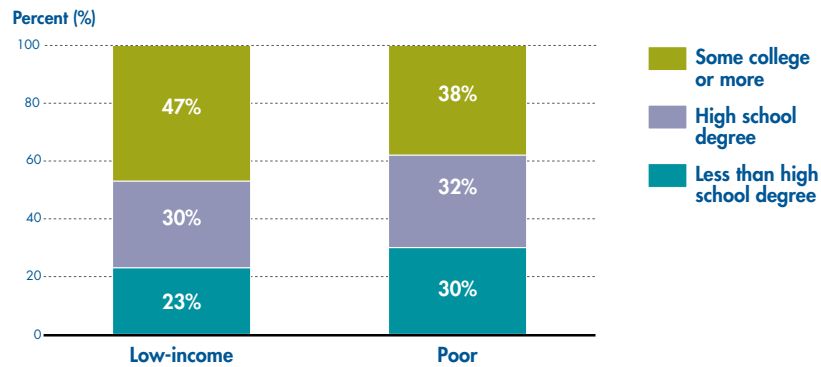
- ◆ 88 percent of children under 6 years old with parents who have less than a high school degree – 2.6 million – live in low-income families.
- ◆ 72 percent of children under 6 years old with parents who have a high school degree but no college – 3.5 million – live in low-income families.
- ◆ 34 percent of children under 6 years old with at least one parent who has some college or more education – 5.4 million – live in low-income families.

Parents' Employment⁸

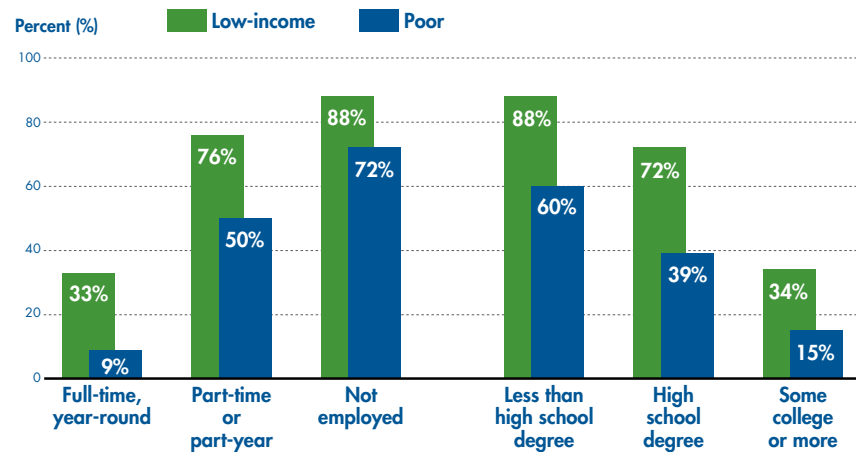
Although young children with a full-time, year-round employed parent comprise 45 percent of the low-income population, they are less likely to be living in a low-income family, compared to young children with parents who work part-time/part-year or who are not employed.

- ◆ 33 percent of children under 6 years old with at least one parent who works full-time, year-round – 5.2 million – live in low-income families.
- ◆ 76 percent of children under 6 years old with at least one

Parents' education among children under 6 years old by family income, 2011



Percentage of children under 6 years old in low-income and poor families by parents' employment and education, 2011



parent who works part-time or part-year – 4 million – live in low-income families.

- ◆ 88 percent of children under 6 years old with no employed parents – 2.4 million – live in low-income families.

Family Structure

Forty-seven percent of young children in low-income families – 5.4 million – and 35 percent of

young children in poor families – 2.1 million – live with married parents.

- ◆ 35 percent of children under 6 years old with married parents – 5.4 million – live in low-income families.
- ◆ 75 percent of children under 6 years old with a single parent – 6.2 million – live in low-income families.

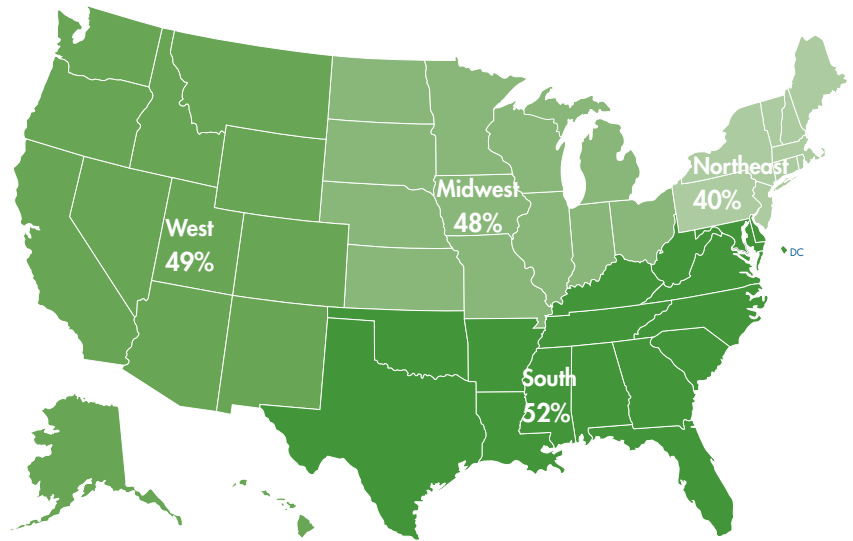
Does the percentage of young children in low-income families vary by where they live?

Region

The percentage of children under 6 years of age in low-income families varies substantially by region.

- ◆ 40 percent of children under 6 years old in the Northeast – 1.5 million – live in low-income families.
- ◆ 48 percent of children under 6 years old in the Midwest – 2.4 million – live in low-income families.
- ◆ 52 percent of children under 6 years old in the South – 4.8 million – live in low-income families.
- ◆ 49 percent of children under 6 years old years in the West – 2.9 million – live in low-income families.

Percentage of children under 6 years old in low-income families by region, 2011



Type of Area

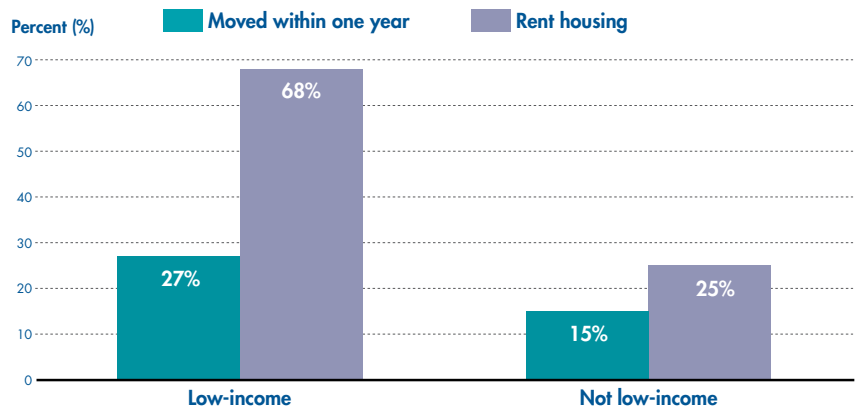
Similarly, children under 6 years of age living in rural areas are more likely to live in low-income families compared to those living in urban areas.

- ◆ 47 percent of children under 6 years old in urban areas – 8.7 million – live in low-income families.
- ◆ 57 percent of children under 6 years old in rural areas – 2 million – live in low-income families.

Residential Instability and Home Ownership

Research suggests that stable housing is important for healthy child development.⁹ However, young children living in low-income families were nearly twice as likely

Residential instability and home ownership among children under 6 years old by family income, 2011

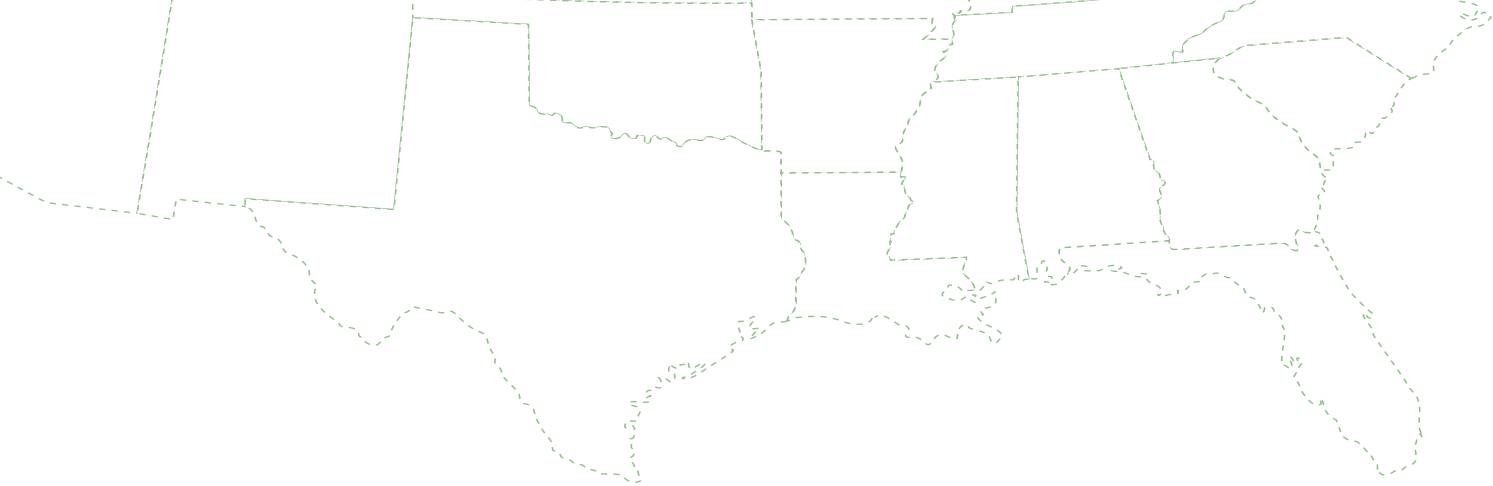


as other children to have moved in the past year and nearly three times as likely to live in families that rent a home.

- ◆ 27 percent of children under 6 years old in low-income families – 3.1 million – moved in the last year.
- ◆ 15 percent of children under 6 years old in families with

higher income – 1.9 million – moved in the last year.

- ◆ 68 percent of children under 6 years old in low-income families – 7.9 million – live with a family that rents a home.
- ◆ 25 percent of children under 6 years old in families with higher income – 3 million – live with a family that rents a home.

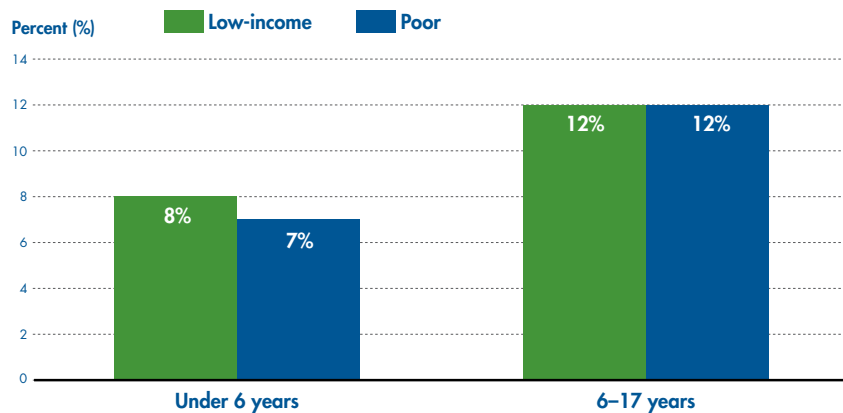


Are young children in low-income families covered by health insurance?¹⁰

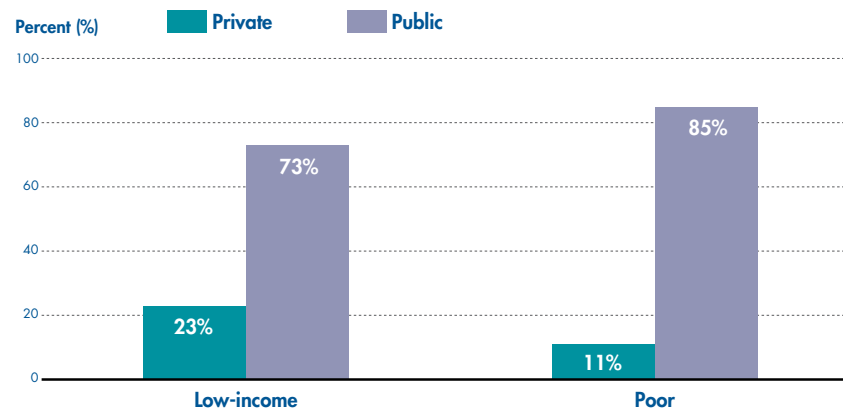
Among all young children under 6 years of age, approximately 8 percent in low-income families and 7 percent in poor families are uninsured. Consistent with research suggesting older children in general are particularly at risk of being uninsured, low-income and poor children under 6 years old are less likely to be without health insurance coverage compared to older children in low-income and poor families.¹¹ Public insurance reaches the largest share of economically disadvantaged children under 6 years old covering 73 percent of low-income children and 85 percent of poor children in this age group.

- ◆ 8 percent of children under 6 years old living in low-income families – 0.9 million – are uninsured.
- ◆ 23 percent of children under 6 years old living in low-income families – 2.7 million – are covered by private insurance.
- ◆ 73 percent of children under 6 years old living in low-income families – 8.4 million – are covered by public insurance.

Percentage of children uninsured in low-income and poor families by age, 2011



Type of health insurance coverage among children under 6 years old by family income, 2011



For comparable information about all children, see *Basic Facts About Low-income Children: Children Under 18 Years, 2011*, or about infants and toddlers, see *Basic Facts About Low-income Children: Children Under 3 Years, 2011*, or about young children, see *Basic Facts About Low-income Children: Children Aged 6 through 11 Years, 2011*, or about adolescent children, see *Basic Facts About Low-income Children: Children Aged 12 through 17 Years, 2011*.

Endnotes

This fact sheet is part of the National Center for Children in Poverty's demographic fact sheet series and is updated annually. Unless otherwise noted, analysis of the 2011 American Community Survey (ACS) was conducted by Sophia Addy of NCCP. Yumiko Aratani provided feedback that contributed to the analysis. Estimates include children living in households with at least one parent and most children living apart from both parents (for example, children being raised by grandparents). Children living independently, living with a spouse, or in group quarters are excluded from these data. Children 14 years old and under living with only unrelated adults were not included because data on their income status were not available. Among children who do not live with at least one parent, parental characteristics are those of the householder and/or the householder's spouse. Special thanks to Morris Ardoin, Amy Palmisano, and Telly Valdellon.

1. In this fact sheet, poverty is defined as family income less than 100 percent of the poverty threshold; low income is defined as family income less than 200 percent of the poverty threshold.
2. These numbers are from the federal poverty guidelines issued annually by the U.S. Department of Health and Human Services. The demographic findings in this fact sheet were calculated using more complex versions of the federal poverty measure – the thresholds issued by the U.S. Census Bureau. Please see <http://aspe.hhs.gov/poverty/11poverty.shtml> for the 2011 poverty thresholds. For more information on measuring poverty and the differences between the federal poverty guidelines and the thresholds, see the U.S. Department of Health and Human Services website.
3. Cauthen, Nancy K.; & Fass, Sarah. (2008). *Measuring income and poverty in the United States*. New York, NY: National Center for Children in Poverty, Columbia University, Mailman School of Public Health.
4. These figures were derived from NCCP's Basic Needs Budget Calculator.
5. In the most recent ACS, parents could report children's race as one or more of the following: "White," "Black," "American Indian or Alaska Native," or "Asian and/or Hawaiian/Pacific Islander." In a separate question, parents could report whether their children were of Hispanic origin. For the data reported, children whose parent reported their race as White, Black, American Indian or Alaska Native, or Asian and/or Hawaiian/Pacific Islander and their ethnicity as non-Hispanic are assigned their respective race. Children who were reported to be of more than one race were assigned as Other. Children whose parent identified them as Hispanic were

categorized as Hispanic, regardless of their reported race.

6. Children under 6 years old living in households with one immigrant parent and one native-born parent (approximately 1.5 million) are not included in these estimates.
7. Parent's education is the education level of the most highly educated parent living in the household. Parents can either have no high school degree; a high school degree, but no college; or some college or more.
8. Parent's employment is the employment level of the parent in the household who maintained the highest level of employment in the previous year. Parents can either have no employment in the previous year, part-year or part-time employment, or full-time, year-round employment. Part-year or part-time employment is defined as either working less than 50 weeks in the previous year or less than 35 hours per week. Full-time, year-round employment is defined as working at least 50 weeks in the previous year and 35 hours or more per week for more than half the year.
9. Aratani, Yumiko. (2009). *Homeless children and youth*. New York, NY: National Center for Children in Poverty, Columbia University, Mailman School of Public Health.
10. People can report more than one type of insurance coverage. Children not covered by private or public health insurance at the time of the survey are considered uninsured.
11. Schwarz, Susan Wile. (2009). *Adolescent mental health in the United States*. New York, NY: National Center for Children in Poverty, Columbia University, Mailman School of Public Health.

2013 FEDERAL POVERTY GUIDELINES

48 CONTIGUOUS STATES AND DC

Household Size	100%	133%	150%	200%	300%	400%
1	\$11,490	\$15,282	\$17,235	\$22,980	\$34,470	\$45,960
2	\$15,510	\$20,628	\$23,265	\$31,020	\$46,530	\$62,040
3	\$19,530	\$25,975	\$29,295	\$39,060	\$58,590	\$78,120
4	\$23,550	\$31,322	\$35,325	\$47,100	\$70,650	\$94,200
5	\$27,570	\$36,668	\$41,355	\$55,140	\$82,710	\$110,280
6	\$31,590	\$42,015	\$47,385	\$63,180	\$94,770	\$126,360
7	\$35,610	\$47,361	\$53,415	\$71,220	\$106,830	\$142,440
8	\$39,630	\$52,708	\$59,445	\$79,260	\$118,890	\$158,520
each additional person, add	\$4,020	\$5,347	\$6,030	\$8,040	\$12,060	\$16,080

Note: The 100% column shows the federal poverty level for each family size, and the percentage columns that follow represent income levels that are commonly used as guidelines for health programs.

ALASKA

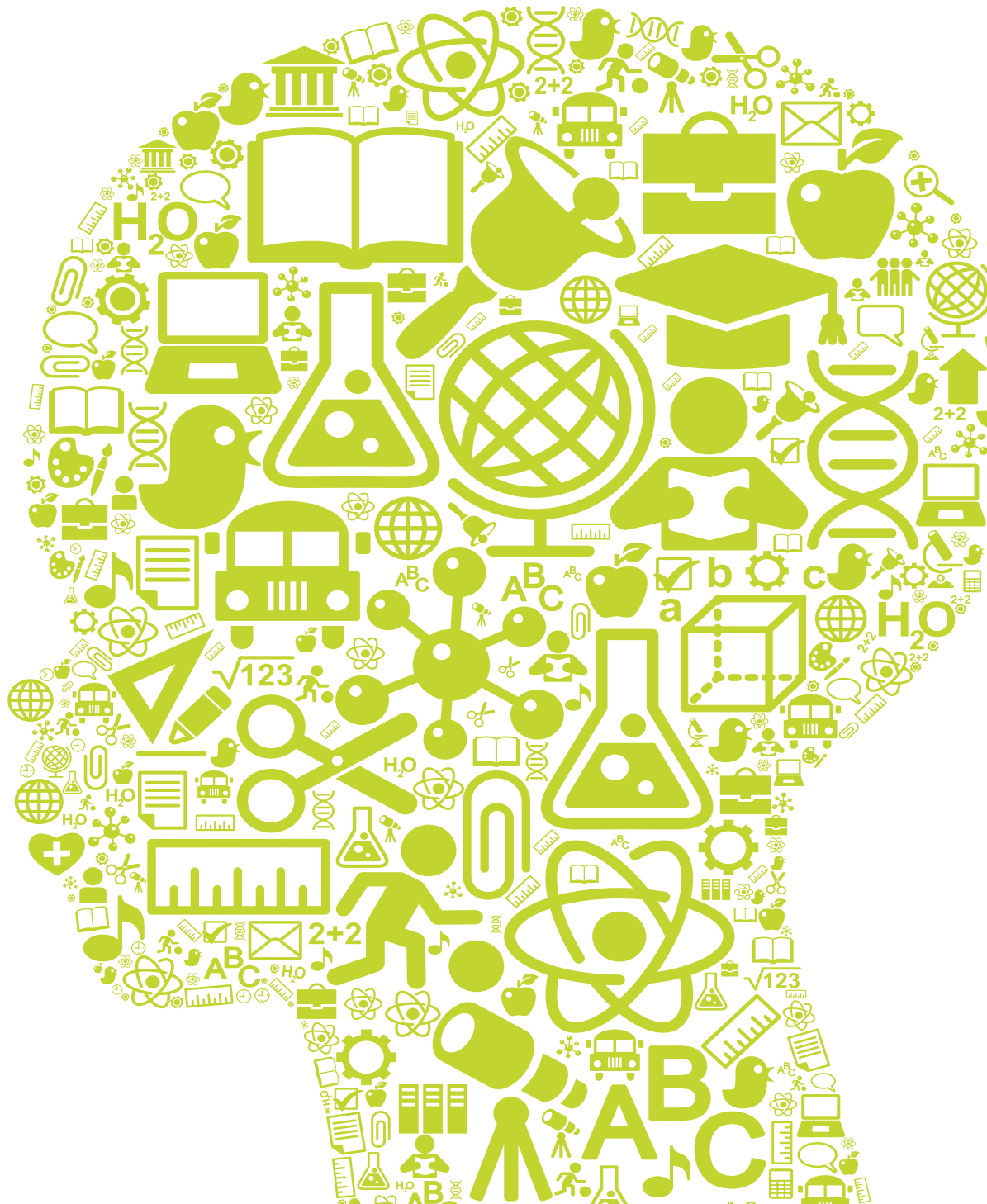
Household Size	100%	133%	150%	200%	300%	400%
1	\$14,350	\$19,086	\$21,525	\$28,700	\$43,050	\$57,400
2	\$19,380	\$25,775	\$29,070	\$38,760	\$58,140	\$77,520
3	\$24,410	\$32,465	\$36,615	\$48,820	\$73,230	\$97,640
4	\$29,440	\$39,155	\$44,160	\$58,880	\$88,320	\$117,760
5	\$34,470	\$45,845	\$51,705	\$68,940	\$103,410	\$137,880
6	\$39,500	\$52,535	\$59,250	\$79,000	\$118,500	\$158,000
7	\$44,530	\$59,225	\$66,795	\$89,060	\$133,590	\$178,120
8	\$49,560	\$65,915	\$74,340	\$99,120	\$148,680	\$198,240
each additional person, add	\$5,030	\$6,690	\$7,545	\$10,060	\$15,090	\$20,120

HAWAII

Household Size	100%	133%	150%	200%	300%	400%
1	\$13,230	\$17,596	\$19,845	\$26,460	\$39,690	\$52,920
2	\$17,850	\$23,741	\$26,775	\$35,700	\$53,550	\$71,400
3	\$22,470	\$29,885	\$33,705	\$44,940	\$67,410	\$89,880
4	\$27,090	\$36,030	\$40,635	\$54,180	\$81,270	\$108,360
5	\$31,710	\$42,174	\$47,565	\$63,420	\$95,130	\$126,840
6	\$36,330	\$48,319	\$54,495	\$72,660	\$108,990	\$145,320
7	\$40,950	\$54,464	\$61,425	\$81,900	\$122,850	\$163,800
8	\$45,570	\$60,608	\$68,355	\$91,140	\$136,710	\$182,280
each additional person, add	\$4,620	\$6,145	\$6,930	\$9,240	\$13,860	\$18,480

Source: Calculations by Families USA based on data from the U.S. Department of Health and Human Services. familiesusa.org/resources/tools-for-advocates/guides/federal-poverty-guidelines.html

APPENDIX C



AUTHORS and SPEAKERS

Nadine Mathis Basha

Nadine Mathis Basha, a former teacher, educator, small business owner, and volunteer, has spent her adult life advocating for Arizona's children, particularly with regard to early childhood education within the state.

Mathis Basha developed Proposition 203, which was approved by voters in November 2006 – a ballot initiative to generate tax funds to establish a comprehensive system of early childhood development and health. The First Things First board is in charge of the implementation and oversight of Proposition 203. Mathis Basha was appointed as the first chair of the founding board of First Things First for its first two years and continues to serve as a member of the board. In 2010, Mathis Basha, once again, led a successful ballot initiative campaign preserving the funding for First Things First.

Mathis Basha has served on numerous boards and committees in conjunction with state and community agencies, the Governor's Office, and Arizona State University. In 1989, she founded the Children's Action Alliance, a children's public policy advocacy group that has significantly influenced the policies that enhance educational and medical needs for families with considerable financial constraints.

The countless awards she has received over the years have acknowledged her accomplishments in the field of early childhood.

Mathis Basha was presented with an honorary degree of Doctor of Humanities from the University of Arizona in December 2009. She also holds an honorary degree of Doctor of Education from Northern Arizona University, as well as Arizona State University's Distinguished Achievement Award. She received a B.S. in Elementary Education from the University of Kansas and a M.Ed. in Early Childhood Education from Arizona State University.

Carol E. Copple

Carol Copple received her Doctorate in Human Development from Cornell University and joined the faculty of Louisiana State University. As senior research psychologist at the Educational Testing Service, she directed a pre-kindergarten program for enhancing young children's thinking skills and coauthored *Educating the Young Thinker: Classroom Strategies for Cognitive Growth*. For a decade in Washington, D.C., Copple was an education consultant. Then, at the National Association for the Education of Young Children from 1993 to 2010, she headed the publications program, authored numerous books, and played a leading role in developing the association's position statements and education initiatives. She is now an early education consultant based in Nashville, Tennessee.

Amy Corriveau

Amy Corriveau is the Deputy Associate Superintendent for Early Childhood Education and Director for the Head Start State Collaboration Office at the Arizona Department of Education (ADE). While employed with ADE, she has been a Program Specialist for both Full-Day Kindergarten and Early

Childhood Special Education. She was previously an executive board member for the Valley of the Sun Association for the Education of Young Children and a member of the Early Childhood Development and Health Board as part of the First Things First Initiative. She is currently a member of the National Association of Early Childhood Specialists in the State Department of Education, as well as a member of the Head Start Association. Corriveau has served as adjunct faculty for ASU and various Maricopa County Community Colleges. Corriveau was formerly a first grade teacher, special education teacher, and high school ECE Program Coordinator.

Adele Diamond

Adele Diamond, Ph.D., is the Canada Research Chair Professor of Developmental Cognitive Neuroscience in the Department of Psychiatry at the University of British Columbia. Her work integrates developmental, cognitive, neuroscience, and molecular genetic approaches to examine fundamental questions about the development of the cognitive control abilities that rely on a region of the brain known as “prefrontal cortex” and has changed medical practice worldwide for the treatment of PKU (phenylketonuria) and for the type of ADHD without hyperactivity. Her recent work, including a paper in the journal, *Science*, is affecting early education practices around the world.

Diamond received her B.A. from Swarthmore College Phi Beta Kappa (in Sociology-Anthropology and Psychology), her Ph.D. from Harvard (in Developmental Psychology), and was a postdoctoral fellow at Yale with Patricia Goldman-Rakic (in Neuroanatomy). She received a YWCA Woman of Distinction this year and in 2001 was named one of the “2000 Outstanding Women of the 20th Century.” Her work has been featured on the Public Television series, *Scientific Am. Frontiers Series* with Alan Alda, and in shows on the CBC, CTV, and NPR, and in articles in the *New York Times*, *Chicago Tribune*, and the *Vancouver Sun*. A recipient of many awards, she was named a Distinguished Scientific Lecturer by the American Psychological Association and has received a Canada Fund for Innovation Award. Her research has been continuously funded by NIH and NSF since she was a graduate student.

Rhian Evans Allvin

Rhian Evans Allvin became Executive Director of the National Association for the Education of Young Children (NAEYC), in Washington, DC, in August 2013. She is responsible for guiding the strategic direction of the organization as well as overseeing the daily operations.

Before joining NAEYC, Evans Allvin was a guiding force in Arizona’s early childhood movement for more than 15 years. In 2006, she co-wrote the citizen’s ballot initiative that created First Things First, which set aside Arizona’s tobacco tax monies for children birth to 5 and created a state agency whose purpose is to ensure all Arizona children start kindergarten prepared to be successful in school and in life. She was appointed to First Things First’s state board, where she served for four years before resigning to become the organization’s Chief Executive Officer (CEO). As CEO, Evans Allvin represented First Things First with state and national constituents and led its coordination with policymakers, state department heads, providers, and community stakeholders. She oversaw First Things First’s daily operations, including the distribution of \$130 million in annual tobacco revenue.

Evans Alvin's earlier experiences helped her prepare for her role at NAEYC. As a founding partner in the Brecon Group, she specialized in public policy, philanthropy, and community engagement. As Senior Advancement Officer at the Arizona Community Foundation, she used her knowledge in community organizing, communications, media relations, fundraising, and nonprofit management to help donors connect their philanthropic interests with community needs. Additionally, she served in leadership roles with Libraries for the Future, a national nonprofit promoting the important role of public libraries in American life, and Children's Action Alliance, Arizona's state-based child advocacy organization.

Evans Alvin has authored a number of white papers, articles, policy briefs, and reports on various topics. She coauthored a report on the state of early care and education in Arizona, *Building Our Foundation: Assessing Early Care and Education in Arizona*, for the Arizona Community Foundation. She has given numerous presentations to diverse local and national audiences.

Evans Alvin holds a Bachelor's Degree from Northern Arizona University and a Master's Degree in Business Administration from Arizona State University.

Cheryl L. Foster

Cheryl L. Foster is immediate Past President of the Arizona Association for the Education of Young Children Governing Board and has served on a number of national and state boards and committees. She served on the National Association for the Education of Young Children (NAEYC) Governing Board and on Governor Janet Napolitano's P-20 Education Council. Foster was recently appointed to the BUILD Arizona Steering Committee. BUILD is a national initiative created to stimulate investments in early learning to foster greater coordination of comprehensive services, policies, and programs for young children. She is a member of the Early Learning Advisory Committee for First Things First, Arizona's child development and health initiative, and also a member of the BUILD Arizona/First Things First Professional Development Work Group.

Foster has provided consulting services to a variety of education and leadership clients, most recently as Special Assistant for Development, President's Office, Central Arizona College (the Pinal County Community College District). Her most recent full-time role at Central Arizona College was in the capacity of Vice President for College Development Services. In that role, she provided leadership to a variety of institutional advancement areas, including Accreditation, Quality Initiatives, the Central Arizona College Foundation, Public Information and Marketing, Community Outreach, and Public Events. She helped establish the Foundation's Promise for the Future program, a scholarship program designed to address the high school completion rate in Pinal County.

Foster has provided strategic planning consulting services to several colleges, city government entities, and early childhood associations. Additionally, she has served as a consultant/mentor to a variety of early childhood program directors. She has a Master's Degree in Education from Arizona State University with an emphasis in Early Childhood Education. She is a graduate of Project CENTRL, a two-year Arizona rural leadership program and a member of the Human Growth and Development Committee for the Tempe Elementary School District.

Rob Grunewald

Rob Grunewald conducts regional economic research and co-authors the Minneapolis Fed's "Beige Book" report on current economic conditions. He also writes articles on the regional economy and other economics and banking issues for the *fedgazette* and *The Region*, two periodicals published by the Minneapolis Fed. Grunewald regularly speaks to business, community, and school groups about the Federal Reserve and the regional economy. He co-authored "[Early Childhood Development: Economic Development with a High Public Return](#)" (January 2003), an economic policy paper, which has been featured in the media, legislative hearings, and seminars throughout the United States.

Grunewald serves on the board of directors for the Minnesota Visiting Nurse Agency, the advisory board for First Children's Finance Growth Fund, and as secretary for the Minnesota Economic Association.

Grunewald joined the Federal Reserve Bank of Minneapolis in 1993, holds a Bachelor's Degree in Economics and Religion from St. Olaf College in Northfield, Minn., and is a graduate student in Applied Economics at the University of Minnesota.

John Huppenthal

Superintendent of Public Instruction John Huppenthal, an Arizona resident for more than 55 years, was educated in elementary and secondary schools in Tucson. He earned an Engineering degree from Northern Arizona University and an MBA from Arizona State University.

During Superintendent Huppenthal's 29 years in public service, he has established himself as one of Arizona's leading education reformers. Over an 18-year career at the Arizona state legislature, he successfully authored and passed more than 200 bills, with a substantial number of them focused on improving education in Arizona.

Naomi Karp

Naomi Karp is the director of Early Childhood Professional Development at the United Way of Tucson and Southern Arizona. In that capacity, she directs a large First Things First grant, Great Expectations for Teachers, Children, and Families, which is creating a new early childhood professional development system in Pima County. She graduated from the University of Arizona with a Bachelor's Degree in Psychology and a Master's in Education, and in 2010 was awarded an Honorary Doctor of Humane Letters. She is a member of the First Things First North Pima Regional Partnership Council. In addition, she is a past member of the Governing Board of the National Association for the Education of Young Children, past-president of the Arizona AEYC, and former chair of the Pima Community College, Desert Vista Campus, Community Advisory Committee. She has served on the University of Arizona's College of Education's Advisory Board since 2005. Naomi spent 20 years in the US Department of Education and for 9 of those years served as the director of the Department's Early Childhood Research Office. She has received numerous awards including the

Arizona Department of Education's Early Childhood Education Leadership Award, the University of Arizona Alumni Achievement Award, the President's Award from the National Down Syndrome Congress, and the Citizen-Volunteer of the Year Award, Arlington County (VA) Public Schools.

Karen Ortiz

Dr. Karen J. Ortiz is the Vice President and Program Director of Early Childhood Education Initiatives for Helios Education Foundation. Ortiz works in conjunction with the Foundation's community investment team to identify partnership opportunities and implement the Foundation's strategic early childhood education investment goals in Arizona and Florida. She brings more than 25 years academic and professional experience in early childhood education. A former early childhood policy advisor to Arizona's Governor Janet Napolitano and Director of the State Board on School Readiness, Dr. Ortiz has helped lead statewide and national initiatives impacting children, ages birth to 8, and their families.

A former elementary school nurse and substitute teacher, Dr. Ortiz has practical experience within school district and classroom settings. Her Doctoral and Master's degrees from Arizona State University are in Curriculum and Instruction and Early Childhood Education, and she holds undergraduate degrees in Business and Nursing.

Art Rolnick

Art Rolnick serves as a co-director for the Human Capital Research Collaborative at the University of Minnesota. He previously served at the Federal Reserve Bank of Minneapolis as a Senior Vice President and Director of Research and as an associate economist with the Federal Open Market Committee – the monetary policymaking body for the Federal Reserve System. He is a board member of several Minneapolis nonprofit firms, including the Minnesota Early Learning Foundation and Ready 4 K, an advocacy organization for early childhood development. A recipient of numerous awards for his work in early childhood development, he was named Minnesotan of the Year by Minnesota Monthly magazine in 2005. Rolnick holds degrees in Mathematics and Economics from Wayne State University and has a Ph.D. in Economics from the University of Minnesota.

Michael Sampson

Michael Sampson is a children's book author of *Kitty Cat, Kitty Cat, Are You Going to Sleep?*, published in fall 2013. In addition, he has collaborated with the late Bill Martin, Jr. on more than 20 books, including *Chicka Chicka, 1, 2, 3, Panda Bear, Panda Bear, What Do You See?*, and *The Bill Martin Jr. Big Book of Poetry*. He is also a distinguished educator, having taught elementary school and university students, and has served as Dean of the School of Education at Southern Connecticut State University and currently as Dean of the College of Education at Northern Arizona University.

Beth Blue Swadener

Beth Blue Swadener is professor of Justice and Social Inquiry and Associate Director of the School of Social Transformation at Arizona State University. Her research focuses on equity issues in early childhood, professional development of teachers from underrepresented groups (e.g., Latino Head Start teachers and Tribal Community early childhood educators), internationally comparative social policy, with focus on sub-Saharan Africa, and children's rights and voices. Swadener has served as PI for federal and state projects including Arizona System Ready/Child Ready early childhood professional development grant (collaborating with the Governor's Office, community colleges, and early childhood agencies) and Head Start Hispanic-focused projects. She has published 10 books, including *Reconceptualizing the Early Childhood Curriculum*; *Children and Families "At Promise"*; *Does the Village Still Raise the Child?*; and *Children's Rights and Education* and serves on the board of directors for the Association for Supportive Child Care, Crisis Nursery, and the Jirani Project (educating vulnerable children in Kenya).

CHILD CARE and EARLY EDUCATION GLOSSARY

Used By Permission from Research Connections: <http://www.researchconnections.org/childcare/childcare-glossary>

Accessibility – In the child care field, the term refers to the availability of child care when and where a family needs it.

Accreditation – A process through which child care programs voluntarily meet specific standards to receive endorsement from a professional agency. The National Association for the Education of Young Children (NAEYC) and the National Accreditation Commission for Early Care and Education Programs (NAC) are among the organizations that offer accreditation programs for child care.

Adult-Child Ratio – A ratio of the qualified caregivers to children in a child care program.

Affordability – In the child care field, the term refers to the degree to which the price of child care is a feasible family expense. High-quality care may be available, but it may not be affordable for a family with a low or moderate income.

After-School Child Care – Programs for school-age children that occur after the school day ends.

Attachment – A psychological bond between adult and child. It is believed that secure bonding leads to psychological wellbeing and resistance to ordinary as well as extreme stress experienced throughout a lifetime.

Best Practices – A term used to denote the ways of delivering services that have been found through research or experience as the “best” ways to achieve desired outcomes.

Block Grant – A mechanism for consolidating and streamlining federal funding streams, giving more authority to states and communities for the design, delivery, and oversight of services.

CCDF Plan – A plan developed by the designated Child Care and Development Fund (CCDF) child care agency in each state, territory, or tribe. The plan serves as a guide for the administration of child care services and quality activities under CCDF. States must promote public involvement in the plan development/review process and submit the plan to the federal Department of Health and Human Services for review and approval every two years.

Capacity – The total number of children that may be in child care at any one time in a particular program.

Center-Based Child Care – Programs that are licensed or otherwise authorized to provide child care services in a non-residential setting.

Certification – The process by which an individual or institution attests to or is shown to have met a prescribed standard or set of standards.

Child Care Bureau – See Office of Child Care.

Child Care Provider – An institution or individual who provides child care services.

Child Care Resource and Referral (CCR&R) – Local and statewide services including (1) guidance and referrals for parents seeking child care; (2) the collection of information about the local supply of child care; and, (3) provider training and support. Some CCR&R agencies also administer child care subsidies.

Child Care Subsidy – Public or private financial assistance intended to lower the cost of care for families.

Child Care Tax Credit – The federal or a state program that reduces the tax liability for families with employment-related child care expenses.

Child Care and Development Fund (CCDF) – Federally funded grant authorized by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, P.L.104-193, to assist low-income families, families receiving temporary public assistance, and those transitioning from public assistance to obtain child care so they can work or attend training /education.

Child Development – The process by which a child acquires skills in the areas of social, emotional, intellectual, speech and language, and physical development, including fine and gross motor skills. Developmental stages refer to the expected, sequential order of acquiring skills that children typically go through. For example, most children crawl before they walk, or use their fingers to feed themselves before they use utensils.

Child Development Associate Credential – A credential earned by an early childhood educator who has demonstrated his or her skills in working with young children and their families by successfully completing an established credentialing process. The CDA credentialing process is administered by the Council of Early Childhood Professional Recognition.

Child Protective Services – An official public agency, usually a unit of the public county social services agency, responsible for receiving and investigating reports of suspected abuse or neglect of children and for ensuring that services are provided to children and families to prevent abuse and neglect.

Child and Adult Care Food Program (CACFP) – A state-administered program funded by the U.S. Department of Agriculture that provides federal subsidies for meals for income-qualifying participants in licensed non-residential child care centers and licensed or license-exempt family or group child care homes.

Co-Payment – A specific fixed amount for a subsidized service that is the recipient's responsibility to pay.

Comprehensive Services – An array of services that meet the needs of and promote the physical, social, emotional, and cognitive development of the children and families enrolled in the program.

Continuity of Care – Provision of care to children by consistent caregivers in consistent locations throughout the day and/or year to ensure a stable and nurturing environment.

Developmental Assessment – Measurement of a child’s cognitive, language, knowledge, and psychomotor skills in order to evaluate development in comparison to children of the same chronological age.

Developmental Domains – Term used to describe areas of a child’s development, including: “gross motor development” (large muscle movement and control); “fine motor development” (hand and finger skills, and hand-eye coordination); speech and language/communication; the child’s relationship to toys and other objects, to people, and to the larger world around them; and the child’s emotions and feeling states, coping behavior, and self-help skills.

Developmental Milestone – A memorable accomplishment on the part of a baby or young child; for example, rolling over, sitting up without support, crawling, pointing to get an adult’s attention, or walking.

Developmentally Appropriate – A way of describing practices that are adapted to match the age, characteristics, and developmental progress of a specific age group of children.

Developmentally Appropriate Practice – A concept of classroom practice that reflects knowledge of child development and an understanding of the unique personality, learning style, and family background of each child. These practices are defined by the National Association for the Education of Young Children (NAEYC).

Drop-In Child Care – A child care program that children attend on an unscheduled basis.

Early Childhood Environmental Rating Scale (ECERS) – A research-based assessment instrument to ascertain the quality of early care and education programs. The scale is designed for classrooms of children ages 2½–5 years. It is used to assess general classroom environment as well as programmatic and interpersonal features that directly affect children and adults in the early childhood setting.

Early Head Start – A program established under the 1994 Head Start Reauthorization Act to serve low-income pregnant women and families with infants and toddlers. This program is family centered and community based and designed to enhance children’s physical, social, emotional, and intellectual development. Early Head Start supports parents in fulfilling their parental roles and helps them move toward economic independence. Participation in this program is determined based on referrals by local entities, such as Head Start programs, to Early Head Start program centers. Programs offer the following core services: (1) High-quality early education in and out of the home; (2) family support services, home visits, and parent education; (3) comprehensive health and mental health services, including services for pregnant and post-partum women; (4) nutrition; (5) child care; and, (6) ongoing support for parents through case management and peer support. Programs have a broad range of flexibility in how they provide their services.

Early Intervention – A range of services designed to enhance the development of children with disabilities or at risk of developmental delay. Early intervention services under public supervision generally must be given by qualified personnel and require the development of an individualized family service plan.

Earned Income Tax Credit – The federal Earned Income Tax Credit (EITC) reduces the income tax liabilities of low- to moderate-income working families (with annual incomes of up to about \$32,000) and provides a wage supplement to some families. One important feature of the federal EITC is that it is refundable, meaning that a family receives, as a cash payment, any amount of the credit that exceeds its tax liability. By definition, only families with earnings are eligible for the EITC.

Even Start – The U.S. Department of Education’s Even Start Family Literacy Program provides parents with instruction in a variety of literacy skills and assists them in promoting their children’s educational development. Its projects must provide participating families with an integrated program of early childhood education, adult basic education, and parenting education.

Extended Day Program – A term that refers to programs for school-age children that provide supervision, academic enrichment, and recreation for children of working parents after school hours end.

FDCRS – Family Day Care Rating Scale – A research-based rating scale of 40 items used to assess the quality of a family child care environment. The scale is divided into 7 categories: space/furnishings, basic care, language/reasoning, learning activities, social development, adult needs, and supplemental items.

Family Assessment – A systematic process of learning from family members their ideas about a child’s development and the family’s strengths, priorities, and concerns as they relate to the child’s development.

Family Child Care – Child care provided for a group of children in a home setting. Most states have regulatory guidelines for family child care homes if they serve a number of children or families over a specified threshold or if they operate more than a specified number of hours each month.

Family Literacy – Literacy for all family members. Family literacy programs frequently combine adult literacy, preschool/school-age education, and parenting education.

Free Play – An unhurried time for children to choose their own play activities, with a minimum of adult direction. Providers may observe, intervene, or join the play, as needed. Free play may be indoors or outdoors.

Gross Motor Development – A child’s development of large muscle movement and control.

Head Start – A federal program that provides comprehensive developmental services for low-income, preschool children ages 3–5 and social services for their families. Head Start began in 1965 and is administered by the Administration for Children and Families of the U.S. Department of Health and Human Services. Head Start provides services in four areas: education, health, parent involvement, and social services. Grants are awarded to local public or private nonprofit agencies.

IDEA – Individuals with Disabilities Education Act – A federal program that provides grants to states and jurisdictions to support the planning of service systems and the delivery of services, including evaluation and assessment, for young children who have or are at risk of developmental delays/disabilities. Funds are provided through the Infants and Toddlers Program (known as Part C of IDEA) for services to children birth through 2 years of age, and through the Preschool Program (known as Part B-Section 619 of IDEA) for services to children ages 3–5.

ITERS – Infant Toddler Environment Rating Scale – A 35-item instrument designed to evaluate the quality of a child care setting for infants and toddlers. The scale is divided into 7 areas: furnishings and displays for children; personal care routines; listening and talking; learning activities; interaction; program structure; and adult needs.

Ill Child Care – Child care services provided to a child who has a mild illness. Similar terms include “mildly ill child care” and “sick child care.”

In-Home Child Care – Child care provided in the child’s home by relatives or non-relatives during the hours when parents are working. Non-relative caregivers are sometimes called nannies, babysitters, and au pairs.

In-Kind – A contribution of property, supplies, or services that are contributed by non-federal third parties without charge to the program.

Inclusion – The principle of enabling all children, regardless of their diverse abilities, to participate actively in natural settings within their communities.

Informal Care – A term used for child care provided by relatives, friends, and neighbors in the child’s own home or in another home, often in unregulated settings. Related terms include kith and kin child care, and child care by family, friends, and neighbors.

Kith and Kin Child Care – A term used for child care provided by relatives (kin), and friends and neighbors (kith) in the child’s own home or in another home, often in unregulated settings. Related terms include informal child care, and child care by family, friends, and neighbors.

Latchkey Program – A term no longer generally used for programs that provide child care for school-age children during the hours immediately before and after the normal school day and during school vacations. More commonly used terms include school-age child care and before- and after-school child care.

Learning Disability – An impairment in a specific mental process which affects learning.

Leaver Studies – Research studies designed to learn about the experiences of families who recently stopped receiving cash assistance, or “left welfare.”

License-Exempt Child Care – Legally operating child care that is exempt from the regulatory system of the state or community. In many cases, subsidized child care that is otherwise license-exempt must comply with requirements of the subsidy system (e.g., criminal records checks of providers).

Licensed Child Care – Child care programs operated in homes or in facilities that fall within the regulatory system of a state or community and comply with those regulations. Many states have different levels of regulatory requirements and use different terms to refer to these levels (e.g., licensing, certification, registration).

Licensing Inspection – On-site inspection of a facility to assure compliance with licensing or other regulatory requirements.

Licensing or Regulatory Requirements – Requirements necessary for a provider to legally operate child care services in a state or locality, including registration requirements established under state, local, or tribal law.

Manipulative Toys – Small toys that foster fine-motor development and eye-hand coordination, such as nesting cups, puzzles, interlocking blocks, and materials from nature.

Market Rate – The price charged by providers for child care services offered to privately paying families. Under CCDF, state lead agencies are required to conduct a market rate survey every two years to determine the price of child care throughout the state. In their state plans, lead agencies are required to describe how the rates they pay to child care providers serving subsidized children ensure access to the child care market. This should include a description of how payment rates are adequate, based on the local market survey.

Maternity Leave – Paid or unpaid time off work to care for a new baby, either after adoption or giving birth. In the U.S., under the Family and Medical Leave Act of 1993, companies with 50 or more employees are required to offer eligible employees up to 12 weeks of unpaid leave during any 12-month period after the birth, adoption, or foster care placement of a child.

Mentors – Trusted and experienced supervisors or advisers who have personal and direct interest in the development and/or education of younger or less experienced individuals, usually in professional education or professional occupations.

Migrant Child Care – Special child care programs designed to serve children of migrant workers while their parents work.

Mildly Ill Child Care – Child care services provided to a child who has a mild illness. Similar terms include “ill child care” and “sick child care.”

Military Child Care – Child care supported by the Department of Defense (DoD) to children of military personnel. In response to the Military Child Care Act of 1989, the DoD created a child care system that included monitoring and oversight, staff training and wage standards, program accreditation, and reduced costs to families.

Mixed Age Grouping – Grouping children or students so that the chronological age span is greater than one year. Multiple-age grouping is prevalent in family child care.

Needs Assessment – An analysis that studies the needs of a specific group (e.g., child care workers, low-income families, specific neighborhoods), presents the results in a written statement detailing those needs (such as training needs, needs for health services, etc.), and identifies the actions required to fulfill these needs, for the purpose of program development and implementation.

Non-Traditional Hour Child Care – Care provided during non-traditional work hours (i.e. weekends, work between either before 6am or after 7pm Monday–Friday).

Nonprofit organization – An entity with the following characteristics that distinguish it from a business enterprise: (1) contributions of significant amounts of resources from resource providers who do not expect proportionate return; (2) operating purposes other than to provide goods or services at a profit; and, (3) absence of ownership interests like those of business enterprises. Not-for-profit organizations have those characteristics in varying degrees.

Nursery Schools – Group programs designed for children ages 3–5. Normally they operated for 3–4 hours per day, and from 2–5 days a week.

Office of Child Care (OCC) – Formerly the Child Care Bureau, a division of Administration for Children and Families, U.S. Department of Health and Human Services, which administers the Child Care and Development Fund (CCDF) to states, territories, and federally recognized tribes.

On-Site Child Care – Child care programs that occur in facilities where parents are on the premises.

Out of School Time – Refers to the non-school time periods for school-age children and adolescents, during which there is often a need for school-age child care and other types of programming.

Outcome – A statement of an intended result.

Parent Choice – Accessibility by parents to a range of types of child care and types of providers. The term often is used to refer to the CCDF stipulation that parents receiving subsidies should be able to use all legal forms of care, even if a form of child care would be otherwise unregulated by the state.

Parent Education – Instruction or information directed toward parents on effective parenting.

Parental Leave – Job-protected leave for the birth, adoption, or serious illness of a child.

Part-Time Child Care – A child care arrangement where children attend on a regular schedule but less than full time.

Part-Year Child Care – Child care that is offered less than 12 months a year. Typical programs include summer camps and summer child care for school-age children or younger children enrolled in 9-month early education programs, such as some Head Start and pre-kindergarten programs.

Personal Responsibility and Work Opportunities Reconciliation Act of 1996 (PRWORA) – PRWORA is the federal welfare reform act. Titles in the act provide block grants for temporary assistance to needy families and child care; changes to Supplemental Security Income, child support, child protection, child nutrition, and food stamp program requirements; and restriction of welfare and public assistance benefits for aliens. PRWORA replaced AFDC programs with a stable block grant for six years. The replacement block grant program is Temporary Assistance for Needy Families, which provides states greater flexibility in designing eligibility, benefit calculation, and other criteria.

Physical Disabilities – Disorders that result in significantly reduced bodily function, mobility, or endurance.

Pre-Kindergarten – Programs designed children who are ages 3–5, generally designed to provide children with early education experiences that prepare them for school. Also sometimes referred to as preschool and nursery school programs.

Prenatal Influences – Factors occurring between conception and birth and affecting the physical or mental development of an individual.

Preschool Programs – Programs that provide care for children ages 3–5. Normally they operated for three to four hours per day, and from two to five days a week.

Preservice Training – In the child care field, refers to education and training programs offered to child care staff prior to their formal work in a child care program.

Professional Development – In the child care field, the term refers to opportunities for child care providers to get ongoing training to increase their preparation and skill to care for children. These include mentoring programs, credentialing programs, in-service training, and degree programs.

Professional Isolation – A condition of professional individuals or groups characterized by lack of communication or interaction with colleagues, the relevant professional community, or related professional organizations.

Professional Recognition – Expressed or implied acknowledgment of one’s professional efforts, qualities, and/or training.

Quality – Quality child care commonly refers to early childhood settings in which children are safe, healthy, and receive appropriate stimulation. Care settings are responsive, allowing children to form secure attachments to nurturing adults. Quality programs or providers offer engaging, appropriate activities in settings that facilitate healthy growth and development, and prepare children for or promote their success in school.

Quality Initiatives – Initiatives that are designed to increase the quality or availability of child care programs or to provide parents with information and support to enhance their ability to select child care arrangements most suited to their family and child’s needs. The CCDF provides funds to states to support such initiatives. Common quality initiatives include child care resource and referral services for parents, training and professional development and wage enhancement for staff, and facility-improvement and accreditation for child care programs.

Regulated Child Care – Child care facilities and homes that comply with either a state’s regulatory system or another system of regulation. In the United States, there is considerable state variation in the characteristics of the homes and facilities that must comply with regulations, as well as in the regulations themselves. A related term is “licensed child care,” which often refers to a particular level or standard of regulation.

Relative Child Care – Child care provided by extended family members either within the child’s home or at the relative’s home. These forms of child care are often referred to as informal care or child care by kith and kin.

Reporting Requirements – Information that must be reported to comply with federal or state law. Under the CCDF, states must report information about child care subsidy expenditures, numbers and characteristics of children and families who receive subsidies, the types of services that they receive, and other information.

Respite Child Care – Child care services offered to provide respite to a child’s primary caregiver.

Retention – In the child care field, the term often refers to issues related to the reduction in the turnover of child care staff.

School Readiness – The state of early development that enables an individual child to engage in and benefit from first grade learning experiences. Researchers, policymakers, and advocates have described school readiness in different ways, but generally they refer to children’s development in five arenas: health and physical development; social and emotional development; approaches toward learning; language development and communication; and, cognition and general knowledge. Some policymakers and researchers also use the term “school readiness” to describe a school’s capacity to educate children.

School-Age Child Care – Child care for any child who is at least 5 years old and supplements the school day or the school year.

School-Based Child Care – Child care programs that occur in school facilities.

Self Care – In the child care field, a term used to describe situations when children are not supervised by adults or older children while parents are working.

Set-Aside Funding – A specified portion of a larger pool of funding, that latter of which is intended for a relatively broad purpose. The set-aside must be spent exclusively on a specific activity or set of activities that is related to the broad purpose of the larger pool.

Sick Child Care – Child care services provided to a child who has a mild illness. Similar terms include “ill child care” and “mildly ill child care.”

Sliding Fee Scale – A formula for determining the amount of child care fees or co-payments to be paid by parents or guardians, usually based on income. Families eligible for CCDF-subsidized child care pay fees according to a sliding fee scale developed by the state, territory, or tribe. A state may waive fees may for families with incomes below 100 percent of the federal poverty level.

Social Development – Pattern or process of change exhibited by individuals resulting from their interaction with other individuals, social institutions, social customs, etc.

Social Promotion – In the education field, the term refers to the process of passing students on to the next level or grade based on age or social maturity rather than academic accomplishment.

Special Education – Educational programs and services for disabled and/or gifted individuals who have intellectually, physically, emotionally, or socially different characteristics from those who can be taught through normal methods or materials.

Special Needs Child – A child under the age of 18 who requires a level of care over and above the norm for his or her age.

Subsidized Child Care – Child care that is at least partially funded by public or charitable funds to decrease its cost for parents.

Subsidy – Private or public assistance that reduces the cost of a service for its user.

Subsidy Take-Up Rates – The rate at which eligible families use child care subsidies. “Take-up rate” is a term generally used when all families who are eligible for a service have access to it. In the case of child care services, a state may choose to offer child care subsidies to a portion of those who are eligible for them and many have waiting lists because of limited funding.

Supplemental Child Care – A secondary form of child care that supplements a primary arrangement; for example, a grandmother who cares for the child after Head Start classes end or for the time when a center is closed.

Supply Building – Efforts to increase the quantity of high-quality family child care and/or center-based programs in a particular local area.

Temporary Assistance for Needy Families (TANF) – A component of the Personal Responsibility Work Opportunity Reconciliation Act (PRWORA). TANF replaced the former Aid to Families with Dependent Children (AFDC) and Job Opportunities and Basic Skills Training (JOBS) programs, ending the federal entitlement to assistance. States each receive a block grant and have flexibility to design their TANF programs in ways that promote work, responsibility, self-sufficiency, and strengthen families. TANF's purposes are: to provide assistance to needy families so that children can be cared for in their own homes; to reduce dependency by promoting job preparation, work, and marriage; to prevent out-of-wedlock pregnancies; and to encourage the formation and maintenance of two-parent families. With some exceptions, TANF cash-assistance recipients generally are subject to work requirements and a five-year lifetime limit.

Therapeutic Child Care – Child care services provided for at-risk children, such as children in homeless families, and in families with issues related to alcohol and substance abuse, violence, and neglect. Therapeutic child care is commonly an integrated complement of services provided by professional and paraprofessional staff and includes a well-structured treatment program for young children provided in a safe, nurturing, stimulating environment. It often is offered as one of a complement of services for a family.

Tiered Reimbursement System – A subsidy payment system that offers higher payments for child care that meets higher quality standards or for child care that is in short supply.

Title 1 – Part of the Elementary and Secondary Education Act legislation of the U.S. Department of Education. Section A of Title 1 describes how funds under this Act may be used to provide early education development services to low-income children through a local education agency (LEA). These services may be coordinated/integrated with other preschool programs.

Transitional Child Care – Child care subsidies offered to families who have transitioned from the cash assistance system to employment. The Family Support Act of 1986 established a federal Transitional Child Care program, which was replaced by the Child Care and Development Fund (CCDF). Some states continue to operate their own Transitional Child Care programs.

Tribal Child Care – Publicly supported child care programs offered by Native American tribes in the United States. Federally recognized tribes are CCDF grantees.

Unlicensed Child Care – Child care programs that have not been licensed by the state. The term often refers both to child care that can be legally unlicensed and programs that should be but are not licensed.

Unregulated Child Care – Child care programs that are not regulated. The term often refers both to child care that can be legally unregulated and those programs that should be but are not regulated.

Vouchers – In the child care field, refers to a form of payment for subsidized child care. States often have different definitions regarding the exact nature of vouchers, and sometimes refer to them as certificates.

Waiver – A suspension or change of an eligibility requirement in a client’s case.

Work Requirements – Requirements related to employment upon which receipt of a child care subsidy or cash assistance is contingent.

Wrap Around Child Care Programs – Child care designed fill the gap between another early childhood program’s hours and the hours that parents work.

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SITES of INTEREST

Alliance for Family, Friend, and Neighbor Child Care (AFFNCC) – familyfriendandneighbor.org

Annie E. Casey Foundation – aecf.org

Arizona Community Foundation – azfoundation.org

Arizona Department of Economic Security – azdes.gov

Arizona Department of Education (ADE) – azed.gov

Arizona Department of Health Services – azdhs.gov

Arizona First Things First. Phoenix, AZ – azftf.gov/Pages/default.aspx

Arizona Health Cost Containment System (AHCCS) – azahcccs.gov

Arizona Intertribal Council. 2214 North Central Avenue, Phoenix, AZ 85004 – itcaonline.com

Arizona State Board of Education – azed.gov/state-board-education

Association for Supportive Child Care. ASCC. 3910 S. Rural Road, Suite E, Tempe, AZ 85282 – asccaz.org

BUILD Initiative – buildinitiative.org

Children’s Action Alliance – azchildren.org

Child Care and Development Fund – hhs.gov/recovery/programs/acf/childcare.html

Educare – educareschools.org/home/index.php

Governor’s Office for Children, Youth, and Families – gocyf.az.gov

HELIOS Education Foundation. 2415 E. Camelback Road, Suite 500, Phoenix, AZ 85016
100 N. Tampa Street, Suite 1625, Tampa, Florida 33602 – helios.org

Kids Count Data Center – datacenter.kidscount.org

NACCRRRA. Child Care Aware. 1515 N. Courthouse Rd, 11th fl, Arlington, VA 22201 – naccrra.org

National Assessment of Educational Progress (reportage). NAEP – nces.ed.gov/nationsreportcard

National Association for the Education of Young Children. 1313 L Street, NW, Suite 500,
Washington, DC 20005 – naeyc.org

National Board for Professional Teaching Standards – nbpts.org

National Center for Children in Poverty. Columbia University Mailman School of Public Health – nccp.org

National Governor’s Association Center for best Practices. 444 N. Capitol St., Ste. 267, Washington, D.C. 20001-1512 – nga.org/cms/center

Nina Mason Pulliam Charitable Trust – ninapulliamtrust.org

Office of Head Start – acf.hhs.gov/programs/ohs

Read On Arizona. 1202 East Missouri Avenue, Phoenix, Arizona, 85014 – readonarizona.org

Southwest Human Development. 2850 N. 24th Street, Phoenix, AZ 85008 – swhd.org

United Way – unitedway.org

United Way In Arizona – apps.unitedway.org/myuw/?id=browsecities&zip=00000&abbr=AZ

United States Census Bureau. Childcare: An important part of American life – census.gov/how/pdf/child_care.pdf

U.S. Department of Health & Human Services. 200 Independence Avenue, S.W. Washington, D.C. 20201 – hhs.gov

Virginia G. Piper Charitable Trust. 1202 East Missouri Avenue, Phoenix, Arizona, 85014 – pipertrust.org

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ARIZONA TOWN HALL PUBLICATIONS

TOWN HALL	DATE	SUBJECT	TOWN HALL	DATE	SUBJECT
1.*	OCT 1962	Arizona's Tax Structure	57	OCT 1990	The Many Faces of Economic Development in Arizona
2	APR 1963	Welfare Policies & Administration	58	APR 1991	Arizona's Taxing Choices: State Revenues, Expenditures & Public Policies
3.*	OCT 1963	Elementary & High School Education	59	OCT 1991	Preserving Arizona's Environmental Heritage
4	APR 1964	Arizona's Water Supply	60	APR 1992	Harmonizing Arizona's Ethnic & Cultural Diversity
5.*	OCT 1964	Revision of Arizona's Constitution	61	OCT 1992	Free Trade: Arizona at the Crossroads
6.*	APR 1965	Gearing Arizona's Communities to Orderly Growth	62	APR 1993	Hard Choices in Health Care
7	OCT 1965	Public Land Use, Transfer & Ownership	63.*	OCT 1993	Confronting Violent Crime in Arizona
8.*	APR 1966	Crime, Juvenile Delinquency & Corrective Measures	64.*	MAY 1994	Youth At Risk: Preparing Arizona's Children For Success In The 21st Century
9.*	OCT 1966	Higher Education in Arizona	65	OCT 1994	American Indian Relationships in a Modern Arizona Economy
10	APR 1967	Do Agricultural Problems Threaten Arizona's Total Economy	66	MAY 1995	Making the Grade: Arizona's K-12 Education
11.*	OCT 1967	Arizona's Tax Structure & Its Administration	67	OCT 1995	Public Spending Priorities in Arizona: Allocating Limited Resources
12.*	APR 1968	Mental Health & Emotional Stability	68	MAY 1996	Arizona's Growth and the Environment – A World of Difficult Choices
13	OCT 1968	Traffic & Highways	69	OCT 1996	Building a Community of Citizens for Arizona
14.*	APR 1969	Civil Disorders, Lawlessness & Their Roots	70	MAY 1997	Forging an Appropriate Transportation System for Arizona
15	OCT 1969	Economic Planning & Development	71	OCT 1997	Ensuring Arizona's Water Quantity and Quality into the 21st Century
16	APR 1970	The Future of Health & Welfare in Arizona	72	MAY 1998	Meeting the Challenges and Opportunities of a Growing Senior Population
17.*	OCT 1970	Preserving & Enhancing Arizona's Total Environment	73	OCT 1998	Who Is Responsible for Arizona's Children?
18.*	APR 1971	The Arizona Indian People & Their Relationship to the State's Total Structure	74	MAY 1999	Future Directions in Arizona Health Care
19	OCT 1971	Alcohol & Drugs – Quo Vadis?	75	OCT 1999	Uniting a Diverse Arizona
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24.*	APR 1974	Land Use Planning for Arizona	80	MAY 2002	Building Leadership in Arizona
25	OCT 1974	The Problems of Transportation: People & Products	81	OCT 2002	Arizona Hispanics: The Evolution of Influence
26.*	APR 1975	Responsive & Responsible Government	82	MAY 2003	Health Care Options: Healthy Aging – Later Life Decisions
27	OCT 1975	The Problem of Crime in Arizona – How Do We Solve It?	83	OCT 2003	The Realities of Arizona's Fiscal Planning Processes
28	APR 1976	Arizona Energy – A Framework for Decision	84	JUN 2004	Pre-K - 12 Education: Choices for Arizona's Future
29	OCT 1976	Arizona's Economy – Yesterday, Today & Tomorrow	85	NOV 2004	Arizona's Water Future: Challenges and Opportunities
30.*	APR 1977	Of, By & For the People – How Well Is It Working?	86	JUN 2005	Arizona as a Border State – Competing in the Global Economy
31	OCT 1977	Arizona Water: The Management of Scarcity	87	NOV 2005	Maximizing Arizona's Opportunities in the Biosciences and Biotechnology
32.*	APR 1978	Cost & Quality of Elementary & Secondary Education	88	APR 2006	Arizona's Rapid Growth and Development: Natural Resources and Infrastructure
33.*	OCT 1978	Corrections in Arizona: Crisis & Challenge	89	NOV 2006	Arizona's Rapid Growth and Development: People and the Demand for Services
34.*	APR 1979	Indians & Arizona's Future – Opportunities, Issues & Options	90	APR 2007	Health Care in Arizona: Accessibility, Affordability and Accountability
35	SEPT 1979	Toward Tax Reform	91	OCT 2007	Land Use: Challenges and Choices for the 21st Century
36	APR 1980	Arizona's Transportation Dimension	92	APR 2008	Who Will Teach Our Children?
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38	MAY 1981	Arizona's Hispanic Perspective	94	APR 2009	From Here to There: Transportation Opportunities for Arizona
39	OCT 1981	Arizona's Energy Future: Making the Transition to a New Mix	95	NOV 2009	Riding the Fiscal Roller Coaster: Government Revenue in Arizona
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41.*	OCT 1982	Impact of the New Federalism on Arizona	97	NOV 2010	Arizona's Government: The Next 100 Years
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