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AUTHOR Conklin, Nancy Faires; And Others  
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ABSTRACT

The Northwest Regional Educational Laboratory's depiction study of early childhood education and care programs in the Northwest and Hawaii documents the extent of program development in the region. In four sections, this report of the study: (1) describes the emerging structure of early childhood services, reviewing key findings and projecting trends in program development; (2) lays out a framework for assessing the potential costs of expanding early childhood services to meet children's actual needs; (3) evaluates the effects of recent and potential federal initiatives in early childhood education and care; and (4) considers the implications of the early childhood analysis framework for policy development. Appendices provide Oregon's costs of services statements for children in five age groups spanning birth through 12 years of age. (RH)

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THE Northwest Regional Educational Laboratory

PROGRAM



REPORT

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EARLY CHILDHOOD  
PROGRAMS AND POLICY  
IN THE NORTHWEST AND HAWAII:

A FRAMEWORK FOR POLICY  
DEVELOPMENT

ED304224

Nancy Faires Conklin  
Rex Hagans  
Leslie Crohn

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## I. THE STRUCTURE OF EDUCATION AND CARE PROGRAMS

The NWREL depiction study of early childhood education and care programs in the Northwest and Hawaii (Conklin, et al., 1989) documents the extent of program development in the region. In this first section of the report, the emerging structure of early childhood services is described. Key findings from the depiction study are briefly reviewed and trends in program development are projected.

The second section of the report lays out a framework for assessing the potential costs of expanding early childhood services to meet children's actual needs. Following the cost analysis, the effects of recent and potential federal initiatives in early childhood education and care are evaluated. The report concludes with a consideration of the implications of the early childhood analysis framework for policy development.

### Programs for Education and Care

The array of early childhood programs in place and under development in the NWREL region is responsive to the varied needs of young children. However, many children in the region still lack access to basic care and the early education programs that will prepare them for success in school and adult life.

While education programs may include aspects of child care and care programs may have educational components, a basic distinction between these two primary functions is useful in describing and assessing the adequacy of the early childhood services offered in the states. Providers of educational programs tend to be in the public sector, following the model of public schooling. Providers of child care, on the other hand, are far more likely to be private organizations or individuals, following logically as a private activity from the primary child care giver, the parent. In addition, administration of public contributions to education and care programs also tends to bifurcate, with education programs often assigned to the state agency in charge of the schools and assistance to child care programs administered by the human services agency.

As all programs for young children necessarily involve their parents and parent involvement is widely recognized as a key to program quality, the states have initiated a variety of parent education programs. These include parenting education and, more recently, basic skills education for parents without a high school credential. Thus, parents' needs as both primary care givers and first teachers are being addressed programmatically as they become involved in both education and care components of programs.

## Education Services

Education services are being expanded downward from mandatory universal schooling at six years of age. Kindergarten is available to almost all five-year-olds in the NWREL region, although generally attendance is not mandatory. Although kindergarten is currently offered on a primarily half-day basis, full-day programs are increasing. Universal availability of kindergarten may be expected soon, and full-day kindergarten will become increasingly available.

About one in four of the region's economically disadvantaged four-year-olds is enrolled in a publicly-supported prekindergarten program. While these programs are based on the federally-initiated Head Start program, they are being expanded with state-level funding. There is considerable momentum in the states to continue to increase these part-day programs, with many advocating enrollment in prekindergarten by all disadvantaged children as a key--for some, the key--element for improved success of the schooling process.

A few disadvantaged three-year-olds are also participating in prekindergarten programs; and among migrant and Indian groups Head Start services reach some even younger children. However, primary emphasis in the region is on reaching the disadvantaged four-year-old group.

Early educational intervention for the handicapped, now provided for three- to five-year-olds, must be greatly expanded for younger children, if states are to qualify for federal matching funds for the developmentally disabled. NWREL region states are planning to expand handicapped services, although some are faced with simultaneously addressing broadening the service net for three- to five-year-olds while they plan for service initiation for the very young.

Education services, then, present a picture of fairly regular expansion from few services at birth toward widespread service for those near the age they will begin school. Figure 1 (next page) provides a schematic representation of educational programs as they increase with the age of the child.

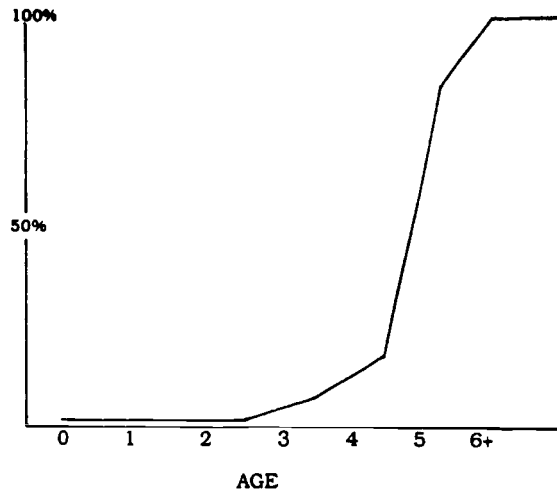
Credentialing of early education program staff is an issue in the states. Most kindergarten teachers hold elementary certificates, while many prekindergarten instructors are not certified as teachers. Program continuity and quality will require that this situation be addressed by the states.

## Care Services

Child care presents a more complex picture. Providers include parents and other family members, paid individuals in care homes, and child care centers operated by a broad range of organizations, including community agencies, religious groups, schools, and for-profit corporations. This diverse system is difficult for states to monitor and its quality is in part unknown.

Figure 1

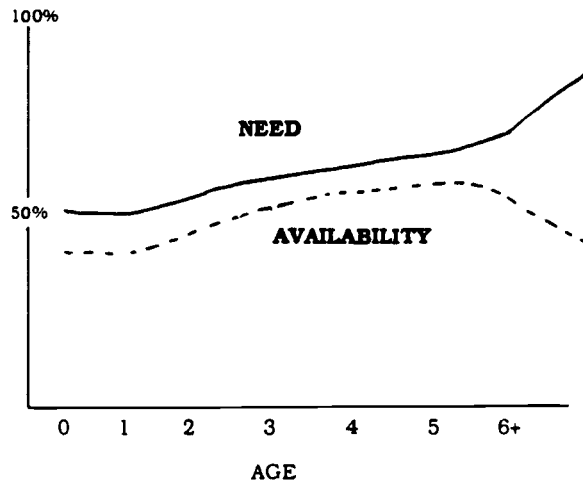
PARTICIPATION IN PUBLIC EDUCATION PROGRAMS BY AGE



Further, somewhat in contrast with the regularly expanding profile of need and service that can be described for early childhood education, the numbers of children in need of child care increase with age, but the availability of care services does not. Figure 2 schematically represents the relationship between need for and availability of child care in the region for children ages birth through twelve.

Figure 2

NEED FOR AND AVAILABILITY OF CHILD CARE





As the age of child increases, so does the likelihood that parents are in the workforce, the percent of working mothers rising from about half for infants to about two-thirds for school-aged children. Thus, the line indicating level of need rises with the increasing age of the child. As the gap between the two lines indicates, demand for child care exceeds the supply at all ages. But the shortfall of acceptable care opportunities is most acute for the very young and for school-aged children.

Care for children birth through two years old, while sought by relatively fewer parents, is difficult to obtain. Because of the need for very low adult:child ratios, care for infants and toddlers commonly costs twice as much as care for older children. Almost all infant and toddler care is provided by relatives and care homes, most of which fall outside of any state regulation or oversight. Parents express a clear preference for home-based care for their infants and toddlers; with increasing numbers of new mothers returning to the workforce, placement of very young children in family care homes can be expected to increase. This expanding sector of the child care service delivery system will continue to present a monitoring challenge to state oversight agencies.

For three-, four-, and five-year-olds, parents seek either full-time care or care that supplements part-day kindergarten or prekindergarten programs. When such education programs are held in schools there is considerable community interest in continuing the custodial care on-site, taking advantage of existing facilities and simplifying parents' arrangements. Increased involvement of the schools in preschooler child care can be expected, at least as a locus for service delivery, if not as a direct service provider.

At the upper end of the age spectrum, school-aged child care is a pressing need, but the service delivery system for before- and after-school care is less well developed than full-day care for preschool-aged children. The limited, disparate hours make care of school-aged children less attractive as an enterprise for the private sector providers who constitute a large portion of the service delivery system. School-aged care is more likely to be school-based than care for younger children, and this role is expanding.

School involvement necessarily raises questions of child care worker credentialing, questions which are largely unresolved in the region's states. Teacher-level credentialing requirements would drastically affect both the supply of qualified care givers and the costs of child care services. There is growing momentum for establishing care giver credentialing requirements, although in some areas setting training requirements for child care center staff has already had the effect of hampering delivery of authorized and funded services due to lack of qualified staff.

Quality of care services is an important point of concern in the states and staff qualifications is only one of the quality control issues facing state administrators. In fact, even the appropriateness and safety of facilities is difficult to ascertain. Much of the child care delivery

system is entirely unmonitored. While education programs have the precedent of an established monitoring and norm-setting system in the form of school administration, child care is a private, patchwork affair, without any quality-assurance system in place.

### Public Funding

Despite substantial federal contributions, overall, the states bear the heaviest responsibility for funding early childhood programs, since they support kindergarten--the largest service--out of general school funds. Federal dollars go primarily to Head Start and child care assistance. Some states are providing increasing amounts for prekindergarten and all add to subsidies for child care for low income families. There is widespread concern that federal funds for new early childhood programs will continue to be received at an incentive, rather than program operation level.

Table 1 (next page) displays the array of early childhood education and care services which receive public financial support. The table highlights programs initiated by the states. Note that, while a wide variety of programs are supported, most are funded at levels that permit only partial participation by eligible children and families.

Some early childhood programs have been funded on a categorical and some on a universal basis. Federal funds have been almost entirely targeted for categorical compensatory programs. Head Start, for example, is designed to primarily serve economically disadvantaged youngsters. Federal child care assistance is for low income families. On the other hand, states have developed both categorical and universal programs. Kindergarten, as developed on a state-by-state basis, is a universal program, open to all five-year-olds. It has been designed as an expansion of general schooling, not a compensatory program.

The states are thus experiencing dual pressures for expansion of early childhood programs: (1) to expand categorical services to serve the entire population defined as eligible and (2) to make programs universal, i.e., to provide equal opportunity for all to participate in services. For example, the cost-benefit of providing all disadvantaged youngsters with prekindergarten is well demonstrated and has widespread support in the states. On the other hand, working parents paying for their own children's private preschool or child care would like access to public prekindergarten programs.

### State Agency Roles

Monitoring, regulation, and technical assistance to early childhood programs are emerging as increasingly important roles for state agencies. The domains of responsibility of education, human service, and other state agencies have not yet been fully resolved in most states. This will be a critical step in establishing the administrative oversight required to assure quality services. As the needs of young children are not easily segmented into welfare, care, developmental, and educational

Table 1

SUMMARY: PUBLICLY SUPPORTED EARLY CHILDHOOD EDUCATION AND CARE PROGRAMS  
IN THE NORTHWEST AND HAWAII

	<u>Alaska</u>	<u>Hawaii</u>	<u>Idaho</u>	<u>Montana</u>	<u>Oregon</u>	<u>Washington</u>
Kindergarten	District option; Available to all	Must be offered	District option; Available to most	District option; Available to almost all	Must be offered by 1990; Available to most	Must be offered; Available to all
Prekindergarten	50% match of Head Start; for 3s and 4s	20% match of Head Start; for 4s	20% match of Head Start; for 4s	20% match of Head Start; for 4s	20% match of Head Start; small PreK program; for 4s	20% match of Head Start; ECEA Program reaches 10%; for 3s and 4s
Child Care	Assistance; Staff training; Some schools; TA for school-based	Assistance; Staff training; facilities grants; Some schools; tax deduction	Assistance; Facilities grants; Tax deduction	Assistance; Tax deduction	Assistance; R&R; state employee salary deduction; Tax credit; Employer tax credit Some schools	Assistance in a variety of programs; Some schools
Handicapped	3-5s served; Some 0-2s served; Planning for 99-457	Most 3-5s served; Infant Centers serve some 0-2s; Planning for 99-457	30% of 3-5s served	Urban 3-5s served; 99-457 contingent on federal funding level	50% 3-5s served; Planning for 99-457	3-5s served; Planning for 99-457
Parent Ed	Some Community Schools offer parenting	Parent-Community Networking Centers			Together for Children program	Even Start; TA to schools

components, it is obvious that no single state agency can easily oversee all early childhood services. Already the picture is complex, with unclear boundaries of responsibility.

For example, currently, kindergarten and most state-funded prekindergartens are administered through departments of education. However, federal Head Start funds, though for an educational program, are directly granted to local agencies, with little involvement of either state departments of education or the local schools.

On the other hand, care services are primarily the responsibility of human service agencies. Human services administers federal and state child care assistance funds. Yet, education programs have care components as well and the schools are increasingly used as child care facilities. Further, private sector providers range from purely custodial care programs to programs with strong educational components.

Handicapped early intervention for three- to five-year-olds, like school-aged handicapped programs, has been an education responsibility. New programs for very young children, however, according to federal regulation, are to be administered through an interagency coordinating council. The NWREL states vary as to which state agency is taking the lead in this effort.

Staff certification presents a difficulty similar to the assignment of responsibility for program administration. It is not possible to draw a clear line between education and care for young children; therefore professionals delivering early childhood services must be familiar with a wide range of children's needs which any program--education or care--must meet. Thus, it is sometimes not immediately apparent which state agency should be assigned credentialing responsibilities.

### Focus on the Child's Needs

The NWREL region states have created a wide array of programs to meet the needs of young children. Among these programs, the full range of children's needs appear to be addressed, although only a minority of children may actually receive the services. These diverse child services are best seen as complementary components of a single, comprehensive services delivery system, a whole system which can be built upon to meet children's developing needs.

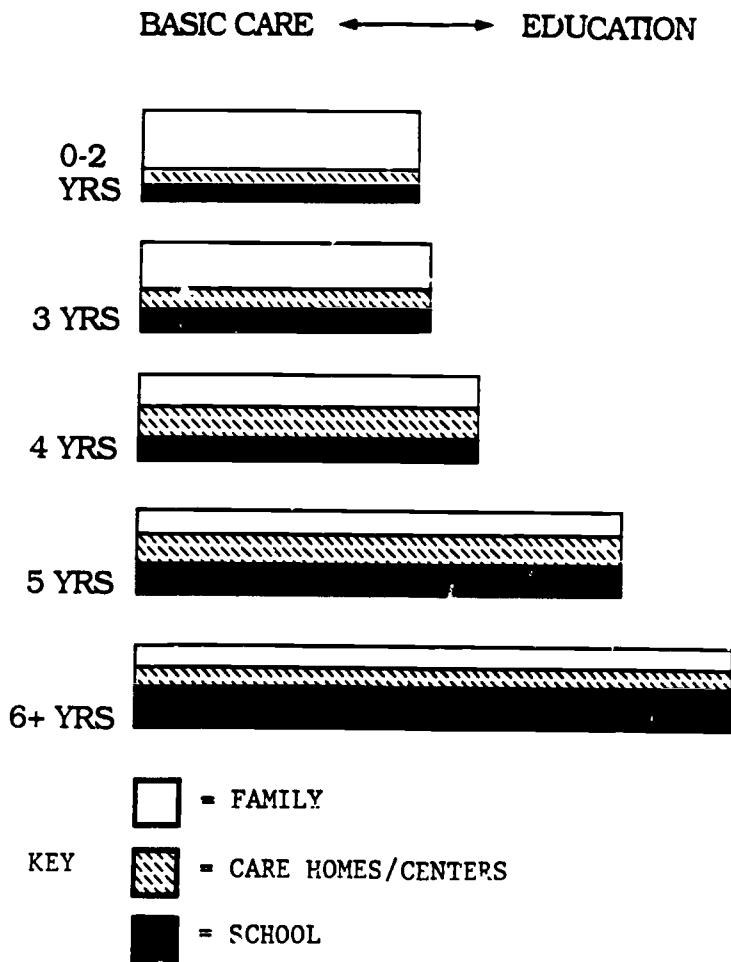
Rather than looking at specific programs in isolation from one another, needs-based policy development assesses how to meet the care and educational needs of the whole child. It crosses state agency domains, as the needs of young children do. It unites research on children's basic care needs and effective school readiness, assuring that programs are instituted when developmentally most appropriate. It takes into account the resources for children in the private sector--in families, community organizations, and for-profit early childhood service providers.

Figure 3 suggests the necessary scope of such a needs-based early childhood policy. It demonstrates the changing nature of developing

children's service needs, moving from the basic care end of the needs spectrum toward educational services as they approach the age of schooling. At the same time, Figure 3 distinguishes among providers of services to young children, the role of the family supplemented by the services of care givers at all ages and, when developmentally appropriate, augmented by educational services.

Figure 3

AGE-GRADING OF CONTENT AND PROVIDER OF EARLY CHILDHOOD SERVICES



Such a comprehensive, needs-based approach underlies the early childhood cost analysis proposed in the following section. The cost analysis draws together often disparate programs for child care and education, assessing the current and potential contributions of the full spectrum of service providers. On this broad basis, a display of the realistic cost of providing age-appropriate services to young children can be constructed and early childhood policies developed.

## II. A FRAMEWORK FOR ANALYSIS OF EDUCATION AND CARE COSTS

While there is considerable support for expansion of early childhood services in the Northwest and Hawaii, states face the reality of highly limited funds for new program development. In this section, a framework for analysis of early childhood education and care costs is proposed. This analysis is data-based, using figures of actual, known, current expenditures.

The early childhood cost analysis is designed to serve as a tool for policy makers as they weigh the feasibility of expanding education and care services, assisting them with actual cost data as they select among alternative program development proposals. By using this analytic framework to simultaneously view the potential costs of comprehensive early education programs and child care services, policy makers can evaluate the impacts of their funding decisions on the state's ability to meet the overall needs of the child.

The cost analysis first assesses the cost of existing services to the region's young children. It then assumes the desirability of extending proven, effective services to all the children for whom they are appropriate. Thus, using current service levels and per-child costs as the base, service needs, i.e., delivery of these services to all appropriate children, can be extrapolated and costs of expansions established.

An illustration of the cost framework's applicability is offered. The framework is applied to data on early childhood education and care services from one of the region's states. For this case study example, data on the State of Oregon's current public expenditures--federal, state, and local dollars--have been drawn from the NWREL early childhood program depiction study (Conklin, et al., 1989). Costs of a set of needed services, i.e., extending this assumed set of programs to all Oregon children for whom they are appropriate, are then derived from these data using the cost analysis model.

The section concludes with consideration of the implications of using a cost analysis as a framework for developing state policy for early childhood services.

### Cost Analysis is Based on Existing Services

The NWREL regional depiction study of early childhood care and education programs demonstrates that a full range of services for young children and their families has been developed in the region's states, but that many programs currently serve only a minority of eligible children. Discussions of how to meet the needs of the region's young children thus

center less around program initiation than extension and expansion of proven programs to meet the service needs of all, not just a portion, of the children for whom they are intended, as well as how to assure program quality.

The cost analysis therefore does not project any new services. Current costs are estimated on the basis of expenditures for specific existing services. Needed service projections display the costs of providing those current services to all children for whom they are appropriate.

If an initial application of the cost analysis were to reveal need for initiation of new services or, more likely, improvements of aspects of the quality of current service types, these can be readily integrated into the model and the costs of alternative service enhancements calculated. Thus, once needed levels of services have been cost-estimated, policy makers can pose their quality-of-service questions in the framework of the cost analysis by integrating the costs of quality-control and -improvement programs into subsequent cost displays.

#### Cost Analysis is Comprehensive in Scope

The cost analysis framework reflects the changing nature of developmentally appropriate services as the child moves from birth through school age, as well as the age-related changes in levels of demand for various services. In their early years, children primarily need basic care. Need for developmental education expands as the child nears school age. The data in the cost analysis are therefore displayed by age groupings of children. Both education and care services are included in the cost analysis.

If the overall needs of young children are to be met, all service possibilities must be viewed as complementary sectors of a diversified service delivery system. For, in reality, expansion of one service or provider affects the demands for services of others. For example, a community's need for child care for four-year-olds cannot be properly assessed without estimating the numbers of four-year-olds who attend public prekindergartens. Thus, expenditures by governments--the public sector--and by parents, community organizations, and businesses--the private sector--must be included in the cost analysis.

#### Cost Analysis is a Flexible Model

A set of assumptions about the services required for young children must be posited in order to develop an analysis of service delivery costs. These assumptions are most appropriately derived from the research on early childhood, young children's welfare and developmental needs and the long-term effectiveness of care, education, and intervention programs.

For purposes of introducing the cost analysis model, a set of research-derived service need assumptions has been developed. These assumptions underlie the case application of the cost analysis to Oregon data which is presented later in this section. They represent delivery of a conservative level of early childhood services.

The cost analysis displays the contributions of the full range of early childhood service providers, from families to publicly-funded programs. Thus, any application of the cost analysis requires that a set of assumptions about who will provide the various services be established. The Oregon case example below attributes specific financial contributions and responsibilities to parents and relatives (for which no cash contribution is computed), to the private sector, and to the public sector. If desirable the cost analysis could, for example, specify federal vs. state contributions, which are collapsed for purposes of the illustration.

Future applications of the cost analysis would probably reflect modification or expansion of these service type and responsibility assumptions. Any assumptions in the cost analysis can be adjusted to reflect programs, policy priorities, and service delivery costs as they are found in an individual state.

#### Current and Needed Services are Displayed

The cost analysis displays current and needed services in early childhood education and care. It calculates the current public and private expenditures for early childhood services and the numbers of children these programs currently serve. These figures constitute the "Current Services."

Then, based on the numbers of children who currently do not have access to appropriate services, the necessary expansions of the services to provide for the entire population are calculated. The difference between current spending and the amount needed to meet the needs of all children is reported as "Needed Services."

#### Oregon Case Example: Services Assumptions

Table 2 (next page) displays in summary form the assumptions developed for the illustrative application of the cost analysis. Note that the services to be considered in the Oregon case example include both education and care and that the cost of providing services is assigned to the public or private sector in the assumptions.

The specific set of services derived from these assumptions is displayed in Table 3 (page 13), with indication of the age groups for which the services are to be provided. On the education side, the services included in the cost analysis represent a conservative interpretation of the early childhood education effectiveness literature. On the care side, the cost analysis assumes that no child of twelve years or younger should be left unsupervised during the work day. Thus, costs of child care are reflected for children from birth through twelve-year-olds who would otherwise be alone at home.



Table 2

OREGON CASE EXAMPLE: SERVICES ASSUMPTIONS

1. TYPES OF NEEDED SERVICES

- o The types of programs currently offered in the state are appropriate to meet the needs of young children.
- o Only program extensions are required to meet the needs of all the state's young children.

2. LEVELS OF NEEDED SERVICE

Education Services

- o At-risk four-year-olds need access to prekindergarten.
- o Five-year-olds need access to half-day kindergarten.
- o At-risk five-year-olds need access to full-day kindergarten.
- o Education is a public responsibility.

Care Services

- o All children need adult supervision.
- o Care by relatives is not a visible cost, but care by non-relatives is a visible cost.
- o Funding of care of poverty children during parents' working hours is a public responsibility, but funding of care in other situations is a private responsibility.
- o Accessible, quality care is in the public interest.

Table 3

OREGON CASE EXAMPLE: NEEDED SERVICES BY AGE GROUPING

	<u>EDUCATION SERVICES</u>	<u>CARE SERVICES</u>
<u>0-2 YEARS</u>		Child care when unsupervised
<u>3 YEARS</u>		Child care when unsupervised
<u>4 YEARS</u>	Prekindergarten for at-risk	Child care when unsupervised
<u>5 YEARS</u>	Half-day kindergarten for all Full-day kindergarten for at-risk	Child care when unsupervised
<u>6-12 YEARS</u>	[Full-day schooling]	Child care when unsupervised

For purposes of cost analysis, care and educational programs are distinguished, although care programs may have developmental components and education programs also provide for children's basic care needs. Kindergarten, Head Start, and state-sponsored prekindergarten programs (as well as public schooling) are included among educational programs. All other services are regarded as care programs.

The cost analysis does not address program content or quality; rather, it states and projects the costs of delivering services as these services are now constituted and at current levels of expenditure per child. Programs directed toward quality assurance could, however, be included in such a model.

Oregon Case Example: Data for an Analysis of Costs

As an illustration of the utility of the early childhood cost analysis, the model has been applied to selected data on education and care services in the state of Oregon.\* In Oregon, as in other states in the

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\* Detailed information on Oregon services and their costs that have been used to derive the figures in the cost analysis can be found in the documents appended to this report and in the NWREL early childhood program depiction study (Conklin, et al., 1989).

region, a wide diversity of early childhood services are in place, but many of the services are not available to all the children in the state.

Education programs reflected in this initial application of the cost analysis include federal Head Start and Oregon's own State Prekindergarten Program and kindergarten. About a quarter of the state's young children live in poverty; prekindergarten, recommended for these economically disadvantaged four-year-olds, is currently available to one in four disadvantaged preschoolers. Public kindergarten is available to most of the state's five-year-olds for at least half a day.

The state also provides early education programs that are not reflected in the case example. Key among these is handicapped early intervention, now provided for some three- to five-year-olds, and planned for birth through two-year-olds as well. Handicapped services generally cost about twice the amount of general per pupil expenses. Services to very young children may be considerably more costly, since they are highly individualized, but these costs have not yet been estimated. In addition, Oregon has parent education programs, many of which are components of child-oriented programs (e.g., prekindergarten), but some of which are separately funded. For simplicity of illustration, these two types of services have not been included in the case study example. However, the cost analysis could be readily expanded to reflect a more complete range of early education services, were Oregon officials to make use of the cost analysis model for actual policy development.

Private sector providers offer most of the state's child care. There is a shortage of family home-based care and, in many communities, center care is also difficult to secure. Almost a fifth of Oregon elementary-aged children lack adult supervision before and after school. Child care seems expensive, apparently beyond the means of many parents, despite child care assistance, income tax credits, and other public subsidies. Full-time annual costs for basic care amount to about \$4,800 for infants and toddlers and about \$2,500 for preschoolers. Arrangements with relatives and friends serve to subsidize this care for many parents.

Tables 4, 5 and 6 (next pages) present summaries of the case example findings for services and for costs. The tables display current and needed services and the costs of those services for five age cohorts of children, each of which makes unique demands on the state's service resources. For children birth through three-years-old, this application of the cost analysis projects basic care services. However, the cost of infant-toddler care is greater than that for children over two and one-half years of age, so the groups birth through two and three year olds are kept distinct for cost assessment purposes.

Children four and above are grouped for the cost analysis according to their changing educational service needs. As stated above, this application assumes prekindergarten for disadvantaged four-year-olds and kindergarten for all five-year-olds, on a full-day basis for the disadvantaged, as well as custodial care when unsupervised. School-aged children require before- and after-school care, if parents are at work.

Table 5

## OREGON CASE EXAMPLE: CURRENT PROVIDERS AND COSTS OF CHILD CARE

		<u>PROVIDER</u>		<u>COST</u>
0-2 Years	Mother	50,099	(43%)	Not Calculated
	Relative	30,833	(27%)	Not Calculated
	Home/Center	33,457	(29%)	\$160,593,600
	Self	<u>1,312</u>	<u>(1%)</u>	\$-0-
		115,701	(100%)	
3 Years	Mother	15,427	(40%)	Not Calculated
	Relative	10,645	(28%)	Not Calculated
	Home/Center	11,801	(31%)	\$29,599,680
	Self	<u>694</u>	<u>(1%)</u>	\$-0-
		38,567	(100%)	
4 Years	Mother	15,427	(40%)	Not Calculated
	Relative	10,876	(28%)	Not Calculated
	Home/Center	11,801	(31%)	\$29,544,600
	Self	<u>463</u>	<u>(1%)</u>	\$-0-
		38,567	(100%)	
5 Years	Mother	16,784	(40%)	Not Calculated
	Relative	11,078	(26%)	Not Calculated
	Home/Center	12,840	(31%)	\$30,520,500
	Self	<u>1,259</u>	<u>(3%)</u>	\$-0-
		41,961	(100%)	
6-12 Years	Mother	90,172	(34%)	Not Calculated
	Relative	33,257	(12%)	Not Calculated
	Home/Center	89,270	(34%)	\$152,389,140
	Self	<u>52,512</u>	<u>(20%)</u>	\$-0-
		265,211	(100%)	

Table 6

## OREGON CASE EXAMPLE: SUMMARY OF SERVICE COSTS

	<u>EDUCATION SERVICES</u>		<u>CARE SERVICES</u>	<u>ESTIMATED PUBLIC EXPENDITURE</u>
	<u>At-Risk</u>	<u>General</u>		
<b>0-2 Years</b>				
Current	\$-0-	\$-0-	\$160,000,000	\$10,000,000
Needed	<u>-0-</u>	<u>-0-</u>	<u>6,300,000</u>	<u>1,600,000</u>
Total	\$-0-	-0-	\$166,300,000	\$11,600,000
<b>3 Years</b>				
Current	\$-0-	\$-0-	\$29,600,000	\$3,500,000
Needed	<u>-0-</u>	<u>-0-</u>	<u>1,700,000</u>	<u>400,000</u>
Total	\$-0-	\$-0-	\$31,300,000	\$3,900,000
<b>4 Years</b>				
Current	\$11,000,000	\$-0-	\$29,500,000	\$14,500,000
Needed	22,300,000	-0-	1,000,000	22,500,000
Total	<u>\$33,300,000</u>	<u>\$-0-</u>	<u>\$30,500,000</u>	<u>\$37,000,000</u>
<b>5 Years</b>				
Current	\$ 2,200,000	\$65,000,000	\$30,500,000	\$ 70,800,000
Needed	<u>20,000,000</u>	<u>23,900,000</u>	<u>1,100,000</u>	<u>44,000,000</u>
Total	<u>\$22,200,000</u>	<u>\$88,900,000</u>	<u>\$31,600,000</u>	<u>\$114,800,000</u>
<b>6-12 Years</b>				
Current	Not Calculated		\$152,400,000	\$23,100,000
Needed	Not Calculated		<u>89,600,000</u>	<u>22,400,000</u>
Total			<u>\$242,000,000</u>	<u>\$45,500,000</u>

Tables 4, 5 and 6 display in separate columns the distinct educational services assumed for the at-risk and the general child population for separate columns. Detailed displays of the analysis of costs for meeting the needs of each age group can be found in the appendices.

#### Oregon Case Example: Services Outcomes

Table 4 reports the numbers of Oregon children who are currently receiving the assumed education and care services and the numbers for whom these services are currently lacking. Education services are specified for the general child population and for children economically at-risk, as additional services are assumed to be required for disadvantaged children.

In the area of education services, it is at-risk preschoolers who are least well served with the programs assumed for the cost analysis. Just 23 percent of the state's 2,200 economically at-risk children are currently offered public prekindergarten. Seventy-three percent of five-year-olds (30,700 children) are enrolled in public kindergarten, but only 10 percent (1,100 children) of those children who are economically at-risk receive the extra half-day of kindergarten proposed in the assumptions. Standard schooling is universally provided for children six and above. Thus, there is a significant gap between current and needed early education services: about a fourth of Oregon children lack access to kindergarten; the additional school-readiness programs of prekindergarten and full-day kindergarten are provided for only a minority of the disadvantaged.

Current and needed child care services have been calculated purely on the basis of whether or not children currently lack adult supervision. These figures do not speak to the quality of the care in which children have been placed. Table 4 indicates the percentage of each age group who are in the care of their mother, in the care of some other adult (a relative, a care home, or a care center) and without the care of any adult. The proportion of children in care of their mothers declines with increasing age, but almost all preschoolers remain under some form of adult supervision. However, 20 percent of elementary school-aged children (52,200) lack adult care before and after school hours. A minority of these children do have the care of older siblings.

#### Oregon Case Example: Cost Outcomes

Table 6 summarizes cost of current and needed services assumed for the case example. Table 5 provides a detailed break-down of the calculations underlying the care service figures reflected in the Table 6 summary.

For purposes of cost analysis, the providers of child care for each age group were established, i.e., how many children are in the care of parents, relatives, care homes, care centers and in self-care. If care is being provided by the mother or another relative, it has been assumed that this care is provided without cash payment, so no cost figure has been assigned. On the other hand, care by non-relatives, in care homes and centers, is assumed to be paid for at prevailing Oregon rates.

Table 4 shows the totals for home and center care for each age group of children. Costs are calculated taking into account hours children are enrolled in educational programs. Table 4 also shows the numbers of children in self-care, i.e., without adult supervision. A cost of \$0 is assigned.

It is important to note that paid vs. non-paid care has been estimated. Arrangements for non-relative, non-paid child care are in fact made between friends and on cooperative and exchange bases. Such arrangements are not reflected in the figures, which may thus be somewhat inflated. On the other hand, the monetary value of the care contributions of parents and relatives have not been calculated and these constitute a significant investment in the child care resource pool.

The summary of costs displayed in Table 6 reflects a need for increased early childhood education services. Providing full access to the projected early education programs would constitute a major public expense. At current costs per child, the Oregon public would have to spend an additional \$22,300,000 to provide prekindergarten to all its economically disadvantaged four-year-olds. Half-day kindergarten for all five-year-olds and the extra half-day program for economically disadvantaged fives would require \$43,900,000 in new expenditures--\$23,900,000 for basic half-day kindergarten and \$22,300,000 for the second-half day for the disadvantaged.

As Table 6 further demonstrates, Oregonians, as families and as a public, are investing large amounts for child care services. The figures total the costs of services which are assumed to be paid, i.e., are not provided by parents or relatives. Were the actual value of these familial services calculated, the sums for the value of child care services would be significantly higher. About \$10,000,000 would be required to provide access to basic care for all preschool-aged children now without adult supervision. School-aged child care, seen in the tables as significantly lacking, would cost almost \$90,000,000. The cost analysis assumes that most of these costs would not be borne by the public; it is stated in the assumptions of the case example that public responsibility extends only to parents in poverty.

The left-most column on Table 6 sums the current and projected public expenditure for the assumed set of education and care services for each age group of children. Education services are assumed to be a public responsibility; therefore the entire amounts for current and needed educational programs are included in the public expenditure column. Current public expenditures for child care are derived from direct and indirect subsidy programs currently in place. The public portion of needed child care expenditures is based on 25 percent of the total additional needed funding, as the cost analysis assumes public responsibility for care of poverty children and private responsibility for care of non-poverty children. Public funding for enhancements to the child care system--e.g., staff training programs, registration and inspection programs, full subsidy for actual expense of care--are not reflected in these figures.

## Oregon Case Example: Policy Implications

The cost analysis points out a fundamental difference between the need for education services and the need for care services for preschool-aged children in Oregon: early education needs attention to service quantity; early childhood care may most need attention to service quality. The cost analysis indicates that, in Oregon, many children who would benefit from early childhood education do not have access to appropriate services. Educational programs that the early childhood research reports as long-term cost-beneficial are not fully in place. Significant public resources would be required to install appropriate levels of service.

The cost analysis shows significant private and public resources are being devoted to child care. Almost all preschool-aged children are in some sort of adult care, although child care expansion is needed for school-aged children. However, the quality of the care at all age levels is open to question. Enhanced quality would probably spur greater demand.

This example application of the cost analysis begins to enable Oregon's policy makers to see their young children's needs comprehensively and to focus on the areas of most urgent need for service expansion and enhancement. It also identifies areas in which further data and analysis may be needed for informed priority-setting.

## Using the Cost Analysis for Policy Development

The case example cost analysis of a limited set of early childhood program data from Oregon has been designed to illustrate how current program cost data can be drawn from a full range of federal, state, and local agencies and brought together for purposes of policy analysis. Looking simultaneously at costs of programs from throughout the public sector together with the contributions of families and private sector providers, policy can be developed that encompasses and enhances the diverse public/private delivery system that characterizes young child services.

Policy developers can articulate any set of assumptions, or various alternative sets of assumptions, about the services that they wish to see provided to the children of their state. Then, plugging them into the cost analysis, they can weigh the costs and impacts of various approaches to providing those services--approaches that rely on private sector contributions as well as public programs and subsidies.

When used by policy developers, the cost analysis would be iteratively applied to expanded data, running alternative data through the cost analysis. Each new pass would test arrays of options, until proposed policy approaches were optimized and their effects on the comprehensive service delivery system evaluated.

Sitting down together to look broadly across the programs that their agencies are responsible for or would like to advocate, policy developers from education, human services, community services, and other interested parties could use the cost analysis to cooperatively assess the extent to which the state is and can meet the needs of children. For example, key



policy makers could collaborate on proposing and then costing-out a comprehensive early childhood policy. Or, key individuals or agencies could each propose and cost-out their ideal (and bottom line) program proposals, then, sharing the results, clarify the effects of their own proposals, identify areas in which different proposals might impact on one another, and develop consensus or complementary policy plans. Such consensus or complementary plans could be quickly run through the cost analysis again to evaluate effects of the revisions on the comprehensive education and care delivery system.

Since the cost analysis takes a comprehensive view, inclusive of family and private sector roles in delivering services to young children, such cost analysis strategy sessions might be broadened to include representatives of non-governmental groups as well. The cost analysis can be adapted to take any range of factors into account. Policy developers would want to consider--and derive cost projections for--state resources, costs, and priorities, for example, the varying costs of delivering services throughout the state or costs of specific service enhancements which have priority with local constituencies. Using the cost analysis, long-range plans for early childhood services could be developed, plans that can be readily adjusted to meet contextual changes.

One useful application would be constructing long-range early childhood service plans which factor in the resources received from federal programs, using the cost analysis to revise state investments to be maximally complementary with those available from federal revenues. The next section of this report reviews the federal context as it applies to state early childhood planning and demonstrates the importance of long-range, but flexible planning for meeting the needs of young children.

### III. THE FEDERAL CONTEXT

State-level planning to meet young children's needs must take federal actions into account. In this section the trends in federal programs are analyzed and their potential impacts on state policy development described.

#### The Federal Role

The federal contribution to state early childhood services, when viewed as a percentage of total state costs, may appear to be a relatively minor one. Many state programs are partially--in some cases, substantially--dependent on federal funds, but it is the states which bear the brunt of the costs. Yet, when considered overall, the part played by the federal government is very important; should some of the legislation proposed but not passed in the 100th congressional session be enacted during the current session, both the nature of the federal participation and that of the state programs might be substantially altered.

In addition to the federal monies which have been made available to state early childhood programs, particularly within the past twenty or twenty-five years, the federal government must be credited with participating in the following positive developments:

- o Federal programs have helped the states redefine what is meant by the term "early childhood education," moving it far beyond its earlier connotations, commonly limited to kindergarten and perhaps nursery school.
- o Federal family assistance programs have expanded the accepted domain of public responsibility to poor families to include child care services and assistance for parents who work.
- o Federal appropriations, though often rather meager when compared with the "such sums as may be necessary" language of the authorization bills, have provided at least the seed money to get programs going and to spur the states to making further expenditures, in part because of the "supplement, not supplant" dictum.
- o Congressional acts which affect early childhood programs have made it clear--mandatory, in fact--that such programs are not to be considered the sole province of the formal educational systems, state and local, but are a responsibility to be shared with other agencies.

- o Coincident with this shared responsibility is the absolute mandate contained in many of the congressional acts for forced collaboration between and among the agencies involved (federal, state, and local).

Up to the present, these positive federal influences have generally been applauded--sometimes rather reluctantly--by the states. Less state enthusiasm is exhibited for two emerging developments in the federal posture which may be foreshadowed by the provisions contained in some of the legislation proposed in the last congressional session, and which are quite likely to reappear in some form in a number of bills which may be expected to be introduced during the current session:

- o The federal interest seems to be leaning more and more toward the child care aspects, rather than the specifically educational aspects, of early childhood programs.
- o Some of the proposed programs, rather than building on the established educational systems of the states, seem in many respects to envision setting up (or supporting the establishment of) a virtually separate state system of early childhood programming, lodged in the general administrative structure of the state, answerable ultimately to the governor and not to the state educational authorities.

The first major early childhood legislative initiative of the 101st Congress, Hawkins' Child Development and Education Act (H.R.3), would designate two-thirds of the \$2.5 billion proposed for authorization for child care--one-third for schools-based child care and one-third for home- or center-based infant and toddler care. The remaining one-third would be directed toward expanding Head Start--in the Northwest and Hawaii a largely non-schools-based program. Ironically, the schools in the region would be recipients of the monies for schools-based child care, but, assuming their current low level of participation as Head Start providers continues, few schools in the region would be involved in providing the educational component of the proposal.

This bare-bones summary of the positive developments which have emerged from federal participation in early childhood programs so far, and some of the problems which may be appearing on the horizon, warrants some further explanation.

#### Scope of Early Childhood Programs

Popularly, federal interest in and partial support of early childhood programs is often thought of as being embodied in its most visible parts: Chapter I, Head Start, and the like. Actually, there is an extremely broad range of federal legislation which funds to some degree (and through a great variety of federal agencies) "child care" and "family intervention" programs which affect the early years. The Council

of Chief State School Officers (1988) has neatly summarized the range of these programs as follows:

- o Tax Expenditures (Child and Dependent Care Tax Credits, Employer-Provided Child or Dependent Care Services Tax Credit, Non-Profit Child Care Center Tax Exemption)
- o Child Care/Early Education (Head Start, Child Care Food Program, Preschool Grants for Special Education and Rehabilitative Services, Compensatory and Migrant Education, Dependent Care Planning and Development, Special Milk Program, Child Development Associate Scholarship Program)
- o Social Services/Community Development Funding (Social Services Block Grants [Title XX], Community Development Block Grant, Child Welfare Program)
- o Welfare and Job Training--Child Care Expenses (Food Stamps, Aid to Families with Dependent Children, Housing Assistance, Work Incentive Program, Job Training Partnership Act, Vocational Education)

With such a range of programs already in place, and the likely emergence of many others which may be embodied in the multiple pieces of legislation which may well come before future sessions of Congress, it is clear that earlier, limited definitions of early childhood programs--those embraced in nursery school and kindergarten, plus a few well received programs such as Head Start and Chapter I--will no longer suffice to describe what the states are now involved in and will likely be undertaking in the future.

#### Effects of Federal Appropriations

If past history is an adequate guide, it seems entirely possible that the federal government will continue to underfund the programs for which it has provided by law. Realistically, it does very little good to bemoan this situation; the sometimes harsh facts of politics argue for the probable continuation of this practice. The good news--if there is any--is that states will continue to be motivated by the stick-and-carrot approach offered by this manner of funding.

For example, the new provisions of federal legislation for the very young handicapped do not really say that the state is mandated to provide the prescribed services; but if they elect not to do so by the cut-off date, they forfeit their entitlement to the federal funds. This threat, plus knowing that failure to comply with the provisions of the act may place the state in violation of other equal-access laws, is enough to stir the states into action. They will grumble, but they will generally comply.

The way in which federal appropriations are tied to state compliance may perhaps be, as state opinion often holds, a somewhat backhanded, even underhanded, way of making federal funds available, but it has stirred many states to expand both their concepts of early childhood services and their support of new programs.

### Shared Responsibility

By placing the responsibility (and more important, the funding) of many child-oriented programs in the hands of agencies other than departments of education, at both federal and state levels, the Congress may signal clearly that they believe that these programs belong elsewhere--the Department of Health and Human Services, for example, or the Department of Agriculture. Alternatively, and perhaps more candidly, such congressional action could be interpreted as an expression of a deep, if often irrational, distrust of the education establishment. Certainly this is true, in many cases, at the state level: neither the governor nor the legislature feels quite comfortable with entrusting a new program to the education authorities.

Wrong as this position may be, and unfair as it may appear, parceling out child-oriented programs may well have had the salutary effect of making all of the agencies concerned more conscious of the fact that they are dealing with families, not just children; that welfare problems are often primarily educational problems; that gainful employment for the individual and an available labor supply educated to meet the demands of industry and commerce are not just a department of education or a department of employment problem alone; that the health and nutrition deficiencies of young children (and their mothers) may be more immediate problems than any deficiencies in their formal education.

### Collaboration Among Agencies

Recognition of a shared responsibility between and among agencies concerned with early childhood does not necessarily ensure real collaboration or genuine cooperation in solving the problems. Federal legislative language in early childhood bills is increasingly couched in terms which attempt to encourage, even to force, interagency collaboration as a condition of receiving the proffered funds. Some states, surely, can point to a long history of encouraging and engaging in such cooperative planning and program operation involving two or more state agencies charged with addressing some aspect of early childhood education and/or care. Strong, sometimes even heavy-handed, federal encouragement, however, has aided immeasurably in forcing both federal and state agencies to get their collective acts together, to the undoubted benefit of the families and the children involved and to the general welfare of the nation and the states.

These positive federal contributions to the development of early childhood programs are of such nature that they will undoubtedly continue to be an important part of the context within which these programs operate, but it seems quite probable that future legislation may also entail some developments which may not coincide with state preferences.

### Congressional Directions are Emerging

There is every reason to believe that the national interest in public support of early childhood services will continue, considering the enthusiasm which has been engendered and the political promises made by

both major parties in response to the widespread and powerful demands which various constituent groups continue to voice. Working parents, particularly those heading single-parent families, are strong in their insistence that they need subsidized child care, a demand that is echoed by employers in need of attracting as large a qualified labor pool as possible. Child advocacy groups, both those with a comprehensive orientation and those specifically interested in the handicapped or the economically disadvantaged, add a strong and vigorous voice to the chorus of those who insist that the schools--or some other agency--must address their well-documented contention that our children are being neglected. The problems of relatively high infant mortality rates, of hunger and homelessness, of abused and neglected children, of teen-age pregnancy, of the emergence of a permanent underclass, and even of the "noncompetitiveness" of America in international markets--all of these identified problems and others support the call for greater federal intervention and support.

The most-discussed proposed legislation of the last congressional session, The Act for Better Child Care Services (ABC) and Smart Start bills, together with other legislation not much further along than the drafting stage, may now be considered to be in a state of inanimate suspension, but not actually dead. New bills incorporating aspects of these have already been introduced into the 101st Congress. Whatever legislation may finally emerge from the current Congress or subsequent sessions, at least two directions toward which the proposed legislation seems to be pointing can be identified.

The first is that the emphasis is increasingly on the child care issue, rather than on specifically educational problems of children. Children have their own advocates, of course, many of them speaking clearly and persuasively on behalf of all the needs--social, economic, health, developmental, and educational--of children. But parents and employers do not need to speak primarily through advocacy groups: they vote. And their vote is for congressional representatives and state legislators who will support programs which give care to children at a reasonable, preferably subsidized, cost so that parents can be employed and wages earned. Child care per se is seen as more important than any of the other related issues.

The second direction implicit--but rarely made explicit--in the various pieces of proposed federal legislation is that the traditional school system (like the disappearing traditional family) is no longer capable of being the primary focus or mover in the provision of early childhood programs. Instead of building on these traditional bases, therefore, some of the legislation (which, if passed, will become the "federal" position) will in effect erect a new system, lodged in the offices of the governors of the states or the agencies designated by and reporting to them. The new early childhood service system, its legislative proponents maintain, will never replace the home or the school, but they do not deny that they are setting up a new system, parallel to the traditional ones.

The federal framework in which state early childhood services now operate, and may quite reasonably be expected to continue to operate,

reflects both the positive advances which these federal programs have offered to the states, and the prospect that changes may occur which will alter, and perhaps diffuse, the efforts of state policy makers on behalf of young children. The concluding section of this report suggests how the analytic framework proposed above may serve to aid policy makers as they develop plans for meeting the needs of young children which can respond to this complex and changing environment.

## IV. IMPLICATIONS FOR POLICY DEVELOPMENT

### A Comprehensive Approach to Children's Needs

The myriad efforts of federal, state, and local programs, of private providers, and of families to provide for the care and education of our young children are amenable to improvement when viewed as a comprehensive system. The focus for policy development lies not in evaluating the efficacy of any single program or group of programs, but rather on creating a system that meets the overall needs of the child. Young children require constant care, with the types of services required expanding from basic care needs to include educational needs as they grow toward school age. Policy which addresses the child thus recognizes that education and care are not distinct services, but that both are necessary for the young child, and that education occurs in care settings and education programs provide care.

While care and education of young children is the legitimate role of the family, the public sector has a role when services are necessary to augment the abilities of families to meet their children's needs. Increasingly, families are calling for such assistance.

### Considerations for State Planning

The overview of publicly supported early childhood programs in the Northwest and Hawaii in the first section of this report indicates that families' requests for collaboration in meeting their children's needs have evoked a positive response federally and in the states. A variety of early education opportunities and child care assistance programs have been initiated. But the public services do not yet reach all the children who need them and many families do not have the means to purchase services privately without public assistance. The accessibility of services remains partial.

Further, as they do with other services, families look to the public sector for assurances that the early childhood services they receive or purchase are of reliable quality. States thus inherit a significant role as agents for monitoring programs, setting standards for staff training, and other quality-assurance activities. While congruent with existing state regulatory and administrative responsibilities, the multi-faceted nature of the early childhood service delivery system makes this task far from straightforward.

Oversight of education programs is complicated by discontinuities between the agencies responsible for administration of the schools and those responsible for education programs for younger children. For education, however, at least the model of an administrative oversight system is well



established in departments of education. In the area of child care, on the other hand, state quality-assurance initiatives constitute entry into highly privatized domains, where state oversight is largely without precedent. Issues such as staff credentialing and program licensing are still new. And much of the care system--most home-based care--has not yet even been well identified by the states.

In addition to demands from families, states must respond to federal initiatives regarding early childhood services, as the preceding section of this report has indicated. Some federal programs have become an integral part of the states' own service delivery systems, augmented with state funds. However, states are also encouraged by federal initiatives to venture into areas which they might, without federal action, have left alone.

The expectation of state participation in early childhood service delivery is rising on all sides. Both as providers and regulators of services, states are playing an increasingly key role. Yet, states' financial resources are highly limited and will remain so for the foreseeable future. Funds for program initiation and expansion are difficult to secure.

#### Long-Range Planning is Required

However, regardless of the obstacles facing meeting even current commitments, it is difficult not to contemplate the advantages of expansion of public support for early childhood programs when the long-term benefits are taken into account. The high cost-benefit of early educational interventions--prekindergarten, kindergarten, and parent-child programs--has been amply demonstrated. The economic advantage, indeed necessity, of an adequate, trained workforce is indisputable and the demographic realities indicate that states will need to rely on the labor force participation of mothers.

Given the increasing imperative to address early childhood service needs and the limitations of state resources, policy makers will need to plan for the long term, phasing in the most cost-effective and cost-beneficial services as funding becomes available. A comprehensive analysis of the state's resources for young children--families, community organizations, and for-profit providers, as well as federal, state and local programs--will be required. Then, informed approaches that best augment and enhance this diversified child-support system can be developed.

#### Cost-Analysis is a Tool for Long-Range Planning

The early childhood cost analysis framework introduced in this report offers policy makers a model for assessing the monetary value of services to children from the entire network of private and public providers. It may assist policy developers to locate the linch points to which state resources can be most effectively applied in order to maximally enhance the overall service system.

The Oregon case example, even with the limited set of assumptions applied for illustration here, demonstrates that there is a need to expand the quantity of early education services, especially for at-risk children. An estimate of the costs of expanding each of the specific services can be displayed. The example cost analysis further shows that, while few preschoolers lack some sort of supervisory care, many school-aged children are without care. The most pressing need for expansion of care, then, is apparently before- and after-school care. Costs of providing this basic care can be displayed, with a portion for public expenditure estimated. Using such cost calculations, the state's policy makers can assess the wisdom of, for example, investing in public education programs against assisting the expansion of child care services.

Further, by assessing the portion of the state's child care that is provided by parents, relatives, care homes, and care centers, costs of programs that would impart quality of child care can be calculated. Thus the cost and efficacy of public investments that directly offer greater quantities of service--most needed in early education--and those that would assure quality of service--of most concern in child care--can be weighed.

Policy makers may wish to apply the cost analysis to data on programs and services in their own states. The analysis can be made as comprehensive as they wish, including the full range of early childhood education and care services provided by federal, state and local agencies--or proposed for public support--together with the contributions of families and the private sector. Groups of state officials can sit down together to review options and alternatives for comprehensive early childhood policy planning, using the cost analysis as a tool to assess the price tags, compatibility, and cost-benefits of various alternatives, taking both private and public resources into account.

Long-range, data-based planning can maximize the effectiveness of states' investments in early childhood programs, at the same time that it demonstrates the cost-benefits of investments which are difficult to rationalize on a short-term basis. And, comprehensive, long-range planning can maximize synergy of family, private, state, and federal resources for meeting the needs of young children.

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# APPENDICES

## APPENDIX A COSTS OF SERVICES: OREGON BIRTH THROUGH TWO-YEAR-OLDS

### POPULATION

<b>A. <u>Disadvantage Status</u></b>	
Not at-risk	86,776 (75%)
At-risk	<u>28,925 (25%)</u>
<b>Total</b>	<b>115,701</b>
<b>B. <u>Caretaking Status</u></b>	
In care of mother	50,099 (43%)
Require care	<u>65,602 (57%)</u>
<b>Total</b>	<b>115,701</b>

### SERVICES

<u>A. Current Services</u>	<u>CHILDREN</u>	<u>COST BY TYPE</u>	<u>COST BY FUNDER</u>
1. Educational Services	None	\$-0-	\$-0-
2. Care Services			
In care of relative	30,833 (47%)	Not calculated	Public \$ 10,039,687
In care homes and centers	33,457 (51%)	\$160,593,600	Private 150,553,922
Self-care	<u>1,312 (2%)</u>	-0-	
<b>Total in Care</b>	<b>65,602 (57%)</b>	<b>\$160,593,600</b>	<b>\$160,593,600</b>
3. Total Cost of Current Services		\$160,593,600	\$160,593,600
<b>B. <u>Needed Services</u></b>			
1. Educational Services	None	\$-0-	\$-0-
2. Care Services			
Require care	65,602	\$166,891,200	Public \$1,574,400
Have current care	<u>64,290</u>	<u>160,593,600</u>	Private <u>4,723,200</u>
<b>Needed</b>	<b>1,312</b>	<b>\$ 6,297,600</b>	<b>\$6,297,600</b>
3. Total Cost of Needed Services		\$ 6,297,600	\$6,297,600

**APPENDIX B**  
**COSTS OF SERVICES: OREGON THREE-YEAR-OLDS**

**POPULATION**

<b><u>A. Disadvantage Status</u></b>	
Not at-risk	28,925 (75%)
At-risk	<u>9,642 (25%)</u>
<b>Total</b>	<b>38,567</b>
<b><u>B. Caretaking Status</u></b>	
In care of mother	15,427 (40%)
Require care	<u>23,140 (60%)</u>
<b>Total</b>	<b>38,567</b>

**SERVICES**

<b><u>A. Current Services</u></b>	<b><u>CHILDREN</u></b>	<b><u>COST BY TYPE</u></b>	<b><u>COST BY FUNDER</u></b>	
1. Educational Services	None	\$-0-		\$-0-
2. Care Services				
In care of relative	10,645 (46%)	Not calculated	Public	\$ 3,492,062
In child care			Private	26,107,618
Family homes	6,479 (28%)	\$15,549,600		
Centers	5,322 (23%)	14,050,080		
Self-care	<u>694 (3%)</u>	<u>-0-</u>		
<b>Total in care</b>	<b>23,140 (60%)</b>	<b>\$29,599,680</b>		<b>\$29,599,680</b>
3. Total Cost of Current Services		\$29,599,680		\$29,599,680
<b><u>B. Needed Services</u></b>				
1. Educational Services	None	\$-0-		\$-0-
2. Care Services				
Require care	23,140	\$31,340,160	Public	\$ 435,120
Have current care	<u>22,446</u>	<u>29,599,680</u>	Private	<u>1,305,360</u>
<b>Needed</b>	<b>694</b>	<b>\$ 1,740,480</b>		<b>\$1,740,480</b>
3. Total Cost of Needed Services		\$ 1,740,480		\$1,740,480

APPENDIX C  
COSTS OF SERVICES: OREGON FOUR-YEAR-OLDS

POPULATION

<b>A. <u>Disadvantage Status</u></b>	
Not at-risk	28,925 (75%)
At-risk	<u>9,642 (25%)</u>
<b>Total</b>	<b>38,567</b>
<b>B. <u>Caretaking Status</u></b>	
In care of mother	15,427 (40%)
Require care	<u>23,140 (60%)</u>
<b>Total</b>	<b>38,567</b>

SERVICES

<u>A. <u>Current Services</u></u>	<u>CHILDREN</u>	<u>COST BY TYPE</u>	<u>COST BY FUNDER</u>	
1. Educational Services				
PreK for at-risk	2,218 (23%)	\$11,051,539	Public	\$11,051,539
<u>Total in Education</u>		<u>\$11,051,539</u>	Private	<u>-0-</u>
				<u>\$11,051,539</u>
2. Care Services				
In care of relative	10,876 (47%)	Not Calculated	Public	\$ 3,492,062
In child care			Private	26,052,538
Family homes	6,479 (28%)	\$15,549,600		
Centers	5,322 (23%)	13,995,000		
Self-care	463 (2%)	-0-		
<u>Total in Care</u>	<u>23,140 (60%)</u>	<u>\$29,544,600</u>		<u>\$29,544,600</u>
3. Total Cost of Current Services		\$40,596,139		\$40,596,139
<b>B. <u>Needed Services</u></b>				
1. Educational Services				
PreK for at-risk	7,424 (77%)	\$22,272,000	Public	\$22,272,000
		<u>\$22,272,000</u>	Private	<u>-0-</u>
				<u>\$22,272,000</u>
2. Care Services				
Require care	23,140	\$30,511,860	Public	\$241,815
Have current care	<u>22,677</u>	<u>29,544,600</u>	Private	<u>725,445</u>
<u>Needed</u>	<u>463</u>	<u>\$ 967,260</u>		<u>\$967,260</u>
3. Total Cost of Needed Services		\$23,239,260		\$23,239,260

APPENDIX D  
COSTS OF SERVICES: OREGON FIVE-YEAR-OLDS

POPULATION

<b>A. <u>Disadvantagemnt Status</u></b>	
Not at-risk	31,471 (75%)
At-risk	<u>10,490 (25%)</u>
<b>Total</b>	<b>41,961</b>
<b>B. <u>Caretaking Status</u></b>	
In care of mother	16,784 (40%)
Require care	<u>25,177 (60%)</u>
<b>Total</b>	<b>41,961</b>

SERVICES

<u>A. <u>Current Services</u></u>	<u>CHILDREN</u>	<u>COST BY TYPE</u>	<u>COST BY FUNDER</u>	
1. <u>Educational Services</u>				
Half-day K for all	30,699 (73%)	\$65,020,482	Public	\$67,267,680
All-day K for at risk	1,061 (10%)	<u>2,247,198</u>	Private	-0-
<b>Total in Education</b>		<b>\$67,267,680</b>		<b>\$67,267,680</b>
2. <u>Care Services</u>				
In care of relative	11,078 (44%)	Not calculated	Public	\$ 3,492,062
In child care			Private	27,028,119
Family homes	7,049 (28%)	\$16,410,000		
Centers	5,791 (23%)	14,110,500		
Self-care	<u>1,259 ( 5%)</u>	-0-		
<b>Total in Care</b>	<b>25,177 (60%)</b>	<b>\$30,520,500</b>		<b>\$30,520,500</b>
3. <u>Total Cost of Current Services</u>		<b>\$97,788,180</b>		<b>\$97,788,180</b>
<b>B. <u>Needed Services</u></b>				
1. <u>Educational Services</u>				
Half-day K for all	11,262 (27%)	\$23,852,916	Public	\$43,823,538
Full-day K for at-risk	9,429 (90%)	<u>19,970,622</u>	Private	-0-
<b>Total</b>		<b>\$43,823,538</b>		<b>\$43,823,538</b>
2. <u>Care Services</u>				
Require care	25,177	\$31,681,800	Public	\$ 290,325
Have current care	<u>23,918</u>	<u>30,520,500</u>	Private	870,975
<b>Needed</b>	<b>1,259</b>	<b>\$ 1,161,300</b>		<b>\$1,161,300</b>
3. <u>Total Cost of Needed Services</u>		<b>\$44,984,838</b>		<b>\$44,984,838</b>

APPENDIX E  
COSTS OF SERVICES: OREGON SIX- THROUGH TWELVE-YEAR-OLDS

POPULATION

<b>A. <u>Disadvantage Status</u></b>	
Not at-risk	198,908 (75%)
At-risk	<u>66,303 (25%)</u>
<b>Total</b>	<b>265,211</b>
<b>B. <u>Caretaking Status</u></b>	
In care of mother	90,172 (34%)
Require care	<u>175,039 (66%)</u>
<b>Total</b>	<b>265,211</b>

SERVICES

<u>A. Current Services</u>	<u>CHILDREN</u>	<u>COST BY TYPE</u>	<u>COST BY FUNDER</u>
1. Educational Services			
Standard schooling	265,211 (100%)	Not calculated	Not calculated
2. Care Services			
In care of relative	33,257 (19%)	Not calculated	Public \$ 23,134,910
In child care			Private 129,254,230
Family homes	49,011 (28%)	82,848	
Centers	40,259 (23%)	70,050,660	
Self-care	<u>52,512 (30%)</u>	-0-	
<b>Total in Care</b>	<b>175,039 (66%)</b>	<u>\$152,389,140</u>	<u>\$152,389,140</u>
3. Total Cost of Current Services		\$152,389,140	\$152,389,140
<b>B. <u>Needed Services</u></b>			
1. Educational Services			
Standard schooling	-0-	\$-0-	\$-0-
2. Care Services			
Require care	175,039	\$242,027,100	Public \$22,409,490
Have current care	<u>122,527</u>	<u>152,389,140</u>	Private 67,228,470
<b>Needed</b>	<b>52,512</b>	<b>\$ 89,637,960</b>	<b>\$89,637,960</b>
3. Total Cost of Needed Services		\$89,637,960	\$89,637,960



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*Ethel Simon-McWilliams, Associate Director*

The Northwest Regional Educational Laboratory (NWREL) is an independent, nonprofit research and development institution established in 1966 to assist education, government, community agencies, business and labor in improving quality and equality in educational programs and processes by:

- Developing and disseminating effective educational products and procedures
- Conducting research on educational needs and problems
- Providing technical assistance in educational problem solving
- Evaluating effectiveness of educational programs and projects
- Providing training in educational planning, management, evaluation and instruction
- Serving as an information resource on effective educational programs and processes including networking among educational agencies, institutions and individuals in the region

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Doyle E. Winter (Vice Chairman)  
Superintendent  
Educational Service District 121  
Seattle, Washington

Center for the Advancement  
of Pacific Education  
1164 Bishop Street, Suite 1409  
Honolulu, Hawaii 96813  
(808) 533-1748  
SOURCE: BDE961  
FAX: (808) 523-1741

NWREL Headquarters  
101 S.W. Main Street, Suite 500  
Portland, Oregon 97204  
(503) 275-8500  
SOURCE: STL058  
FAX: (503) 275-8489

Alaska Office:  
Goldstein Building, Room 506  
130 Seward Street  
Juneau, Alaska 99801  
(907) 586-4952