

PART ONE

INTRODUCTION





CHAPTER ONE

Early Childhood Intervention: A Continuing Evolution

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Children are the touchstone of a healthy and sustainable society. How a culture or society treats its youngest members has a significant influence on how it will grow, prosper, and be viewed by others. In the words of the Carnegie Corporation's 1996 report, entitled *Starting Points: Meeting the Needs of Our Youngest Children*, it is these children

whose boundless energy is matched only by their curiosity and creativity, whose agility is the envy of their parents and teachers, [and] whose openness and expressiveness are always remarkable and occasionally breathtaking. Watching them, it is easy to believe that they can do anything they want to do, be anyone they want to be; it is easy to summon the optimism that yet a new generation is rising to fuel this nation's historical belief in endless possibility. (p. 3)

Nevertheless, not all children are born healthy; not all children have access to good nutrition, adequate health care, and acceptable housing; not all children are raised by parents who can comfort, nurture, and challenge them appropriately; and not all children are born free of disabilities or other biological vulnerabilities. It is the mission of early childhood intervention to help young children and their families to thrive. The fundamental challenge that faces early intervention services is to merge the knowledge and insights of scholars and practitioners with the creative talents of those who design and implement social policy initiatives and to invest the products of this alliance in the future of our children and thereby in the well-being of our society as a whole.

The mandate to provide support and to intervene on behalf of infants and young children – especially those who are vulnerable, disabled, or at risk - appears, at first glance, to be a straightforward goal. One would think that a child with a disability, or one whose early life experiences are dominated by the material deprivations of poverty or by the caregiving of an overwhelmed, isolated, or abusive parent, would be the uncontested beneficiary of adequately funded public services. Indeed, many researchers and advocates have proposed that the allocation of resources for this most vulnerable and disenfranchised population group should be based simply on its moral imperative (e.g., Caldwell, 1986; Children's Defense Fund, 1998; Edelman, 1987; National Commission on Children, 1991; Schorr, 1988; Turnbull & Turnbull, 1985). Moreover, evidence is emerging that an "investment" in the health and development of young children will also return monetary dividends in the subsequent, decreased need for special education, custodial care, welfare support, and incarceration for delinquent behavior (Barnett, 1985; Barnett, this volume; Council of Economic Advisers, 1997; Karoly et al., 1998; Warfield, 1994; Zigler, Taussig, & Black, 1992).

Despite its intrinsic appeal, however, early child-hood intervention has not been embraced uniformly or supported consistently. It has endured battles over the delineation of its goals and objectives (Casto & White, 1993; Clarke & Clarke, 1976; Ferry, 1981; White, Taylor, & Moss, 1992), specification of program models and methods (Anastasiow & Mansergh, 1975; Meisels, Dichtelmiller, & Liaw,

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1993), and selection of service providers and recipients (Bricker & Slentz, 1988; Gallagher, Malone, Cleghorne, & Helms, 1997; Neuman, Hagedorn, Celano, & Daly, 1995). It has tried to respond to the challenge to document its effectiveness while struggling with the methodological and logistical constraints of inadequate outcome measures, unavoidable sample attrition, limited funds to sustain long-term longitudinal studies, and ethical barriers to the maintenance of untreated control groups of children with documented problems (Meisels, 1985a; Shonkoff, 1992; Shonkoff & Hauser-Cram, 1987; Shonkoff, Hauser-Cram, Krauss, & Upshur, 1988).

The history of early childhood intervention in the United States illustrates the power of an idea and set of practices that continue to evolve over time. Whereas its early roots were established in a variety of fields that have converged over the past four decades, its theoretical foundation continues to grow and mature from both its successes and disappointments. On the threshold of the twenty-first century, the concept of early childhood intervention faces a formidable array of political, practical, and theoretical challenges and opportunities. Its antecedent pathways and their links to the tasks of the present and the future are the focus of this chapter.

The chapter is divided into four sections. The first explores the diverse origins of the field of early child-hood intervention prior to the 1960s. The second section provides an overview of the dramatic advances of the past four decades. The third focuses on the provisions of the landmark federal special education law that mandates comprehensive family-centered services for young children with developmental disabilities and delays. Finally, the chapter closes with an examination of the conceptual and programmatic challenges facing the field at the beginning of the twenty-first century.

HISTORICAL ROOTS AND EARLY FOUNDATIONS

The overall framework of contemporary early child-hood intervention has evolved from multiple sources. This section focuses on the historical contributions of four related domains: early childhood education, maternal and child health services, special education, and child development research.

Early Childhood Education

The intellectual roots of early childhood education can be traced to the relatively recent historical recognition of childhood as a unique period of life and to the writings of the European philosophers of the seventeenth and eighteenth centuries (Aries, 1962). Comenius (1592-1670) characterized the "School of the Mother" as the most appropriate vehicle for education in the first six years of life and advocated that the child learn "spontaneously . . . in play whatever may be learned at home" (Eller, 1956, p. 116, cited by Clarke-Stewart & Fein, 1983). John Locke (1632-1704) popularized the notion of the tabula rasa, suggesting that children from birth are a blank slate, thereby challenging the commonly held concept of genetically predetermined behavior and competence. Jean-Jacques Rousseau (1712-78), an even stronger advocate of a child's unspoiled nature, urged a laissez-faire approach to the early childhood years to allow for the natural unfolding of individual talents. These views were largely echoed by the nineteenth-century educational experiments of Tolstoy (1967) and by those of A. S. Neill (1960) and other school reformers in the latter half of the twentieth century. In contrast to the humanistic child development attitudes of eighteenth- and nineteenth-century Europe, child-rearing practices in the American colonies during the seventeenth and eighteenth centuries were dominated by a harsh Puritan influence, which focused on spiritual salvation and advocated rigid discipline in early education to counteract the innate "sinful" tendencies of young children (Greven, 1973; Wishy, 1968).

classes, which were based on a philosophy grounded in traditional religious values and in a belief in the importance of learning through supervised play, were established in Germany by Friedrich Froebel in the early 1800s (Brosterman, 1997). During the latter half of the nineteenth century, these ideas were transported across the Atlantic and stimulated the proliferation of experimental programs throughout the United States (Cuban, 1992). Shortly after the first public school kindergarten was established in St. Louis in 1872, the National Education Association made an official recommendation that kindergarten become a regular part of the public school system (Peterson, 1987).

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The interactive influences of industrialization, urbanization, and secularization provided the social context in which the kindergarten movement developed in the nineteenth-century United States. With much early support coming from private agencies and philanthropic groups, advocates of formal kindergarten programs emphasized the potential benefits for poor children and focused particularly on recent U.S. immigrants and those who were living in urban slums (Braun & Edwards, 1972; Cremin, 1988).

Within a few decades of its early popularization in the United States, however, the kindergarten movement was beset with a series of battles over goals and curricula. Traditionalists remained loyal to the philosophy of Froebel and defended their value-driven educational practices. In contrast, reformists worked to liberalize the kindergarten experience and looked beyond its moralistic foundation to the emerging discipline of child psychology for more empirically derived principles based on the systematic observations, data collection, and analyses of early child development researchers (Hill, cited in Braun & Edwards, 1972). During the early 1900s, G. Stanley Hall's developmental approach to early childhood curriculum and John Dewey's pragmatic emphasis on the functional purposes of education were particularly influential.

As research about the developmental process progressed, and as social and political forces shifted, sharp disagreements over the goals of kindergarten persisted throughout the twentieth century (Bredekamp & Copple, 1997; Hirsch, 1996). Its primary objectives alternated between an emphasis on early academic achievement and an emphasis on social and emotional development, including exploration and discovery of the world. Although publicly supported kindergarten programs are not yet mandated in all parts of the country, kindergarten is considered a standard component of the American education system and has become instrumental in introducing child development ideas to the educational mainstream.

NURSERY SCHOOLS. Similar to kindergartens, nursery schools originated in Europe. In 1910, Rachel and Margaret MacMillan established the first nursery school in London, which began as a health clinic that was later expanded into an open-air school. This experimental program was designed to provide comprehensive prevention-oriented services to meet young children's social, physical, emotional, and intellectual needs. Unlike the religious orientation of Froebel's kindergarten, the MacMillans' curriculum was based on secular social values and focused on the development of self-care, individual responsibility, and educational readiness skills (Peterson, 1987).

While the MacMillans developed their model of early medical-educational intervention in England, Maria Montessori opened the first nursery school in the slums of Rome. Montessori, a physician and former director of an institution for children with mental retardation, applied the methods she had developed for training children with intellectual impairments to the preschool education of nondisabled, urban, poor children. The Montessori method departed significantly from traditional early childhood curricula in its emphasis on individualized self-teaching by children within a carefully prepared classroom environment (Elkind, 1967).

The initial introduction of the Montessori approach to preschool education in the United States had minimal impact, as it was lost amidst the battles then being waged among the Froebelian conservatives, the liberal-progressive adherents of the philosophy of Dewey, and the newly emerging "American" positivism championed by such prominent psychologists as Thorndike and Kilpatrick (Braun & Edwards, 1972). Consequently, interest in the Montessori method remained essentially dormant in the United States until the 1960s. The rise in its popularity in the latter half of this century, however, has been greatest among the middle classes, rather than among those who work with poor or disabled children - the populations for whom the method was originally designed (Peterson, 1987).

The nursery school movement first gained popularity in the United States in the 1920s, based upon an adaptation of the MacMillans' model that attached a great deal of importance to parent involvement within the school program. In contrast to the kindergarten focus on school readiness, early nursery school programs were designed to nurture exploration and to facilitate social-emotional development. By the early 1930s, approximately 200 nursery schools existed in the United States, half of which were associated with colleges and

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universities, including some of the most productive child development laboratories in the country. The remaining programs were operated as private schools or were sponsored by child welfare agencies (Peterson, 1987).

During the Depression of the 1930s, the number of nursery schools increased dramatically as federal relief programs were developed to subsidize unemployed teachers. With the onset of World War II, the need for women to work in defense plants led to further expansion of the schools and to the establishment of federally supported day care centers under the Lanham Act of 1940 (Morgan, 1972). Prior to this period, child care services were utilized primarily by the working poor. The employment of large numbers of middle-class women to support the war effort blurred the distinctions between day care programs and nursery schools. After the war ended, however, federal support for child care terminated, large numbers of women left the workforce to raise families, and many programs closed. Without public resources, nursery schools drifted from their early mission of serving poor children and became increasingly available only to those who could afford private tuition.

In recent years, as women have chosen or been compelled by circumstances to combine both child rearing and employment outside the home, the distinctions between child care programs and nursery schools have become blurred once again (see Kamerman, this volume). In this social context, the debate about the balance between "care" and "education" in the early preschool years has resumed with considerable intensity (see Barnett & Frede, 1993; Hauser-Cram, Pierson, Walker, & Tivnan, 1991; Kahn & Kamerman, 1987; Kamerman & Kahn, 1995; Provence, Naylor, & Patterson, 1977).

SUMMARY. An examination of the historical roots of early childhood education in the United States tells us much about our enduring traditions and changing values. First, it reveals a willingness to explore ideas that were developed in other societies and a determination to adapt them to our own perceived needs. Second, it emphasizes the extent to which the interests of young children and their families are always addressed within the constraints of concurrent political and social demands. Third, it highlights the degree to which early childhood

programs have alternatively been developed to meet the needs of poor children or middle-class children and their families. Finally, it underlines the extent of inevitable overlap that exists among the generic health, educational, and social needs of all young children regardless of socioeconomic status.

Early childhood intervention services have been influenced significantly by our history of education for young children prior to traditional school entry. The central features of these early programs that have become firmly embedded in current intervention efforts include a child-centered curriculum focus; an emphasis on early socialization of the child outside of the family; an enhanced understanding of child development and the practical applications of developmental theory; and a belief in the importance of the early years as a foundation for later social, emotional, and intellectual competence. This conceptual legacy, in conjunction with the wealth of materials, resources, and techniques that have been refined over the years, is woven throughout the dayto-day activities of contemporary early intervention programs.

Maternal and Child Health Services

In much the same way that the industrialization and secularization of the nineteenth century provided fertile ground for the development of new concepts in early childhood education, persistently high mortality rates among young children promoted greater concern for their physical health. In fact, many pediatric authorities in the late 1800s urged a de-emphasis on educational stimulation before five years of age to prevent the diversion of "vital forces" from activities that promoted physical well-being (Griffith, 1895; Holmes, 1857). In a classic textbook, one of the most prominent pediatricians at the turn of the century wrote:

Great injury is done to the nervous system of children by the influences with which they are surrounded during infancy, especially during the first year... Playing with young children, stimulating to laughter and exciting them by sights, sounds, or movements until they shriek with apparent delight may be a source of amusement to fond parents and admiring spectators, but it is almost invariably an injury to the child... It is the plain duty of the physician to enlighten parents upon this point, and insist that the infant shall be kept quiet, and

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that all such playing and romping as has been referred to shall, during the first year at least, be absolutely prohibited. (Holt, 1897, p. 5)

THE CHILDREN'S BUREAU. In 1912, in an attempt to address the widespread problems of high infant mortality, poor physical health, and exploitation of working children, Congress established a Children's Bureau in the Department of Labor "to investigate and report . . . upon all matters pertaining to the welfare of children and child life among all classes of our people" (quoted in Lesser, 1985, p. 591). In its first annual report, the Bureau acknowledged its responsibility to serve all children but noted that particular attention would be focused on "those who were abnormal or subnormal or suffering from physical or mental ills" (Bradbury, 1962, cited in Lesser, 1985, p. 591). On the basis of a decision to emphasize the concept of prevention, and having addressed the issue of infant mortality as the object of its first investigation, the Children's Bureau proceeded to conduct early studies in such subject areas as day care, institutional care, mental retardation, the health of preschool children in selected cities, and the care of "crippled children" (Lesser, 1985).

As the first official acknowledgment of a federal responsibility for children's welfare, the establishment of the Children's Bureau provided a foundation for governmental data collection and federal grants to promote the health and development of the nation's most vulnerable children. In its earliest studies, the Bureau highlighted striking correlations between socioeconomic factors and infant and maternal deaths. These data established a firm justification for programs supported by the Sheppard-Towner Act during the 1920s that increased public health nursing services and stimulated the creation of state child hygiene divisions and permanent maternal and child health centers throughout the country (Steiner, 1976).

Although the development of programs for children with disabilities progressed more slowly than services for those who were poor, data collected by the Children's Bureau through its state surveys served to highlight marked unmet needs in this area as well. Consequently, the 1930 White House Conference on Child Health and Protection recommended that federal funds be made available to each

of the states to establish programs for "crippled children" that reflected cooperation among medical, educational, social welfare, and vocational rehabilitation agencies to provide a comprehensive array of diagnostic and treatment services (Lesser, 1985).

TITLE V. When the Social Security Act was enacted in 1935, the importance of a federal responsibility for the well-being of children and their mothers was reinforced explicitly. Title V of this landmark legislation contained three major components that established the framework for resource allocation and program development that has influenced national health policy for children and families over the succeeding half century (see Magee & Pratt, 1985).

Part I (Maternal and Child Health Services) authorized financial assistance to states to develop services designed to promote the general health of mothers and children, with special emphasis on program initiatives for rural and economically depressed areas. The most common activities supported by such funds included prenatal care, well-baby clinics, school health services, immunization programs, public health nursing, nutrition services, and health education.

Part II (Services for Crippled Children) created the first federal program in which state funds were matched by federal funds in the provision of medical services to a targeted patient group. The law was clear in its intent to develop a comprehensive service system, including case finding, diagnosis, treatment, and follow-up care. The prevention of "crippling" diseases and the amelioration of secondary handicaps were highlighted as central goals, and each state was required to promote cooperative efforts between health and welfare groups to achieve such ends. The definition of crippled children was left to the states and, although more than three-quarters of those who received services in the 1930s and 1940s had orthopedic problems, by the mid-1950s that proportion had dropped to less than 50% as increasing numbers of children with other chronic disabilities (e.g., heart disease, seizure disorders, and so forth) were identified.

Part III (Child Welfare Services) of the Title V program authorized funding to state welfare agencies to develop programs (especially in rural areas) for the care and protection of homeless, dependent, and

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neglected children, as well as children considered to be in danger of becoming delinquents (Lesser, 1985).

In 1939, nonmatching Title V funds were appropriated for "special projects of regional and national significance" (SPRANS grants), thus enabling states to develop innovative programs beyond the core of mandated services. Subsequently, these grants provided support for such wide-ranging initiatives as improved care for premature infants, training of professionals, and applied research on children with a wide variety of chronic illnesses and disabling conditions, including sensory impairments, seizure disorders, and congenital heart disease.

EPSDT. In 1965, the Medicaid provisions of the Social Security Act (Title XIX) were signed into law to improve the quality and accessibility of medical services for all those living in poverty. Although designed primarily as a medical reimbursement program to be administered by the states and jointly financed by state and federal funds, Medicaid does include mandated programs that reflect specific federal interest in early childhood intervention for poor children. One of the best known of these efforts is the Early and Periodic Screening, Diagnosis, and Treatment Program (EPSDT).

EPSDT was initiated in the late 1960s as part of a national effort to improve the health and welfare of poor children. It mandated the early and periodic medical, dental, vision, and developmental screening, diagnosis, and treatment of all children and youth under 21 years of age whose families qualified for Medicaid eligibility. Recognition of the wide-ranging and apparently preventable problems among the nation's youth was one of the incentives for formulating and enacting this new program (Foltz, 1982). Thus, EPSDT was designed to ensure early identification of such problems and to provide funds for subsequent intervention. Indeed, this program was conceived as an attempt to break the cycle of poverty, to remedy the health consequences of uneven economic circumstances, and to improve poor children's health by providing services designed to have a high payoff in later well-being (Meisels, 1984). Unfortunately, EPSDT's record of success has been uneven, and as it continues into its fourth decade of existence - especially with recent changes in the welfare and Medicaid laws – its effectiveness has been impaired (Foltz,

1982; Margolis & Meisels, 1987; Meisels & Margolis, 1988; Ohlson, 1998).

SUMMARY. Unlike education, which is accepted as a traditional responsibility of state and federal government, health care services in the United States are provided by a complex amalgamation of public and private resources and delivery systems. Thus, any attempts on the part of the federal government to regulate or otherwise influence the organization or delivery of medical services are always met with some degree of organized opposition, noncompliance, or both, in the private sector. In this context, the early history and subsequent growth of publicly supported maternal and child health and crippled children's services are striking. Indeed, within the American political system, there is a persistent, powerful, underlying consensus that the care and protection of children's health is too important to be left to the "wisdom" of the free market, particularly for those who are poor or those who have a chronic disabling condition. The creation in 1997 of the State Children's Health Insurance Program (SCHIP) under Title XXI of the Social Security Act, during a period of marked public resistance to increased government spending, further underscores the political salience of child health concerns. Furthermore, as the single largest federal commitment to child health since the enactment of Medicaid, SCHIP moved beyond the domain of poverty to include the needs of uninsured children of low-income working families. Whether recent changes in health care management and reduced public health and welfare benefits will both have an adverse impact on child health and wellbeing have yet to be seen.

Special Education

The history of special education services for children with disabilities provides a third lens through which we can examine the evolution of early childhood intervention services. In ancient times, young children with physical anomalies or obvious disabilities were often the victims of active or passive euthanasia. During the Middle Ages and in succeeding centuries, individuals with mental retardation were either tolerated as court jesters or street beggars (see Ariès, 1962) or imprisoned or otherwise institutionalized (see Chase, 1980).

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Most historical overviews of the field of special education begin with the attempts by Itard, in the late eighteenth century, to teach the "wild boy of Aveyron," using a set of sensory training techniques and what is currently characterized as behavior modification. However, Itard's student, Edouard Seguin, is generally acknowledged as the most important pioneer in this field. As director of the Hospice des Incurables in Paris, Seguin developed a "physiological method of education" for children with disabilities. This method was based on a detailed assessment of individual strengths and weaknesses and a specific plan of sensorimotor activities designed to correct discrete difficulties. Through painstaking observations, Seguin described the early signs of developmental delay and emphasized the importance of early education (Crissey, 1975). As noted earlier, his methods were later adapted by Montessori for the education of poor preschool children in Rome.

Seguin's pessimism about the benefits of special education initiated later in life was complemented by his belief in the critical importance of early intervention. He stated, "If the idiot cannot be reached by the first lessons of infancy, by what mysterious process will years open for him the golden doors of intelligence?" (quoted in Talbot, 1964, p. 62). Seguin was, indeed, one of the first "early interventionists."

RESIDENTIAL PLACEMENTS. Inspired by Seguin's work in Paris, educational programs for persons with mental retardation proliferated throughout the world during the early 1800s. In the latter half of the nineteenth century, residential institutions were built in the United States, and, stimulated by Seguin's immigration to this country, his teaching techniques were incorporated into many of these newly opened facilities. In 1876, the Association of Medical Officers of American Institutions for Idiotic and Feeble-Minded Persons was formed, with Seguin as its first president, to provide a mechanism for communication among those interested in the education of persons with mental retardation. (In 1906, the name of the organization was changed to the American Association for the Study of the Feeble-Minded; in 1933, it was changed again to the American Association on Mental Deficiency; and in 1987, the name was changed for the third time to the American Association on Mental Retardation). By the end of the nineteenth century, residential institutions in the United States were well established, highly invested in the development of teaching strategies, and firmly committed to the integration, albeit in limited form, of persons with disabilities into community life (Crissey, 1975).

In the early decades of the twentieth century, however, residential institutions changed their mission from training and planned social integration to custodial supervision and isolation. Among the forces that influenced this dramatic shift were the activities of such prominent psychologists as Henry Goddard and Louis Terman, who embraced the prejudices of the eugenics movement and employed the newly developed technology of individual intelligence testing to identify specific groups for discrimination, if not systematic exclusion, from American society (Chase, 1980). Data providing "scientific validation" of the link between mental retardation and criminal behavior were disseminated, and intelligence test scores were used to justify the legislation of racist immigration restrictions and compulsory sterilization procedures for the "mentally defective" (Kamin, 1974). The psychology community's harsh rhetoric challenged the early optimism of special education, and residential institutions were transformed into dreary warehouses for neglected and forgotten individuals.

PUBLIC SCHOOL PROGRAMS. In the public schools, the development of special education programs began slowly and served relatively small numbers of children. Children with moderate-to-severe disabilities were either sent to institutions or kept at home, and most children with mild disabilities were simply enrolled in regular classes from which they ultimately dropped out at very high rates. During the Depression and the World War that followed, special education resources for the public schools were curtailed, and greater reliance was placed on already overcrowded and educationally limited residential institutions.

During the postwar period, children with disabilities began to receive more benevolent attention. This renewed interest in the needs of developmentally vulnerable children was stimulated in part by the results of massive testing of military personnel during World War II, which revealed the striking prevalence of young men and women with physical, mental, or behavioral disabilities. This interest was

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also stimulated by changes in societal attitudes toward disabled persons, in general, brought about by the large numbers of wounded veterans who returned with physical impairments. In 1946, a Section for Exceptional Children was established within the United States Office of Education, which later (in 1966) became the Bureau of Education for the Handicapped and then (in 1980) the Office of Special Education and Rehabilitation Services. By the late 1950s, state and federal legislation began to promote greater access to special education for wider segments of the population (Hobbs, 1975).

SUMMARY. Shifts in attitudes and practices regarding the education of children with disabilities have been described in evolutionary terms by Caldwell (1973), who identified three major historical periods. The first, labeled "Forget and Hide," refers to the practice in the first half of this century through which children with significant physical or intellectual handicaps were kept out of public view, presumably to avoid embarrassing their families. The second period corresponds to the prevailing attitudes of the 1950s and 1960s and is called "Screen and Segregate." In this period, children with disabilities were tested, labeled, and then isolated once again in special facilities, based on the assumption that they needed protection and could not function independently in the mainstream. Caldwell named the third period "Identify and Help." Beginning in the mid-1970s, with the passage of landmark special education legislation, this stage was marked by efforts to screen for special needs in the early years of life in the hopes of providing appropriate intervention services at as young an age as possible. We might add a fourth evolutionary period to describe the past 15 years in special education services, calling it "Educate and Include." The goals of this period (see Gartner & Lipsky, 1987; Turnbull, Turbiville, & Turnbull, this volume) are to contain the consequences of disabling conditions, prevent the occurrence of more severe disorders, empower the families of children with special needs, and increase the opportunities for all children to reach their full potential by integrating them as fully as possible into regular classrooms and society at large.

Child Development Research

Although fundamental decisions regarding program design and resource allocation are typically motivated by sociopolitical considerations, the evolving conceptual context of early childhood services has been influenced substantially by the scholarly study of the development of young children. Thus, a fourth lens through which the history of early childhood intervention can be examined focuses on the contributions of the academic child development community. Although a comprehensive overview of the history of child development research is beyond the scope of this chapter, a brief mention of several influential theoretical and empirical contributions is essential. In this regard, two critical research themes are addressed: the naturenurture controversy and the importance of the caregiver-child relationship.

THE NATURE—NURTURE DEBATE. Interest in the determinants of competence in young children is a relatively modern phenomenon. Although systematic evaluations of the emerging abilities of infants were conducted by a New Orleans physician in the late nineteenth century (Chaille, 1887), the cataloguing of early achievements and the methods of childhood assessment were not well developed until the early decades of the twentieth century.

The dominant figure in the emerging field of child developmental evaluation was Arnold Gesell, a pediatrician and psychologist. As the director of one of several child study centers supported by the Laura Spelman Rockefeller Memorial Fund, Gesell conducted extensive studies of the skills of normally developing children, the abilities of youngsters with Down syndrome, and the developmental accomplishments of those who were born prematurely or who sustained perinatal injuries (Gesell, 1925, 1929). His observational methods produced a wealth of data that continue to influence to this day the construction of developmental assessment instruments

Gesell's theoretical orientation was clear, and his impact on the clinical study of children was enormous. He strongly believed in the primacy of biologically determined maturation. He disdained the relative impact of experience on the developmental