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## **Early Childhood Learning: Programs for a New Age Recommendations from a National Invitational Conference**

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A number of societal values cut across issues of class, race, and geographical divisions. Healthy development and early learning of children is one universal challenge faced by this country and all nations around the world. Early childhood development and education has been a major topic of discussion and planning at all levels—federal, state, and local communities—not only because of the widespread recognition of the research base on the importance of early development to long-term schooling success, but as a critical national investment strategy for the future of the nation in the 21st Century global economy.

In recent years, early childhood interventions from birth to the early grades have received much attention, including the nearly \$15 billion annual federal and state spending in early childhood care and education programs. There have been many advances in research and the knowledge base on what contributes to healthy development and learning success for all of the increasingly diverse children growing up in this country. This

progress falls far short of a vision and standards of an educated citizenry in the United States. For example, the United States lags far behind other leading nations in providing universal child care and preschool for all children, regardless of family income, social status, race, or ethnicity. While there is a significant increase in the number of children attending day care and preschool programs, access to this care is very inequitably distributed. In addition, the research base on the quality of these program options is sorely lacking.

It is in the context of taking stock of what we know from research and practical knowledge about what works in providing child care and education during the first decade of life and to chart a plan to achieve the goal of quality universal childcare and preschool education in this country that the national invitational conference on “Early Childhood Learning: Programs for a New Age” was cosponsored by the Laboratory for Student Success and the National Center on Education in the Inner Cities at Temple University Center for Research in Human

Development and Education on the eve of the new millennium.

The conference, held on November 29–December 1, 1999 in the nation’s capital, included key stakeholders—policy makers, researchers, practitioners, and parents—from all parts of the country. The overall goal of the conference was to provide a forum for addressing the national concern of providing quality universal childcare and preschool programs for every child in this country, and to bring this urgent call to the forefront of the national dialogue.

The complexity of multiple challenges facing families and their children and the rich resources that can be mobilized in the service of healthy development and educational success of this nation’s young children are highlighted in the research base and have significant implications for policy and practice. An interdisciplinary team of nationally known scholars and practitioner leaders were commissioned to prepare background papers to provide knowledge syntheses of what is known from research and practical applications



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in preparation for the conference. The authors were asked to address three sets of questions that are frequently raised in public discussions about new and continuing investments in early childhood programs, including:

- What is the current state of knowledge about the impact of early childhood programs on learning and development of young children? What works? Who benefits most? What are the limits of our knowledge?
- What are the key components of effective programs? How are they organized and managed? What contributes to effective implementation and how is a high degree of implementation sustained? What conditions increase the quality of program implementation and effectiveness?
- What are the implications for policy and program development, modification, and expansion? How can the best or most promising practices be disseminated to scale up implementation of quality early childcare and education programs, particularly for children from educationally and economically disadvantaged circumstances?

This issue of the *CEIC Review* includes a summary of the recommendations that emerged from the discussions and a synopsis of the commissioned papers.

### **Key Recommendations**

Conference participants formed several work groups that included practitioners, policy makers, and researchers from multiple disciplines, including sociology, psychology, early childhood development specialists, social workers, and educators. In addition to discussion at the plenary sessions, the work groups worked on developing recommendations and next-step plans throughout the course of the two-day confer-

ence. Several key areas emerged from the work groups, including: providing universal access to daycare, improving the quality of professional development, and increasing parental involvement. The following is a summary of the recommendations.

### **Universal Daycare and Preschool Education**

- Access to public-supported daycare and preschool programs should be universal regardless of family income, social status, or ethnic and racial backgrounds. These programs should be full-day, full-year programs that do not distinguish between childcare and education.

The conference participants are cognizant of the requirement for major increases in funding and oversight, and are equally clear in articulating the long-term benefits to children and to the nation's future.

The participants noted that universal access to daycare and preschool education would attract greater numbers of middle and lower socioeconomic status families to early childhood programs, which would lead to increased diversity and ultimately to better quality programs. The current "you get what you pay for" mentality that exists would be eliminated and all children would begin their education on a level playing field.

- Universal access to daycare and preschool programs should be seamless, creating a continuity of learning for children. Curriculum and assessment standards must be aligned and services should be comprehensive and aimed at intellectual, physical, and social development of children and their readiness to achieve learning success in elementary schools.

### **Professional Development**

- High-quality, well-trained, well-compensated educators and staff are key to student achievement at all levels of education. Professional development for early childhood educators and staff must be improved and focus on early childhood development, curriculum design, best practices and pedagogy, and parental involvement.
- A balance of focus in preservice and inservice professional development programs must be maintained. The issue of maintaining a substantive balance of pedagogy versus subject matter mastery in teacher preparation and inservice professional development programs has been a persistent debate among educators, and was a key issue of concern raised at the conference.

Teacher education programs often emphasize subject matter knowledge and offer little training in developing a great understanding of the learning of young children. It was generally agreed by the participants that teaching, teacher development, and curriculum delivery needs to focus on what has the greatest impact on healthy development and life-long learning of each child. Professional development should not only strengthen staff and teachers' knowledge of subject matter and curricular issues, but should emphasize methods for recognizing and addressing children's developmental and learning needs.

### **Parental Involvement**

- Parental involvement is crucial to the success of early childhood programs. Involving parents at all levels of decision

*(Introduction, continued on p. 15)*

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# Child Care Quality and Children's Success at School

Deborah Lowe Vandell and Kim M. Pierce, University of Wisconsin–Madison

According to the 1995 National Household Education Survey, fully 59% of children who are 5 years or younger are in nonparental arrangements on a regular basis, including child care centers, Head Start, relative care, family day care homes, and nanny care. Child care becomes especially common by the later preschool years, when 77% of 4-year-olds and 84% of 5-year-olds are in some form of nonparental care. However, several recent studies have suggested that the quality of this care is highly variable.

Child care quality can be defined by structural–regulable characteristics and by processes or experiences. Structural–regulable characteristics are aspects of child care settings such as group size, child–adult ratio, caregiver education, and caregiver training that might be subject to regulation by communities or states. Child care processes are the experiences that children have in child care settings, including interactions with caregivers and peers and opportunities to participate in different activities.

## Process Quality and Educational Success

In his recent comprehensive review of child care research that was published in the *Handbook of Child Psychology*, Lamb examined numerous studies that looked at relations between process measures of child care quality and children's developmental outcomes. With respect to infant care, he concluded that “high-quality day care clearly has positive effects on children's intellectual, verbal, and cognitive development, especially when children would otherwise experience impoverished and relatively unstimulating home environments.

Care of unknown quality may have deleterious effects.”

In terms of care for older preschool children, Lamb concluded that “center-based day care, presumably of high quality, can have positive effects on children's intellectual development, regardless of family background, and does not seem to have negative effects on any groups of children.”

## Structural–Regulable Factors and Developmental Outcomes

Structural–regulable characteristics of child care settings have been shown to be associated with children's academic, cognitive, behavioral, and social development. Smaller group sizes, lower child–caregiver ratios, and more caregiver training and education appear to have positive effects on these important developmental outcomes. Future work might address threshold levels for these child care characteristics, or the point at which further improvements in structural quality do not yield additional developmental benefits for children.

## Structural–Regulable Factors and Process Quality

Some of the most robust associations in the child care literature are those between structural–regulable characteristics and process quality. Lamb considered findings from 20 studies and concluded “there is substantial evidence that scores on diverse structural and process indices of quality are intercorrelated.”

## Summary and Recommendations

Recent research provides strong indications that child care quality in both structural–regulable and process terms has

significant and positive effects on children's cognitive development, language skills, social competence, behavioral adjustment, and work habits. Each of these adjustment indicators plays a role in children's readiness to learn and ability to profit from instruction. Furthermore, recent longitudinal research demonstrates that child care quality during the infant and preschool years continues to have positive effects on children's success at school and academic progress into the early elementary years.

One of the challenges for future research is further consideration of the effects of child care quality over time in conjunction with the quality of school classroom environments that children experience subsequent to child care.

Another challenge for future research is to test a mediational model of the influence of the components of child care quality on children's development. It is likely that structural–regulable factors exert their influence by altering the quality of the care provided to children. Tests of a full mediation model should be conducted, the results of which may allow us to draw firm conclusions about how best to improve child care quality so that all children can benefit developmentally from their experiences in these settings.

Given the knowledge that is available at this point in time, child care programs should strive to meet the recommendations of organizations such as the American Public Health Association. These guidelines include a child–staff ratio of 3:1 in infant/toddler classrooms and 7:1 in preschool rooms, and maximum group sizes of six children in infant/toddler classrooms and 14 children in preschool rooms. ☞

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# The Federal Commitment to Preschool Education: Lessons from and for Head Start

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Forty years ago, there was no such thing as a federal preschool education program. Today, the federal Head Start program enrolls over 800,000 children ages 0 to 5 each year. In fact, the current federal commitment to early childhood education is due in large part to the success of Head Start's focus of providing a comprehensive intervention that includes but goes beyond traditional preschool education.

Head Start's development team based the program on a "whole child" philosophy that called for comprehensive programming. Head Start was unique not only because it called for a multifaceted intervention but because it included the family as well as the child. The program's goals were to improve physical health, enhance mental processes, and foster social and emotional development, self-confidence, relationships with family and others, social responsibility, and a sense of dignity and self-worth for both the child and family.

## **Program Implementation**

When Head Start opened in 1965, over one-half million children were served in a summer program lasting six or eight weeks. Today the program is generally a center-based preschool serving primarily poor children aged 3 to 5 years. Most children attend a half-day session for one academic year. Full-day programs and home-based services are delivered in some locations. Federal guidelines require that at least 90% of the children enrolled be from families in poverty; at least 10% of

enrollment must consist of children with disabilities. Head Start programs receive 80% of their funding from the federal government. The rest comes from other, usually local, sources, which may be in the form of donated services.

Each program is required to include early childhood education, health screening and referral, mental health services, nutrition education and hot meals, social services for the child and their family, parent involvement, and family and community partnerships. Additionally, each program is encouraged to adapt services to local needs and resources. Thus, Head Start is not a formula intervention but a diversity of local programs that share a common structure and practices.

## **Research: Then**

The 1960s were characterized by lofty promises that, given the "right" experiences at the "right" time, all children could develop into great intellects. Although early childhood intervention programs also experienced growth at this time, few of them were designed explicitly to boost IQ scores. Considering the wild beliefs of the day concerning intelligence, it is easy to see how initial research on Head Start and other interventions dwelled on cognition.

There were several practical reasons why Head Start research focused on test scores. For one, the project's broad scope, multiple objectives, and local diversity complicated evaluation. Reliable commercial tests were an easy alternative. Additionally, there

were no established measures of some program aims, such as parent involvement and social relationships. But perhaps the most compelling reason that IQ and achievement tests were used nearly exclusively in Head Start research was that the results were very positive.

Early reports of IQ gains following almost any program ignited hopes about the potential of intervention. Results grabbed the public attention and made it easy to forget that the program had other aims. They also led people to expect too much and to feel duped when it was later revealed that the IQ gains were not sustained. Studies of Head Start and almost every other early intervention program showed that preschool graduates generally do not continue to do better on cognitive or achievement tests.

In a welcome break from the narrow focus on IQ that characterized early research, the Consortium for Longitudinal Studies (1983) brought to light some of the noncognitive benefits of early intervention. The findings confirmed that children who attend quality preschool programs do gain an initial boost in IQ and achievement scores that lasts for some years but appears to fade. However, lasting effects were found in other areas. Participants were less likely to be assigned to special education classes and were somewhat less likely to be retained in school. The rigor of the Consortium methodology, and the findings of benefits that persisted until many children had reached 12 or more years of age, did much to restore public and

scientific faith in the value of early intervention.

### **Research: Now**

The conclusion that Head Start has immediate effects on school readiness and possibly sustained effects on social adaptation reflects a general but by no means unanimous consensus. A significant dissenter is the U.S. General Accounting Office, which conducted a major review and concluded that the body of research on current Head Start is insufficient to draw conclusions about the program's impact. They also discovered that support for research was greatly reduced during the 1980s. In 1986, only \$810,000 was spent on research, demonstration, and evaluation, representing only 0.08% of the program's \$1 billion budget. It is therefore true that much of what is known about the effects of Head Start is based on older, sometimes problematic research studies.

A deterrent to informative research has been the lack of clearly defined goals. In 1993, the Administration on Children, Youth, and Families (ACYF) began to develop program performance measures that assess both quality and effectiveness of Head Start services. After the measures project got underway, Congress passed the Coats Human Services Reauthorization Act of 1998, which explicitly reworded Head Start's goal as school readiness.

Despite the differences in terminology, past teams of scientists, ACYF, and Congress are all on the same page—social competence and school readiness are indistinguishable. To be competent, a child must be effective in dealing with his or her environment and be able to meet age-appropriate social expectations.

### **Research Planning**

The Advisory Panel for the Head Start Evaluation Design Project studied 25 years of Head Start research studies and concluded that this expansive data set had not produced an organized knowledge set and drew up plans to attain one. The resulting “blueprint for Head Start research” focused on studying which program services work best and for whom.

More definitive plans were the responsibility of the Roundtable on Head Start Research, a collaborative effort formed by the National Research Council and the Institute of Medicine. This group focused on the need to study the content and quality of Head Start services, the program's work with families in a changing world, mental health issues, and ways to invigorate the program's role as a national laboratory where effective service models are developed and disseminated to the early childhood fields.

Research is not only being planned but conducted under the renewed federal interest in understanding and improving Head Start's effectiveness. In 1995, the Head Start Bureau created four Quality Research Centers that are each carrying out major independent studies. Together, they are also developing the program performance measures that will eventually be used to assess Head Start quality and results.

### **A Unified Federal Response**

Americans and their elected officials are by now convinced that investments in programs for young children are monies well spent. To prove their commitment, policymakers have supported an array of programs directed toward the education of poor children. However, years of

legislative tinkering have created a frustrating maze. The overlap in programs and policies suggests that time, effort, and money are being wasted at both the administrative and service delivery levels. We have now had decades of experience with early intervention and compensatory education. It is time to use this information to revamp our strategies for educating poor children.

### **Elements of Effective Intervention**

One guiding principle of effective intervention is that programs must be comprehensive in scope. All children need certain learning experiences to be ready for school, but poor children often have myriad other needs as well.

Another principle is that successful intervention programs target not only the child but also the family who rears the child. Parents whose basic needs are met feel a degree of social support and have a sense of control over their own and their children's future.

It is also very clear that only high quality early childhood services can deliver the intended benefits. This point deserves emphasis because in recent Head Start expansion, efforts to serve more children proceeded more rapidly than efforts to serve them well.

Finally, the many intervention attempts tried over the years have proven beyond a doubt that there is no silver bullet for poverty. No amount of early brain stimulation, years of preschool, or class periods of compensatory studies will ensure a bright future for a child raised in economic deprivation. Intervention must begin early and last long enough to have a meaningful impact on the child's development. ❧

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# Understanding Efficacy of Early Childhood Programs: Critical Design, Practice, and Policy Issues

Sharon Landesman Ramey and Craig T. Ramey, *Civitan International Research Center, University of Alabama at Birmingham*

Documented efforts to enhance the development of children, especially to remediate the consequences of deprivation, have taken place since the early nineteenth century, when researchers learned that certain types of early experience were essential for the emergence of high intellectual functioning. More recently, studies of children in orphanages in the 1930s and 1940s initiated the investigation of what young children need to ensure healthy growth and development. This paper traces subsequent attempts to identify factors contributing to impaired development and measures to ameliorate them in several early intervention programs. The analysis of data gained from these programs indicate that the rates of mild mental retardation associated with extreme poverty can be substantially reduced by intensive programs of significant duration and that additional social benefits will accrue as a result.

Research following the orphanage studies took three tracks. One track conducted behavioral experiments on animals and demonstrated that deprivation can produce mental retardation and aberrant social and emotional behavior in animals. A second line of research sought to understand variation (Person X Environment interaction) in young children's responses to non-optimal settings and the extent to which improvements in the environment could reverse or minimize negative effects of deprivation. Factors hypothesized to contribute to the variation included biological, genetic, gender, timing and duration of deprivation, the life history of the child prior to deprivation, and the child's own behavioral repertoire, which may serve to elicit

different caregiving and social interactions.

The third track of research showed that (a) the rates of mild mental retardation were markedly elevated among very poor families, (b) the quality of a child's home environment—including the responsiveness and sensitivity of the mother to her child, the amount and level of language stimulation, direct teaching, and parenting styles—correlated with the child's intellectual and problem solving abilities, and (c) that very young infants could learn, that they could learn in many different ways, and that early learning experiences directly affected infants' responses to subsequent learning opportunities.

As a result of these research findings, enrichment programs were initiated 1960s to prevent developmental and mental retardation among extremely poor families. The first attempts at enrichment took place in highly-controlled, university-based preschool centers in the 1960s and 1970s; these compensatory programs differed considerably in duration, timing, and intensity. They provided interesting toys, books, music, and games; responsive educated care givers; a safe environment, nutritious meals, regular rest and vigorous activity; and cognitively rich environment where language and thinking skills were encouraged. The substantive content of what was offered was sound and often proved successful.

## The Effectiveness of Preventing Mild Retardation

The Consortium for Longitudinal Studies analyzed the efficacy of eleven early intervention programs for children "at risk" and supplied

the authoritative study of early intervention programs for the 1980s. The consortium derived two major conclusions: (a) reaffirmation that the programs did produce significant gains in intellectual and cognitive performance of participating children, and (b) the magnitude of gains, as indexed by IQ, scores peaked at the end of intervention and for three or four years thereafter, then declined over time, the often-noted "fade out effect." Because of the attention generated by the IQ decline, the longitudinal study's positive conclusions about long-lasting effects of early education programs for children from low-income families—school competence, developed abilities, attitudes and values, and impact on the family—were largely ignored.

Continued longitudinal inquiry and new intervention studies have provided additional data for better understanding the development in children who receive different types and amounts of early intervention. Five studies focused on groups of children at high risk for mental retardation: the Perry Preschool Project (Michigan), the Milwaukee Project, the Abecedarina Project (North Carolina), Project CARE (North Carolina), and the Infant Health and Development Program (eight cities). All of these intensive, multi-pronged programs involved random assignment of children to intervention or control groups; and in each program, intervention continued for a minimum of one year prior to age 5.

## Summary

The five major programs all demonstrated significant and clinically meaningful IQ increases and corresponding decreased rates

of mental retardation. For four of the programs, multiple benefits persisted until middle school or later, although IQ differences between groups declined or, in the case of the Perry Preschool Project, disappeared. In contrast to the decline in differences in IQ, more substantial benefits appeared in terms of everyday performance indicators: decreased rates of grade retention special education placement, improved school achievement (except Milwaukee's school achievement). The study of the Perry Preschool Program showed benefits continuing into adulthood, including economic self-sufficiency, educational attainment, decreased criminal activity. The one study that did not show long-term benefits, the Infant Health and Development Program, selected children on the presumed biologic risk factors of premature and low-weight birth and concluded intervention by 36 months of age. All other programs continued until children entered school or beyond and selected children according to demographic risk characteristics (especially maternal characteristics), or in the case of the Perry project, according to significant developmental delays apparent by age 3.

### **Mechanisms**

In a social ecological model of development refined over the past two decades, the authors posit that a child's competence is determined by a multitude of forces, including intergenerational factors, biological factors, parental competencies, and community social and cultural norms and practices. In this model, the important influences on intellectual competency are the direct transactions a child has with the immediate environment. Thus early intervention programs that provide more intensive educational services, that start earlier and last longer, and that target the child's everyday experiences are hypothesized to be

the most beneficial. This hypothesis finds support in a recent, new analysis of the two Carolina projects, which agree with the Milwaukee Project on the causal mechanisms of development. However, children in these programs still, with the exception of IQ scores in Milwaukee's program, performed below national norms and still needed additional support. Children from high risk families clearly benefited from compensatory experiences, although these did not entirely eliminate all risks as children continued to live with their natural families and attended public schools in their locale.

### **Who Benefits the Most?**

Analyses of the North Carolina project and Infant Health and Development Program confirm a strong association between low levels of maternal education and/or low maternal IQ and the magnitude of benefits in children. Analysis of the Milwaukee Project concludes the home environment exerted a powerful influence on the development of children among children at greatest risk, those with very low IQ mothers. The Infant Health and Development Program also indicated premature children with heavier low birth weight from families with the greatest social and economic risks benefited most from early intervention.

### **Implications**

To date, none of the large scale, Congressionally authorized programs for children living in poverty (Head Start, Early Head Start, New Chance, the Comprehensive Child Development Program, and the JOBS program) have produced the same types of benefits that smaller scale studies have. Several factors may account for this apparent reduction of benefits. The smaller scale programs provided far more intensive educational supports to a greater proportion of enrolled

children than large scale programs. Also, enrollment in federal programs is based on poverty income, and children in the programs are not at the high levels of risk for developmental or mental retardation or for special education placement as were the children in the small scale programs. However, the number of children at high risk of mild mental retardation associated with sociodemographic factors, the most prevalent form, can be reduced by 50% or more with high quality, intensive, multi-year, multi-pronged, targeted intervention.

The cost benefits of such preventative programs would show up in reduced numbers of students entering special education, reduced grade retention, reduced remedial summer programs, reduced criminality, and reduce welfare enrollment. Given the increasing evidence that brain development is affected by early and cumulative life experiences and the positive results of the early intervention for high risk children, there is ample support to justify systematic prevention efforts. Without this, children from very low income families are likely to continue to fulfill their intergenerational prognosis of sub-average intellectual performance and marginal social and economic existence.

Challenges to early childhood developmental programs include a lack of advocacy and the jeopardizing of existing home-visiting programs, but the two greatest obstacles seem to be informing opinion leaders and policy makers about the benefits and the general resistance to developing a new large scale program in the light of many that have had disappointing results. The situation calls for a comprehensive analysis of such large scale programs so that current investments may be redirected. With such an analysis in hand, scientific facts and political realities may be effectively integrated. ☘

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# The Three Types of Early Childhood Programs in the United States

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Evaluative research takes a critical approach to all types of early childhood programs, seeking to identify all their costs and benefits, strengths and weaknesses. Head Start, public school prekindergarten programs, and preschool child care programs define the landscape of early childhood programs in the United States today. Understanding what these three programs have in common and how they are different from each other will help develop an accurate overall perspective on early childhood programs.

## Staffing Patterns

In the United States today, early childhood programs follow one of three staffing patterns – Head Start, public school, or child care. These three patterns strongly depend on the corresponding funding and regulatory source.

The Head Start staffing pattern is a multidisciplinary team of teachers, family service workers, and various coordinators. The teachers are low-paid and required to have a competency-based Child Development Associate credential. In recent years, Head Start has been engaging in a continuing effort to improve quality, including requiring teachers to have an associate-level college degree and increasing teacher salaries. Nonetheless, the Head Start staffing pattern places teachers alongside family service workers and a step below various coordinators. It places the classroom as one component alongside parent support, health and mental health services, and social services referrals.

The public school staffing pattern places teachers in charge, supervised by a building principal.

There are no family service workers or coordinators of other services, except sometimes school nurses. Relative to Head Start or child care, teachers are better-paid and better-educated, generally with a teaching certificate based on a bachelor's degree. Because of this staffing, the classroom teacher predominates, and there is less emphasis on separate positions that provide parent support, health and mental health services, and social services referrals.

Unlike child care, both Head Start and public school prekindergarten programs typically have part-day classes for children and, thus, can serve twice as many children by having double sessions, serving one classroom group in the morning and the other in the afternoon. The apparent efficiencies, however, severely limit the time available for non-classroom activities, such as teacher planning and home visits, which may be critical to program effectiveness.

Both Head Start and public school staffing patterns are designed to help children develop and prepare for school. While the public school pattern focuses primarily on education, the Head Start pattern provides multiple services with intermediate goals, such as parents' economic self-sufficiency, that may become ends in themselves. Indeed, some Head Start practitioners consider Head Start to be primarily a parent program.

The child care staffing pattern resembles the director and teaching staff portion of the Head Start pattern. Unlike Head Start, there are no family service workers and no coordinators of other services. The staffing is set up for teachers to take care of children. The teachers

surely engage in some educational activity and may well aspire to do more, but they are not accorded the status and compensation that public school teachers receive. While Head Start and public school programs are fully supported by public tax dollars, child care programs are paid for primarily by families; government subsidies are either partial or nonexistent. Child care hours are longer, in response to family needs. The relatively low cost of child care staffing is done in the interest of greater affordability and responsiveness to families.

Each of these staffing patterns involves tradeoffs relative to the other two. Public schools employ tax dollars to give teachers greater responsibility and compensation than Head Start or child care teachers. Head Start employs tax dollars to give children and families access to other support services as well as education. Child care programs, with no or partial support from tax dollars, strive to take care of children at a level of quality that families can afford.

## Goals

Head Start, public school prekindergarten programs, and preschool child care programs all have the goal of contributing to children's development, and all value and support parent involvement in the service of contributing to children's development. But each definitely offers its own variations on these themes. Head Start also has the goal of encouraging and supporting families' self-sufficiency by referrals to needed social, health, and mental health services as well as support for adult literacy, employment, and

freedom from drug abuse. Head Start's adult goals generally support children's development, but can on occasion compete with, or even replace, this goal. Public school prekindergarten programs focus single-mindedly on contributing to children's development, but may narrow this goal to focus only on children's academic readiness for school. Preschool child care programs really have as their primary goal taking care of pre-school-aged children while parents are otherwise occupied. Contributing to children's development is an enhancement of this primary goal, which is at the discretion of the caregivers involved, their supervisors, and the parents who support these programs.

### Definitions of Quality

Quality practices are either structural or process. Structural practices are established program characteristics, such as group size, staff-child ratio, and teacher qualifications. Process practices are the behaviors that adults and children engage in during the program. Structural practices are more easily set by rules and regulations, but process practices directly affect children's behavior and development, so that they mediate any effects of structural practices on children's development.

Head Start has family self-sufficiency as a secondary goal, so Head Start program quality is defined as those practices that contribute to children's development or families' self-sufficiency. Public school prekindergarten programs place special emphasis on children's school readiness as the defining construct of their contribution to early childhood development, so the quality of these programs emphasizes those practices that help prepare children for school. Preschool child care programs place a premium on those practices that take care of children while parents are otherwise occupied.

### Implications for Evaluative Research

These programs can be evaluated against the common core of criteria for all three – structural and process practices that contribute to children's development. In addition, Head Start programs can examine practices that contribute to families' self-sufficiency; public school prekindergarten programs can concentrate on practices that contribute to children's readiness for school; and preschool child care programs can examine practices that enable parents to be otherwise occupied when they need to be.

Of course, it would also be possible to apply these idiosyncratic criteria to the other types of programs. We could examine how well public school prekindergarten programs and preschool child care programs contributed to families' self-sufficiency, a particularly apt criterion for programs serving families living in poverty. We could examine how well any of these programs contributed to children's readiness for school, a criterion that is beginning to break boundaries anyway because of our national interest in it. We could examine how well Head Start and public school prekindergarten program meet families' child care needs. Such ideas go to the heart of the question of whether the differentiation of types of early childhood programs is a good idea or not. Should publicly funded programs be expected to meet families' child care needs, or should we continue with our national policy of no or partial subsidy of such programs? Should early childhood programs address families' self-sufficiency needs for families not living in poverty? Until these questions are answered, however, we can stick with the universal definition of early childhood program success – structural and process practices that contribute to children's development.

Nonetheless, it is very difficult, perhaps impossible, to compare the

effectiveness of Head Start, public school prekindergarten, and pre-school child care programs for the simple reason that they serve different populations. The main entry criterion for Head Start is that families have poverty-level incomes. Low family income may be a factor in the entry criteria for public school prekindergarten programs, but it is only one factor among others; and low family income may play no role at all in the entry criteria for pre-school child care. The criterion for enrollment in preschool child care is that the family needs child care to permit parents to be otherwise employed, a criterion that tends to increase family income and also renders impossible the idea of randomly assigning children who need child care to an unserved control group.

On the other hand, it is possible to compare the quality of the various types of early childhood programs. The question is not which funding source is best, but rather what funding levels per child and staffing and governance patterns lead to programs of the best structural and process quality. Such comparisons lead to thorny dilemmas that need to be faced. Funding levels and policies interact in complex ways, making interpretation of findings difficult.

It would be quite reasonable to conduct evaluative research on all types of early childhood programs together. But it will only happen if those who fund evaluative research rise above their positions of employment for one or the other of these programs. Federal and state legislators are well-positioned to be asking questions of all these programs, but they need to figure out ways to transcend program positioning in the funding agencies. All of us who care about young children should find ways to place their education and welfare above the status of the programs in which they find themselves. ☞

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# Lessons from Europe: European Preschools Revisited in a Global Age

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Rising enrollments in preschool programs and increasing use of nonparental child care are surely among the most significant worldwide trends of the past two decades. The growing demand for early childhood care and education services is precipitated by social, political, and economic changes that are themselves global phenomena—the increased participation of mothers in the labor force, declining birth rates, dwindling family size, and disappearing extended family support, for example. Demand for preschool services has also been fueled by an increased understanding of the importance of the early years of life, as well as by concern over the high proportions of children who are doing poorly in school.

It is generally agreed that the 15 nations comprising the European Union have some of the world's most highly developed early care and education (ECE) systems and some of the best empirical evidence on the effects of preschool experiences on children's development and welfare. During the 1970s and 1980s, there was a tremendous expansion of preschool programs for children from the age of three to the age of compulsory schooling (ranging from five to seven), and approximately half of E.U. countries now have publicly funded preschool places available for 80% or more of the children in this age group. (Of course, as a result of the increased dominance of free market economics, many countries are feeling pressure to reduce social benefits to become more "efficient"—in this context, continued support for quality preschool programs may depend

on compelling evidence of their cost-effectiveness and not on their popular support.)

This article summarizes several years of research on the long-term effects of ECE programs in the E.U. The information presented here may prove helpful to U.S. policymakers, researchers, early childhood educators, and advocates seeking evidence of ECE program effectiveness and results.

## What Are the Most Important Long-Term Benefits of Preschool Programs?

International research provides considerable evidence that high-quality early childhood programs can substantially improve children's cognitive, social, and emotional development. Further, it shows that such programs are especially beneficial for children in poverty, that some of the benefits are impressively long lasting, and that the long-term benefits of effective programs can far outweigh their costs. Many E.U. countries are far ahead of the United States in making free or inexpensive preschool programs available to three- to six-year-olds, though ECE services for younger children remain more expensive and less available.

In **France**, a Ministry of Education survey of sixth graders found that every year of preschool in *ecole maternelle* reduced the likelihood of school failure, especially for children from the most disadvantaged homes. (The French *ecole maternelle* is fully funded by the national government and provide free, full-day programs with a national curriculum developed by the Ministry of Education; *ecole maternelle* teachers earn a salary

comparable to that of elementary school teachers.)

In the **United Kingdom**, comparisons between children who attended playgroups, private or public nursery schools, or no preschool indicated that experience in any preschool program contributed to cognitive development and school achievement at ages five and ten. (Public investment in full-day child care is limited in the U.K. and many families rely on individual childminders, who may or may not be registered with the government.)

An analysis of statistics routinely collected by the elementary schools in one state in the former **West Germany**, where 65% to 70% of children between three and six attend half-day preschools that are provided by the government at no cost to parents, produced similar findings. Preschool experience influenced rates of retention in grade, assignment to special education, and other school outcomes more consistently than any other factor studied.

In **Sweden**, children with extensive preschool experience (in centers or family child care) performed significantly better on cognitive tests and received more positive ratings from their teachers both on school achievement and social-personal attributes than children with less or no ECE experience. In fact, children placed in out-of-home care before age one received the most positive ratings on verbal facility, persistence, independence and confidence, as well as the lowest ratings on anxiety. The positive effects of day care persisted throughout the elementary school period. (In Sweden, local governments provide carefully supervised, subsidized

child care through centers and family child care homes to about half of the nation's children between birth and school entry at age seven.)

### **What Are the Most Important Elements of Preschool Quality?**

Although specification of the crucial components of program quality continues to elude ECE researchers, most would agree that a high-quality preschool program should be based on a variety of developmentally appropriate activities that engage children. For example, the curriculum of the French *ecole maternelle* includes emergent literacy and other activities designed to acculturate children to a formal school setting, but gives equal attention to the cultivation of children's curiosity, creativity, psychomotor development, and social skills.

Some indicators of quality considered essential by American evaluators, such as class size and child-to-staff ratios, are accorded less importance in Europe. E.U. programs do, however, have well-trained personnel, though training requirements vary from one nation or system to another. Not surprisingly, in nations with high proportions of well-trained teachers and caretakers, salaries tend to be relatively high and staff turnover relatively low.

In Europe as in the United States, the involvement of parents in their children's preschools is often postulated as an important element of program quality. While there is little empirical evidence supporting the claims regarding the benefits of parental involvement, preschool programs in European countries do involve parents in varying ways and degrees.

### **How Can Preschool Programs Reduce Educational Inequities?**

Efforts to use the preschool system to reduce rates of early

school failures and the vast inequalities among children from different social backgrounds are usually based on one of two general strategies: (1) providing preschool programs as universal entitlements, ensuring that the programs are of high enough quality so that they are supported and used by high- and low-income families alike (a strategy used in France and Sweden); and (2) developing compensatory preschool programs targeted specifically at children in poverty. Programs aimed at children from poor or immigrant families include home-based "enrichment" programs (e.g., the Home Instruction Program for Preschool Youngsters, or HIPPY, and parent-run centers or playgroups).

In Europe, as in the United States, preschool appears to have a greater impact on the lives of poor children than more advantaged children. In the French and British studies discussed earlier, preschool experience was found to be most beneficial for the most disadvantaged. A recent German study of the effects of *kindergarten* (publicly financed preschool for children age three and older) on children's school outcomes shows similar results. While participation in preschool did not significantly enhance enrollment in an academic high school or high school curriculum for native German children, it did increase the probability that the children of guest workers or recent immigrants would achieve a higher educational level.

### **Lessons for Americans?**

The United States has invested more than any other nation in rigorous research on the effects of preschool programs, and has produced a strong body of evidence of the long-term benefits of good quality programs, especially for

children in poverty. Yet our nation continues to have one of the world's most fragmented, incoherent, and incomplete ECE systems. This is due in part to our ambivalence about large public investments in "other people's children" and, perhaps, to our reluctance to learn from the experiences of other nations.

This must change. Although much remains to be done in conceptualizing and assessing the quality of E.U. programs, the studies surveyed here provide valuable information for U.S. policymakers, educators, and other stakeholders.

The long-term costs of the failure to provide high-quality early childhood programs—higher costs for education, social services, police and prisons, and lost productivity and tax payments—are likely to be far higher than the costs of these programs. The long-term benefits of current European preschool policies and programs are by no means decisively demonstrated, but the results thus far show the plausibility of an array of policies and services that merit more serious consideration in this country.

The question is how a shift toward universal access to high-quality preschool programs can be made compatible with American individualism, suspicion of governmental interference in family affairs, and demands for choice and free association. The 10-year action plan developed by the European Network on Childcare, which attempts to combine unity of purpose with accommodation of national and within-nation diversity, which envisions ECE systems that are coherent but flexible, offering programs and services to all families but allowing choices among them, seems to violate no important American values and may constitute a lesson from Europe that Americans can accept. ☞

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# The Science and Policies of Early Childhood Education and Family Services

by Robert B. McCall, Lana Larsen, and Angela Ingram, University of Pittsburgh

While it limited the number of years that parents are eligible for public assistance, the 1996 welfare reform legislation recognized the need for publicly supported child care to ease the transition from welfare to work. To assure that such child-care services are useful (and cost-effective), it is important to know whether early childhood and family programs are effective at achieving particular goals, and to understand which program characteristics contribute to such effectiveness. This article provides a brief, balanced, and nonpartisan summary of the pertinent research literature, emphasizing what is known and not known about service effectiveness.

## Program Effectiveness

Early childhood educational programs, which typically begin when children are three to four years old, have been shown to accomplish many of their short-term and some of their long-term goals. Early education demonstration programs for low-income children can increase early mental and academic skills (e.g., IQ, language fluency), minimize severe academic problems in grade and high school (e.g., class failure, retention in grade, and use of remedial and special education services), and increase social maturity and independence. Children participating in early childhood programs engage in less noncompliant and delinquent behavior, have fewer teen pregnancies, graduate at higher rates, and are more likely to be employed and less likely to be dependent on welfare after high school.

Programs aimed at improving maternal behavior have demonstrated

only modest and inconsistent effects. For example, such programs have been shown to improve maternal attitudes and reduce self-reported use of harsh disciplinary practices, but few programs have led to reduced rates of reported child abuse and neglect.

It is of interest to note that when pilot programs are implemented as routine services, outcomes are similar but often weaker and less consistently observed. The benefits of Head Start, for example, are similar qualitatively to the benefits of early childhood education demonstration programs, but the size of the benefits, their persistence over developmental time, and the consistency with which they are found from study to study is often smaller. The crucial question is why these programs, once they are implemented as routine services, fail to produce the level and consistency of benefits that demonstration programs show is possible. The answer is likely to be related to the fact that the government frequently asks service providers to implement demonstration programs on a mass basis at a fraction of the original cost per family—it seems that this approach does not result in the same level of beneficial outcomes.

## Characteristics of Successful Programs

Successful programs usually share some characteristics, which are related to quantity and quality of “treatment dosage.” In terms of quantity, the more a program is experienced by parents and children, the greater the benefits; the longer the duration (i.e., the more years in service) and the greater the intensity, the better the outcomes. With regard to age of onset, however, earlier may

be better for certain outcomes (e.g., the improvement of parent-child relationships) but make less difference for others (e.g., mental development and school success).

It is also important for programs to permit and support a high-quality educational and family service that is developmentally appropriate and outcome-specific. (The beneficial outcomes of programs are specific to the family members served and the nature of the services delivered—for example, programs aimed at parents tend to produce parent benefits, whereas programs aimed at children tend to produce child benefits.) Overall, smaller groups of children and lower children-to-staff ratios are associated with better social and cognitive outcomes; successful programs have well-trained personnel who are closely supervised. Effectiveness also increases with level of parental involvement.

It is likely that the several components of dosage accumulate and are mutually compensatory—a short program of great intensity and high quality may produce greater benefits than a longer program of less quality and intensity. Certain interventions may also be more efficacious if performed at certain ages.

## Policy and Program Issues

To succeed, early childhood and family programs require substantial funding allocations. Are the benefits of such programs worth such a large investment of public dollars? Two issues that are important to consider in answering this question are effect size and benefit “fade out.”

**Effect Size.** It is true that the mean for the entire group of children

treated by an early childhood or family program rarely attains the national average of academic performance. The major benefit of these programs, however, may not be to raise the school and social performance of all students in the group, but to prevent extreme disasters for a few individuals. Long-term benefits are found in terms of preventing serious problems in a smaller number of cases (i.e., students who would otherwise fail, be retained in grade, need specialized educational and family services, commit crimes, become unemployed, use publicly funded services, or produce unwanted pregnancies).

**Benefit Fade Out.** In the years following program termination, there is a fade out of general mental performance benefits for children enrolled in early childhood educational programs relative to nontreated comparison children. Other benefits, however—such as the prevention of school failure, the reduction in antisocial and criminal behavior, and the improved economic self-sufficiency of program participants—are long-term benefits that do not disappear.

The same logic that suggests that an enriching program can produce benefits for low-income four-year-olds also implies that quality educational and family programming is essential *throughout* childhood and adolescence. “Follow-on” programming is needed, as benefits of early education programs will fade if children are put back into poor environments and poor schools when they are six years old.

### **The Nature of Services**

To maximize benefits to children and families, publicly supported early childhood education and family services should be comprehensive and family-specific. Programs should be coordinated and integrated across service type, government level, public and

private agencies, and age groups. (The same is true for program funding and administration.) Specialized services are needed for particular groups, age ranges, and problems, but more funding should also be aimed broadly at families. Funds must be allocated for case management and service coordination, and staff training should be improved.

The “dosage” of services must be sufficient to achieve program goals. Interventions should begin early in the lives of participant children, perhaps before they are born, and should emphasize a developmentally appropriate sequence of goals for parents and children.

Policymakers must be prepared to make a long-term investment and have realistic expectations about what constitutes progress and benefits at different stages of a program’s development. To this end, deliberate attempts should be made to improve the persistence of program benefits. It makes little sense to “enrich” preschoolers only to subject them to inferior educational programming thereafter.

### **Balancing Cost and Effectiveness**

In balancing program costs with their effectiveness, policymakers should consider the implications of hard questions such as those outlined below.

#### **Should eligibility requirements be more restrictive?**

Family income level or residence in a low-income neighborhood determines eligibility for most programs. While poverty is the single most pervasive risk factor for later problems, the literature also suggests that the likelihood of subsequent problems is much greater if a family has more than one risk factor. With this said, it is not clear that changing the requirement would substantially reduce the number of eligible families from current levels, given that there are

often multiple risk factors present in high-poverty families.

#### **Should services of greater quantity and quality be offered to fewer families rather than offering services of less quantity and quality to more families?**

“Lite” programs do not work, and it does not make sense to provide ineffective programs to a large number of families and children. If benefits are produced primarily by programs of high quantity and quality dosage, perhaps it is better to offer such programs to a smaller number of families.

**Should standards of quality be mandated?** Standards do work, but nations that implement mandatory standards also tend to provide resources to monitor compliance, help providers meet and maintain personnel and facility standards, and insure that low-income parents can afford and access high-quality services.

**Should parents be trained and made more responsible for the improved development of their children?** While parent-education programs produce changes in parents’ behaviors and create a better home environment, their ability to produce educational and social gains in children are more limited. Parent training, it appears, is most effective when performed in combination with programming aimed directly at children conducted by well-trained professional staff.

#### **Can welfare-to-work adults be employed as caretakers and produce the same beneficial results for low-income children?**

Such a strategy has economic advantages, but it is not clear that it will lead to the benefits for children outlined here. The amount of general education and specific training in child development and care have been shown to be related to child outcomes, and it is unlikely that welfare-to-work adults would be given the necessary substantial levels of such education and training. ☞

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# Kindergarten Programs: Readiness, Transitions, and Delay of Kindergarten Entry

by Elizabeth Graue, University of Wisconsin–Madison

Kindergarten is both a beginning and an ending. It is the end of a particular type of parent control of child care and education while at the same time it is the beginning of what many would call *real school*. This transition is complex, framed emotionally, politically, socially, and psychologically. Its practices are filled with ritual, folk wisdom, and solidly developmental logic. This alchemy of beliefs and rules for practice shape the interactions among teachers and their students and play a vital role in policymaking related to kindergarten.

## Kindergarten today

Kindergarten is in the unique position of being practically universal and merely an option. Ninety-eight percent of all first graders have had prior experience of school by attending kindergarten. At the same time, if policies for program provision are an indicator of the instantiation of an institution, then kindergarten is still seen as merely an option. Only 39 states require districts to offer some form of kindergarten program (29 require 1/2 day program offerings, 10 require full day program availability). Some states require districts to offer both. Seventeen states impose no programming requirements related to kindergarten. And if compulsory attendance is seen as the gold standard for expectation, kindergarten is not close. A total of 15 states require kindergarten attendance (10 require 1/2 day, 5 require full day) and a stunning 44 states have no attendance requirement at all.

## What is readiness?

Readiness for school is a notion widely used in discussions

about education in the United States. It is the first of our national education goals; the source of great anxiety for many parents who anticipate their child's transition to school; the target of a diverse array of activities designed by policy makers and educators; and the catalyst for a very lucrative industry of testmakers, parent literature, and developers of early childhood education materials, experiences, and settings.

## Parents' views

When asked to rate a set of skills as essential/very important to success in school, parents had highly developed images of prerequisites. At least 80% of parents focused on social skills such as communication, sharing, enthusiasm, and attending as essential to kindergarten success. At least half felt that more basic skills like using pencils, counting, and knowing the ABC's were necessary.

These ideas of what a child needs to know to succeed are related to parent characteristics such as educational attainment and socioeconomic status. An inverse relationship generally exists between level of formal education and the degree to which parents feel that particular skills are necessary for readiness.

## Teachers' views

Teachers' views are instrumental in defining readiness for individuals and groups of children. By and large, public school kindergarten teachers see physical health, good communication skills, and enthusiasm as most essential to school readiness. Least important for school readiness were "skills" that are often seen as academic,

including problem solving skills, ability to identify primary colors and shapes, ability to use pencils/paint brushes, alphabet knowledge, or ability to count to 20.

Following the patterns of parents, teachers in high poverty schools are more likely than their colleagues in more affluent contexts to expect specific academic skills for readiness. In addition, teachers in high poverty schools and those who teach primarily students of color are more likely to think that children with readiness problems should come to school as soon as they are legally eligible. Curriculum, retention practices, and advice about when to enter a child into school are all linked to readiness beliefs.

Descriptively these categorizations are interesting, but pragmatically their implementation is problematic. Within the common discourse of readiness there are different assumptions about students depending on ideas held about their home life, their ability to learn, and the interventions that might enhance their success. Therefore, we have different readinesses for different children.

## Delayed Kindergarten Entry

While public schools cannot deny entrance to legally eligible students, there is evidence that schools have gently advised some parents that another year might provide the kind of maturation that will ensure a child's success. Is this delayed entry to kindergarten—often referred to as *redshirting*—a good investment? It certainly does not come without costs. Redshirting requires an additional year of care that is paid for on a cash basis or with lost wages by

parents. For this reason, it is an intervention that is only available to families that can afford it.

From an individual perspective, the logic of redshirting promises that the extra year will ameliorate the immaturity that troubles children in formal education settings. It is suggested that redshirts will be leaders, who are

able to meet the challenges of early schooling academically and socially. There are promises that redshirting can help students avoid later problems that lead to retention or placement in special education. One difficulty in these claims is that the research to this point does not allow unambiguous comparisons. Studies have not provided initial

measures prior to the “treatment” of redshirting so it is difficult to assess the impact of the extra year.

Developmental variability is an essential element of working with children. We should expect it, incorporate it into our programming, and in our most flexible and optimistic moments, celebrate it. ☘

*(Introduction, continued from p.2)*

making, including curriculum design and professional development, increases parents’ sense of ownership of these programs and encourages collaboration between schools and the communities.

Most parents want to be involved in every aspect of their children’s education. By including parents in the early childhood equation, learning that begins in the classroom is reinforced at home. A critical element of this reinforcement is the development of a common vocabulary that teachers and parents can use to discuss a child’s progress and methods for improvement.

- Parents should receive information on relevant research on effective practices in readable and useful forms. Parents should not only be informed, but also should be involved in providing input and making programming decisions about the education of their children.

**Next-Step Recommendations**

In addition to the broad-based issues of universal daycare, professional development, and parental involvement, the conferees made the following specific recommendations for moving forward with an advocacy action agenda for universal quality childcare and preschool education.

- Convince policymakers that:
  - (a) early childhood programs

can be cost effective; (b) the extent and quality of programs are crucial to achieving success; and (c) programs can be successful at a relatively small amount of cost if integrated into existing structures.

- Initiate discussions between early childhood education advocates and members of the National Parent–Teacher Association. Form coalitions with other advocacy groups to create better political climates for children and their families.
- Identify champions of the childcare and early childhood education movement who are influential. Promote leadership advocacy for early childhood educators.
- Focus on what sells. Advocates need to get the media on the side of quality childcare and early childhood education. Inform the public about relevant research on what works in providing quality childcare and preschool education.
- Use new technologies and mass communication avenues to forge a national dialogue on the mandate for quality childcare and preschool education for all, and to foster increased parent–school connections.
- Work to eradicate the risk factors that continue to challenge and mitigate against human capital investment and confront racial and social

stratification. Examine the assumptions behind the term “at risk” and devise a new term that reduces stereotyping.

- Utilize the research on preventing reading difficulties in young children to minimize severe academic problems in the primary grades.
- Improve articulation alignment of what is taught in colleges and the professional expertise required for a quality childcare and preschool education force. There is a critical need to increase collaboration and coordination between higher education institutions that provide preservice education of childcare and preschool education professionals and childcare and preschool education providing agencies.
- Attention needs to be placed on preservice and inservice programs that focus on bringing research-based knowledge to bear on improving practice.
- Parental involvement should be required coursework for childcare and early childhood education programs.
- Researchers, policy makers, and practitioners need to work intensively to educate their colleagues and the public on viewing the 21<sup>st</sup> Century as the “Century of the Child” and creating a national investment strategy for continuing to be a leading nation in the 21<sup>st</sup> Century. ☘

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# The Added Value of Continuing Early Intervention into the Primary Grades

by Arthur J. Reynolds, University of Wisconsin–Madison

## Introduction

Few issues have greater significance for the early childhood field than the optimal timing and duration of service participation. While it has long been posited that the earlier intervention begins, the greater and more lasting the impact on children, the duration (e.g., dosage) of program participation also is believed to be an important principle of effectiveness. The early entry perspective has been most recently highlighted by the implementation of family support programs for young children from birth to 3 years of age such as Early Head Start and Parents as Teachers. The urgency to intervene during the first three years of life has been accentuated by research on early brain development, and by the public attention findings often generate. To many observers, the implication of this research is that neurological growth in infants' brain circuitry is so rapid and dynamic that intervention after ages 2 or 3 may be too late to prevent serious learning difficulties and their negative long-term consequences.

Alternatively, in the duration of service perspective, the continuity of children's development from infancy to preschool and beyond is believed to be more crucial than experiences or developmental changes that occur just in infancy. Thus, from this perspective there is an equal balance of influences in the learning environments between infancy and early childhood. This perspective is best represented by the ecological model of development in which children's out-

comes are conceptualized as a function of a nested structure of influences emanating from the individual child to the larger systems of family, school, and community. This supports the role of relatively intense and multi-year programs.

Extended early childhood programs are defined as planned interventions that begin during any of the five years of a child's life before kindergarten and continue through at least second grade. These programs typically include both center-based child education, family services, and community outreach to children from low-income families or who have special needs.

## Rationale for Extended Early Childhood Programs

Many studies of preschool programs have indicated that, for at least some outcomes, effects fade with the passage of time. Although there are many reasons for the dissipation of effects, the key rationale for extended interventions is that the continuation of programs into the primary grades will not only promote more successful transitions but also help prevent the fading effects of preschool intervention. Most developmental theories indicate that environmental support during the transition to formal schooling is important for children's continued success. This process of change is called an ecological transition, or any change in the role, function, setting, or expectations of a developing person. The transition from preschool to kindergarten and the primary grades necessi-

tates changes in the roles, settings, and expectations of an individual child.

Participation in extended early childhood interventions (continuation programs) may lead to greater and longer-lasting effects than interventions that end in preschool for several reasons. First, longer periods of implementation may be necessary to promote greater and longer-lasting changes in scholastic and psychosocial outcomes. Early interventions are often comprehensive, and they provide many services to children and parents that require significant coordination. They may be more effective if they have more time to work. Another factor that reinforces the need for longer-lasting interventions is that children in many urban settings are more at risk today than in the past; hence early intervention services must be more extensive than before to be equally effective.

Second, extended early childhood programs are designed to encourage more stable and predictable learning environments, both of which are key elements in optimal scholastic and social functioning. Participation in extended interventions, for example, may encourage higher rates of school and home stability than would otherwise be expected. Certainly, environmental forces continue to operate after preschool and kindergarten. One assumption of early interventions that continue into the primary grades is that the postprogram learning environment at home and in school can reinforce, limit, or neutralize earlier gains in learning,

and thus should not be left to chance.

A third rationale for extended childhood interventions is that they occur at a crucial time in children's scholastic development. It is expected that the provision of additional educational and social support services to children and families during this key transition would promote greater success, and would help prevent major learning problems by third grade, a primary marker that presages later academic and social development.

As a result of these features, continuation programs may not only promote children's learning but also help prevent the dissipating effects of earlier intervention, a pattern that occurs for many kinds of social programs. The literature indicates that five hypotheses of effects can promote effectiveness, and they are a major focus of extended childhood programs: (a) cognitive advantage hypothesis (as measured by developed cognitive and scholastic abilities), (b) social adjustment hypothesis (prosocial behavior), (c) family support hypothesis (changes in the family behavior), (d) motivational advantage hypothesis (children's motivation or perceived competence), and the (e) school support hypothesis (classroom and school learning environments). To the extent that continuation programs strengthen the factors associated with these intervening mechanisms, long-term success is more likely.

### Conclusion

Although extended intervention programs have been discussed since the founding of Project Head Start, only recently has sufficient evidence become available to assess their short and long-term effects above and

beyond preschool intervention. For example, findings from both the Carolina Abecedarian Project (ABC) and the Chicago Child-Parent Center and Expansion Program (CPC) directly support the conclusion that extended early childhood programs can promote more successful transitions to school than preschool interventions alone. Additionally, studies of the Head Start/Follow Through program reveal the benefits of modifications in school learning environments. Transition programs that directly alter the organizational and learning environments of the elementary school generally demonstrate more consistent and longer-lasting effects on children's school success.

Although the CPC program is far from perfect (e.g., it provides few health services), it did from the beginning what Head Start/Follow Through did not: implement an extended early childhood intervention from preschool to third grade under a single administrative system. Although more longitudinal data from a variety of settings are needed, several lessons about the future success of extended early childhood programs can be drawn from this review of the evidence:

1. To increase continuity of services, use schools as the single delivery system for early and extended childhood interventions.
2. Service provision should reflect the principle that duration of program participation can matter as much as timing of participation.
3. Implement intensive parent programs through staffed parent-resource rooms emphasizing both personal growth and their school participation.
4. Focus enrichment activities

on language-based, school-readiness skills while keeping activities diverse enough to meet the needs of individual children.

5. Focus school-age programs on school organization and instructional resources through such elements as reduced class sizes and ratios, and instructional coordination and quality.

Extended early childhood interventions are one element of larger reforms of educational and human services occurring today. The overarching principle is the provision of well-coordinated, comprehensive services that occur over many years. Given demographic trends showing increasing concentration of poverty and other risk factors in large metropolitan areas, early interventions today must be better in quality, intensity, and comprehensiveness than in the past to successfully meet the needs of children and families. While downward expansion of programs to birth to age 3 is an important area of intervention, upward expansion of early childhood programs seems critical for supporting the transition to school and reinforcing preschool learning gains.

Extended childhood programs have two practical advantages over programs from birth to age 3. First, educational systems are already in place to support extended childhood intervention in the primary grades. New early childhood systems would not have to be developed. Second, upward expansion of programs into the primary grades may cost less than many of the alternatives, and they are certainly more cost effective than continuing the current system of providing little or no extra support for children's transition to school. ☞

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# Grade Retention, Social Promotion, and ‘Third Way’ Alternatives

by Karl L. Alexander, Doris R. Entwisle and Nader Kabbani, Johns Hopkins University

What’s a body to do when Johnny can’t read? Not too long ago, many schools simply would have passed the problem along. That’s “social promotion” in a nutshell, and if one believes all the furor, it is akin to educational malpractice. School systems throughout the country are responding vigorously to this most recent diagnosis of the crisis in our nation’s schools with new screening tests, mandatory summer schools, and, as a last recourse, retention in grade.

## Social Promotion and Grade Retention: Surveying the Landscape.

To determine in a rigorous way how many students are promoted despite falling short of prescribed standards requires, first, that there be prescribed standards, and, second, knowing the promotion/retention history of a well-defined population of students in relation to those standards. According to a 1997 American Federation of Teachers’ survey of promotion policies in 85 of the nation’s largest school districts, there is an absence of specific academic standards against which to judge students. Additionally, teachers and administrators lack commonly agreed upon expectations of satisfactory performance. Consequently, the extent of social promotion has yet to be authoritatively mapped through research.

It can be assumed, however, that if social promotion is commonplace, then there should be few children that are being retained in grade. Sound reasoning perhaps, but very wrong on

the facts. Here the record is a bit easier to piece together. At the national level, retention rates can be inferred from annual census data that map the distribution of October school enrollments by age and grade for large, nationally representative samples. Panel surveys like the NELS88 project are a second source for estimating retention rates across the country. A review of these data show that grade retention is pervasive in American schools.

This estimate of the prevalence of grade retention applies to the country as a whole, but for certain kinds of children in certain kinds of settings, the estimates are much higher. There are large differences in over-age enrollments comparing whites, blacks, and Hispanics. There also are large differences in retention rates from one state to the next and across different kinds of school contexts. High rates of retention in urban school systems that enroll mainly low-income and minority students are a particular concern.

Grade retention, especially plain vanilla grade repetition without supplemental services, should be a last recourse, not a first recourse. It is expensive, costs children a year, and separates children from their age-mates, which under present organizational arrangements apparently creates problems for them later. That said, simply passing the problem along in the form of social promotion is not the answer either.

An important point often missing from debates over grade retention is that in order to

determine what is the best course in the individual case educators must understand what is behind a particular child’s difficulties. Across the board solutions will not work across the board, and the available research offers little guidance for determining individual placements — it informs the issue “on average,” but “on average” isn’t good enough for that purpose. Telling people responsible for policy that grade retention “does harm and does not help” misrepresents the evidence, and could do harm if it means that children who might benefit from extra time are deprived of it.

## In Search of a ‘Third Way’

The easiest course would be to stay the course. From an administrator’s perspective, the surface appeal of grade retention/repetition and social promotion is easy to understand. For one thing, they pose few if any burdens—no new programs, no additional staff training, no new technology. They also can help with external pressures. A school’s achievement profile will look better, for example, if many poor performing seven year-olds are given tests designed for six year-olds, as happens with first grade repeaters.

These approaches entail costs too, but often they are either deferred or hidden from view. What is the cost, for example, to teachers or to students performing at or near grade level when socially promoted students enlarge the span of reading levels that must be covered in a class to four, or five, or six years? The retention/promotion research

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literature never addresses those kinds of costs, but school people confront them daily, and parents sense them too.

Even costs in dollars often are submerged. Funding for regular education typically is done by head count, which means that for a principal to have half her enrollment in elementary school for six years instead of five poses no particular fiscal burden. The same holds true when students spend 13 or 14 years getting a diploma instead of only 12. The cumulative cost to the state or town treasury is substantial, though, especially in localities with high poverty rates. These hidden costs of retention contrast sharply with the conspicuous costs of special programs for poor performing children.

In light of all these many reasons for resting content with the status quo, the vigor of the current reform climate can't help but impress. Many school systems are experimenting, ambitiously and energetically, with "third way" alternatives to both grade repetition and social promotion for children who are not keeping up. These programs often incorporate research-based "best practice" principles—summer programs, reduced class size, one-on-one or small group supplemental instruction—and preliminary results in many instances are encouraging.

Children at risk of academic failure require early and on-going interventions, and to address their needs effectively calls for a more comprehensive reform agenda than resolving the social promotion/retention conundrum. Schools are the venue where low achievement, underachievement, and other problems that derive from them typically come to public attention, but the problems themselves trace mainly to

resource shortfall in children's home and community environments. Still, we often ask our schools to fix problems not of their making, and the current reform climate is no exception.

There is a large group of children, perhaps 20% nationally and an even larger percentage in high poverty school districts, for whom regular schooling simply is not doing the job that needs to be done. The externalities that weigh on these children—the drag of poverty and of dysfunctional families—are ever-present in their lives, and so too must be the corrective measures undertaken to help them advance academically. This is why it seems unrealistic to expect lasting cognitive benefits from a one-shot infusion of "extras," be it compensatory education, full-day versus half-day kindergarten, or grade retention.

At present there is no sure blueprint for fixing "regular schooling." Classroom and school reform models that interweave best practice insights from basic research on student learning and classroom process sometimes yield impressive results, but even the best of these programs still leave many children behind. This suggests that more radical surgery may be necessary.

The curriculum in the primary grades is the foundation for all later learning, and children need to master it before moving on. But children do not all mature on the same timetable, they do not all learn at the same pace, and they do not all learn in the same way. Mastering the curriculum will take longer for some than for others. The challenge is to build more flexibility into the system without the stigma and other problems that come with being "off-time" for one's age. In tomorrow's classrooms, it should hardly

warrant note that some seven year-olds are working on "first grade" material and others on "third grade" material, if that is the right pace for them. Class-mixing of this sort is routine in high school and college, so long as prerequisites are satisfied. There are restrictions to be sure, but typically they are not defined around age.

With prerequisites appropriately defined, why couldn't similar organizational arrangements be attempted in the primary grades? One barrier is that "age" and "grade" are so closely aligned in how we think about schooling at the elementary level that it is hard even to conceive of separating them, and so to move in this direction will require significant changes in school organization.

For them to work well, such new structures will have to be administered flexibly and incorporate appropriate best practices into the extra learning time they afford. This may not be quite the right formula even then, as circumstances outside school still will conspire to hold many children back. But allowing the clock and calendar to dictate which children will succeed and which will stumble is not good educational practice. The pace of schooling under present organizational arrangements poses obstacles, often insurmountable ones, for children who have the ability but need more time. An extra year in grade might help some of these youngsters, but in general there ought to be better ways to buy more time when it is needed. Until school reform addresses the pace of learning in a serious way, too many of our children will continue to fall behind and we will find ourselves again pondering "what's a body to do?" ❧