



A Different Way of Doing Business: Examples of Pre-K to Third Grade Alignment in Practice

By Rebecca Ullrich and Maryam Adamu January 13, 2016

The years spanning pre-kindergarten to third grade are particularly important ones: During this time, children develop crucial social-emotional and cognitive skills that build the foundation for later success inside and outside the classroom. High-quality early learning programs have a significant positive impact on 4-year-olds' academic achievement and social-emotional skills over the course of their pre-K year.¹ Children who attend preschool gain four additional months of learning, on average, compared with their peers who do not attend.² Many studies show that cognitive gains for children who attended high-quality preschool last into early elementary school³ and adolescence,⁴ while others have identified a convergence of achievement scores between children who attended high-quality pre-K and those who did not by third grade.⁵ Long-term benefits, particularly gains in social-emotional learning, generally persist.⁶

There is growing recognition among early childhood experts that high-quality early learning opportunities are necessary but not sufficient to ensure long-term success for all children.⁷ Children's experiences in early elementary school can have similarly significant and lasting effects on development,⁸ but—like for pre-K—the quality of elementary school classroom environments is highly variable.⁹ Consistent access to high-quality classrooms and schools from preschool to third grade provides opportunities for all children to build continuously upon the foundational skills developed during the first four years of life.¹⁰

Early childhood is widely recognized as the most flexible developmental period for influencing children's future trajectories,¹¹ and this critical period of development is not limited to the years before children enter formal schooling. Recognizing this, states and school districts across the country are making an effort to align the policy and practice in early care and education with subsequent K-12 systems. This issue brief provides an overview of some of the key components and challenges of pre-K to third grade, or P-3, alignment initiatives identified by implementers at the state and local levels. (see Appendix for full list of interviewees)

Steps to success: How state and district implementers achieve alignment

Early learning and K-12 education systems have traditionally been disjointed in the United States. Administrative oversight for early learning initiatives at the state level is often scattered and typically not housed in the same agency as elementary and secondary schools. Consequently, preschool and elementary administrators and educators are subject to vastly different policies and standards for practice. These systematic differences, coupled with divergent and sometimes competing philosophies around education and development, pose significant challenges for implementers looking to align early learning and K-12 systems.

Successful alignment from preschool to third grade requires implementers at all levels—from agency directors to superintendents to classroom teachers—to embrace policies and practices that support a consistent approach to children’s education beginning in pre-K. During interviews conducted by the authors for this brief, implementers described a number of strategies and initiatives that have been and continue to be critical to their alignment efforts, namely:

- Creating a unified vision or goal for all children and identifying how P-3 alignment helps achieve that goal
- Establishing a coherent, collaborative system for the programs and services that benefit children and families
- Building and supporting leadership at all levels to influence policy and practice and to foster buy-in around the need for alignment
- Streamlining approaches to instruction through aligned professional development and standards for children’s learning
- Engaging families and the broader community to meet the diverse needs of all children
- Using data to inform policy and practice and to build evaluation activities into alignment initiatives

“We originally focused on preschool because studies show it can reduce gaps. . . . We got to the issue of a coordinated [age] three to [grade] three approach [because] if you don’t have high-quality first, second, and third grade[s], the value of preschool is erased.”

– Larry Schaefer, senior staff associate, Connecticut Association of Public School Superintendents¹²

Each of these strategies and initiatives are highlighted in detail in the following sections.

Creating a unified vision

Implementers emphasized that a crucial first step toward alignment is working with partners across state and district agencies and the private sector to establish an overarching goal for all children. Identifying a big-picture goal in the context of children's outcomes allows implementers to employ concrete, targeted strategies for alignment.¹⁴ In Oregon, policymakers and practitioners realized that the educational programs serving children and families between early childhood and third grade were scattered and not working toward the same goal. Stakeholders across the state responded by identifying a benchmark for all Oregon children: 100 percent reading proficiency at the end of third grade. With a common goal in mind, partners are now working to improve how children are transitioning from early care and education settings to kindergarten and beyond.¹⁵

For a vision to be truly unified, all partners must be invested in the goal. Administrators in Massachusetts described the state's college- and career-readiness definition as one "where the early childhood system didn't see themselves."¹⁶ Before they could engage in alignment initiatives, implementers needed to ground themselves in the definition. Similarly, leaders in New Jersey had to identify what college and career readiness means for 4-, 5-, and 6-year-olds, as well as how educators might identify "readiness" in young children.¹⁷

Establishing this collective vision for alignment was important for states and districts to overcome the disjointed nature of early learning and K-12 education systems and philosophies. Unified under a single goal, implementers were able to identify how the strengths of each partner could be leveraged to achieve alignment for children and families, determine how larger goals should play out at each level of implementation, and select the initiatives that would help achieve those goals.

"We're telling them that it's not an add-on or an extra. It's a different way of doing business."

—Brett Walker, alignment specialist, Oregon Department of Education¹³

Establishing a collaborative system

The sheer number of agencies, programs, and funding streams that serve young children and families can present a barrier to creating an aligned continuum of services. To break down existing silos, implementers executed systems-level changes in how their agencies were organized and/or operated in conjunction with other stakeholders. These changes can mean the difference between isolated initiatives—in which children and families might fall through the cracks—and achieving a unified vision.

One approach to creating continuity is carving out a new home for P-3 work. Implementers in Pennsylvania work out of the Office of Child Development and Early Learning, or OCDEL—a joint office between the state Department of Human Services and the state Department Education. By nesting many of the programs that serve young children and families in OCDEL—from early intervention to subsidized child care—Pennsylvania is able to collaborate and share information across bureaus.¹⁸ In

Connecticut, many P-3 initiatives are housed in the Office of Early Childhood, or OEC, a stand-alone agency comprised of programs that were originally located in five different agencies. Programs and services in both states all operate under a prenatal or birth through third grade lens, allowing implementers to think about how education, health, and other support systems change across the continuum of development.¹⁹

Another strategy is identifying representatives from different stakeholder groups or organizations to participate in an ongoing working group. In Massachusetts, P-3 work is not contained in a particular agency; instead, implementers brought together partners across state agencies and stakeholders in the community to create a state Birth–3rd Grade Advisory Group. Members include the state Department of Elementary and Secondary Education, the state Department of Early Education and Care, the state Department of Public Health, and Head Start; specialists within these agencies that represent special education, early childhood mental health, assessment, literacy, and dual-language learners; and Strategies for Children, a state advocacy organization. The advisory group established a birth to third grade framework that informs state-wide alignment initiatives.²⁰

Systems change at the administrative level can be challenging, particularly as implementers determine how to leverage different budgets and maintain varying operating standards. However, implementers emphasized in their interviews that working with partners to coordinate the administration of programs and services is an integral component of alignment work, reducing the duplication of services and creating a more comprehensive, holistic set of programs for children and families.

“The more we build alignment, the more support we have from everywhere.”

– Deborah Wise, division chief, Pennsylvania departments of Human Services and Education, Office of Child Development and Early Learning²¹

Funding and partnerships

Blending and braiding multiple funding sources—including federal, state, and private monetary and in-kind support—to launch and sustain alignment is an integral part of establishing a collaborative system. Some of the alignment strategies that implementers identified, such as increasing access to high-quality early learning programs and providing aligned professional development for teachers across the P-3 continuum, did not require new funding sources—instead, states and districts strategically worked with their existing budgets to reallocate funds. Other initiatives, such as aligning standards and developing kindergarten entry assessments, required implementers to seek outside grant support²² and/or engage in partnerships with private organizations in the community.

In Chicago, for instance, the Child-Parent Center, or CPC, model utilizes federal, state, and private resources—including Title I,²³ Head Start,²⁴ Illinois Early Childhood Block Grants,²⁵ and social impact bonds²⁶—to finance various aspects of the program.²⁷ The model is being further expanded into other high-need schools in Illinois and Minnesota as part of a school reform initiative supported by an Investing in Innovation Fund,²⁸ or i3, grant.²⁹

Several states noted that private funding was integral to kick-start their alignment efforts.³⁰ In Oregon, some efforts to implement innovative initiatives at the local level are funded with private dollars from community foundations,³¹ while state general funds support the statewide expansion of certain alignment components, such as full-day kindergarten.³² Leaders in Pennsylvania used Race to the Top-Early Learning Challenge funds to grow their cross-sector work, evaluate existing initiatives, and determine next steps for alignment.³³

Leveraging new and existing funds from public and private sources is critical to systems change, as it creates widespread buy-in across stakeholders, ensures that programs across agencies and funding streams are working toward a common vision, and builds sustainability into alignment efforts. One interviewee from Connecticut noted that while bringing stakeholders to the table can be difficult, it is extremely important—no one partner has the resources to achieve these initiatives alone.³⁴

Building and supporting leadership

Along with establishing a unified vision and centralizing the administration of programs and services, implementers highlighted the importance of having passionate leadership at the helm of state agencies. Visible and committed leaders who have long-standing relationships with districts and programs lend credibility to P-3 alignment initiatives and facilitate buy-in among local administrators.

With implementation ultimately taking place in schools and classrooms, it is equally important that district and school leaders see the benefit of alignment and actively champion alignment initiatives. At CPCs, elementary school principals collaborate with leadership teams, comprised of a head teacher, a parent resource teacher, and a school-community representative.³⁵ In Lansing, Michigan, the principal and two teachers at each school work together to identify strengths and instructional areas with room for growth—both within each grade level and across the entire school—based on data gathered during classroom observations.³⁶ The heavy involvement of leadership in these models often creates a climate of enthusiasm among the rest of the instructional staff.³⁷

Implementers noted that because many K-12 administrators do not have a background in early childhood education, they require explicit leadership training and technical assistance to effectively support early childhood educators and facilitate alignment initiatives. In Marin County, California, specific meetings and training sessions for principals are key to ensure that leaders are spearheading necessary systems changes.³⁸ In Pennsylvania, administrators working with children ages 0 to 8 have the opportunity to participate in joint professional development through the Early Childhood Executive Leadership Institute.³⁹ Similarly, state leaders in New Jersey are piloting a professional development model that establishes district teams, which include a central office representative, a principal, and classroom teachers.⁴⁰

“Those funding opportunities have a shelf life; having leadership at the executive level is really important if we’re making sustainable change.”

– Donna Traynham, early learning team lead, Massachusetts Department of Elementary and Secondary Education⁴²

Several interviewees suggested that when district and school administrators are knowledgeable and passionate about alignment efforts, they are more likely to prioritize funding and other resources toward programs and initiatives that support alignment.⁴¹ Thus, it is important that the collaboration occurring at the state level also occurs at the district and school levels.

Pennsylvania’s P-3 Governor’s Institute

Pennsylvania’s P-3 Governor’s Institute is a unique approach to developing leaders at multiple levels to advocate for alignment in schools and classrooms. OCDEL accepts teams comprised of an early learning administrator and a teacher, a K-3 administrator and a teacher, and up to four additional members of the community—such as a curriculum coordinator, a parent liaison, an early interventionist, or a college faculty member. In 2015, OCDEL hosted four regional institutes with a total of 62 teams.⁴³

Using Kristie Kauerz and Julia Coffman’s “Framework for Planning, Implementing, and Evaluating PreK-3rd Grade Approaches,”⁴⁴ teams kick off the three-day workshop by identifying existing strengths and potential areas for growth in their current policies and practices and sharing with the other attendees. Teams

prioritize areas for growth and create P-3 priority documents to guide their participation through subsequent sessions. Breakout sessions consist of targeted content, including systems change, team building, data-driven instruction, family engagement, and play-based learning.

Encouraged to start with small, manageable changes that can be achieved quickly and easily, teams create an action plan to outline the initial steps toward P-3 alignment in the immediate future.

Teams from the 2015 institutes have taken a variety of steps toward P-3 alignment that will lead to more substantial systematic change down the road, including implementing joint professional development, aligning standards, and renewing focus on family and community engagement in kindergarten through third grade.⁴⁵

Streamlining approaches to instruction

There are significant differences in how administrators and educators approach their work with children and families in early learning compared with elementary grades. Implementers discussed the importance of streamlining approaches to practice in the classroom to create a seamless continuum of learning from preschool to third grade. Specifically, states and districts highlighted the need for aligned professional development and standards for learning and development as children transition from preschool into the K-12 system.

Professional development under an alignment framework

A truly aligned P-3 system includes access to high-quality instruction from age 3 through grade three. Improving instruction—and thereby children’s outcomes—relies on supporting educators and administrators to provide the optimal context for learning. Professional development and training that is aligned across grade levels and based on the same principles is a cornerstone of that work. In Connecticut, the OEC—in partnership with the state Department of Education—offers webinars, coaching, and consulting to help teachers provide high-quality early learning environments, with a focus on birth to age 5. Lansing School District organizes professional development around instructional strengths and areas of opportunity. At each grade level, data are aggregated so that teachers can look across grade levels to inform their practice based on instruction in grades above and below.⁴⁶ CPCs work to enhance their professional development by partnering with the Erikson Institute, a graduate school specializing in child development, to provide on-site coaching as well as online learning modules that detail best practices linked across grades.⁴⁷

Supporting social-emotional development across the P-3 continuum

Another key component of alignment is ensuring that instruction supports all aspects of children’s development—not just academic achievement—across the P-3 continuum. Dramatic play and other avenues for children to acquire important social and behavioral skills are hallmarks in early learning classrooms. However, activities that support the development of noncognitive skills do not always follow children into kindergarten and beyond. Recognizing the important link between children’s social and behavioral development and academic achievement, a primary goal for many implementers is to create standards for noncognitive skills that extend into the early elementary grades. Several implementers interviewed noted that their states are in the process of rolling out the standards themselves and of creating instructional guides and professional development models to support teachers as they implement the standards in their classrooms.

One state leader in Oregon noted that kindergarten teachers in particular were excited about this shift—many teachers knew how important interpersonal skills and self-regulation were to their students’ learning but often felt left out of that framework. Social-emotional learning, or SEL, standards provide them with clear goals for children’s

development and a road map to facilitate these skills.⁴⁸ EASTCONN, a regional education service center in Connecticut, partnered with state leaders to train teachers in instructional strategies that promote executive function skills, including working memory, mental flexibility, and self-control. The development of executive function skills is crucial for academic achievement, as they are necessary for children to self-regulate, think critically about ideas, plan activities, interact with peers, and know when to ask for help.⁴⁹ As a result, project staff are finding that children are more engaged, eager to learn, and increasingly able to manage their behavior in the classroom.⁵⁰

Engaging families and the broader community

At each step of implementing alignment strategies, there is a concerted effort to incorporate a variety of stakeholders, including families and community service providers. A trademark of high-quality early learning programs is that they focus on engaging families and maintaining strong ties to resources in the community.⁵¹ Many implementers are working toward sustaining that family and community involvement through third grade. Still, defining and engaging the community manifests differently across schools and programs and from urban to rural settings.

The CPC model is based on a two-generation approach to education, and sites are required to develop strong partnerships with community organizations that serve families. The model is flexible to the particular needs of families in each community within the district, allowing individual centers to identify which partnerships would best support the parents and children they serve. For example, some sites work with the City Colleges of Chicago to offer GED programs to support young mothers who had to drop out of high school. More recently, as the program expanded into bilingual communities, many CPCs started to provide English as a second language classes.⁵² In Portland, another diverse, urban area, implementers modeled their parent engagement strategy off of a health education worker model that focuses on developing culturally specific community leaders. These leaders partner with families that have been previously disconnected from the formal early learning system to do capacity-building work, helping them understand early childhood learning and development and to access critical social services before their children enter school.⁵³

In Yoncalla, a very small, rural, economically depressed community in southwestern Oregon, implementers realized that building trust among members of the community was, above all else, integral to their alignment efforts. Originally, implementers thought the solution to low rates of kindergarten readiness would be a large-scale investment in pre-K, but parent and community surveys revealed a different community vision. Instead, they channeled their energy toward other strategies. Specifically, implementers created a family room at the elementary school that houses play groups for infants and 3- and 4-year-olds, offers parenting education classes, and hosts on-site services

such as lactation consultation for new mothers. Implementers also work closely with the elementary school to create opportunities to familiarize families and young children with the school before they enroll in kindergarten. Implementers were responsive to the desires of the community, rather than imposing an unwanted program on families—consequently, they were able to launch successful initiatives and likely will have opportunities to expand services in the future.⁵⁴

At all levels, a crucial component of engaging families is working with very trusted members of the community who champion the work and get parents in the door. Marin County, for example, recruits family engagement liaisons in each school who work with feeder pre-K programs and K-12 schools. This was an intentional shift from “fortress schools” that shut out families to “partnership schools,” which give families the opportunity to take on leadership roles and become key partners in learning.⁵⁵ Initiatives such as these allow schools to become sites for constant contact and, eventually, more holistic services. In southern Oregon, a local food bank partnered with the local elementary school to host a produce market once per week, allowing families to shop while interacting with teachers and principals.⁵⁶

Implementers emphasized that efforts to engage families under an alignment framework must be driven by the unique needs of the communities being served by each district or school; a one-size-fits-all model runs the risk of alienating parents and missing critical opportunities to meet families where they are. However, by strategically incorporating broader services from the community and creating targeted programs for family engagement, many implementers were able to support parental involvement and establish the school as a trusted resource for families.

“[It is important for implementers] to know the landscape of their communities—where the resources and people who need them are located.”

– Amy O’Leary, director of Early Education for All, *Strategies for Children*⁵⁷

Using data to inform policy and practice

Implementers emphasized the importance of using data to inform and evaluate their alignment initiatives. Collecting and analyzing data helped implementers shape the big picture, and to identify overarching goals and particular strategies to achieve them. Leaders in Oregon partnered with researchers at Portland State University to conduct a community needs assessment prior to beginning their alignment work. Implementers wanted to get a sense of the skills and supports that children possessed as they transitioned from early learning programs to elementary school; they also wanted to identify gaps and inconsistencies in the current systems that serve young children and families.⁵⁸

Building evaluation processes into day-to-day activities allowed implementers in schools and classrooms to transform instruction. State leaders in Oregon⁵⁹ and Pennsylvania⁶⁰ focused on equipping districts and schools with the tools they needed to collect their own data and on supporting their use of these tools. At the P-3 Governor’s Institute, a

session on data-driven improvements in the classroom was among the most popular—an administrator from a local school district discussed how his district overcame challenges to effectively implement Pennsylvania’s Kindergarten Entry Inventory and used those data to improve instruction.⁶¹

A number of districts partner with FirstSchool⁶²—an initiative focused on improving P-3 experiences for African American, Hispanic, and low-income children—including Marin County⁶³ and Lansing School District,⁶⁴ to implement the EduSnap classroom observation system. EduSnap provides detailed, minute-by-minute breakdowns of students’ experiences in the classroom, focusing on instructional content and approaches, student learning approaches, and activity settings.⁶⁵ Aggregated data at the school level help leadership teams choose targeted professional development, while teachers use individualized data to improve their instruction in the classroom. As a district, Lansing schools focused on bolstering instruction that targets oral language development, small-group instruction, and scaffolding. Scaffolding is an instructional strategy in which teachers provide temporary guidance to support children as they begin to master new skills or concepts.⁶⁶ Last year, district teachers increased the amount of instructional time spent on scaffolding literacy skills from 18 percent to 35 percent.⁶⁷

Regardless of how implementers used data, they each emphasized the importance of having short-term benchmarks to evaluate change over time. In the early months and years of these initiatives, it can be difficult to assess whether changes in policy and practice are having a significant effect on big-picture outcomes for children—third grade reading scores, for instance, or college and career readiness. Instead, implementers discussed focusing on how alignment was changing practice by improving instruction, increasing family engagement, and bridging gaps in differing attitudes between early childhood and elementary educators.

“The evidence is strong, and it’s among the best in terms of school reform: This continuity [from preschool to third grade] is a big advantage.”

— Arthur Reynolds, professor, University of Illinois at Chicago, College of Education and Human Development⁷⁴

Data-driven improvement

Chicago’s CPC model⁶⁸ is a powerful example of how data can be used at multiple levels to improve alignment.⁶⁹ Parent resource teachers conduct a family needs assessment at the beginning of each year to help target services for families.⁷⁰ At the classroom level, teachers collect information about children’s learning and development; this information, along with classroom observation data, is integrated into daily lesson plans.⁷¹ These data collection procedures allow classroom leadership to ensure that children and families receive individualized, high-quality educational experiences and are put in touch with the support services that will most benefit them.

At the programmatic level, several large-scale evaluations of the model have been conducted over the years, and the information from these studies has helped inform refinements to the model and has influenced its expansion in other states. For instance, data from evaluations of the CPC model revealed that children who attend preschool for a full day vs. those who attend for a half day experience greater gains in learning and development.⁷² This evidence has informed hours of operation for CPCs, as well as for public pre-K in Chicago Public Schools, as they begin to expand their early childhood services.⁷³

Conclusion

Increasing the access to and quality of educational opportunities during early childhood and beyond has tremendous potential to reduce existing disparities in achievement and increase the long-term success of our nation's youngest learners. Toward this goal, it is imperative that we not limit our conceptualization of early childhood to the years before children enter formal schooling—the early elementary grades are equally important determinants of children's achievement trajectories in school. Policymakers and practitioners looking to align policy and practice between preschool and third grade can learn from the ongoing efforts of implementers in the field and identify opportunities to apply these initiatives in their own communities.

While implementers have and will continue to face a number of challenges in their alignment work—such as building trust among community members, overcoming conflicting attitudes and philosophies among educators from different backgrounds, and dealing with the logistical challenges associated with blending funds from multiple sources—they also have made tremendous strides toward aligning high-quality educational opportunities for children and families.

State and local leaders established big-picture goals for children's achievement, which informed systems-level change in how agencies, programs, and services are organized and operated. Consequently, implementers were able to leverage new and existing resources and partnerships to support widespread alignment efforts. At the district and school levels, implementers focused on creating a cadre of leaders and increasing cohesion in approaches to professional development, instruction, and family engagement across grades. Finally, implementers incorporated data collection and analysis into practice to guide systems change and inform instruction in the classroom. This different way of doing business, starting with early learning and continuing into third grade and beyond, may be the shift in policy and practice that our nation needs to increase opportunities for all children to succeed.

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Methodology

The Center for American Progress selected five states and three districts to interview for this report and based the selection on a variety of factors, including the maturity or stage of the states' and districts' alignment initiatives and geography. It is beyond the scope of this brief to provide a nationally representative scan of pre-K to third grade alignment initiatives across the country. Instead, this brief seeks to describe common critical components and key challenges identified by the interviewees.

For each state or district, CAP conducted phone interviews with at least one representative from the agency responsible for overseeing P-3 alignment initiatives and also spoke with a variety of additional stakeholders in the public and private sectors. Ultimately, a total of 31 implementers were interviewed. A full list of interviewees can be found in the Appendix. Interviews were conducted between October and November 2015 using a consistent protocol framework designed for qualitative information gathering; questions were adapted on an ad hoc basis to be appropriate to each interviewee. All information in this brief is derived from these interviews and cited more specifically in the endnotes.

Appendix: List of interviewees by location

Chicago, Illinois

- **Samantha Aigner-Treworgy**, director of early education policy, Mayor's Office
- **Chris Rosean**, executive director of the Office of Early Childhood Education, Chicago Public Schools
- **Arthur Reynolds**, professor, University of Illinois at Chicago College of Education & Human Development

Connecticut

- **Larry Schaefer**, senior staff associate, Connecticut Association of Public School Superintendents
- **Andrea Brinnel**, education consultant, Connecticut Office of Early Childhood, Division of Early Care and Education
- **Harriet Feldlaufer**, division director, Connecticut Office of Early Childhood, Division of Early Care and Education
- **Elizabeth Aschenbrenner**, director of early childhood initiatives, EASTCONN

Lansing, Michigan

- **Sam Oertwig**, director of school implementation, FirstSchool
- **Betty Underwood**, Lansing iCollaborate project leader, Lansing School District

Marin County, California

- **Don Jen**, program director, education, Marin Community Foundation
- **Carol Barton**, Early Childhood Education Quality Improvement Project coordinator, Marin County Office of Education
- **Jan La Torre-Derby**, PK-3 director, Marin County Office of Education

Massachusetts

- **Winnie Hagan**, associate commissioner for academic affairs & student success, Massachusetts Department of Higher Education
- **Donna Traynham**, early learning team lead, Massachusetts Department of Elementary and Secondary Education

- **Carol Nolan**, director, policy, Massachusetts Department of Early Education and Care
- **Amy O’Leary**, director of Early Education for All, Strategies for Children
- **Kelly Kulsrud**, director of reading proficiency, Strategies for Children
- **Lauren Healy**, research and field associate, Strategies for Children

New Jersey

- **Vincent Costanza**, director, New Jersey Department of Education, Office of Primary Education
- **Ellen Wolock**, administrator, New Jersey Department of Education, Division of Early Childhood Education

Oregon

- **Dana Hepper**, director of policy & program, Oregon Children’s Institute
- **Brett Walker**, P-3 alignment specialist, Oregon Department of Education, Early Learning Division
- **Kara Williams**, early education to K-3 education specialist, Oregon Department of Education, Office of Learning - Student Services
- **Christy Cox**, senior program officer, The Ford Family Foundation
- **Jeneen Hartley Sago**, program officer, The Ford Family Foundation
- **Abby Bush**, associate program officer, early childhood, Oregon Community Foundation
- **Beth Green**, director of early childhood and family support research, Portland State University School of Social Work

Pennsylvania

- **Jolie Phillips**, program director, Pennsylvania’s P-3 Governor’s Institute, Pennsylvania Office of Child Development and Early Learning
- **Debra Reuvenny**, director, Race to the Top-Early Learning Challenge, Pennsylvania Office of Child Development and Early Learning
- **Deborah Wise**, chief, division of standards and professional development, Pennsylvania Office of Child Development and Early Learning

Endnotes

- 1 Andrew J. Mashburn and others, "Measures of Classroom Quality in Prekindergarten and Children's Development of Academic, Language, and Social Skills," *Child Development* 79 (3) (2008): 732–749.
- 2 Hirokazu Yoshikawa and others, "Investing in Our Future: The Evidence Base on Preschool Education" (Ann Arbor, MI; and New York: Society for Research in Child Development and Foundation for Child Development, 2013), available at http://www.srcd.org/sites/default/files/documents/washington/mb_2013_10_16_investing_in_children.pdf.
- 3 Ellen S. Peisner-Feinberg and others, "The Relation of Preschool Child-Care Quality to Children's Cognitive and Social Developmental Trajectories through Second Grade," *Child Development* 72 (5) (2001): 1534–1554.
- 4 Deborah Lowe Vandell and others, "Do Effects of Early Child Care Extend to Age 15 Years? Results from the NICHD Study of Early Child Care and Youth Development," *Child Development* 81 (3) (2010): 737–756.
- 5 Steve Barnett and Megan E. Carolan, "Facts about Fadeout: The Research Base on Long-Term Impacts of High Quality Pre-K" (New Brunswick, NJ: Center on Enhancing Early Learning Outcomes, 2014).
- 6 Judi Boyd and others, "Promoting Children's Social and Emotional Development Through High-Quality Preschool" (New Brunswick, NJ: National Institute for Early Education Research), available at <http://www.nieer.org/resources/factsheets/10.pdf> (last accessed December 2015).
- 7 Rima Shore, "The Case for Investing in Pre-K-3rd Education: Challenging Myths about School Reform" (New York: Foundation for Child Development, 2009), available at <http://fcd-us.org/sites/default/files/TheCaseForInvesting-ChallengingMyths.pdf>.
- 8 Bridget K. Hamre and Robert C. Pianta, "Can Instructional and Emotional Support in the First-Grade Classroom Make a Difference for Children at Risk of School Failure?," *Child Development* 76 (5) (2005): 949–967; Bridget K. Hamre and Robert C. Pianta, "Early Teacher-Child Relationships and the Trajectory of Children's School Outcomes through Eighth Grade," *Child Development* 72 (2) (2001): 625–638.
- 9 Robert C. Pianta and others, "Opportunities to Learn in America's Elementary Classrooms," *Science* 315 (5820) (2007): 1795–1796.
- 10 Arthur Reynolds, Katherine Magnuson, and Suh-Ruu Ou, "PK-3 Education: Programs and Practices that Work in Children's First Decade." Working Paper 6 (Foundation for Child Development, 2006).
- 11 Jack P. Shonkoff and Deborah A. Phillips, eds., *From Neurons to Neighborhoods: The Science of Early Childhood Development* (Washington: Committee on Integrating the Science of Early Childhood Development, 2000).
- 12 Larry Schaefer, phone interview with authors, November 3, 2015.
- 13 Brett Walker and Kara Williams, phone interview with authors, October 15, 2015.
- 14 Amy O'Leary, phone interview with authors, October 21, 2015.
- 15 Walker and Williams, phone interview with authors.
- 16 Donna Traynham, phone interview with authors, October 16, 2015.
- 17 Vincent Costanza and Ellen Wolock, phone interview with authors, October 30, 2015.
- 18 Debra Reuvenny and Deborah Wise, phone interview with authors, October 6, 2015.
- 19 Harriet Feldlaufer, phone interview with authors, October 19, 2015.
- 20 Donna Traynham and Carol Nolan, phone interview with authors, October 16, 2015.
- 21 Debra Reuvenny and Deborah Wise, phone interview with authors, October 6, 2015.
- 22 Several states' initiatives were supported by Race to the Top-Early Learning Challenge grants and participation in the National Governors Association's Early Childhood Policy Academy. Traynham and Nolan, phone interview with authors; Reuvenny and Wise, phone interview with authors; Walker and Williams, phone interview with authors.
- 23 Title I is a component of the Elementary and Secondary Education Act aimed at eliminating disparities between low- and higher-income students. Many schools and districts use Title I to invest in early education. For more information, see U.S. Department of Education, "Improving Basic Programs Operated by Local Educational Agencies (Title I, Part A)," available at <http://www2.ed.gov/programs/titleiparta/index.html> (last accessed December 2015).
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