Testimony of Grover J. (Russ) Whitehurst to the Health, Education, Labor, and Pensions Committee of the U.S. Senate

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Chairman Harkin, ranking member Alexander, and members of the Committee,

My name is Russ Whitehurst. I am director of the Brown Center on Education Policy at the Brookings Institution, where I am a senior fellow and hold the Herman and George R. Brown Chair in Education Studies. Thank you for inviting me to offer testimony.

I bring to my testimony 30 years of experience in my first career as a developmental psychologist conducting research on programs to enhance the language and cognitive development of young children. In that role I spent a lot of time in childcare facilities that were under the sway of federal legislation, including Head Start, Even Start, and subsidized daycare centers. My testimony is also informed by my career since that time, first as the founding director of the Institute of Education Sciences within the U.S. Department of Education, and subsequently as an education policy expert at Brookings.

In testimony before the House Education and Workforce Committee in February and in a number of reports I have released at Brookings over the past year I've addressed specifics of the research literature on pre-k programs, doing my best to objectively characterize the quality of studies that have received public attention and trying to make sense of what the findings mean for public policy. I'm not going to repeat myself on those issues today, unless something comes up in questioning. I'll simply say that the research is much more mixed in quality and equivocal in findings than advocates of universal pre-k would lead you to believe. The oft trumpeted claim that we should expect \$7 in taxpayer savings for every \$1 invested in pre-k is a fanciful extrapolation to today's circumstances of a flawed study of a program that served a little more than 50 children 50 years ago in a small town in Michigan. It is as if someone did a study in the 1960s showing that a new federal post office built in a small town somewhere increased business activity in that town, and on that basis argue that building new post offices across the nation today will spur the economy.

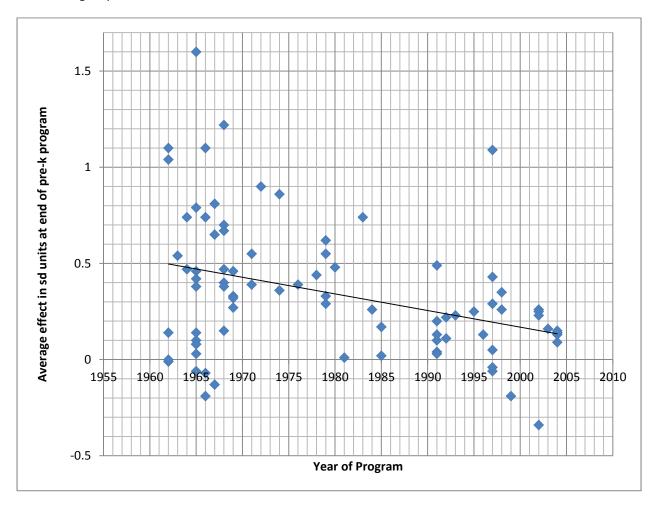
Today I will focus not on specific research studies but on how preschool services ought to be supported by the federal government. The takeaway from my testimony is that we know very little from research, or even from practical experience, that can inform the dozens of important decisions that should be on the table for government officials responsible for the design and implementation of early childhood programs and services. In that light, as well as in deference to parental prerogatives, federal policymakers should design systems that afford variety in the nature of the preschool programs that are offered to parents and that can adapt with experience.

The federal government presently spends over \$22 billion a year on programs to support early learning and childcare through 45 different programs and 5 tax provisions. To this the Obama administrative has proposed adding another \$15 billion a year in federal spending and state matching funds in order to

create universal free pre-k for four-year-olds. Parents spend heavily as well for unsubsidized out-of-home care for their young children.

Most of the present and newly proposed taxpayer expenditure is based on the assumption that children will learn transformative skills from early center-based care that will eliminate gaps in school readiness between more and less advantaged children, enable all children to get more out of every additional investment in their education, and generate socio-emotional dispositions that pay dividends in later life, for example, by reducing criminality or enhancing performance in the workplace.

But even a non-selective reading of the pre-k research literature research raises questions about the degree to which such transformative outcomes are regularly achieved. The following figure is based on data provided in the appendix to a 2013 article by Duncan and Magnuson (Investing in Preschool Programs, *Journal of Economic Perspectives*, 27, 2, 109–132). The authors review 84 studies on the impact of early childhood programs published between 1960 and 2007, including all the studies they could find that had a measure of children's cognition or achievement collected close to the end of the program treatment period, and, at the least, had a comparison group demographically similar to the treatment group.



Each data point in the scatter plot represents the mean achievement test outcome at the end of the program period for a single pre-k program. The program year is plotted on the horizontal axis, with new programs towards the right. The vertical axis represents the size of the measured effect, i.e., the difference between the program group outcomes and the control group outcomes, calculated as an effect size. An effect size of zero means that there is no difference between the treatment and control group. Negative numbers favor the control group whereas positive numbers favor the pre-k treatment group. A rule-of-thumb for judging effect sizes is that an effect size of 0.20 to 0.30 might be considered "small", around 0.50 "medium", and 0.80 to infinity "large". The solid line represents the best linear fit to the data points.

Keeping in mind that the program effects represented in the figure do not include follow-up data from elementary school, where all longitudinal research indicates fade-out, and that the studies are overwhelmingly of programs serving disadvantaged children, for whom impacts are largest, two conclusions seem undeniable: The first is that the effects produced by pre-k programs as found in the 84 studies represented in the figure are highly variable, ranging from moderately negative to hugely positive. This means that any single preschool program is not a sure bet to produce positive effects even at the end of the pre-k year. The second conclusion is that older programs produced much larger effects than more recent programs – the trend line begins at 0.50, a medium effect, and ends at 0.14, a small effect.

The diminishing effect size across years is probably best understood as resulting from changes in the home environments of children from low-income families. For example, the percentage of children from families in the bottom quintile of income who have mothers who finish high school roughly doubled in the time frame covered in the figure while the percentage with postsecondary education quintupled. To the extent that preschool programs are intended, in part, to compensate for deficiencies in parent-child interactions in the home that are associated with parental education, improvements in parental education mean that the control group of children in a present day study of a preschool intervention is likely to perform much better than untreated children from 40 years ago. Thus the difference in outcomes between the two groups in the present day study, the effect size, is smaller.

Is it reasonable to conclude from the data in the figure as well as the more detailed examination that I have given to high profile studies with more rigorous methods that the return on investment from any particular early childhood program is likely to be high, e.g., 7 to 1? I believe it would be unreasonable to draw such a conclusion – again the effects are all over the place, with many at zero or below. Is it reasonable to conclude from this and other research that some early childhood programs can produce worthwhile benefits for some participants? I believe it is quite reasonable to draw that conclusion – many of the effects are positive.

To sum up, we know that some pre-k programs work for some children in some circumstances. But, what programs for whom under what circumstances? That's where the empirical sledding gets rough.

Consider the following program design decisions that are available to policy makers with regard to early childhood programs:

- targeted vs. universal
- multiyear vs. single year
- significant parent component or not
- year round or school-year calendar
- full- or part-day
- wrap around or school-like hours
- teacher certification or not
- provider licensure requirement or not
- teacher college degree or not
- school districts as providers or any sponsor meeting requirements
- parental choice or zip code assignment
- market-based or regulatory accountability
- assessment of children to monitor program quality and provide consumer information or not
- align pre-k curriculum with Common Core, or focus on social/emotional development, or let a thousand flowers bloom
- sliding scale fee structure or strict income eligibility for a free service
- financial incentives and career ladders to highly effective early childhood teachers or not
- family day care included or only center-based programs
- spending levels per student per program type
- single state system with coordinated federal and state funding streams or separate systems serving different populations with different needs
- early childhood programs as a seamless part of the education system or serving broader and different goals and needs
- enable non-traditional early childhood teachers, including Teach for America-type recent college graduates and educated retirees, or focus on upgrading the traditional early childhood workforce

- financial support and training to qualifying parents to care for their children at home or focus on out-of-home care
- provide digital materials intended to strengthen the role of parents as their children's first teachers or not
- identify and disseminate evidence-based curriculum materials and professional development activities or leave this responsibility to others
- expand state k-12 student-level database to include children receiving early childhood services or not

Only a couple of these design choices (targeted vs. universal and requirements for teacher credentials) are informed by decent research evidence. For all the rest, there is almost no relevant evidence, much less anything from credible research. Further, the list of important public policy design questions could be much longer, and most items in the present list subsume a set of subordinate questions for which there is also little or no evidence. For example, the decision to provide accountability through regulatory oversight of the performance of individual early childhood centers generates dozens of unanswered questions about how to do so.

In short, we know very little about nearly all of the decisions that policymakers with a relative clean slate of early childhood options ought to have on the table – and for many states it is a nearly clean slate.

Further complicating the matter is the role to give to parents in deciding what they want for their young children. Wherever people think the dividing line should lie between the authority of parents vs. the authority of the state in determining the content of a child's education, nearly everyone agrees that the line shifts towards parents in the period in a child's life prior to the beginning of formal education. Some parents will be as intent on homeschooling their preschoolers as they are their school-aged children. Some will want center-based care for their young children that has an explicit moral or religious grounding whereas others will take exception to that. Some will want a curriculum that has a pre-academic emphasis, e.g., building math skills, whereas others will want a play-focused program, and still others will want a program that develops social relationships. Some will want a part-day program whereas others will want or need full day. Some will prefer a family setting for out-of-home care whereas others will want their child in a classroom at a center. Some will want or need out-of-home care for their toddler whereas others will not want their child to be in a center until he or she is at least four years of age. Some will want their children to experience a diverse set of classmates whereas others will want their children to be with children with similar backgrounds.

Desirable elements of federal pre-k policy

1) Target families with financial need

There is no compelling reason that flows from the long-term well being of children for the federal government to expend resources on universal pre-K programs. Existing research demonstrates that higher income parents receive a disproportionate financial benefit from universal programs because

they shift their preschoolers from care they would have paid for themselves to care that is paid for by the taxpayer. At the same time, children of higher income, educated parents benefit far less from preschool, if they benefit at all, than children from disadvantaged programs. If the goal of federal or state programs is to create access, increase participation, and decrease gaps in school readiness, covering the childcare expenses of families that can afford to cover their own costs is counter productive. Federal expenditures should be targeted on families that cannot otherwise afford childcare.

2) Devolve administration to the states

States have critical roles to play in administering federal funds for early childhood services in a) establishing licensing and oversight processes that rid the childcare market of service providers that do harm or commit fraud, b) collecting information on the quality and effectiveness of center-based childcare providers and assuring that parents avail themselves of it, and c) designing a system of early childhood services that reflects the preferences of the citizens of the state. The federal government currently operates 45 programs that support early child care and related services to children from birth through age 5, as well as five tax provisions that subsidize private expenditures in this area. Each program has its own requirements and each represents a challenge to individual states that are trying to design and implement programs. It would be far better, in my view, for the federal government to provide funding to states to support early child care on a formula basis, requiring that states use the money to assure access for lower income families and to carry out the three critical roles described above.

3) Allow parents the maximum amount of choice consistent with the laws and regulations of the state in which they live

Whatever the reasons for the prevalent practice of assigning school-aged children to the public school closest to their place of residence, our lack of knowledge of what works best for whom under what circumstances in preschool as well as the deference we should afford parents in how they want to rear and educate their young children argue for giving states the maximum leeway to support parent choice in early childcare. Some states will fully embrace choice by providing families a means-tested voucher to be used as they see fit to obtain early childhood services from any provider the state licenses. Others will want a system that is more constrained for parents, e.g., by funneling funds through school districts. That is the nature of our federal system. The variety in the types of services that will emerge between and within states if the federal government allows states maximum flexibility in their use of federal funds for early childcare is desirable both in terms of our knowledge of what works as well as our ability to learn as we go.

4) Invest in the data systems and research that will inform state actions and parental choice

Anyone who tries to map the landscape of early childhood services in the U.S. quickly understands how little reliable data exist on who is served, by whom, with what forms of funding. Other than a couple of federal longitudinal studies and questions that the Census Bureau asks as part of the Current Population Survey, even simple descriptive information is absent or questionable. This affects both policymakers and parents. The federal government should require states receiving federal funds for early childcare and related services to extend their statewide longitudinal databases to include preschoolers. Without

being able to follow children as they move through the system, everyone interested in improving quality and access is flying blind, including parents who need to make informed choices with respect to their own children.

The federal government should expand its investment in the science of early childhood education. And when knowledge is produced from that investment that should find its way into practice, the federal government should provide incentives for uptake by the states. As an example, federally sponsored research has demonstrated that teacher credentials bear scant if any relationship to teacher effectiveness, and that the teacher to which a child is assigned is far more important that the aggregate quality of the school the child attends. In light of this knowledge, the federal government could provide competitive grants for states to measure on-the-job performance by teachers and caregivers in early childhood settings, and to use that information to establish policies that encourage good teachers to stay in the classroom.

A way forward

Much of what I see as desirable elements of federal policy on early childcare and services has been incorporated in this committee's bipartisan effort that led to the Senate's passage by a vote of 96-2 of the Child Care and Development Block Grant Act of 2014 (S. 1086). This legislation provides for parental choice in early childhood services, allows states to administer block grant funds with substantial flexibility, targets expenditures on low-income families, and requires states to fulfill fundamental responsibilities with respect to the quality and continuity of services.

Federal support for childcare for poor families, if designed along the lines of the template in the CCDBG reauthorization, would enable parents to work, live productive lives, and raise their children in keeping with their values. It would allow states to innovate and parents to take advantage of information on the child care services available to them. This time of high interest in the expansion of government support of early childhood programs is an ideal one for the federal government to rethink its investments. Don't provide 45 different programs with many strings attached. Provide one. Design it so that it places key responsibilities with states and parents and has a structure that generates continuous feedback and opportunities for improvement. We need systems and services that help children learn and that, likewise, can adapt to experience. We don't know what works best, but that doesn't mean we shouldn't act.

Early childhood is a period of life for which evolutionary processes have endowed the human species with an absolute need for extended social dependency and opportunities to learn from caretakers, and that brain science indicates is our most active period of neurological development. The very factors that make early childhood a critical period for children also make it a challenging one for parents, particular for those who do not have the financial means to purchase help when they need out-of-home care for their children. I strongly support taxpayer expenditure on these young children and their families. But a shared commitment to public investment in lower-income families with young children doesn't mean we know which programs that are intended to help will do so at all, much less in the most productive way. We should not to be hobbled by consensus views that arise largely in an evidence-free zone grounded on little more than high hopes. We need to acknowledge how much we don't know and

proceed in a humble spirit of discovery. If we are prepared to learn and adapt as we go, the prospects are exciting.