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LADDERS OF LEARNING: FIGHTING FADE-OUT BY ADVANCING PK-3 ALIGNMENT

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INTRODUCTION

It's a good news, bad news situation. The good news is an increasing body of evidence shows that children's participation in high quality pre-kindergarten (PK) programs helps them begin kindergarten ready to succeed. Similarly, there is growing evidence that children who start kindergarten behind but participate in a *full*-day kindergarten (FDK) program catch up to their peers by the end one academic year. The bad news is these effects often appear to "fade out" over time. As children move through the primary grades (grades 1, 2, and 3), the progress they made in PK and FDK dissipates and they are, once again, lagging behind other children. This fade-out effect suggests that while participation in PK and FDK produces positive short-term outcomes, it may not be sufficient to inoculate children against future academic failure.

Learning and development are like climbing a ladder. One starts at the bottom rung, then climbs to the next, and then to the next, ultimately reaching the top. The rungs provide incremental footholds to span a distance of space. If, however, there are no rungs—or only one or two—at the bottom of the ladder, then a long distance of open air with a random rung here and there, successfully climbing the ladder becomes a dicier proposition. As children progress through learning opportunities, they climb from rung to rung, building skill upon skill, incrementally expanding their knowledge and development. High-quality PK and FDK give children a boost to successfully climb the first few rungs on the ladder of learning. If the rungs stop after kindergarten and there is a long gap of unsupported space until the top of the ladder, children will have more difficulty—and need more assistance—to reach the top. Education should be structured in such a way that all children have learning experiences that build on those in previous years and connect with those to come, creating a smooth and predictable climb to the top.

This paper outlines the importance of having strong, well aligned programs beginning in PK and extending through third grade (PK-3). It reviews the short term impact of PK and FDK programs, then summarizes the evidence that these impacts may "fade out" by the primary grades. To fight fade-out, PK-3 alignment is proffered as one means to enable children to maintain and expand upon the gains they make in early childhood education. PK-3 suggests that PK experiences should be aligned with kindergarten and that kindergarten should be aligned with early elementary education. The paper closes with federal policy recommendations that provide both models and incentives for the nation, states, and local school districts to institute and strengthen PK-3 alignment.

THE GOOD NEWS: A SHORT REVIEW OF RESEARCH ON THE POSITIVE IMPACT OF PRE-KINDERGARTEN AND FULL-DAY KINDERGARTEN

The research is clear: preschool for 3- and 4-year olds is an effective investment for helping children succeed in the short term. Based on data from the *Early Childhood Longitudinal Study-Kindergarten Class of 1998-99* (ECLS-K), children who attended preschool (the specific program type was not disaggregated) performed significantly better in both math and reading in the fall of their kindergarten year compared to children cared for only by their parents before kindergarten. In fact, children who attended preschool increased on average from the 50th to the 54th percentile in reading achievement. The effects on math skills were of a similar size (Magnuson, Meyers, Ruhm, & Waldfogel, 2005). Beyond these findings about preschool in general, studies of carefully controlled, high quality early childhood programs designed specifically to be "model" programs for disadvantaged students (*e.g.*, High/Scope Perry Preschool and the Carolina Abecedarian Project) also show substantial short term positive outcomes in children's cognitive development, boosting at-risk children's achievement by nearly one-half (Barnett, 1995; National

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Research Council, 2001). Even programs that are neither as well funded nor as carefully controlled produce positive short term gains for young children. For example, recent research on state-based, pre-kindergarten programs—publicly funded programs that serve children who are not all economically disadvantaged—shows cognitive progress for participating children. Specifically, children who attended state pre-kindergarten programs have statistically significant and meaningful gains in early language, literacy, and mathematical development—an 8 percent increase in children’s average vocabulary scores and a 13 percent increase in math scores (Barnett, Lamy, & Jung, 2005). In short, the research shows that PK provides crucial short term gains for participating children, giving them a sturdy first foothold on the ladder of learning.

Defining “PK”

PK encompasses the full range of programs used by families to educate and nurture their 3- and 4-year old children, including school-based pre-kindergartens, community-based child care centers, Head Start, and home-based family child care. Across this variety of settings, PK assumes the provision of high-quality care in which children are safe, feel secure, and thrive in an environment that supports their physical, social, emotional, and cognitive development.

Similarly, there is increasing evidence of the efficacy of FDK in boosting children’s academic achievement (Ackerman, Barnett, & Robin, 2005). Analyses of ECLS-K data show that children who participated in FDK made statistically significant gains in reading and math skills by the end of the kindergarten year when compared to their peers who attended a half-day program. Children in FDK programs made greater gains in both reading and math achievement – gains that close the achievement gap between the highest and lowest performing students by nearly one-third in reading and by one-fourth in math (Walston & West, 2004). FDK thus is another strong rung on the ladder of learning.

THE BAD NEWS: A SHORT REVIEW OF THE FADE-OUT PROBLEM

Unfortunately, while children show short term gains at the end of PK and FDK, those gains are reduced or have faded out when measured a few years later. For example, based on ECLS-K data, early academic advantages associated with preschool attendance fade over the first two years of elementary school. In fact, researchers estimate that 60 to 80 percent of the cognitive gains found in kindergarten associated with attending preschool dissipate by the spring of first grade (Magnuson, Meyers, Ruhm, & Waldfogel, 2005). Additional findings from ECLS-K did not detect any substantive differences in children’s third grade achievement relative to the type of kindergarten program (full-day vs. half-day) they

attended, thereby pointing to a fade-out effect in elementary school for full-day kindergarten as well (Rathbun, West, & Hausken, 2004).

The fade-out effect of achievement during the elementary years may cause some to rush to judgment about the efficacy of PK and FDK, concluding that such early childhood programs are not beneficial to children and therefore are a waste of time and resources. Such a conclusion, however, would be premature and overly broad. There are several plausible explanations for fade-out during elementary school; all point to the need to expand and improve children’s learning experiences from PK through third grade. First, it is simplistic to assume that there is a single magic bullet solution to raising student achievement. The lives of many at-risk children are complex and include multiple risk factors (National Institute of Child Health and Human Development Early Child Care Research Network, 2004; Ryan, Fauth, & Brooks-Gunn, 2006). Indeed, what research on early intervention suggests is that there is no program that, administered for one or two years, will ensure the success of at-risk children throughout their school careers and beyond (Slavin, 1994).

Second, the availability of high quality PK programs to *all* children is a crucial variable contributing to fade-out. In the absence of universal PK programs, some children enter first grade having had extensive and high quality PK experiences, while other children enter first grade with no enriched or intentional early learning experiences. Inevitably, the first grade teacher must focus on those children who do not have the relevant and necessary cognitive or social skills, thereby being forced to slow and level down the curriculum and pedagogy in order not to leave behind less well prepared children. This though can have the simultaneous effect of holding back and hindering the learning of children who enter first grade well prepared to take advantage of a robust curriculum and high learning standards. The cumulative effect of slowed down curriculum and pedagogy over the course of two or three years would understandably lead to the fading out of gains made by children in PK and FDK.

Third, it is important to consider the quality of elementary schools into which children enter. If children move from a high quality PK program into a low quality school, it is not surprising that fade-out occurs. This is particularly problematic for low income students, because placements into elementary schools are entirely dependent on residential location, with low income children more likely to end up in low resource schools (Clements, Reynolds, & Hickey, 2004; Education Trust, 2005; Reed, 2001; Schrag, 2003). No matter how beneficial PK or FDK were initially for young participants, such benefits are undermined if students are subsequently exposed to schooling of systematically lower quality (Currie & Thomas, 2000; Lee & Loeb, 1995).

Importantly, despite the fade-out of benefits during the elementary school years, scientifically rigorous research shows that high quality early childhood interventions

produce impressive long term benefits to society including fewer grade retentions, fewer special education placements, increased high school graduation rates, decreased arrest rates, and increased employment earnings (Campbell, Miller-Johnson, Sparling, & Pungello, 2001; National Research Council, 2001; Schweinhart et al., 2005). These data do not contradict the fade-out problem, but highlight the complexities of measuring cognitive achievement in comparison to other factors. For example, measuring grade retention is rather straightforward: either a child was or was not retained. In contrast, measuring cognitive achievement over time relies on valid and reliable test instruments that calculate roughly the same kinds of skills and learning, despite the myriad of technical problems that affect achievement testing and assessment today. In today's standards-based education climate, however, it would be a mistake to dismiss fade-out as a technical glitch in research efforts. Rather, fade-out should be seen as justification for ensuring that children's achievement is supported and sustained in both the short term and the long term.

PK-3: ONE PROMISING SOLUTION TO ADDRESS FADE-OUT IN ELEMENTARY SCHOOL

It is not that PK and FDK are not effective. Indeed, PK and FDK *are* effective in closing achievement gaps before children enter first grade. It is crucial to expand children's access to high quality PK and FDK programs so that every child enters first grade well prepared to undertake a challenging curriculum and to meet high standards. One or two strong rungs, however, do not guarantee a successful climb up the ladder of learning; there must be an ongoing succession of sturdy rungs. Therefore, improving the quality of K-3 schools is a necessity to mitigate fade-out. Two prominent efforts have articulated cross-cutting principles for strengthening *both* early care and education and schooling in the primary grades.

First, the Ready Schools Resource Group of the National Education Goals Panel (NEGP), convened in the 1990s, focused on the importance of elementary schools being ready to support the learning needs of young children and delineated the essential attributes of a "ready school." Among others, these attributes include: smoothing the transitions between pre-school settings (*e.g.*, home, child care, PK) and public school settings; striving for continuity between early care and education programs and elementary schools; and integrating training for professionals who work across the 3- to 8-year old age span (Shore, 1998). Second, and about the same time, the Carnegie Corporation of New York's Task Force on Learning in the Primary Grades issued a report that recommended expanding high quality early learning opportunities, creating effective elementary schools and school systems, and linking the key learning institutions into a comprehensive, coordinated education system (Carnegie Task Force on Learning in the Primary Grades, 1996). Both reports highlight the shared responsibilities of early care and education and elementary schools for raising student achievement.

Beyond the import of recommendations from these esteemed advisory groups, there is a long history of federal demonstration efforts focused on strengthening the continuum of education between PK and elementary school (Kagan & Neuman, 1998). In the late 1960s, for example, Follow Through, a federal program designed to provide continuing support to former Head Start children as they entered public school, developed an articulated curriculum from preschool through third grade. In the 1970s, Project Developmental Continuity offered guidelines to link child development programs and public schools including the creation of administrative coordination and emphasizing parent involvement in elementary school. While longitudinal data from these efforts did not produce valid or reliable findings, more recently there is an emerging empirical basis for creating stronger linkages between early care and education and primary school.

A longitudinal study of children who attended Chicago Child-Parent Centers (CPC) from the age of 3 or 4 *through second or third grade* shows higher educational attainment and fewer juvenile arrests compared to peers who were not enrolled in the program from PK through the primary grades (Reynolds, Ou, & Topitzes, 2004). In New Jersey, Union City School District provides PK to all children, staffs the PK programs with licensed teachers, and links them to the primary grades through standards, curriculum, and assessments. As a result, the proportion of fourth grade children reaching proficiency on state standards in language arts has risen from 45 percent to 87 percent and in mathematics proficiency from 48 percent to 93 percent (Graves, 2005). Clearly, focusing on improving the continuum of learning from PK through third grade produces compelling benefits.

A closer examination of these studies, though, highlights that the mere existence of high quality programs that begin in PK and continue into second or third grade is a necessary, but not sufficient, condition for reducing fade-out. PK, FDK, and the primary grades must be similar in particular ways, providing continuity, coherence, and alignment of experiences and expectations between and among programs. PK-3 provides just such an approach. The Foundation for Child Development, the leading national proponent of creating high quality PK-3 learning opportunities for all children, defines PK-3 as:

An approach to education [that] proposes voluntary, universal access to PK for 3- and 4-year olds, followed by mandatory full-school-day kindergarten. Social and pedagogical experiences from PK through third grade are aligned across grade levels and aligned with the learning experiences research indicates children require based on their developmental capabilities. Teachers who are prepared to provide high-quality experiences across PK through third grade are a necessary component to this approach to education. This alignment necessitates a master plan that intentionally

lays out clear expectations for children at each grade level, aligns these expectations with classroom experiences that facilitate reaching the expectations, and multiple forms of assessment that provide information on whether or not children are progressing toward the expectations set out for them throughout the years from PK through third grade. (Bogard & Takanishi, 2005)

ALIGNMENT: ONE CRITICAL COMPONENT OF PK-3

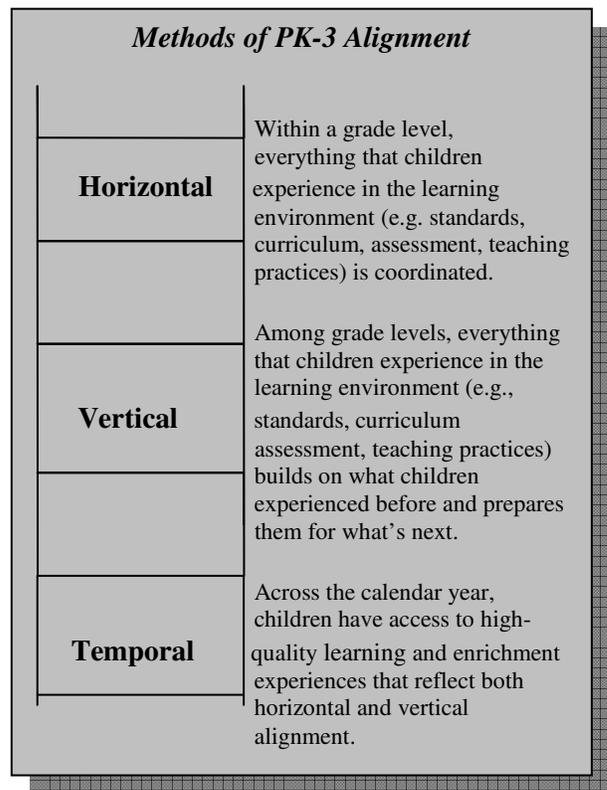
Alignment is a central element of PK-3 and it has been shown to be a crucial factor for improving the quality of education. A study of elementary schools in California, for example, analyzed why some schools score substantially better on the state’s academic performance index than other schools with similar students. Practices found to be associated with higher performance included school-wide instructional *consistency* within grades, curricular *alignment* from grade-to-grade, and classroom instruction guided by state academic standards (Williams, Kirst, & Haertel, 2005).

Alignment can assume a number of different meanings and configurations. It is an ongoing and comprehensive endeavor that has both structural elements (the policies and regulations that structure children’s learning environment) and process features (what children actually experience in classrooms and learning environments). In education, alignment ensures that the critical structural elements and process features are coordinated so that the system works toward one common goal: supporting students to achieve (LaMarca, Redfield, Winter, Bailey, & Despriet, 2000).

Alignment can work *horizontally* as the child experiences a single grade level, *vertically* as the child moves up through grade levels (Kagan & Kauerz, in press; Pelletier & Corter, 2006), and *temporally* as children learn and develop throughout the calendar year. Each type of alignment is crucial to young children’s PK-3 experiences. Using the ladder analogy again, horizontal alignment is the equivalent of providing solid, stable ladder rungs that establish predictable, meaningful, and independent steps of learning. One faulty rung can make getting to the top treacherous. Vertical alignment is the equivalent of providing logical, predictable, and achievable sequences of rungs on the ladder of learning. Vertical alignment allows for a smooth ascension, preventing students from needing to change ladders altogether from one grade to the next. Temporal alignment ensures that there are not missing rungs that leave children with large gaps of time to navigate without footholds and assistance.

While alignment commonly implies a lining up of standards, curricula, and assessments, it is a principle that can—and should—also be applied to teacher preparation, certification, and training; parental involvement; technology; classroom organization; and school

leadership. For example, at present there is a serious misalignment between the teaching qualifications expected of adults who teach children in kindergarten through third grade and those who teach children in many PK programs. Many early learning professionals who work with young children—especially in child care programs—are not required to hold a college degree or any specific certification (LeMoine, 2004). In contrast, most K-3 teachers are required to hold at least a bachelor’s degree and teacher certification or licensure, if they work in public schools. To address this disparity between teacher qualifications, there has been extensive discussion and advocacy nationally to require all teachers in PK programs to hold bachelor’s degrees. To fully align expectations for PK-3 teachers, though, it will also be necessary to require all K-3 teachers to hold certification in early childhood development or early childhood education (Kauerz, 2005).¹



Horizontal Alignment

Horizontal alignment refers most directly to children’s experiences with standards, curriculum, and assessments within a single grade level. In short, within each grade level, the standards (what children should know and be able to do), curriculum (the content of what is taught), and assessment (the means for observing student progress) should each—independently—reflect current research and understanding about young children and their learning and development. There should be an explicit match

¹ In 2006, the New America Foundation’s Early Education Initiative will release a separate Issue Brief on *Teacher Standards and Qualifications for Pre-Kindergarten through Grade 3*.

between the standards, curriculum, and assessments so that what is expected for children to know and be able to do is supported by what is taught in the classroom, both of which are reflected in what is assessed.

While receiving relatively little attention in the early childhood field, this kind of alignment is not new to K-12 education. Horizontal alignment—at least of standards and assessments—in elementary and secondary schools is already required by Title I of the No Child Left Behind Act. According to requirements specified in the act, state education assessment systems must measure and be aligned with the content and performance standards developed or adopted by the state ("Title I – Improving the academic achievement of the disadvantaged," 2002). These requirements neglect the important component of curriculum in horizontal alignment, but provide a preliminary horizontal alignment framework for K-12 education. Even though these Title I requirements are specifically directed to K-12 education, not to PK programs, horizontal alignment is becoming increasingly relevant to PK as both early learning standards and readiness assessments become more prevalent in the field.

Two federal standards-based efforts have prompted many states to develop results-based standards for preschool, defining what young children should know and be able to do both academically and socially. The 1998 reauthorization of Head Start launched the dissemination and use of the Head Start Child Outcomes Framework, a document that defines 100 specific expectations for attendees' skills, abilities, knowledge, and behaviors. Then, in 2002, states were required by federal regulation to develop "voluntary early learning guidelines" in language and early literacy skills in order to receive Child Care Development Funds (CCDF). According to one recent survey, more than half the states have developed or are developing child-based outcome standards that define at least one developmental domain for some age range prior to kindergarten entry (Scott-Little, Kagan, & Frelow, 2003). Unfortunately, many state-created standards do not align with Head Start's Child Outcomes Framework and the standards are voluntary for most PK programs. Ensuring alignment of the various PK standards in each state remains an important first step toward horizontal alignment and improved early education quality.

Furthermore, with the current widespread focus on school readiness, various forms of readiness assessments are emerging in PK and it is necessary to align these assessments with what is expected for children to learn and what children are taught. Obviously, there is still much work to be done on horizontal alignment of standards, curriculum, and assessment in PK-3. Horizontal alignment is an important goal itself; additionally, if there is no horizontal alignment—no coherence within single grade levels—then vertical alignment becomes less potent.

Vertical Alignment

Rather than focusing on a single grade level, vertical alignment addresses both structural and process features *across* grade levels. Vertical alignment refers to the notion that concepts and experiences build on each other; skill begets skill. One example of vertical alignment would be that PK standards are aligned with kindergarten standards which are, in turn, aligned with standards for first grade, and so on. Vertical alignment is based on the premise that continuity of learning across age levels is essential for optimum child development. The foundational idea in vertical alignment is that the standards, curricula, and assessments used in PK settings, for example, will be targeted at a developmental range somewhat below those used in kindergarten and, at the same time, there will be continuity between the two age levels in terms of the subject matter, the learning concepts, the pedagogical strategies, and the evaluative processes included.

The emphasis on standards-based education in K-12 is prompting most states to develop and improve vertical alignment for standards in K-12, but in many states, these efforts have not embraced PK standards. At the federal level, the U.S. Department of Education merely "*encourages* [states] to develop developmentally appropriate preschool content standards that are aligned with the [state's] K-3 content standards and that specify what children are expected to know and be able to do when they arrive at kindergarten" [emphasis added] (U.S. Department of Education, 2004). Because Title I of NCLB does not explicitly require vertical alignment between PK and K-12, most states are developing PK standards, curriculum, and assessments that are separate in both structure and content from their K-12 efforts.

For full vertical alignment, there needs to be greater effort to ensure that states' PK standards align with their K-12 standards in subject areas such as reading, math, science, and social studies. Vertical alignment, however, is not a one-way street; it cannot be accomplished only by extending downward the academic expectations of K-12 onto PK. Equally important, states that have PK standards in physical/motor, social, and emotional development should extend these learning expectations upward to the K-12 grades. The same holds true for assessment and curriculum; they, too, should be aligned vertically both up and down the PK-3 continuum.

Vertical alignment highlights the continuous and progressive nature of learning and development. The skills and knowledge gained in one year serve not as an end point, but as a foundation upon which to build additional skills and knowledge.

P-16: Promising State Efforts to Align Learning

P-16 education—or the continuum of learning from pre-school through post-secondary education—is becoming a prominent policy vision in many states. In P-16, vertical alignment extends beyond the PK-3 years; including learning opportunities for infants and toddlers and marking successful completion of a four-year college degree as the top of the ladder of learning. While many states are pursuing P-16 goals, two notable state efforts are underway:

Ohio has been deeply engaged in promoting an integrated system of education that begins in early childhood and continues beyond college. In 2003, Governor Bob Taft convened the Commission on Higher Education and the Economy to recommend what should be done to achieve higher education's full potential for fueling economic growth and creating more jobs in Ohio. Central to its final recommendations, the Commission highlighted the lack of P-16 alignment as one of the key reasons for the state's low levels of college participation and degree attainment. This lack of alignment was visible in the conflicting expectations about required levels of knowledge and skills at different points along the education continuum (Governor's Commission on Higher Education and the Economy, 2004). To redress this situation, the Commission encouraged the Governor to establish a P-16 Education Council, providing a formal venue for the Board of Regents and the Board of Education to work together to establish standards, then provide the services to children, that prepare students to be successful in college *without remediation*. Recognizing that eliminating remediation would require increased early intervention, in 2005 the State Board of Education launched the School Readiness Solutions Group and charged it with designing an early learning system that supports the school readiness of children from birth through kindergarten, providing a solid first level of learning for the state's children. The Solutions Group will make final recommendations to the Governor and the Board of Education in June 2006.

In 2005, **Washington** Governor Christine Gregoire established Washington Learns, a comprehensive effort to review all education sectors: early learning, K-12 education, post-secondary education, and workforce training. The goal is to create a "strong education system that will provide an educated citizenry and a thriving economy" in the state. This goal is based on the understanding that K-12 and higher education must work together with early childhood educators to ensure that young children are prepared to succeed in elementary school which, in turn, must be ready and able to successfully transition these young children into K-12. Three separate advisory committees—one each focused on early learning, K-12, and higher education—are looking critically at the issues and will recommend improvements to the Washington Learns steering committee by November 2006. These advisory committees are being informed by on-going education efforts such as the recent work of the Washington State Early Learning and Development Benchmarks (Kagan, Britto, Kauerz, & Tarrant, 2005) which establish learning standards for children from birth to kindergarten entry, while providing explicit linkages to and alignment with the state's kindergarten standards which are themselves aligned with the state's standards for grades 1 through 12. These Benchmarks represent a concrete example of state-based efforts to establish both horizontal and vertical PK-3 alignment.

Temporal Alignment

A third type of alignment related to PK-3 is temporal, or the alignment of children's learning experiences across the calendar year. Related to the literature about the fade-out of PK learning as children enter primary school, there is a growing body of evidence that many students lose academic ground over the summer vacation. At best, children make no academic progress over the summer months; at worst, they lose at least one month's worth of skills (Bracey, 2002; Cooper, Nye, Charlton, Lindsay, & Greathouse, 1996). Temporal alignment reflects the need for children to have continuous high quality learning and enrichment experiences not just within or across grade levels, but also *between* grade levels. Across the PK-3 continuum there is a lack of summer school, summer enrichment, and extended-year programs; most state-funded PK programs operate on the same school year schedule as K-3, leaving children with a gap in learning opportunities over the summer months. When summer learning opportunities do exist, their structure and content often are not aligned with what is provided by schools both before and after the summer months.

At the federal level, summer learning opportunities have received surprisingly little emphasis despite the fact that Title I of NCLB explicitly allows schools to use funds for extended year and summer programs (Fortune, Padgett, & Fickel, 2005). Summer fade-out effects could be reduced by considering changes to the school calendar (*e.g.*, extending the school year or establishing year-round schools that better fit the lifestyle of American families in the 21st century) or by expanding access to summer school options (Cooper, 2003).

Expanding the provision of summer learning and enrichment programs is an important first step; aligning the content and pedagogy of those programs with academic year PK and K-3 education efforts is the next crucial step. Temporal alignment embraces the tenets of both horizontal and vertical alignment, focusing on the importance of extending such principles to programs provided to children over the summer months.

RECOMMENDATIONS FOR FEDERAL ACTION

Horizontal, vertical, and temporal alignment requires commitment, support, and investment from a wide array of stakeholders. For PK-3 initiatives to expand in more than a piecemeal fashion, the federal government must take a strong leadership role. The federal government can—and, indeed, should—encourage, institute, and strengthen alignment efforts to reduce the effects of fade-out and increase student achievement across the PK-3 learning continuum. Without federal leadership, PK and K-3 education reforms are apt to continue in an uncoordinated and less than fully effective fashion.

Simply put, early intervention is more cost effective than later remediation. Therefore, federal education policy

efforts should pay primary and particular attention to expanding and strengthening the PK-3 ladder of learning which serves as the foundation for all subsequent education opportunities.

Following are specific recommendations that the federal government can pursue to strengthen PK-3 alignment:

Convene a National PK-3 Commission:
Alignment at the National Level

As an important financial supporter of PK efforts (*e.g.*, child care and Head Start) and K-3 education (*e.g.* Title I and IDEA) the federal government should address the importance of PK-3 alignment by convening a National PK-3 Commission. At present, there is no formal collaborative body within the federal government to guide and sustain alignment across multiple agencies and programs. Despite the fact that the federal government asks states to voluntarily coordinate PK with primary education, there is a lack of formal coordination among federal agencies—namely the Department of Health and Human Services (including the Head Start and Child Care Bureaus), the Department of Education, and the Department of Defense (which administers the largest employer-sponsored child care program in the country). The federal message to states regarding alignment has been “do as we say, not as we do.” A high level, highly visible Commission could produce a series of findings and recommendations that address the alignment of federal policies in PK and primary education in the United States, thereby establishing a common understanding of PK-3 strategies and goals.

In addition, a National PK-3 Commission could:

- *Establish national guidelines for Ready Schools.*
Under the banner of “school readiness,” the majority of public attention and policy effort has been directed to children’s readiness to succeed in school. A simultaneous and substantial effort should be invested in expanding public attention to, and policy efforts for, ensuring that all elementary schools are ready to support the learning and development of all young children. Ready Schools are those that embrace PK-3, ensuring horizontal, vertical, and temporal alignment within their own buildings and with community-based providers that offer PK, FDK, and summer learning programs. A starting point for this work already exists with the work of the Ready Schools Work Group of the National Education Goals Panel (Shore, 1998).
- *Examine the quality, comprehensiveness, and alignment of states’ PK-3 standards, curricula, and assessments, and teacher preparation, training, and certification.*
Conforming to the history and nature of the American federal system, each state has undertaken independent efforts to establish standards, curricula, and assessments. Similarly, each state has its own

system (or non-system, as the case may be) for establishing standards for the adults who work with young children. There is not—and perhaps should not be—a one-size-fits-all approach to early care and education. States have different populations, different resources, different priorities and, therefore, different emphases and efforts around PK-3. What states *do* share in common, though, is the need to graduate students who are competitive in the global marketplace. So that states can learn from the promising efforts of others, a National PK-3 Commission could examine, and disseminate information on, the quality, comprehensiveness, and alignment of each state’s PK-3 efforts. A “seal of approval” could be awarded to those states with particularly strong and innovative efforts.

- *Consider the establishment of national guidelines for states’ PK-3 standards, curriculum, and assessments.*
The question of national standards, curriculum, and assessments recently has re-emerged as an issue receiving prominent attention (Olson, 2005; Ravitch, 2005). National guidelines for alignment would help to decrease the vast disparities in standards that exist across the 50 states. Recent data show that almost every state reports that large proportions of their students are meeting high academic standards when measured by their state-developed standards and assessments; yet when the same students are scored on the federal National Assessment of Educational Progress (NAEP), their proficiency levels are much lower. Furthermore, because nearly 50 percent of children experience at least one school change between the start of kindergarten and the end of third grade (Walston & West, 2004), national guidelines for standards would help solve the problems created by mobility, creating more continuity through uniform learning opportunities and standards from district to district, and from state to state.

Support the Creation of State PK-16 Councils:
Alignment at the State Level

As an influential tone setter for state education reforms, the federal government should incentivize and support states in the creation of state-level PK-16 councils (Education Commission of the States, 2004; National Association of System Heads and Education Trust, 2006; National Governors Association, 2005). These councils can serve as a forum for identifying and deliberating education issues that transcend the exclusive domain of PK, K-12, or higher education. Such councils can provide a logical forum for coordinating alignment not just across the PK-3 years, but across the entire continuum of P-16 learning.

While these councils will have broad oversight of efforts in PK, K-12, and higher education, to promote the PK-3 approach, they will:

- Develop a plan for financing and implementing voluntary, full-day PK for all 3- and 4-year olds and FDK for all 5-year olds;
- Develop PK-3 content standards that include cognitive, social, emotional, and physical skills, knowledge, and behaviors;
- Align standards, curriculum, and assessments horizontally, vertically, and temporally across the PK-3 continuum;
- Develop a plan for ensuring that all public schools are “Ready Schools;”
- Establish consistent teacher training, certification, and ongoing professional development requirements for all teachers working with children PK-3.
- Identify and address additional education issues (e.g., parent involvement, technology, classroom organization, school leadership) that require PK-3 alignment.

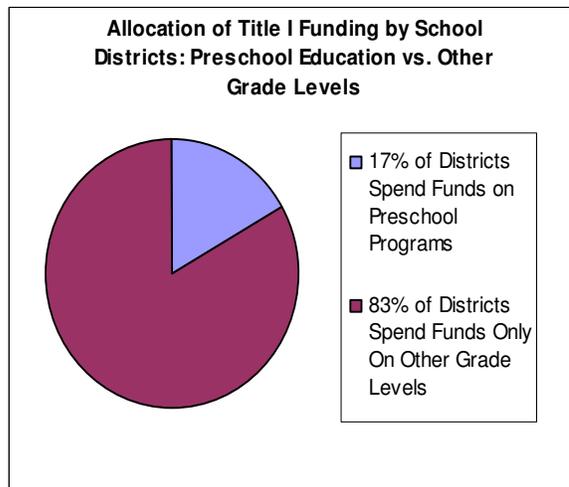
Dedicate New Title I NCLB Funds to PK-3 Efforts: Alignment at the Local Level

To more closely link Title I funds with efforts that have a proven positive impact on children’s achievement, the federal government should require states and school districts to direct all new, non-secondary school required Title I funds to early education expansion and PK-3 alignment efforts. Doing so would restrict and target new Title I funds to efforts that focus on effective early intervention, not on more costly later remediation. In addition, doing so would formally integrate PK with *No Child Left Behind* (NCLB), incorporating PK into the existing Title I alignment requirements. This would not only benefit young children, but would also facilitate presentation of clear evidence of the positive impact of the federal Title I investment. As such, the likelihood of increases in federal Title I funding would rise.

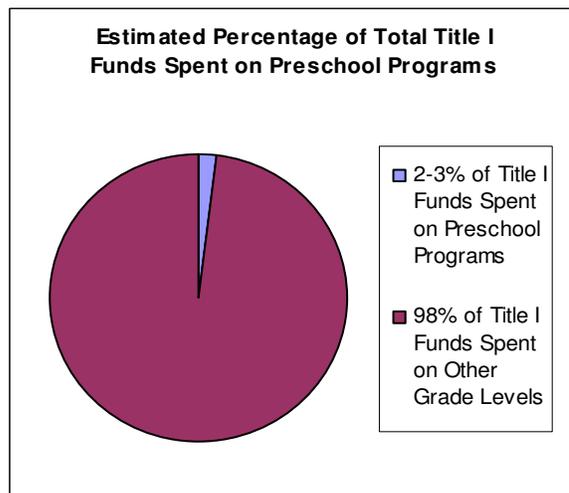
Title I of NCLB provides an opportunity for states and local districts to improve the quality of education services for disadvantaged children. Local school districts have extensive discretion over their use of Title I funds. While at least 18 states currently report using Title I funds for pre-kindergarten (Ewen, Mezey, & Matthews, 2005), the U.S. Department of Education estimates that only two to three percent of the near \$13 billion in Title I funds received by schools is actually spent on PK (Graves, 2005). In fact, it is often difficult to define specifically and substantively the programs and services that Title I funds. The lack of such data has contributed to an unwillingness to increase Title I funding in percentage terms over the last four fiscal years.

Based on solid research that shows the cost effectiveness of early education, expanding children’s access to high quality PK and FDK and aligning those experiences with quality K-3 programs would be legitimate and important uses in which districts could invest new Title I funds (Ewen, Mezey, & Matthews, 2005). Investments of Title I in PK-3 horizontal, vertical, and temporal *alignment*

would support innovative, yet proven, efforts to improve student achievement with specific program goals.



Source: Adapted from U.S. General Accounting Office. (2000). *Title I Preschool Education: More Children Served, but Gauging Effect on School Readiness Difficult*. Washington, DC: Health, Education, and Human Services Division.



Source: Adapted from Graves, B. (2005) *Getting there: PK-3 as public education’s base camp*. New York: Foundation for Child Development.

What would investment in alignment look like? One specific example, focused on temporal alignment, would be for all new Title I funds to be directed to summer scholarships for PK-3 age children to attend summer programs that provide academic, social, emotional, and physical enrichment activities that are aligned with school year programs and standards. Focusing on PK-3 temporal alignment, scholarships for children to attend high quality summer enrichment programs would expand academic and other educational offerings and address the problem of the summer slide or fade-out (Winship, Hollister, Horwich, Sharkey, & Wimer, 2005). Unlike traditional models of remediation funded by Title I, summer scholarships for children in PK-3 could:

- Promote parental choice by allowing families to select the summer enrichment program that best fits their child's needs;
- Promote innovation by permitting both public and private organizations to be eligible to administer summer programs, fostering competition, creativity, and accountability; and
- Promote opportunity and integration by providing full scholarships to all low income students and provide partial scholarships to other families on an income-based sliding fee scale.

Regardless whether new Title I funding is dedicated to PK or FDK expansion, to summer scholarships, or to other PK-3 alignment efforts, it is clear that for PK-3 initiatives to expand in more than a piecemeal fashion, the federal government must increase and dedicate funding to support states' and local school districts' efforts. Otherwise, early education efforts and standards are apt to continue to be uncoordinated, unaligned, and fall short of their potential to help all children establish a strong foundation for a lifetime of learning and achievement.

CONCLUSION

Research consistently shows the importance of investing in high quality pre-kindergarten (PK) and full-day kindergarten (FDK) programs to give children a boost in their preparation to succeed in school and in life. Positive impacts often fade over time though, pointing to the nation's lack of commitment to ensuring that children have a sturdy ladder of learning to climb as they progress into elementary school. PK-3 is a promising approach for reducing fade-out and enabling children to expand upon the gains they make in PK and FDK. A core element of the PK-3 approach is alignment within and among grade levels. Devoting federal attention and funding to horizontal, vertical, and temporal alignment along the PK-3 continuum will not only raise this nation's consciousness about the necessity of improving both early childhood and elementary education, but will provide crucial leadership for states and local school districts to expand their own efforts in PK-3.

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