As state-funded pre-K expands, policy makers and other stakeholders are increasingly interested in how the impact of high quality pre-K can continue through the early elementary years. Aligning early care and education to the K-3 system seems daunting because of differences between the two systems. For example, there are different funding streams with different levels of accountability, different teacher preparation and education requirements, and different curriculum approaches.

This report takes a deeper look into the recommendation from the “Success Starts Early: Indiana’s Roadmap to Pre-K Expansion” regarding the alignment of early care and education and the K-3 school system. In the following pages, we examine the importance of aligning pre-K to the early elementary years, how alignment is addressed in other communities, and offer recommendations for consideration as Indiana continues to expand high quality pre-K to more Hoosier children and families.

**SUMMARY**

As Indiana continues to expand state-funded pre-K, greater continuity and coordination between preschool and elementary school systems is necessary.

In 2016 Indiana spent $24 million on kindergarten retention as five percent of students were held back.

Children learn best when the instruction builds on individual learning trajectories that are built throughout their academic careers.

Increased emphasis on developmentally appropriate academic skills at the pre-K level while intentionally attending to social-emotional development beyond pre-K is needed.
What do we mean by aligning pre-K and K-3?

The success of a high-quality pre-K program depends on many factors. One is how the early care and education system and the K-3 educational system can work together to ensure smoother transitions from preschool to early elementary school. With the rise in state-funded pre-K in Indiana and other states, policy makers and practitioners are increasingly focused on strengthening this important transition period (Takanishi, 2016).

Some research suggests that gains made in pre-K can be diminished when there is misalignment between pre-K and the elementary school systems (Stipek, Clements, Coburn, Franke, & Farran, 2017). However, aligning the two is complex and calls for a clear understanding of the meaning of continuity between these two different but increasingly interconnected systems (Takanishi, 2016).

According to experts, aligning early care and education programs and K-3 systems includes attention to the following components:

- alignment of early learning standards and K-3 standards, assessments and curricula,
- continuity and coordination of meaningful learning experiences for children throughout the PK-3rd grade that can lead to improved child outcomes,
- professional development for early learning and K-12 teachers as well as superintendents, principals and early care and education professionals that emphasizes the full continuum of pre-K to 3rd grade,
- longitudinal data systems across the two systems, and
- coordinated kindergarten transition efforts between early education programs and schools.


Because this area of research is largely unexamined, much of what we know about alignment of pre-K-3 systems comes from a strong educational framework for how young children learn (Stipek et al., 2017). As more evaluations, including Indiana’s On My Way Pre-K evaluation, share their findings, researchers will understand which aspects are particularly important in strengthening the connections between early care and education and the K-3 systems.

What does the research say about alignment, and why is it important?

To understand the important components of an aligned pre-K-3 system, the following section provides key points on the importance of each of the components listed above.

Continuity and coordination of meaningful learning experiences for children in the pre-K through 3rd grade time period leads to improved child outcomes.

One of the key components to aligning these two systems is recognizing that to continue the successes of high-quality pre-K experiences, future educational experiences need to intentionally build upon the skills and knowledge that children already possess when they enter kindergarten. While this seems evident in theory, it can be difficult in practice when two different systems of early care and education are involved.

Some research found kindergarten children who attended high-quality pre-K programs experienced repetition in their kindergarten learning environments, which led to boredom and
a decline in motivation (Stipek et al., 2017). In one nationally representative study, researchers found that incoming kindergarten students had already mastered the math skills that were being taught to them in kindergarten, yet kindergarten teachers reported spending a significant amount of time on teaching these basic concepts (Engel et al., 2013).

Other research surrounding the importance of creating continuity and coordination lies in the K-12 research literature. Evidence indicates children develop an understanding of math, reading and science based upon learning trajectories (Clements & Sarama, 2014; Gelman & Brennermann, 2004; Quinn, Spencer, & Wagner, 2015). Learning trajectories are developmental progressions of specific skills in specific content areas. For example, children generally learn to crawl before they can walk, to count before they can add two numbers together and that letters make sounds that form words before they learn to read.

Knowing where children are in their learning trajectory helps teachers scaffold children’s learning so they can be challenged and reach the next level of mastery in a subject area. Through this framework, children can continue to practice the skills they have already learned and be given opportunities to go deeper and demonstrate knowledge of their skills in a different way.

So why is this important to a pre-K to 3rd grade alignment? Children learn best when the instruction they receive from their teachers builds on these learning trajectories. When children change systems – from an early care and education environment to a school-based environment – there is the potential for disconnect in the child’s learning if new instruction doesn’t build on previous learning. And, if this happens, gains children make in the pre-K year can diminish.

In summary, pre-K and early education systems should consider:

- continuity in instruction between pre-K and the early elementary years by using a learning trajectory framework,
- targeting instruction slightly ahead of children's skill levels to motivate and encourage deeper learning, and
- providing opportunities for children to deepen their knowledge and skills by using them in different ways.

**THE FADEOUT DEBATE**

Some critics charge that the effects of high-quality pre-K “fadeout” by 3rd grade. While this debate won’t be solved here, fadeout is generally measured by academic skills and not social-emotional skills. More recent studies have demonstrated that social-emotional skills learned in high-quality pre-K settings contribute to longer-term outcomes such as high school graduation, fewer arrests, college graduation, employment, and better long-term health outcomes (Heckman, Pinto, & Savalyev, 2013).

Some research suggests having continuity and coordination of learning between systems and grades can actually reduce the academic fadeout experienced by children who participate in high-quality pre-K programs. Simply put, if children do not have opportunities to practice the skills they already learned, they will not progress. As a result, other children “catch up” and the effects of high quality pre-K are diminished (Clements, Sarama, Engel, Claessens, & Finch, 2013; Clements & Sarama, 2014).
Align early learning standards and K-3 standards, assessments and curricula.

Another critical factor cited in the research is the importance of aligning the early learning standards, assessments and curricula in a coherent manner across systems. Indiana has moved ahead on addressing this important component. In its latest revision, Indiana’s Early Learning Foundations (The Foundations) are aligned with the Indiana Academic Standards (Indiana Department of Education, n.d.). The Foundations are also aligned with ISTAR-KR, the assessment tool used by all On My Way Pre-K providers and other early care and education providers around the state.

When it comes to curricula alignment, there is some evidence that suggests using the same approach across from preschool to the early elementary years provides better alignment with learning expectations in the early elementary grades (Kagan, Carroll, Comer, & Scott-Little, 2006). However, the importance of the alignment has less to do with what curriculum is used, and more to do with how it is used. Curriculum needs to build on children’s prior skills and knowledge, have a clear learning trajectory, and have some flexibility built into it to allow for emergent ideas and adjustments to instruction. Any approach that is inflexible or follows a rigid schedule without regard to the children will probably not produce positive outcomes.

The notion of aligning standards and curriculum in pre-K-3 settings is often met with skepticism and fear from early care and education providers. They worry about academics being “pushed down” to pre-K with more attention on traditional academic skills and less attention on social-emotional and self-regulation skills (National Association of Elementary School Principals Foundation, n.d.). In fact, some researchers have found a trend toward more academic instruction in kindergarten over the past decade, and have referred to it as “the new first grade” (Bassock, Latham, & Rorem, 2016).

The challenge lies in how to provide continuity and coherence around curricula and learning standards between the early childhood and early elementary system. The solution to this issue involves meeting in the middle. Just as “pushing down” academics to pre-K is undesirable, so is “pushing up” new requirements from pre-K to early elementary school. There needs to be both an increased emphasis on teaching developmentally appropriate academic skills at the pre-K level while intentionally attending to social-emotional development beyond pre-K (National Association of Elementary School Principals Foundation, n.d.). Some states, such as Ohio, have added additional social-emotional standards to their K-3 academic standards to support continuity between the early education and K-3 standards (Ohio Department of Education, 2015).
Provide professional development for early learning and K-12 teachers as well as superintendents, principals, and early care and education professionals.

To encourage better alignment between the two systems, some researchers and practitioner groups have suggested providing joint professional development opportunities to professionals in both the early care and elementary systems (BUILD Initiative, n.d.; Lesaux, 2013). These experiences can help professionals understand and recognize learning trajectories, as well as how to build on children’s skills both from within the same program and across different systems.

In 2017, Alabama launched the Strong Start, Strong Finish initiative funded by the state to help ensure better alignment and professional development opportunities for pre-K through 3rd grade administrators and teachers. Through this initiative, the Pre-K-3 Leadership Academy teaches elementary principals about child development and provides an instructional coach for the pre-K classrooms in elementary schools to help ensure alignment with instructional practices and assessments. In addition, the pre-K classrooms received grants to help them purchase materials to ensure more active, hands-on learning experiences for pre-K children (Hinton, 2017).

Minnesota has also launched a similar effort. The Minnesota Elementary School Principal’s Association has adopted a pre-K-3 implementation training series for superintendents, principals and pre-K through 3rd grade educators. The webinar series includes topics on principal leadership, how to build alignment between the two systems and how to engage in rigorous and engaging learning environments (Minnesota’s Elementary School Principal’s Association, n.d.).
Align longitudinal data across the two systems.

One way to better understand the skills that pre-K children have mastered is to have better alignment between the data systems from pre-K to elementary school. New research has suggested that kindergarten teachers lack adequate data on children's performance prior to kindergarten, even if they attended a pre-K program (Valentino & Stipek, 2016). Incorporating data from early care and education into the K-12 system allows communities to make more informed decisions about effective policies and programs (National Association of Elementary School Principals Foundation, n.d.).

Some states have addressed this issue. Maryland and Pennsylvania have systems that link data from the early care and education programs to the K-12 system. New Jersey also created a comprehensive assessment system for pre-K through elementary school. This assessment system includes indicators that alert teachers if a child does not consistently meet certain benchmarks. This system is used by pre-K through 3rd grade teachers to look for areas where children's skills need to be strengthened across the continuum (Stipek et al., 2017).

Coordinate kindergarten transition efforts between early education programs and schools.

There is not much empirical evidence to support specific types of kindergarten transition activities. Most kindergarten transition activities focus on visits to the new kindergarten classroom and having the family meet the kindergarten teacher. One study found that visiting the classroom and having elementary teachers and parents meet prior to the transition helped prepare the child for the new learning environment and was related to increased learning (Schulting, Malone, & Dodge, 2005).

One important area of transition less explored is focusing on the continuity of classroom practices from pre-K to elementary school. For example, researchers have suggested that certain routine practices, such as dismissing children to go to lunch or using similar behavior management techniques, may help ease the transition to kindergarten for children because of the similar expectations between the two settings (Kagan et al., 2006).

ALIGNMENT IS CRITICAL

Establishing coordination and coherence between the early care and education system and the K-3 system could impact kindergarten retention.

5%

In 2016, five percent of kindergarten students in Indiana were retained in grade.

$24M

In 2016, Indiana spent 24 million dollars on kindergarten retention.

Source: Indiana Early Learning Advisory Council, 2017
Highlights of pre-K-3 alignment in Indiana

While the On My Way Pre-K legislation is largely silent on ways to align the early care and education and elementary systems, Indiana has already taken some steps in this area.

- Indiana’s Early Learning Foundations are aligned with the Indiana Academic Standards and the Common Core Standards.

- Child care providers who receive On My Way Pre-K funding assess children’s development using the ISTAR-KR, an observation-based tool aligned with the Indiana Academic Standards for kindergarten in English/Language Arts and Mathematics. In addition, ISTAR-KR includes three additional areas of assessment: physical development, personal care and social-emotional skills. While data on this tool can be accessed by kindergarten teachers, it is not known to what extent kindergarten teachers use this information to build upon children’s prior learning.

The recent passage of the Every Student Succeeds Act (ESSA) provides an opportunity for Indiana to strengthen some of its transition activities. In the plan submitted to the US Department of Education, Indiana committed to supporting “transition collaboration among school and community-based programs, including Head Start programs” (IDOE ESSA plan, page 91). In addition, the plan called for local school districts to receive guidance on evidence-based transition practices, activities and key strategies supported by the Indiana Department of Education (IDOE, ESSA plan, page 91; https://www.doe.in.gov/essa).

Different Indiana communities have adopted many activities to address aligning early care and education to the early elementary system. While each community or school district may engage in different activities, we have highlighted a few examples, knowing that more exist at the local level.
Muncie BY5, Delaware County

In 2012, stakeholders from the Muncie community, including representatives from the early childhood community, Muncie Community Schools and Ball State University, developed a “BY5 Kindergarten Essential Skills Checklist” to help determine if children were entering kindergarten with the skills needed to be successful. The 23-item checklist was developed by researchers from the Indiana Institute on Disability and Community-Early Childhood Center at Indiana University in collaboration with the Muncie community.

As a result of their efforts, community leaders now have three years’ worth of data to better understand the skills children enter kindergarten with, which helps support how the community can better prepare children and families for this important transition to kindergarten.

The BY5 Kindergarten Essential Skills Checklist is now administered in five of the six school systems and one public charter school in Delaware County.

About 1,000 incoming kindergarteners had a checklist completed on them in the fall of 2017. Efforts are currently underway for the Kokomo Consolidated Schools to use the tool (personal communication, C. Bale, September 25, 2017).

Fort Wayne, Allen County

The Northeast Indiana Regional Partnership and the United Way of Allen County are working together to share data on children’s academic outcomes from preschool through 3rd grade. Starting in 2016, three local preschools and Southwick Elementary School have entered into a partnership to better understand the skills children need to be successful in elementary school. Using standardized data collected from the elementary schools, preschools that traditionally have children enroll at Southwick Elementary will receive data on how the children that attended their preschool are faring in elementary school. The goal of this partnership is to help preschool educators understand what skills they can help prepare children for as they enter elementary school (Guffy, 2016).
Evansville Vanderburgh School Corporation, Vanderburgh County
Early learning efforts have been a core part of the Evansville Vanderburgh School Corporation (EVSC) for more than 20 years. As part of the community schools initiative, the corporation has been able to implement model practices in aligning pre-K-elementary school practices through several ongoing initiatives within the school corporation.

Culver Family Learning Center serves approximately 120 children birth to five years old and is a model program for EVSC’s efforts. Through its strong partnership with the school, parents have learned about the positive behavioral supports that are implemented in the preschool and kindergarten classroom. Not only does this provide consistency in behavioral expectations between pre-K and kindergarten, but it also provides consistency with parents who can use the techniques at home.

In addition, one of the EVSC elementary schools partnered with a local child care provider to open a pre-K classroom within the community when the initial On My Way Pre-K scholarships became available. Through this partnership, EVSC provided transportation to the child care center for the children and provided joint professional development opportunities for the pre-K teachers and the elementary school’s kindergarten teachers. This provided EVSC an opportunity to work with the pre-K teachers at a community-based child care to share and discuss how to help transition children and their families to kindergarten. (Jacobson, Rollins, Brown, & Naviasky, 2016).
Recommendations for aligning early care and education with the K-3 system

Policy Makers

Ensure longitudinal data systems can answer key questions about children’s experiences prior to kindergarten entry. Currently, Indiana does not have a longitudinal data system to track children’s experiences prior to kindergarten. Children who receive public funding, such as pre-k scholarships, child care vouchers, Head Start, and other public funding sources could be assigned a student tracking number, similar to the system that Indiana currently uses for all students starting in kindergarten. This would allow policymakers and researchers the ability to track children’s pre-k learning experiences throughout their school career.

Strengthen data available to pre-K and elementary schools so they can better understand the early childhood programs that feed into the system. Although data can already be shared with elementary schools through the ISTAR-KR system, elementary schools should also share data with pre-K providers so they understand how children from their programs are faring at the elementary level. Data about both systems should include social-emotional and academic data.
Develop a plan to intentionally coordinate professional development opportunities between early care and education and K-3 elementary systems. One way Indiana could strengthen alignment between pre-K and the elementary schools is to consider a professional development pilot program with a local school district and child care providers who receive On My Way Pre-K funding. Since there are already related efforts underway in Indiana, the state could consider prioritizing this type of alignment between On My Way Pre-K providers and the local school systems.

For example, Indianapolis Public Schools offers professional development opportunities for pre-K and its early elementary teachers on special education topics. More opportunities such as these need to be available to more teachers and include additional topics that will help the two systems work together. Professional development opportunities could include establishing professional learning communities (PLCs) with early childhood providers and the school community so the two systems can collaborate to ensure smoother transitions between pre-K and early elementary.

Strengthen the understanding among pre-K and elementary administrators and teachers regarding instructional practices. To improve alignment between the two systems, both systems need to better understand their instructional practices. Since many On My Way Pre-K providers are community-based providers, consider hosting forums or visits to each other’s sites to better understand the teaching methods and curriculum approaches used in both settings. In addition, in collaboration with local school districts, elementary schools could be encouraged to gather and share data on where children attended pre-K to the incoming kindergarten teachers.

Continue to strengthen community coalitions in these efforts. Pre-K-3rd grade alignment is most successful when a wide variety of stakeholders—such as private child care providers, public school elementary teachers, district administrators, funders, and social service providers—are at the table working together. A strong example of this type of partnership already exists in Indiana through the Evansville Vanderburgh School Corporation’s community schools efforts and with the Muncie BY5 effort (Jacobson et al., 2016).

The Road Ahead

Right now in Indiana, early childhood education and K-3 settings are two very different systems that co-exist but often don’t support one another. That reality means that Hoosier children are missing opportunities across the state. By implementing changes in policy and practice to create greater continuity and coordination between the pre-K and K-3 systems, Indiana can not only achieve cost savings associated with reduced kindergarten remediation costs, but also ensure better and longer-lasting outcomes for the our littles learners. Greater and more intentional alignment between early education and elementary school systems is critical to keeping Indiana’s pre-K expansion efforts moving forward and building a better future for those children.
References


