A recent report published by a new project at Brookings called “Evidence Speaks” claims that advocates exaggerate unmet need as well as the cost of universal pre-kindergarten (UPK). It estimates that 69 percent of all four-year-olds already attend preschool and that universal access tops out at 80 percent enrollment. To close this modest gap, the report proposes a means-tested subsidy for half-day preschool that fully funds only those in poverty. The estimated cost is $2 to $4 billion per year. Unfortunately, the report vastly underestimates unmet need and costs; both estimates are based on serious factual errors and unfounded assumptions. Access to high-quality preschool (as opposed to attendance in any preschool classroom) for four-year-olds is under 25 percent, not 69 percent. High-quality UPK could enroll more than 90 percent, not 80 percent, of children. Enrollment rates go up with better policy design. Also, the Brookings plan would leave one in five children in low-income families with no access to any preschool education and, since the plan ignores dosage and quality, would leave many more in weak or ineffective programs. The report’s conclusions regarding needs and the costs to meet them are invalid and misleading, and it should not be used as a basis for policymaking.
This is one of a series of Think Twice think tank reviews made possible in part by funding from the Great Lakes Center for Education Research and Practice. It is also available at http://greatlakescenter.org.

This material is provided free of cost to NEPC’s readers, who may make non-commercial use of the material as long as NEPC and its author(s) are credited as the source. For inquiries about commercial use, please contact NEPC at nepc@colorado.edu.
I. Introduction

In the last several decades preschool education has become prominent on the education policy agenda. Evidence that high quality preschool education can enhance children’s learning and development with long-term benefits for children and taxpayers has contributed to this rise. As policymakers develop and implement legislation to expand access to high-quality preschool education, the first questions to arise are: who has access now, and who will gain access under alternative policies. The latter is a key point of contention in debates between proponents of targeted vs. universal public programs. Whatever one’s opinion, good estimates of current levels of access, expected take up rates (i.e., the number of children from different backgrounds who will enroll in the new program) and the costs of increasing access are important. In *Do we already have universal preschool?* Grover Whitehurst and Ellie Klein claim to produce better estimates of all of these. Unfortunately, the report introduces more confusion than clarity on its way to conclusions about access and the cost of “universal preschool.”

II. Findings and Conclusions of the Report

The report contends that advocates of universal preschool use misleading figures to exaggerate the unmet needs for high-quality preschool education and the new spending required to meet those needs. The Obama administration is criticized for: (1) aggregating figures for three- and four-year-olds when policymakers are focused only on four-year-olds; and (2) relying on the Current Population Survey (CPS), which is likely to underestimate preschool participation because it asks misleading questions. The report faults the Economic Policy Institute (EPI), for reporting “primary care arrangements” as this does not include the center enrollment of children who spend most of their nonparental care hours in another type of child care. The report suggests advocates seek to mislead the public about enrollment disparities by socioeconomic status (SES) as well as about program levels.

Relying on the same data set as EPI, this report finds that 69 percent of all children attend pre-K the year before attending kindergarten, 14 percentage points higher than the EPI figure. The report claims that this figure gives a very different impression of unmet
needs from the administration’s combined estimates for three- and four-year olds. The report also finds that participation rates vary considerably by SES, though their estimated levels of participation at age four are higher for all groups than EPI’s and than the administration’s average for three- and four-year-olds.

Ultimately, the report concludes that unmet needs for preschool are modest and that the cost to meet that need is much smaller than others claim. It estimates that universal access to high-quality preschool could be provided for less than $2 billion annually. An “extreme” upper bound estimate of $4 billion per year is presented that takes into account shifts from private to public programs. These figures are contrasted with an Obama administration Preschool for All proposal said to cost $12 billion annually.

III. The Report’s Rationale for its Findings and Conclusions

It is expected that preschool will be a prominent education issue in the 2016 presidential race. The rationale for this report’s conclusions is that others have used misleading estimates to advocate for and formulate federal preschool policy proposals. By using the “right numbers” for need and being clear about the program provided, this report seeks to provide a better basis for debate and sound policy proposals for universal preschool.

IV. The Report’s Use of Research Literature

The report’s findings and conclusions depend on strong assumptions about preschool programs and behavior. The report makes little use of research in making those assumptions, citing just a handful of studies. This review identifies key assumptions that might have been different if research had better informed the report. Recourse to comprehensive data on state preschool programs would have provided examples of enrollment above 90 percent in states (and D.C.) with UPK and would have led the authors to estimate a higher target enrollment rate. Had the report looked beyond one source from 1996 regarding Hispanic preferences for preschool, it would have found more recent studies rejecting the idea that Hispanics disfavor classroom-based programs for four-year-olds and raising other issues regarding barriers to participation. The report’s decision to base costs on a half-day program conflicts with research findings that full-day programs increase attendance and learning gains. Similarly, research finding that mixed SES programs generate larger learning gains for disadvantaged students through peer effects is not addressed. Likewise, the fact that children from middle- to high-income families can benefit from public preschool is not addressed. Further, examining the evidence on the limitations of means-testing might have altered the decision to rely on this mechanism to expand access.
V. Review of the Report’s Methods

The methodology of this report can be divided into three steps. The first is estimating current enrollment. The second is estimating how many children will actually enroll if universal preschool is offered. The difference between the two is defined as unmet need. The third is estimating the cost to meet that need. The methodology for each step is addressed separately below.

Current Enrollment

The report devotes most of its attention to attacking other estimates rather than obtaining a new more accurate estimate. The Obama administration is criticized for reporting combined enrollment in center-based programs at ages three and four based on the Current Population Survey (CPS). These figures show that enrollment falls substantially as parental education declines with a 20 percent gap between mothers of high school dropouts and mothers of college graduates, though even college graduates children had a participation rate of just 60% in recent years. The report’s criticism of these numbers is two-fold. First, it alleges “misleading aggregation” because policy makers are said to focus only on four-year-olds (p.3). In addition, the report claims that: “a substantial portion of the lower enrollment rates for three-year-olds is probably due to parental preference not to enroll … in regular school” (p.3). Second, they argue that the CPS asks “misleading questions” because it asks if a child is enrolled “in regular school” (p.3).

The report also cites a figure of 55% percent participation in the year before kindergarten from the Economic Policy Institute (EPI), accompanied by estimates that 44% of the lowest socioeconomic (SES) quintile and 70 percent of the highest SES quintile attended preschool in the year prior to kindergarten. They fault EPI for reporting from the Early Childhood Longitudinal Survey Kindergarten Class of 2010 (ECLS-K) the percentage whose “primary care arrangement” (the non-parental arrangement in which the child spends the most time) is a center rather than the percentage that attended any preschool center for any amount of time (p.4).

As the best estimate of the percentage enrolled, the report relies on the percentage regularly attending in the year prior to kindergarten obtained from the ECLS-K. This estimate is 69 percent. The report also finds that enrollment varies substantially by SES quintile, from 50 percent for the lowest quintile to 83 percent for the highest. Substantial differences by ethnicity are found, with Hispanic participation 18 percentage points below that for White non-Hispanic children. The report states that some of part of this difference may reflect cultural values rather than lack of access “in that Hispanics prefer home-based” care. However, the report does note that this pattern is undesirable, as Hispanic children have been found to benefit more than others from attending preschool.

The report’s attacks on the Obama administration’s figures are misguided in at least two respects. First, policymakers are interested in high-quality preschool for three-year-olds.
Head Start serves substantial numbers of three-year-olds as do a few states. The Obama administration has proposed a set of policies to address access to high-quality early care and education for children from birth to five including Head Start improvement and expansion. Second, the CPS figures employed by the administration yield nearly the same estimates of enrollment at age four and disparities in enrollment as the report’s favored source. Apparently, the CPS does not ask a substantially misleading question or at least it is no more misleading than the ECLS-K question.

The EPI figure seems more readily faulted as an undercount. However, the ECLS-K estimate favored by the Brookings report counts any preschool participation regardless of how few hours. Some preschool programs provide as few as two hours a day, two or three days per week. Vermont requires a minimum of just 10 hours per week in its state-funded preschool program. Such programs might have very weak educational benefits. Moreover, education is only one purpose of preschool programs; they also provide child care. A more useful estimate would classify enrollment based on the hours each child receives.

One of the most serious shortcomings of the Brookings report is how it uses the estimated enrollment figure as it ignores program quality. “High-quality” preschool is necessary to produce the benefits that justify expanded public investment in preschool programs. Yet, the estimates of current enrollment used by the report are for enrollment in any kind of program. Unfortunately, most programs that children attend at age four are not high quality, including far too many that are publicly funded.

An estimate of the percentage of four-year-olds who attend high-quality preschool is the percentage in classrooms that score “good” or better in direct observation using the Early Childhood Environment Rating Scale--Revised Edition (ECERS-R). Some may consider even this score on the ECERS-R to be too low a bar for high quality. Data from the Early Childhood Longitudinal Study--Birth Cohort (ECLS-B) reveal that in 2005 the percentage of four-year-old center-based enrollment rated good or better on the ECERS-R was just 35 percent in the bottom SES quintile, 32 percent in the 3 middle quintiles and 41 percent in the top quintiles. Adjusting the Brookings report’s estimates of enrollment for quality yields the following estimates of enrollment in high quality: 18 percent in the bottom quintile, 19 percent in the second, 22 percent in the middle, 25 percent in the fourth, and 34 percent in the top quintile. If overall enrollment is 69 percent, enrollment in high quality is at best 24 percent. However, this estimate fails to account for program duration, which also influences preschool effectiveness.

Unmet Need

To estimate unmet need the Brookings report assumes a participation ceiling of 80 percent, citing “three states that offer universal free pre-K” (Georgia, Florida, and Oklahoma). As the highest enrollment rate among these is 79 percent of four-year-olds and participation for the top SES quintile nationally is 83 percent, the report characterizes 80 percent as an upper bound that is likely higher than can actually be achieved. This
80 percent is set as the goal from which is subtracted the CPS participation rate for each quintile resulting in unmet needs of: 30 percent for the lowest quintile, 21 percent for the second, 12 percent for the middle, 3 percent for the fourth, and none for the top.

Why unmet need should be defined based on current enrollment is not adequately explained. Need could be defined based on the potential for children to benefit from high-quality preschool. From this perspective the goal should be 100 percent for the bottom two SES quintiles, and a case can be made to apply this to all children.\(^\text{14}\) From this perspective, it is unacceptable to design a universal preschool program in which 20 percent of children in poverty do not participate. As a practical matter reasons that children do not currently participate in programs include: poor outreach, limited hours and no transportation, document requirements, and insensitivity to language and culture.\(^\text{15}\) Who participates is shaped by program design rather than predetermined.

However, even adopting the report’s perspective on need, it has made a serious error. Participation rates in state-funded preschool programs in Vermont and Washington, DC exceed 90 percent at age four.\(^\text{16}\) The participation rates in the states cited by the report reflect restrictions on access--of those three only Florida offers every family access. Moreover, Florida’s program has low standards and funding; many low-income families opt to stay in Head Start, which is not integrated in Florida’s preschool program. When Head Start and special education enrollments are included, 90 percent of Florida four-year-olds are seen to be in public programs. Accurate assessments of enrollment in the states and DC reveal that five states enroll more than 89 percent of four-year-olds in public preschool at age four.\(^\text{17}\)

### Cost and Program Design

The report estimates the cost of providing access to universal high-quality preschool through an “income-based” subsidy. The proposed plan offers a full subsidy to families in the lowest quintile, a 50 percent subsidy to the next quintile, a 25 percent subsidy to the middle quintile, and nothing to the two top quintiles. Average cost per child is set at $5,500 per child for a half-day program. The report’s rationale for a half-day is that full-day costs are so high that they are “politically improbable” (p.6). The $5,500 figure is said to be “likely on the high side” because preschool programs often pay teachers less than K-12 schools and are frequently operated by non-profits rather than public schools (p.6). That low pay might be inconsistent with high quality is not considered. With a population of 4 million four-year-olds, the report’s estimated national cost of addressing the unmet need is $1.91 billion annually.

This initial cost estimate assumes that no families switch from privately paid programs to the public subsidy. As this is unrealistic, the report produces a second estimate assuming that 80 percent of four-year-olds in the second and third quintiles currently receive no subsidy and enroll in the new public program. No changes are incorporated for the other quintiles. It is assumed no one in the bottom quintile pays for private preschool, and the
top two quintiles are not funded. The new estimate is then $3.96 billion annually or $40 billion over 10 years. The report characterizes this as “an extreme outside” figure that neglects efficiencies that might be obtained by redesigning the current “$20+ billion dollar federal expenditures on early care and learning” (p. 7).

As noted earlier, high-quality full-day preschool programs have been found to have larger effects on learning and development than do half-day programs. This makes length of day an important policy choice that influences not just cost, but benefits. In addition, to the benefit for child development, full-day programs better meet family needs for child care (even if other care can be arranged, parents have difficulty with drop-off and pickup in the middle of a work day) and reduce family expenses for child care allowing this money to be spent on other child and family needs. The report considers none of these benefits.

The means-tested half-day program put forward by the report has limitations beyond the length of day. Program effectiveness depends in part on peers and means testing discourages participation of children from higher SES families.\(^\text{18}\) The proposed approach provides for no participation by children in the top two quintiles and a weak incentive for those in the middle quintile.\(^\text{19}\) Would a voucher program lead to mixed SES classrooms? This question might have been addressed with evidence, but was not.

No analysis is presented regarding the effects of the sliding fee scale on take-up. Requiring low-income families in the second quintile to pay $2,250 per child and families in the middle quintile to pay $4,125 for a half-day program would reduce their willingness to participate. These costs are higher than such families typically pay at private centers for 540 hours: $1,350 at the 25\(^{th}\) percentile, $1944 at the median and $3294 at the 75\(^{th}\) percentile.\(^\text{20}\) Access to care by otherwise unemployed family members and to child care subsidies would affect participation rates even in the absence of fees and despite the low quality of most centers. Many parents do not seem to recognize the quality problem.\(^\text{21}\)

**VI. Review of the Validity of the Report’s Findings and Conclusions**

The Brookings report questions the need for large public investments in preschool education claiming that advocates use misleading estimates of unmet need to justify unnecessary spending. The report suggests that the United States is already near universal access and proposes to solve the remaining problem at a cost of $2 billion. The report concludes with an expression of hope that presidential candidates will “use the right numbers on present need” and “be clear about the nature of the new programs they are proposing” (p.7).

Unfortunately, the right numbers are nowhere to be found in the report. It errs from the very beginning by assuming that universal enrollment (in public and private programs) would be no more than 80 percent for any income quintile. Just using accurate estimates of current enrollment where preschool programs are offered to all children to set the
enrollment goal for UPK would have roughly doubled the report’s estimated unmet need. Moreover, the report ignores the difference between a high-quality preschool of sufficient dosage and any preschool program. As a result, the report greatly underestimates both unmet need and the cost of public policies to meet that need.

More accurate estimates of potential and current participation rates result in very different conclusions. Applying national estimates of high-quality (defined as ECERS-R >= 5) to the Brookings report’s estimates of enrollment at age four yields the following estimates of enrollment in high-quality programs (regardless of hours) by SES quintile from low to high: 17 percent, 19 percent, 22 percent, 25 percent, and 33 percent.\textsuperscript{22} To turn this around, more than 80 percent of four-year-olds in the two bottom quintiles alone are not enrolled in high quality preschool--1.3 million children. If policymakers set as a goal to enroll 90 percent of all four-year-olds in high-quality programs, unmet need for the entire population would be 2.75 million. Such estimates are not an extreme upper bound on need. Higher enrollment rates have been achieved in Europe and the United States.\textsuperscript{23}

The validity of the report’s ultimate conclusion that universal high-quality preschool could be provided to all four-year-olds in the United States for $2 to $4 billion per year is undermined by two other major limitations. First, it relies on a sliding fee scale that requires even families just barely above the poverty line to pay 50 percent of the cost. No evidence is presented to support the assumption that families would be willing and able to pay the fee and attend. Second, the report not only ignores the cost of raising quality, it neglects the costs of offering a full school day 5 days per week when many existing programs are half-day and operate less than five days per week.\textsuperscript{24}

\textbf{VII. Usefulness of the Report for Guidance of Policy and Practice}

The Brookings report raises important questions about unmet needs for high-quality preschool education and the cost of meeting those needs. However, it fails to provide accurate, evidence-based answers. The report’s claim that unmet need is small and can be addressed with $2 to $4 billion per year in additional spending is based on serious errors and unfounded assumptions. The plan put forward leaves one in five children in poor and low-income families with no access to preschool education of any kind. Many more are consigned to ineffective programs. The report’s plan ignores the problems of inadequate hours and quality. It also ignores the needs of children in moderate and higher income families and the benefits to low-income children from including peers from more diverse backgrounds. As a consequence, the report is not just unhelpful, it is misleading.
Notes and References


8 See https://www.whitehouse.gov/issues/education/early-childhood


http://nepc.colorado.edu/thinktank/review-universal-preschool 10 of 13
What We Know, How Public Policy Is or Is Not Aligned With the Evidence Base, and What We Need to Know. *Psychological Science in the Public Interest, 10*(2), 49–88.


The quintiles used in the report are for SES, which depends on parental education and occupation as well as income. Presumably, eligibility for a public subsidy would be based on a family income rather than a complex calculation of SES. This likely has a small impact on results as preschool center participation is slightly less unequal by income than by SES while quality (if a child attends) is slightly more unequal by income than SES.


