Meeting the Needs of Children and Families
with Schools of the 21st Century

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In many schools across the United States, educators are opening their doors to children as young as three or four years of age or even younger. Although much of this attention concentrates on providing disadvantaged children with preschool education, an increasing number of schools are beginning to address the needs of children and families of all incomes by offering child care and family support services not traditionally associated with public education. This recent increase in interest among educators reflects the growing awareness that high quality early childhood education enhances school readiness and prevents later social problems. Educators acknowledge that the current inadequate supply of high quality child care services potentially harms families and children. This is of broad concern because the negative consequences of poor-quality care, or the lack of care, may hurt children's performance throughout their tenure in the education system. In this Article, we discuss the School of the 21st Century—an education reform initiative designed to address the nation's child care problem while enhancing the capacity of schools to meet the educational needs of all children.

The School of the 21st Century, conceptualized by Dr. Edward Zigler in 1987 and prepared for national implementation at the Yale Bush Center, is a comprehensive program of child care and family support services located in and offered through a well recognized, widely used institution—the public school. The underlying theory of this program assumes that children at any age have the capacity to learn. Further, learning is a dynamic process that begins at birth and occurs not only in the classroom but also in any setting where children spend time. By improving the quality of children's experiences in the classroom and in other settings, and integrating the two, schools can create the infrastructure necessary to optimize the growth and development of children.

The School of the 21st Century is not a program per se, but a constellation of services available to children and their families through the neighborhood school. The program includes two child care components, one for preschool age children and the other for school-age children. The school also has three outreach components: (1) home visitation for parents of children from birth

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to age three; (2) support and training for family day care providers; and (3) information and referral services. Once implemented and integrated into the school system, the services become expected ingredients of the school. To date, the program has been implemented in school districts in seven states around the country.

Before we describe the School of the 21st Century in more detail, it is important to examine the need for the program and the rationale underlying its development.

I. THE PROBLEM

In 1970, the White House Conference on Children voted child care the most serious problem facing America’s families. Despite worthy attempts to deal with the issue over the past two decades, the United States has not developed a comprehensive solution to the child care problem. In fact, the “problem” has grown so pervasive that it is now known as the child care crisis. Virtually everyone—working parents, school administrators, chief executives of major corporations, and legislators—is discussing the need for good quality, affordable, child care; however, as the problem worsens, we are still far from resolving it.

A. Demographic Pressures and Societal Changes

A brief look at current demographics reveals the magnitude of the child care crisis. Two significant changes in family life have created an unprecedented demand for child care in the U.S. over the past two decades. First, the number of women, particularly those with young children, employed in the out-of-home labor force has increased. Second, the number of single-parent households also has risen. Today, sixty-five percent of mothers of school-aged children are in the out-of-home workforce. For mothers of preschoolers, that number is about fifty percent.\(^1\) Even more striking than this increase is the fact that fifty-two percent of women with infants work outside of the home.\(^2\) Demographic projections indicate that by 1995, about three-quarters of all children will have a working mother.\(^3\)

Unquestionably, the worsening economy has contributed to these changes in family life, and the majority of women work primarily for economic reasons. In 1989, the Select Committee on Children, Youth, and Families

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reported that in two-parent homes, sixty-eight percent of employed mothers had husbands who earned $15,000 to $19,000 annually. Of the working mothers of preschoolers, sixty percent were married to men earning less than $25,000. Clearly, both husband and wife must now work to provide their family a decent standard of living.

For single-parent families, the situation is even more desperate. Although single-parent families do not comprise a homogeneous group, they may be generally characterized as female-headed, living below the adjusted poverty level, and having children under the age of five. In 1988, approximately one-half of all single mothers had incomes below half the adjusted poverty line. Today in the United States, approximately one in four children live with only one parent; among African-Americans, that number is more than half.

For single parents, child care is a required condition for employment. Without it, their only alternative seems to be to go on welfare to support their children. Therefore, the accessibility of child care is a particularly pressing need for these parents, one that will determine their children’s security and future. The 1988 Family Support Act includes provisions for child care for women with children over the age of 3 who are required to work or participate in job training as a condition for receiving welfare.

These demographic and societal changes place an enormous burden on parents, creating stressful conditions which permeate the entire family system. A 1987 survey revealed that more than forty percent of employed parents, both men and women, experience stress, conflict, and guilt in their attempts to balance work and family responsibilities. Because social policies in the United States have not kept pace with societal changes and the realities of family life, few supports exist to assist families. The effects of this discord are noticeable in children, an increasing number of whom are unable to cope with the demands of school, family, and peer relationships.

Undoubtedly, child care is a real or potential issue for the majority of parents in the United States. The effect of widespread nonparental care on the development of children also affects (negatively, some believe) the education system. Although researchers for the most part agree that high quality child

5. CHILD CARE ACTION CAMPAIGN, CHILD CARE: THE BOTTOM LINE 68 (Barbara Reisman et al. eds., 1988) [hereinafter BOTTOM LINE].
care does not harm children, such quality care is not guaranteed in the vast non-system of child care that operates in the United States. As a result, a significant number of American children currently may experience subpar child care that compromises not only their chances for optimal development but also their potential for succeeding in school.

B. Standards of Quality

When parents select a child care setting, they are purchasing an environment where a good portion of their child’s rearing will occur, which undoubtedly will affect the child’s course of development. If the quality of the environment experienced by the child falls below a certain point, optimal development will be threatened. Standards of quality and their expression in licensing codes attempt to define this threshold objectively. Unfortunately, there are no consistent “standards” for quality across the United States.

In defining quality care, child care specialists distinguish between care that is developmentally appropriate for the age of the children and that which is merely custodial, where minimal attention is paid to the optimal development of children. The determinants of good quality care have been found to be stability of care, appropriate staff-to-child ratios and group sizes for the age of the children, and provider training. In terms of provider training, it has been shown that providers who have training in child development are more likely than other providers to be responsive to the individual needs of children and to ensure the optimal growth and development of children in their care.

Of further concern is the heterogeneity in the quality of child care offered in the hundreds of thousands of settings around the country. The National Child Care Staffing Study evaluated child care centers across the U.S. and found that the average quality was poor and that child care providers are not adequately trained or paid and have low social status. As of 1989, approximately fifty-seven percent of workers in the child care field worked for wages at or below five dollars per hour, and the annual employee turnover rate was forty percent, similar to that of gas station attendants. This high turnover rate is of particular concern since, for optimal development and later academic success in school, children need continuity of care.


13. WHO CARES FOR AMERICA'S CHILDREN?, supra note 7, at 87-90.

14. Id. at 89-90.

C. The Cost of Care

Any effort to resolve the child care crisis must be based on a thorough analysis of the problem and the identification of its various constituent units, one of which is the high cost of care. Although not much data exist on how much parents pay for child care, it is known that there is a direct relationship between cost (which ranges from $58 to $200 per week depending on the age of the child and the quality of the care)\textsuperscript{16} and quality of child care. It would therefore cost tens of billions of dollars to provide good quality care to all children in need in the United States.

The high cost of care is significant for at least two reasons. First, child care is a major expenditure for families, and the amount of money families spend on care is directly related to their income. Low-income families spend less in absolute terms on care than do higher income families, but the proportion of the family budget spent on child care is greater among low-income families, who may spend as much as twenty-three percent of their income on child care.\textsuperscript{17} Second, with cost and quality of care inextricably tied, we are witnessing the emergence of a tiered system of child care wherein the choices for low- and middle-income families are limited to low cost and, most likely, low quality services, while more affluent families can purchase quality care which will facilitate the optimal development of their children and ultimate success in school.

D. Availability of Care

Although a recent study addressed the supply of and demand for child care,\textsuperscript{18} little information is currently available on how many child care facilities exist and the characteristics of their staffs. Although information regarding demand—who uses or needs child care—is better, that database is also inadequate. As a result, there is confusion and disagreement regarding availability of care. Some argue that there is no shortage of child care facilities,\textsuperscript{19} while others contend that demand for child care outpaces supply.\textsuperscript{20} However, there is agreement on several points. First, demand for child care is going to increase, not only because of the growing presence of mothers in the labor force, but also because: a) after delaying childbearing, the "baby boom" generation is having children, and b) with the tightening of the labor market, there will

\textsuperscript{16} ZIGLER & LANG, supra note 12, at 9-10.
\textsuperscript{17} BOTTOM LINE, supra note 5, at 69.
\textsuperscript{19} BOTTOM LINE, supra note 5, at 30-31.
\textsuperscript{20} Id. at 32.
be fewer workers in many fields, including child care,\(^2\) thus widening the gap between demand for and availability of care.

Second, although there is agreement that many parents obtain needed child care, there is no guarantee that the services are of good quality. As noted earlier, the quality of care is determined in large part by the provider, with good quality care more likely to be offered by providers who have training in child development. Although there are many trained providers, the child care field is beset with problems of low salaries, virtually no benefits, and low status. Hence, it is difficult to attract and maintain qualified providers\(^2\) and staff turnover is extremely high. This potentially negatively affects children who need stability and consistency of care in order to ensure optimal development. The younger the child, the more important it is that he or she has the opportunity to rely on a consistent caregiver over time.

II. ATTEMPTS TOWARD A REALISTIC SOLUTION TO THE CHILD CARE PROBLEM

Attempts to create a more coherent child care structure have resulted in calls for both lesser and greater government involvement in child care. Some groups advocate limiting the role of government to granting tax credits for parents while others argue for increased government spending and involvement in such areas as the regulation of child care facilities. These and other views were represented in the hundreds of bills introduced in Congress in recent years, which culminated in the passage of the 1990 Child Care and Development Block Grant Act of 1990.\(^2\) In keeping with the New Federalism trend evidenced over the past decade, the law makes funding available to the states in the form of block grants, allowing allocation decisions to be made at the state level. To a certain extent, this presents a good opportunity, since each state can respond more readily to its population's needs. However, in light of the non-uniform standards for child care across the United States and the diversity of services which currently exist, this legislation does not represent any gain in terms of establishing a comprehensive, accessible, quality system of child care and family support in this country.

The greatest concern is that passage of the Child Care and Development Block Grant Act of 1990 may be counterproductive because while Congress views the Act as the solution to the child care problem in this country, it really only scratches the surface. In terms of better meeting existing child care needs, the impact of the Child Care Act will be negligible. For example, the law targets seventy-five percent of the block grant funding to serve low-income

\(^{21}\) Id. at 54.

\(^{22}\) WHITEBOOK, ET AL., supra note 15, at 157.

families.\textsuperscript{24} Currently in California, child care programs are able to serve approximately twenty-five percent of the low-income families in need of care.\textsuperscript{25} With funding from the Child Care Act, estimates indicate that these programs will be able to serve approximately thirty percent of them.\textsuperscript{26} Although an increase, the funding still falls far short of meeting the needs of all, or even most, low-income families.

III. GUIDING PRINCIPLES FOR A SYSTEM TO SUPPORT FAMILIES

In addition to providing for a comprehensive child care system, any child care policy that is developed \textit{must} be based on what we know from child development research on the needs of children and the programs that can successfully meet these needs. Toward this end, several guiding principles have been identified.\textsuperscript{27} First, the system must provide universal access to quality child care by subsidizing middle- and lower-income families with a sliding scale parental fee system, in addition to providing direct subsidies through federal, state, and/or local funding.

Second, child care must enable the optimal development of children and should focus on all domains of development, including physical, social, emotional, and cognitive. Third, child care must be predicated on a partnership between parents and providers. Successful programs, such as Head Start, have demonstrated that much of their success can be attributed to the active participation of parents in the services provided to their children.\textsuperscript{28}

The fourth guiding principle requires increased recognition and support of providers through training, the provision of benefits, and pay upgrades, underscoring the crucial role providers play in the quality of care that children receive. Fifth, any child care policy must ensure a flexible system that is adjustable to the needs of families, reflecting the importance in appreciating the heterogeneity of children and parents and their differing needs for child care and support.

Finally, we must build a stable, reliable, good quality child care \textit{system} that is integrated with the political economic structure of society and is tied to a recognized and easily accessible societal institution. The necessity of such a \textit{system} is apparent, given the current incoherent patchwork of child care and family support services in the United States.

\textsuperscript{26} Id.
\textsuperscript{27} Edward F. Zigler, \textit{Addressing the Nation's Child Care Crisis: The School of the Twenty-First Century}, 59 AM. J. ORTHOPSYCHIATRY 484 (1989).
\textsuperscript{28} \textit{PROJECT HEAD START: A LEGACY TO THE WAR ON POVERTY} (Edward Zigler & Jeanette Valentine eds., 1979).
IV. THE SCHOOL OF THE 21ST CENTURY

This need for a coordinated, accessible child care and family support system led to the conceptualization of the School of the 21st Century program. The program calls for implementing a child care system within the already existing educational system, where possible, making use of available school buildings. The components of the School of the 21st Century—child care programs for children ages three to twelve, parent education and support from birth to age three, information and referral, and outreach to family day care providers—not only ensure a comprehensive array of services for children and families, but also make possible continuity of care and support for children in order to provide the foundation on which subsequent learning occurs.

The strength and ultimate potential of the School of the 21st Century stems from its comprehensive nature and integration with the education system. By eliminating the distinction between child care and education, the model embraces and actualizes the notion that learning begins at birth and occurs in all settings, not just within the classroom. This guarantees the necessary consistency and enrichment opportunities necessary for children to realize their academic potential.

In a School of the 21st Century, the school is no longer seen as a building in which formal schooling is delivered during limited hours. Instead, the school becomes a place where formal schooling, child care, and family support occur together. The formal school operates, for example, from eight in the morning to three in the afternoon, nine months of the year. The school building, however, is open from six or seven in the morning to six in the evening, twelve months a year, to provide core child care and family support services. Existing school and community programs, such as Head Start, other preschool or after-school services, programs serving children with special needs, and so forth, become a part of the School of the 21st Century, which enables coordination of services, activities, and resource sharing.

A. Implementation Issues

Although numerous sites have successfully implemented Schools of the 21st Century, there are several issues associated with implementing the program that deserve attention. One concerns who operates the program. Given that professional educators, principals, and teachers are already overburdened and working tirelessly to enhance, or just maintain, the quality of schools, it is not appropriate to expect them to take on the responsibility of operating child care and family support services. Also, most school personnel do not have the training or expertise required for working with young children and their families. Instead, in the School of the 21st Century, services are headed by
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a person with a degree and training in early childhood education. The day-to-day care of children in the program is handled by staff trained in early childhood development, with preference for those with Child Development Associate credentials.

Another implementation issue concerns program funding. The ideal situation would call for the public to assume responsibility for supporting a system of child care, as is done for public education. In the current context, however, funding must be provided by parents, employers, taxpayers, or some combination thereof. Within this funding arrangement, it is important to acknowledge that, given the high cost of providing services of high quality, subsidies by all levels of government must be available, particularly for the working poor.

From a policy perspective, it is essential to approach the School of the 21st Century as an investment in human capital, not as a cost to be assessed in terms of present value. The long term benefits that school districts and society stand to realize by investing in this program are detailed in the Cornell consortium’s analysis of several major early childhood education efforts.29 These studies reveal numerous benefits associated with early education, including: improved grade retention rates, reduced usage of special education and other special services, fewer graduates on welfare, increased rates of college attendance, and decreases in delinquency and social problems.30 In terms of costs and benefits, a conservative estimate of the benefits suggests that for approximately every dollar invested in high-quality, developmentally appropriate preschool programs, a subsequent three dollar savings will be realized.31

Currently, the school districts that have implemented School of the 21st Century programs finance them in a variety of ways. Districts in Missouri, Kansas, Wyoming, and Colorado have implemented Schools of the 21st Century primarily through local initiatives and have received start-up financial assistance from community and corporate foundations.32 In Connecticut, legislation enacted in 1988 to implement three demonstration programs was broadened in 1989 to include funding for program development in five additional sites.33 In Kentucky, the program is part of the School Reform Act of 1990, which provides funding for the development of the program in 131 school districts beginning in July 1991.34

In all existing and future School of the 21st Century sites, once the programs are implemented, operational costs are covered through parental fees.

30. BERRUETA-CLEMENT, ET AL., supra note 29, at 21, 49, 63.
31. Id. at 90.
32. Working files, School of the 21st Century Division, Yale Bush Center in Child Development and Social Policy, New Haven, Conn. (Information on file with Authors).
for child care services on a sliding scale according to family income. In addition, federal and state subsidies are available for low-income families.

An important aspect of the School of the 21st Century is that the programs are expected to respond to the individual needs of the communities in which they are located. Therefore, to a certain extent, implementation varies by site depending on existing services and resources. Some of the services included may already exist in some form in school districts. For example, schools in most communities sponsor school-age and preschool child care programs, albeit in inadequate supply. Therefore, it is not necessary for all school districts to initiate a whole new set of services. Rather, the program can be fashioned to implement needed services and serve as the hub to coordinate new services with pre-existing services. The goal is to maximize resources, ensure quality programming, and provide parents with the broadest possible selection of services to meet their individual needs.

Although there are, and should be, differences in the way the model is implemented in each site, in order to facilitate replication, all Schools of the 21st Century must adhere to the guiding principles and share the common goal of providing good quality, developmentally appropriate care that is accessible to all families who need the services. Certain variables, such as program quality, staff training, and the level of commitment of all school district personnel, affect the performance of the School of the 21st Century. Therefore, interested school districts are required to follow implementation guidelines developed by the Yale Bush Center. In addition, district personnel, ranging from superintendents to child care staff, are required to receive training on implementing and operating the program. 35

Even though the School of the 21st Century has been successfully implemented in a variety of sites, there has been some opposition. Critics argue, for example, that school is not a suitable place for young children, since schools may provide an academically oriented program that could be inappropriate for young children. 36 Studies indicate that “highly academic environments have little benefit for children’s academic skills, may dampen creative expression, and may create some anxiety.” 37 However, the potential for such an orientation exists not only in school-based settings, but also in other child care and early intervention settings. School-based School of the 21st Century programs can prevent this problem by stressing the need for a developmentally

35. It is important to note that the program and accompanying materials are still in the process of being developed. With funding from the Kraft General Foods Foundation, the Yale Bush Center is currently developing a set of training modules which will serve to standardize further the training process.


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appropriate curriculum (e.g. child-directed and based on cooperative play experiences) and hiring staff with backgrounds in child development and early childhood education.

Others argue that schools do not have the space for school-based child care and family support services. While this may be true in some districts, accommodations such as modular buildings are being made by school districts committed to implementing the program. In addition, many school boards are taking child care needs into consideration as they develop long-term plans for space allocation.

Also, “turf” issues have arisen concerning the School of the 21st Century. Child care providers fear that schools will eventually take over the child care business. Of course, this is unlikely because programs like the School of the 21st Century operate on parental fees for service and are voluntary. In addition, one of the goals is for the school district to serve as the hub of service coordination and to optimize resources, not to duplicate services. The idea is to offer parents the broadest range of good quality services possible, including school-based, as well as an array of community options, such as family and center day care. Even if services in schools are cheaper than programs in the communities, many parents will make their choices according to their own perceptions regarding the needs of their children and their level of satisfaction with the services they receive.

Finally, there appears to be such a demand for child care services that school-based programs cannot possibly replace that which already exists; rather, they will provide another option for parents. Many parents who have trouble finding child care are grateful for the school-based programs available in their community. Several national organizations suggest that schools, as well as other agencies, offer such programs.

B. Evaluation

To understand how the School of the 21st Century is operating in school districts and what effects the program is having on children, families, and school districts, the Yale Bush Center has been evaluating the program in several sites since 1989. While the Bush Center is not an unbiased party, it has designed an objective evaluation which has been reviewed by several nationally prominent experts in child care and evaluation.

Results of the evaluation are, as yet, preliminary; nevertheless, they indicate that the program is working and that parents are satisfied with its convenience, location, and quality. For example, in one school district, sixty-

39. BOTTOM LINE, supra note 5, at 19, 33-36.
seven percent of the 221 parents surveyed who use the school-age services and seventy-two of the 141 surveyed who use the preschool child care report using the program for convenience and quality. More than nineteen percent of these school-age program parents and forty-one percent of these preschool parents reported enrolling their children because the program is operated by the school district.

There appear to be other benefits associated with the program as well. In one district, where the program has been in operation since 1988, an advisory committee comprised of school principals, district officials, teachers, 21st Century staff, and PTA members oversees the operation of the program. Efforts are made to ensure that the School of the 21st Century services are not simply "added on" to the school, but rather, fully integrated with overall district operations so that the program is now a necessary and expected ingredient of the school system.

These preliminary evaluation results suggest that it is possible to successfully implement child care and family support services in the public schools and that parents favor such endeavors. Our results also indicate that child care and family support services can become an integral part of the school and that the school can serve as the hub for the delivery and coordination of a system of services for children and families.

Through the process of evaluating these programs, we have also identified some problems school districts face as they implement the program. Successful implementation (defined as implementing the five services and coordinating them within the existing school system) is completely dependent on the extent to which the superintendent, principals, and teachers are committed to the program. In the districts where this multi-level commitment has not been present, the implementation process has been difficult and complicated. For example, turf issues have arisen over identifying suitable space within the schools for the school-based child care programs.

Another implementation problem concerns staffing. Surveys of School of the 21st Century staff indicate that, as for any child care program, hiring staff trained specifically in the area of child development or early childhood education can be difficult. To address this issue, the school districts provide training, either on-site or through local community colleges, to their staff and implement "career ladders" which encourage staff to acquire additional training.

V. CONCLUSION

To date, the efforts to implement Schools of the 21st Century are proving successful and constitute a good start for developing the program on a wider scale. Although much of the implementation can be characterized as emerging at the grassroots level, many states are paying serious attention to broader
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statewide and nationwide child care problems. For example, through funding under the A+ program, Hawaii is providing before- and after-school programs in every school.\(^4\) Also, as noted earlier, both Connecticut and Kentucky have funded the implementation of 21st Century Schools in the form of Family Resource Centers.\(^1\) Legislative efforts like these, coupled with local initiatives, are fueling the momentum in this country to develop a comprehensive strategy to address the needs of families.

Given the current political-economic climate, it is clear that developing and implementing a comprehensive child care system may be regarded as a state rather than federal responsibility. Such a stance would not be without precedent since child care, like education, is not mentioned in the Constitution. Therefore, as with public education, child care could be perceived as a state and local responsibility. Of course, in this scheme, the federal government would still have a role to play, namely to subsidize the cost of care for low-income children.\(^2\)

The School of the 21st Century represents the fruit of more than a quarter of a century of thought on this matter. To adequately meet the changing needs of families in this country, education reform must be concerned with both the early childhood years and the non-classroom settings which children experience. High quality child care must be institutionalized and available to every child requiring substitute care. The future of this country and our ability to compete in the world depend in great part upon the degree to which American children achieve their potential within the education system. The School of the 21st Century and programs like it represent viable strategies for creating a comprehensive system which enables the education system to better support children and families.

\(^{40}\) HAW. REV. STAT. §§ 296-81 to 296-83 (1991).