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School Readiness and International Developments in Early Childhood Education and Care

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Subject

One major concern in many industrialized countries is that a large number of children enter primary school, and even kindergarten or its equivalent, with widely differing levels of preparation for formal schooling or *school readiness*.[a] When school readiness is narrowly understood, the emphasis is to prepare or *ready* children so that they develop a specific set of academic skills and abilities--follow directions, demonstrate reading and reasoning skills, and carry out independent work[1]--by the time they enter school. In contrast, the U.S. National Education Goals Panel[b] took a broader approach, arguing that school readiness encompasses five dimensions: physical well-being and motor development, social and emotional development, language usage, cognition, and general knowledge.[2] It is this broader definition, which has international applicability, that frames this discussion, with special attention to academic and related skills.

Research has found that on starting kindergarten, children who participated in high quality, model preschool programs were significantly more advanced in key areas of development than those who were in parental or informal care.[1] The key areas were language, literacy and reasoning skills, and children's concepts and understanding of the world around them. Former preschool participants were more eager to learn and try new things and less likely to be retained in a grade or placed in a special education class.[3] Of particular importance, these results were disproportionately achieved by disadvantaged children.[4,5]

Problems

Because children's readiness to learn is so strongly associated with future school performance, children who enter kindergarten less ready than their peers are unlikely to ever close the achievement gap. Given this concern, there is growing interest with regard to which programs are successful in achieving readiness goals. What does research tell us about the impact of ECEC programs on school readiness? And what are the implications for early childhood education and care (ECEC) policy and program development?

Research Context

Most of the research on school readiness has been conducted in the U.S. Most of the U.S. research on the impact of ECEC on school readiness has highlighted two small-scale, random-assignment, experimental model programs: the High/Scope Perry Preschool Program and the Carolina Abecedarian Study. These studies found that high quality early childhood education can have large and significant effects on school readiness, produce both short- and long-term cognitive and academic benefits for children from disadvantaged backgrounds, and that the positive effects are disproportionately larger for disadvantaged children.[4,5,6,7,8] A second focus has been on Head Start, the large scale compensatory education program now serving, primarily, 3- to 4-year-olds, designed to remedy the deficiencies disadvantaged children face when they start school. Studies of this program found that participation brings short-term benefits to children's cognitive and socio-emotional development, but these positive impacts have been found to fade out by around the third grade.[5,6,8,9] There is some debate regarding whether such fade-out is a problem of the program or is related to the poor schools attended by these children once they leave the program.

In contrast, we know much less about the effects of the typical preschool programs that most children experience in the U.S. and other English-speaking countries. Generally, these are more

diverse, pro grammatically and in terms of the children served, and are of lower quality and lower cost than the model programs or Head Start. Several studies of such programs have demonstrated significant positive benefits and produced important results in terms of preparation for entry into primary school. In several cases, cognitive gains during the early childhood years were sustained through the early school years.

Recent Research Results

Magnusson, Ruhm and Waldfogel (2004)[10] focus on school readiness using data from the Early Childhood Longitudinal Study–Kindergarten Class of 1998-99 (ECLS-K), a large nationally representative sample of children who entered kindergarten in the fall of 1998. The overall finding is that children who attended prekindergarten programs entered primary school more ready to learn and had better math and reading performance at school entry. As well, there were more lasting cognitive gains for disadvantaged children.

Other U.S. studies finding positive school readiness outcomes include: the Chicago Child Care study, the Cost, Quality and Child Outcomes study, the National Institute of Child Health and Human Development (NICHD) Study of Early Childcare, the Southern Regional Education Board (SREB) study, and a study of a universal preschool program in Tulsa, Oklahoma, that concluded that regardless of race, ethnicity, and/or family income, the children who participated in the program demonstrated enhanced school readiness as compared with a similar group of children who did not participate. [11]

Several international studies reached the same conclusions, including the Swedish longitudinal studies,[12,13] a New Zealand longitudinal study (Competent Children's Project), and a more recent British study, the Effective Provision of Pre-School Education (EPPE) project.[c] The New Zealand study found that literacy, math, and social skills were sustained even at age 20.

Implications

Six lessons from this ECEC research are clear and generalizable internationally:

First, expanding access to ECEC for 3- to 4-year-olds is a key policy for enhancing child well-being, in general, and school readiness, in particular. Research has documented that preschool education can significantly improve primary school readiness and school performance and enhance overall child development. Children who participate in preschool programs are more

likely to have better language skills, better verbal skills, better arithmetic skills, and consistently higher reading achievement scores. They are more interested in school when they attend primary school: They are more motivated to learn, to attend school, and to complete assignments and are more likely to have long term academic success. The universal preschool programs in Denmark, France, Italy, and Sweden are preschool exemplars, in which almost all children of 3 to 4 years old are enrolled.

Second, there is a growing body of evidence that quality can make a difference although the debate about the definition of quality continues. Children who receive high quality ECEC (defined as high staff-to-child ratios, small groups, and qualified/trained staff) are likely to demonstrate better cognitive and language abilities while those in lower quality settings are more likely to have difficulties with language, social, and behavior skills.[14] Moreover, benefits for children of well-designed, intensive forms of ECEC (i.e., which are responsive to children's needs and use good pedagogy) are less likely to fade out than those that are merely designed for custodial purposes.

Third, disadvantaged children benefit significantly more from a good quality preschool experience than more advantaged children. Preschool attendance can narrow the achievement gaps faced by disadvantaged children.

Fourth, there is an emerging trend toward integrating the education and care services into one system, increasingly into the educational system, a development likely to result in greater public support and higher quality programs. Sweden, New Zealand, Spain, Scotland, and the UK have already implemented this system.

Fifth, making preschool programs a full school-day program rather than a very short day, appears to lead to more positive outcomes. [15] The Scandinavian programs cover the full workday and the French preschool covers a long school day with after-school programs.[16]

Sixth, there is a growing need to pay more attention to policies and programs for parents with children under 3 years old, in particular parental leave policies. The EU provides statutory maternity and parental leaves ranging from 6 months to 3 years and Canada provides one year.

Conclusions

Promoting school readiness has emerged as an increasingly important factor in driving ECEC policy and program initiatives, supplementing the existing influence of high labor force

participation rates of women with young children, with a goal of increasing human capital. As a result, countries are increasingly expanding the supply of ECEC places, especially for 3- and 4-year-olds (there is largely universal coverage in preschool or primary school for the year preceding compulsory school entry), and beginning to pay more attention to children under 3 years old.

A new report issued by UNESCO (2006)[17] reminds us that despite well-documented benefits on all aspects of child development and child well-being, ECEC remains the "forgotten link in the education chain" even for the 3- and 4-year-olds in much of the world. Especially important, about half of the world's countries have no early childhood care and education policy for children under 3 years old.

The European Commission has taken an explicit position with regard to access. At the Barcelona summit in 2002, explicit targets were set with regard to ECEC arrangements. The commission agreed that "Member States should remove disincentives to female labor force participation and strive, taking into account the demand for childcare facilities and in line with national patterns of provision, to provide childcare by 2010 to at least 90% of children between 3 years old and the mandatory school age and at least 33% of children under 3 years of age".[18] About half of the EU-25 countries have achieved the goal for the 3-, 4-, and 5-year-olds, in particular the Scandinavian countries, Belgium, France, and Italy. The UK and Netherlands are approaching this goal. If coverage for children under 3 years old includes paid and job protected maternity and parental leaves, as well as services, this goal is close to being achieved as well.

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Notes:

[a] *Kindergarten* in the U.S. is the year before compulsory school begins. It is universal, free, and voluntary and is attended by almost all 5-year-olds. It is viewed as the transitional year, before formal schooling begins.

[b] U.S. bipartisan and intergovernmental body of federal and state officials created in July 1990 to assess and report state and national progress toward achieving national education goals.

[c] An important, large scale, longitudinal study--Effective Provision of Pre-School Education (EPPE) Project and Effective Pre-School and Primary Education 3-11 (EPPE–3-11) is currently being carried out in the UK, funded by the UK Department of Education and Skills. The findings agree with those of the U.S. research reported here.