Inter-American Development Bank

Women in Development Unit
Social Programs and
Sustainable Development
Department

EARLY CHILDHOOD CARE AND DEVELOPMENT PROGRAMS IN LATIN AMERICA AND THE CARIBBEAN

A REVIEW OF EXPERIENCE

by

Robert G. Myers
The Consultative Group on Early Childhood Care and Development

October 1995

SDS/WID Working Paper Series No. 1

EARLY CHILDHOOD CARE AND DEVELOPMENT PROGRAMS IN LATIN AMERICA AND THE CARIBBEAN:

A REVIEW OF EXPERIENCE

by

Robert G. Myers
The Consultative Group on Early Childhood Care and Development

Women in Development Unit
Social Programs and Sustainable Development Department
Inter-American Development Bank

October 1995

SDS/WID Working Paper Series No. 1

Robert Myers is Originator and Co-Director of the Secretariat for the Consultative Group on Early Childhood Care and Development, an international, interagency group dedicated to improving the condition of young children at risk, Insurgentes Sur 4411, Ed 25-304, Tlalcoligia, D.F. 14430, Mexico. Dr. Myers is the author of The Twelve that Survive: Strengthening Programs of Early Childhood Development in the Third World and has participated in the design and evaluation of Early Childhood Development and Care programs in such places as Nicaragua, Peru, Kenya and India.

Women in Development Unit
Social Programs and Sustainable Development Department
Inter-American Development Bank
STOP W-0502
1300 New York Avenue, NW
Washington, DC 20577

TABLE OF CONTENTS

EXECUTIVE SUMMARY

A caring environment and child care services of good quality are essential to meet the protection, health, and physical needs of young children, as well as their intellectual, social, and emotional needs. These needs appear together and interact with each other as a child survives, grows, and develops. "Child care" and "child development" programs should respond in an integrated way to these needs, taking into consideration the needs of caregivers (particularly working mothers) as well as those of children. The programs should be affordable, accessible, flexible, run by trusted and accountable persons, and, in the very least, meet established minimum levels of quality.

This paper reviews programs intended to improve early childhood (ages 0 to about 8) care and development (ECCD), and provides a set of program guidelines, and a rationale for investing in ECCD programs. Integrated attention to young children can help improve economic productivity, reduce costs and social inequalities (including gender inequalities), strengthen social values, and mobilize communities to engage in positive social action. Because, changing social and economic conditions have created new needs and demands for ECCD programs, it is suggested that any benefits derived from them bear directly on the Inter-American Development Bank's twin objectives of reducing poverty and promoting social equity.

The report briefly describes five complementary ECCD program approaches: attending to children in centers, supporting and educating caregivers, promoting child-centered community development, strengthening institutional resources and capacities, and strengthening demand and awareness. Each of these strategies should be adjusted to different stages of child's development from conception to the first years of schooling. An appendix describes, program experiences that illustrate the first three of these five programming strategies.

The heart of the paper is devoted to an examination of, "lessons learned" with respect to program contexts, insertion of ECCD in a broader social policy, the importance of political will, and the planning and delivery of ECCD services. With respect to the latter, attention is given to planning, selecting the population to be included, the models to be used, the administrative and executing groups, and the supervisors and practioners, as well as training, delivering the service on site, integrating components, supervising, and monitoring and evaluation.

A section on costs and financing ECCD programs examines individual cost components and their variation, and considers costs per child, affordability, cost-effectiveness, who bears the costs and alternatives for lowering costs. A listing of potential effects of ECCD programs is also provided.

Finally, the paper discusses the implications for IDB policy and action. Given the close fit with IDB goals, it is suggested that the IDB affirm its commitment to support ECCD programs. Several ways in which ECCD actions can be linked to or built into existing activities and lines of action are discussed. In conjunction with the IDB's attention to women's participation and productivity, an innovative way for the Bank to support care and development would be through its provision of credit to groups of women. Other suggestions include: establishing a trust fund to support child care projects run by social organizations in urban areas and directed to female-headed households and children of women who work in the informal sector; supporting ECCD in relation to reducing primary school repetition and dropout rates; incorporating child development components into maternal and child health, health and nutritional education, food supplements, and growth monitoring activities; providing ECCD support in community kitchen projects, construction of municipal markets and urban housing projects; and supporting research and evaluation studies of several kinds.

I. INTRODUCTION

Over the last year or so, the Inter-American Development Bank (IDB) has found itself increasingly involved with a new -- to the Bank -- area of activity: early childhood care and development. This involvement has emerged from requests made at the field level as part of the project preparation process related to work in other areas such as women's productivity and urban development (Rio de Janeiro, Brazil), education (Mexico), assistance to low-income urban groups (Peru) and, more directly, programs of attention to young children (Nicaragua). Recognizing the importance of attention to early childhood care and development as both a supportive strategy for other programs lines, and as a potential area for investment in its own right, the IDB has requested a policy review paper focussing on "child care services" that would "assess the experiences of countries and international organizations in the area of early childhood education and community child care projects."[1]

A general assumption made in writing this paper is that the main question is not so much **whether** the Bank should invest in early childhood programs, but **how** to go about making such investments in as informed and intelligent a way as possible. Nevertheless, this section provides some basic definitions and a brief rationale for investment for the benefit of readers who are new to the field and in order to help link this programming strategy to the current goals and strategies of the Bank. Section II, presents a framework that sets out a range of possible programming options. The framework helps to order the discussion of possible strategies to be considered when preparing projects that incorporate attention to young children. The heart of this review lies in Sections III and IV, titled "Lessons Learned." These sections include discussions of lessons related to program context, planning, organizing and delivering services, costs and financing, integration, targeting, participation, and the process of "going to scale." A final section presents implications for IDB policy and action.

It seems appropriate at the outset to list several caveats to be kept in mind when interpreting what appears in the following pages.

- First, *generalizations are not only extremely difficult but also potentially misleading given Latin America's regional diversity, as well as that found within some countries.* Some general principles for programming may be specified, but it is risky to attempt to generalize from one setting to another.

---

[1]The terms of reference are as follows: "Prepare an applied research paper by gathering information on, reviewing and critically assessing the experiences of other countries and of other international organizations in the area of early childhood education and community child care projects. The study should link the review of "lessons learned" from other projects to the Bank's particular operational structure and priorities, and should serve as a guide for the preparation of the Nicaragua program as well as future Bank operations in this area, taking into account the different possible socio-cultural-institutional contexts in which these projects will be designed and implemented."

- Second, although extensive and solid scientific research has been carried out which establishes the importance of investments in early childhood development for intelligence, personality and behavior in later life, and although we can point to examples of successful program interventions, *the evaluation of program experiences and the systematization of processes is still in an important early stage*. It will be possible to draw on project evaluations, but we should not expect more from that literature than it can provide.

- Third, the *programming issues to be raised and discussed in this paper go well beyond the early childhood field; they are common to many program areas*. For that reason, it should be possible to draw on field experiences from other areas (health, nutrition, women's programs, rural development) when discussing such matters as "integration" or "participation." At the same time, we should not expect firmer answers for the field of early childhood development programming than we have for these other, more established fields.

We turn now to basic definitions in order to clarify how the terms child care and child development are being employed in this review.

Child Care and Child Development: What Do They Mean?

The terms of reference for this paper were set in relation to "child care services." However, the term, "child care" does not mean the same thing to all people. In the health community, for instance, "care" is defined in terms of preventing or attending to infection and disease. When associated with programs designed to improve the productive role of women, child care refers to the arrangements made to look after a child while the mother works. Such "custodial" care tends to focus on assuring that a child has shelter and food, is protected from accidents, and will be attended to if a health problem arises. If child care is approached from a social welfare perspective, it is usually associated with institutionalized care, and often with programs for abused, abandoned or indigent children. These programs also have a strong custodial tradition.[2]

---

[2]In everyday parlance, the phrase "custodial care" has taken on a pejorative meaning equated with limited attention focussing on physical needs, with little or no attention to intellectual, social and emotional development. This is different from the basic notion that custodial care occurs when temporary responsibility for a child is assigned, in custody, to another person or institution. If we turn to the dictionary, we find that "care" can be defined both as a concern, interest, or love (to care about someone) and as a responsibility or charge (to take care of someone). Although we would like to think that people charged with taking care of children will also display concern and love, that is not always the case. Indeed, in a world in which parents are often under intense pressures and in which the balance of responsibility for children is shifting more and more from immediate family members to institutions which assume a custodial role, maintaining concern and love in the process of child care is an increasing challenge. With the everyday definition in mind, we will reject a "custodial" approach to care. We will use other terms to refer to institutions or arrangements in which responsibility for care is assigned to someone other than the mother or family.

In this paper, and for general program purposes, a broader definition of care is recommended that goes beyond health care or custodial arrangements to include actions that respond to a child's developmental needs as well as to needs for protection, growth, and survival.

> **Child care** is a process that consists of the set of actions necessary to promote the survival, growth, and development of children by responding to their basic physical, social, and emotional needs as defined within particular cultural, socioeconomic, and physical contexts.
>
> **Child care services** are services that support these actions as they are carried out by parents or other family members in homes, by neighbors in their homes, or by paraprofessionals or professionals in institutions located outside the home.

To fully understand what constitutes good care, we need to know what it means to promote development and to respond to the social, emotional, and physical needs of children, that is, we should be clear about what is meant by child development. Simply stated:

> **Child development** is a process of change in which children become able to handle ever more complex levels of movement and coordination, of thinking and reasoning, of feeling and expressing emotions, and of relating to and interacting with people and the natural environment.

It is important for programmers to realize that although the physical, intellectual, social, and emotional dimensions of child development can be separated conceptually, a holistic and integral view of development must be taken because progress along one dimension affects progress along another. The process is integral. Therefore, programs of child care and development should themselves be multi-faceted and integral. It is also important to know that although all children develop and there is a general sequence or pattern to that development, the rate, character, and quality of development will vary from child to child. Therefore, while it is possible to think in general terms about development, it is also necessary to take variations into account.

Also important for programming is the fact that the developmental process is both continuous and changing. Although we will focus on child development and limit our discussion to the period up to about eight years of age, development begins before birth and continues throughout life. Child development is part of the larger process of human development. At all points, child and human development occur as a changing person (biologically) interacts with the people and objects and conditions that define changing environments of the family, community, society, and culture. Because children change, different kinds of programs will be necessary at different points in the developmental process. However, at any moment in the process, development can be supported and fostered or, the potential for development can be allowed to wither away, depending on the

nature of the environment in which development is occurring. This provides a powerful rationale for programs that attempt to strengthen or improve the different environments in which a child is developing.

Up to this point in the discussion, programs of child care and development have been discussed only with relation to the needs and welfare of children. And, by defining child care to include child development we have brought these two terms together. There is, however, another aspect to "child care" programs that tends to differentiate them from "child development programs." The need for child care has its origin in the needs of adults who seek someone to care for their child while they are working or studying, or sometimes for more frivolous reasons. Increasingly, the options of care by grandparents or older siblings are not viable, creating the need for other child care arrangements outside the family. Accordingly, many programs labeled child care programs are provided as a benefit for working parents; they are not, in the first instance, created for the benefit of children. Too often, such programs become "parking lots" for children or are limited to attention to the physical needs of children, or provide less than the minimum required for proper care and development.

We have described the needs of children with respect to programs of child care and development, but what are the needs of adults (particularly mothers) to which programs of child care and development should respond?

Responding to the Child Care Needs of Adults (Particularly Mothers)

From reviews of a growing literature (Myers and Indiriso, 1987; Landers and Leonard, 1992; Leslie and Paolisso, 1989) which examines the "intersecting needs of women and children" it is clear, not only that there is a need for **adequate** child care through alternative (to exclusive care by mothers or other family members) care arrangements that is not being met, but that to meet this need parents require programs that meet the characteristic of affordability, accessibility, flexibility and trust described below:

Affordable. Expensive programs or those that depend on recovering all costs from the users often lead to the exclusion of the poor who most need access to child care and development services. Often hidden costs put a program out of reach; for instance, parents maybe asked to make "donations" for materials or to purchase uniforms.

Accessible. An employer may be complying with all legal requirements when providing an on-site day care center for his employees' children. However, the center cannot be considered accessible if to reach it, a mother must subject her toddler to an hour long ride in a crowded bus. Similarly, if a five-year old must walk an hour or more to get to a pre-school, that center is not accessible. In these situations, ways must be found to bring care and education to the children rather than the reverse. Neighborhood options such as home day care or programs attached to community kitchens can help solve the problem in

urban areas. In rural areas, bringing care to the children is more complicated, but where there are small concentrations of population, the same community or neighborhood approach can be implemented with the help of selected local mothers (or sometimes fathers, as in the PRONOEI program in Puno, Peru) trained as *promotoras* or *madres educadoras*.

Flexible. Many formal pre-school programs do not serve child care needs because their hours are limited and inflexible. The need for care does not always begin at 9 am or end at noon. For this reason, several countries have experimented with models in which children who need to remain in centers for longer hours are cared for in the same center during afternoons (the Mexican program of *jardines mixtos*, for instance). Even so, these may not be sufficiently flexible to meet the needs of working mothers. Here, non-formal neighborhood programs seem to have an advantage.

Run by trusted and accountable persons. Parents need assurance that their children are in the hands of people they can trust. Involving community members in choosing center operators and, to the extent possible in the running of centers, are important ways to increase trust and accountability. Trust in many places is associated more with personal acquaintance than with the level of training or the degrees that a person brings to the job. On the other hand, this same familiarity can create confusion in the para-professional role that a caregiver plays. If she is not seen as a qualified professional, she may be seen as a "mother" who is competing with the mothers who leave their children in her care.

Minimum standards of quality. In order to avail themselves of a service, parents need to know that their child will be treated well and provided with adequate stimulation and education. This need may be rooted in love, guilt or an expectation adequate early childhood will increase the economic benefits that the child can later provide to the family. It makes parents alert to problems of the quality of the care provided as well as to the physical condition of a center. It also helps to bring back together the ideas of child care and of child development. However, low income parents do not always have a choice as to alternative care and, in some cases, are forced to place their children in very low-quality day care situations.

For the reasons indicated above, existing child care services, even those of reasonable quality, may be theoretically meeting existing demand but may be underutilized because they do not provide adequate care. They do not meet the needs of potential users, who may prefer to remain with more accessible, accountable, trusted arrangements, even if these arrangements may prejudice development of the child and may limit options for other family members. For this reason, planners should not automatically conclude that they have met demand because existing centers do not fill their available spaces.

From experience and research we also know that parental needs for alternative child care is particularly acute:

- *in conditions of poverty*, where the imperative of working in order to survive may come before the need to of provide adequate attention to young children;

- in *single parent, female-headed households*, where the pressures to fulfill both parental roles may lead to tradeoffs that leave young children with less attention than would otherwise have been the case;

- *when alternative child care options (grandparents, siblings, etc.) are lacking*;

- *during periods of "life cycle squeeze,"* i.e., when the first child is born to young parents who have not yet established themselves and have few resources; or, when a family has four or more children, with the eldest approaching adolescence where a decision must be made about staying in school, entering the work force or staying home to care for a younger sibling;

- *if work is poorly paid, without benefits, far from home and physically demanding*;

- *during heavy work seasons* (e.g., harvest) or 'wet' seasons; and

- *where culture strongly dictates a domestic role for women.*

Identifying those women and families that fall into these categories should help determine the selection of the populations to be favored when establishing child care programs.

Box 1

Responding to the Needs of Parents and Children

From this initial discussion of child care and development several points should be clear:

1. A caring environment (and a good quality child care service), will respond not only to a child's needs for protection, health and physical care, but also to intellectual, social and emotional needs, all of which appear together and interact with each other as a child grows and develops. Therefore, **child care services should include a child development and education component**.

2. An adequate program of child care should **take account of the needs of working adults (particularly mothers)** as well as the needs of children. For child care and development programs to meet parental needs, they should be affordable, accessible, flexible (particularly in terms of hours), and run by trust worthy and accountable people. Programs that focus only on child development or education often fail to take adult needs into account.

3. Although programs labeled "child care" or "child development" may arise from different circumstances, and even though programs with these names may be administered by different organizations, the **content of such programs should be similar for the children in them. Both should respond to needs of children and of their caregivers.**

4. **The quality of a child care service is important** both from the standpoint of the children and their parents.

With these definitions and considerations in mind, we now turn to a brief presentation of reasons why it is useful for an institution such as the Inter-American Development Bank to support programs directed toward improving the early childhood care and development.

The Importance of Investing in Early Childhood Care and Development (ECCD)[3]

Scientific findings from a variety of fields have demonstrated that ECCD programs can yield rich benefits not only in immediate ways for the child and its parents, but also over time in terms of the child's ability to contribute to the community and the nation. Evidence from the fields of physiology, nutrition, health, sociology, psychology, and education

[3]The arguments presented here are set out in greater detail and with appropriate citations in: Robert Myers, **The Twelve Who Survive**. London: Routledge, 1992.

continues to accumulate to indicate that the early years are crucial in the formation of intelligence, personality, and social behavior. Consider, for instance, the following with respect to individual children.

During the first two years of life, brain cells and the structure and organization of neural pathways are affected by both sensory stimulation from the environment and by nutritional and health status. If the brain develops well, learning potential is increased and the chances of failure in school and life are decreased. Programs that promote proper interaction and stimulation in the early years will promote brain development and learning.

Children with consistent, caring attention are generally better nourished, less apt to be sick and learn better than children who do not receive such care (Zeitlin, 1990). Conversely, neglected children are prone to sickness and malnutrition and are less equipped and motivated to learn. This is so not just because children are deprived of food or health care, but because the stress caused by neglect affects the immune system, and because lack of physical interaction in the earliest months negatively affects the functioning of growth hormones. The above reinforces a holistic view of survival, growth, and development and the need for a multi-faceted and integral program approach.

The benefits of early intervention can accrue to societies as well as to individuals. These benefits include:

Increased Economic Productivity and Employment. Even without recurring to the extensive scientific literature which links improvements in schooling and learning to increased employment and economic productivity, common sense suggests that a person who is well developed physically, mentally, socially, and emotionally will be in a better position to be employed and to contribute economically to family, community and country. Drawing on research, however, we can trace the following relationships. First, we know that schooling levels and educational attainment are affected by the preparation of children for school; interventions supporting the development of young children's physical and mental capacities lead to increased enrollment and improved progress and performance in school (Myers, 1992). Second, we know that, in general, improvements in the level of schooling and educational attainment are linked to improvements in economic productivity. Schooling helps to build such skills as the ability to organize knowledge into meaningful categories, to transfer knowledge from one situation to another, and to be more selective in the use of information (Rogoff, 1980; Triandis, 1980). Schooling facilitates greater technological adaptiveness (Grawe, 1979). It relates directly to both increased farmer productivity (Lockheed, Jamison, and Lau, 1980) and productivity in the informal market sector (Colclough, 1980).

It is difficult to calculate a ratio of program costs to program benefits or an economic rate of return for social investments of any kind, including ECCD programs. But when such estimates have been made, they suggest a high return on investments in early childhood is possible. For instance, Selowsky, using Chilean data, concluded that:

> Yearly investments per child in programs that can induce a change in ability equal to one standard deviation can be "justified" if they cost between 0.37 and 0.51 the yearly wage of an illiterate worker." (Selowsky, 1981, p. 342)

Data from the High/Scope Perry Preschool project in the United States suggests that returns on preschool investment in the U.S. can be seven-fold (Schweinhart, 1993).

But potential increases in economic productivity related to investment in child care and development programs go beyond those resulting from changes in the child; they are also brought about because child care programs permit increased labor force participation by women (one such employment may be as a child care provider), and can free older siblings (usually girls) to go to school or get a job. In many cases, women are unable to consider employment in higher paid jobs outside the home because they must care for young children.

Savings. Early childhood care and development programs have the potential to:

- *reduce work losses* by assuring that children of workers are well cared for, removing a concern and making it less necessary for parents to take time off from work (Galinsky, 1986);
- *reduce health costs* because good care involves preventive measures (Evans, 1993);
- *reduce inefficiency in school systems* by reducing repetition, dropout, and remedial programs (Myers, 1992; Ministerio da Saude, 1983); and
- *reduce costs related to social welfare and crime* (Schweinhart, et al., 1993).

Reductions in Social and Economic Inequalities. Poverty and/or discrimination produce stressful conditions and unequal treatment that can inhibit healthy and comprehensive development in the early years. This reinforces a vicious circle because children from poor families often fall quickly and progressively behind their more advantaged peers in their readiness for school and life, and that gap is never closed. By failing to intervene to foster early childhood development where conditions are difficult, governments have tacitly endorsed and strengthened inequalities. Ironically, one argument used against early education programs is that they are discriminatory -- favoring the upper class. That is certainly true if no special effort is made to assist the poor and if programs of early care, development, and education are available only to those who can pay for them.

Reductions in Gender Inequalities. The care of children bears on gender issues in several ways:

- All children have a right to develop to their full potential but attention to young girls often lags behind attention to young boys, beginning and reinforcing a long cycle of discrimination. By providing a "fair start" it is possible to modify distressing

socioeconomic and gender-related inequalities. In some parts of Latin America, boys still have an advantage in terms of their preparation for school and their opportunities to enter and remain in school. These differences begin with gender-linked disparities in attitudes and expectations, and in patterns and practices of early care and development that need to be changed if discrimination is to be overcome. Although these are often deeply rooted in culture, there is evidence that *integrated attention to early development can not only produce changes in the development of the girl child but also in the ways that families perceive the abilities and future of that child* (Klein, 1979; Myers, 1992). In most early development programs, girls are given an equal chance with boys to acquire pre-literacy and pre-numeracy skills needed in school and to show their parents that they are capable of performing outside the family context. Apparently, this changes perceptions and expectations on the part of parents.[4]

- *Through children, humanity transmits its values, including discriminatory values related to gender.* If these are to be changed, an important starting point is the pre-school years.

- *Investment in early childhood development can increase women's productivity and result in savings to society.* By providing child care, many women (and young girls) are freed from their full-time child care responsibilities so that they can earn and learn.

Strengthened Values. Transmission of the social and moral values that guide societies begins in the earliest months of life. In societies where there is a concern that crucial values are being eroded, a strong incentive exists to find ways in which they can be strengthened. Early childhood programs can assist in that effort by strengthening the resolve and actions of parents, and by providing environments within which children can play and give attention to culturally desirable values.

Social Mobilization and Community Benefits. In many locations, political and social tensions make it difficult to mobilize people for actions that will be to their own benefit. In such circumstances, focussing a program on young children as a point of common interest and an entry point for action can be an effective rallying strategy. Community improvements in health, sanitation, and nutrition that benefit children are also likely to benefit parents, families, and the community at large. The benefits are evident in improved self-confidence, in the emergence of leaders, and in increased community organization and social action.

---

[4]In most parts of the Caribbean, the achievement of girls in school is greater than that of boys and in those mostly matriarchal societies, girls often receive favored treatment. There, early childhood programs, particularly parental education programs, are being directed toward closing this "reverse" gap.

The above six arguments are phrased in terms of potential program benefits. An additional argument for investment should be taken into account that is not linked directly to benefits but derives instead from **changing social and economic conditions.** A growing need and demand for early childhood care and development programs is being driven by changing demographic, social and economic circumstances. Today, many more children live beyond their first birthday than did in the past, making it essential to attend to their care and development, as well as to improving survival rates. Migration and urbanization have brought with them major and disruptive changes in family structure and child rearing patterns. The growing participation of women in the labor force requires rethinking of child care issues. The central place of education in contemporary society requires a new appreciation of the ways in which children are (or are not) prepared for schooling. Structural adjustment policies have brought increasing pressure for so–called compensatory programs, among which is child care.

The arguments presented here constitute a strong rationale for supporting increased investment in ECCD programs, whether organized by individuals, families and communities, or by governments, nongovernmental organizations or international funders. The arguments are varied, but often interwoven. Each argument stands on its own, but when combined, they are particularly compelling.

Relation to Inter-American Development Bank Policy and Programming

The benefits that can be expected from ECCD programs bear directly on the IDB's twin objectives of reducing poverty of promoting social equity, and support the reorientation of the Bank toward social and human development goals. ECCD programs can help to reduce poverty and moderate inequities by giving children the needed base for subsequent learning that will improve their productivity and increase their opportunities for employment. ECCD programs can help relieve caregivers in poor families who must work. They can help to moderate gender inequities and to improve the condition of girls and women. Because ECCD programs result in improvements in "basic education," ECCD interventions should be considered by the Bank in conjunction with projects supporting improvements in primary schooling.[5] In all of this, attention to child development is conceived within a broader philosophy of human development.

---

[5]At the World Conference on Education for All, held in Jomtien, Thailand in March 1990, the definition of "basic education" was extended to include ECCD. The Declaration states that "Learning begins at birth" and that "This calls for early childhood care and initial education. These can be provided through arrangements involving families, communities, or institutional programs, as appropriate." The Framework for Action indicates that, one of the targets to be considered in plans for the 1990s should be "Expansion of early childhood care and development activities...especially for poor, disadvantaged and disabled children".

In brief, there is a strong scientific and experiential basis for supporting early interventions, as self-standing programs or in support of other programs presently within the Bank's portfolio. ECCD fits squarely within the goals and program interests of the Bank. It now remains to set out what some of those interventions might be and to discuss choices to be made in deciding how they might be carried out. To help identify and distinguish several complementary strategies that might be pursued in the Bank's programming, the following section sets out a program framework.

II. A PROGRAM FRAMEWORK

For many people, talk of a child care program suggests the construction of rather large centers in which children of various preschool ages, including babies, are taken care of by professional caregivers, including educational and health personnel, in a setting where meals can be served, baths can be given, and diapers changed. A child development project or program immediately conjures up the image of twenty-five or thirty small children, ages 3 to 5, playing with blocks or fitting triangles and squares into brightly colored puzzle boards, supervised by a professional teacher in a preschool classroom. These images are limiting and somewhat biased by so-called First World experiences. Associating child care only with large centers is unfortunate because it cuts out more intimate forms of home day care which can also be less expensive. Associating child development programs exclusively with a preschool model is also unfortunate because it focusses narrowly on a child's mental development, is relatively expensive, and begins relatively late in a child's life. Both of these images derive from a direct, institutional approach, relying on the creation of centers that compensate for missing elements in the family and community environment while, too often, leaving parents and community members out of the program. These images seldom provide the most appropriate guide to programming for child care and development in Latin American settings.

To broaden our perspective and identify a range of complementary approaches to early childhood care and development programming, Figure 1 shows a framework that has two dimensions, derived from the fact that development occurs as a changing child interacts with his/her environment at various levels.

Variations in a Child's Age and Developmental Status

A child's needs varies during the first years of life in relation to his or her process of maturation. To take this into account, programs need to be different for different ages and

developmental periods.[6] At a minimum, the following periods can be distinguished:

Prenatal and Birth. During this period, attention is focussed on the mother and programs of child care are usually found among maternal and child health programs in the health sector. Here, as well as during the following period of infancy, programs of parental support and education appear as an important intervention strategy.

Infancy (up to about 18 months and encompassing weaning, learning to walk, and early language development). During infancy, and particularly during the first year, the literature suggests that every attempt should be made for children to be with their mothers so that bonding and breastfeeding can occur. Often, this is not possible and experience also shows that other arrangements, in homes and in centers, can be beneficial to the infant, but that a relatively high ratio of caregivers to children is needed. Particular emphasis needs to be placed on health and nutrition during this period, but early stimulation and the development of close affective attachments are also crucial.

Toddler and Post-toddler (about 18 to 36 months; during which a child's co-ordination, language, ability to think and social skills advance rapidly). Because children can do more on their own during this stage but still need a lot of help, and because this period includes the beginnings of a search for independence, this is a particularly challenging time. Whether in homes or in a larger center, children will need considerable attention and it is difficult for one person to take care of many children.

Preschool (approximately ages 4 and 5 and sometimes 6; when co-ordination is more developed, and cognitive development and of pre-literacy and numeracy skills develop rapidly, along with greater attention to relationships with peers). Caring for children in a more formal setting and in somewhat larger numbers is more feasible during this period. However, four-year-olds are usually not quite up to what five-or six-year-olds can do, and a child care setting should make allowances for these differences. Because the child is approaching schooling during this period, often more attention is given to cognitive development than to other dimensions and the administrative placement is often within the education sector, particularly for children aged 5. There is no particular reason why this needs to be the case; cognitive development can be handled by parents, a home day care program, a center run by a community or a child care center within a social welfare system. More important than the administrative or institutional location or the size of the institutional setting are the training and conduct of the caregivers.

---

[6]It is possible to make divisions in a different way from those we have used here. An alternative, for instance would be: pre-natal and birth; birth to age 1, age 2, age 3 and 4, preschool at age 5, and primary schooling. There is no magic to these divisions. We have chosen the period up to 18 months because it is likely to cover most cases of weaning, walking, and the beginnings of talking, whereas a division at age 1 would not necessarily do so.

Early Primary School (a period of transition into school and the world at large; roughly ages 6 to 8). At this time, programs will normally fall within the formal education sector. Because primary schooling is a major topic in and of itself, we will not try to deal with it in this paper which focusses, rather, on the preschool years. Nevertheless, it seems important to include the move into primary school in an early childhood framework, since doing so recognizes the continuous nature of development. It also alerts us to the importance of "readiness for school" as a crucial outcome of the broader early childhood development process.

Within governments, the organizational responsibility for early childhood care and development programs tends to follow developmental stages and/or children's age. In the case of children younger than two or three, responsibility for these programs often falls to the health sector or to organizations concerned with family welfare. From age four onward, child development is more likely to be associated with education and preschool programs. This division is logical in the sense that survival and the early months of development are closely tied to the biophysical condition and physical maturation of the child, and that during this time, most children are cared for within the family. During the later preschool years, socialization and preparation for schooling take on greater importance, and the circle of caregivers widens. However, the division also hides the need for continuous attention of a coordinated nature. It reinforces the unfortunate tendency to omit psychosocial components prior to age 4, and to think of child development programs as essentially educational programs beginning at about that same age.

Variation in Environmental Factors and Programming Focus

The development of a child occurs in interaction with the environment of the home or an alternative child care environment such as a child care center. It also occurs in interaction with environments provided by the community, by social institutions and by cultural values. Each of these environments sits at a different distance from the child, but has an influence on child development. Therefore, a long-term and comprehensive child care and development programming strategy should look beyond approaches that provide attention directly to the child (immunization, center-based care), and should include ways of improving the different environmental conditions that affect the child's development. Box 2 presents five complementary program approaches each with its particular focus on a different level of a child's environment and a corresponding target for action.

Box 2

Programming for Child Development: Complementary Approaches and Models

Program Approach	*Focus*	*Objectives*	*Models*
Educate caregivers	FAMILY Parents Other adults Siblings	Create awareness Change attitudes Improve/change practices	Home visiting Parental education Child–to–Child Mass media
Attend to the child	CHILD 0–2 years 3–6 years 0–6 years 6-8 years	Survival Comprehensive development Socialization Rehabilitation Child care Transition to primary school	Home day care Integrated child development centers Workplace Preschools:formal/ non–formal Primary school After-school programs
Promote Community development (child-centered)	COMMUNITY Leaders Promoters Residents	Create awareness Mobilize for action Change physical conditions	Education Technical/social mobilization
Strengthen institutional resources, capabilities	INSTITUTIONS Professionals Para–professionals	Create awareness Improve skills Improve physical conditions	Training Provide plant/ equipment
Advocate for child development	KNOWLEDGE Policymakers Professionals Public	Create awareness Build political will Increase demand Change attitudes	Social marketing Knowledge dissemination

All five of the strategies have the basic goal of improving a child's development, but each oes about that task in a different way, as will be described below. Examples of each pproach will be mentioned in the text; of several examples are presented in Appendix 1.

Supporting and Educating Caregivers. This approach focusses on FAMILY members and is intended to educate and empower parents and others in ways that improve their care and interaction with the child, and enrich the immediate environment in which child development is occurring rather than provide an alternative to it. The strategy is intended to work on the knowledge, attitudes, and practices that parents and other responsible family members bring to that task. Among the options available within this general strategy are:

- *Home Visits*. In Jamaica, a psycho-social component was added into the repertoire of para-professional home visitors connected to the primary health care system. In Venezuela, parents were provided with information about child care in conjunction with agricultural extension programs.

- *Parental Education Courses*. For approximately 15 years, Mexico has operated an initial education program in which trained community members teach child development to groups of parents.

- *Child-to-child Programs*. In Jamaica, a program directed to children in the upper years of primary school, most of whom are responsible for caring for younger siblings, has been incorporated into the regular primary school curriculum (see Appendix 1).

- *Education Through the Mass Media*. The *Proyecto Familia* project in Venezuela relied on both television and radio to reach parents with messages about child care. In Chile, a program called *Conozca a su hijo* combines information from radio programs with home visits by locally trained para-professionals.

Attending to Children in Centers. The immediate goal of this direct approach, focussing on the CHILD, is to enhance child development by attending to the immediate needs of children in centers organized outside the home. These are, in a sense, alternative environments. Within this strategy, a number of options have been tried out including:

- Self-standing, large *integrated day care/child development centers:* The preschool feeding program in Brazil, known as PROAPE, provided food, health care and education to children ages 3 to 6, in groups of 100 children located in marginal urban areas in several states (see Appendix 1)

- *Day care or play groups in neighborhood homes.* Although this type of program occurs in homes, the homes are converted into, and are operated as small-scale centers. Versions of this model can be found in Venezuela, Colombia, Brazil, Ecuador, Mexico and elsewhere within the region.

- *Formal and Non-formal Preschools:* Non-formal programs include PRONOEI, the Peruvian Non-formal Early Education Program, described in Appendix 1.

- *Centers attached to the workplace* (companies, markets or government institutions, for instance), *to health centers* (as in the la Florida municipal project in Chile or in the Maternal and Child Health program in Argentina), or *to community kitchens* (as in Peru).

These ECCD centers may be run as small private businesses by individuals or by the government, companies, unions, cooperatives, NGOs, women's groups, the community or sometimes on a rotating basis by the participating families.

Promoting Child-Centered Community Development. Here, emphasis is on working to change COMMUNITY conditions that may adversely affect child development. This strategy stresses community initiative, organization, and participation in a range of interrelated activities, to improve the physical environment, the knowledge and practices of community members, and the organizational base allowing common action and improving the base for political and social negotiations. Children's needs provide an entry point for such activity and the integral development of children serves as one indicator of program effectiveness (see Appendix 1 for a description of the PROMESA program in Colombia.)

Strengthening Institutional Resources and Capacities. There are many INSTITUTIONS involved in carrying out the three complementary approaches mentioned above. In order to do an adequate job, these institutions need financial, material, and human resources with a capacity for planning, organization, implementation, and evaluation. Programs to strengthen institutions that involve more than the straight provision of financial resources, may include training (or retraining), the provision of equipment and materials, support for experimentation with innovative techniques and models, improving the technology available to them, or assistance with administrative and accounting capacity. How institutional strengthening would be approached in any given setting would, of course, depend on an analysis of the existing strengths and weaknesses of such institutions. We will see later on that there is a trend toward giving responsibility to nongovernmental organizations (NGOs) for implementing ECCD programs. In many cases, however, these institutions need training and other support to be able to carry out the role properly. The current discussions of how to approach support to ECCD in Nicaragua are placing considerable emphasis on this strategy.

Strengthening the institutional program base may also involve providing the legal underpinnings for proper institutional functioning. This is sometimes set apart as a separate strategy.

Strengthening Demand and Awareness. This program approach concentrates on the production and distribution of KNOWLEDGE in order to create awareness and demand. It may function at the level of policymakers and planners, or be directed broadly toward changing the cultural ethos that affects child development. In the latter case, this strategy is different from parental education only in terms of its scale; the goal is to reach the population at large, not only parents.

Against this background, the next three sections of this report will present lessons learned with respect to: (a) the context for ECCD programming; (b) planning and delivering ECCD services; and (c) costs and financing of ECCD programs.

III. LESSONS LEARNED: THE CONTEXT FOR PROGRAMMING

Context Is Crucial

Models, technologies and program contents should be chosen or developed to fit varying circumstances and the particular needs that grow out of those circumstances rather than trying to make circumstances fit a pre-determined model. Common sense and a growing literature tell us that programs are affected by the context in which they carried out, and must be tailored to that context. We begin with this lesson learned because it affects all of the elements of policy, planning, execution, and evaluation that will be discussed subsequently. We also stress this lesson because there continues to be a strong tendency to transfer and impose models from one setting to another without adequate attention to whether or not the model recommended is the best for the particular setting.

Among the dimensions that should be taken into account when adjusting program ideas and models to particular contexts are:

- *Size (and anticipated program extension)*: Working in Nicaragua is obviously not the same as working in Brazil. A program for one small area of a country is not the same one for the country as a whole.

- *Cultural homogeneity*: Programming will be more difficult in a country that has many ethnic groups (e.g., Mexico) than in a country with much less variation (e.g., Uruguay). Cultural homogeneity is only in part related to size. The cultural dimension is particularly important when dealing with child care and development because values, norms, worldviews, and specific practices governing childrearing differ from culture to culture. These must be taken into account when formulating programs.

- *Settlement patterns*: rural-urban balance, migration patterns, and the degree of dispersion in rural areas are related to differences in child rearing practices and patterns, as well as to possible logistical problems involved in delivering a service. The technologies and models that can be called upon may also be very different.

- *Poverty, livelihood, and employment:* If a large portion of the population lives in poverty, or if a program is directed toward those who live in poverty, it must take a very different approach than if it is directed to those who can afford child care and

pay for basic shelter and food. If a large portion of the target population is unemployed or employed in the informal sector or in self-sufficient agriculture, programs will have to be organized in a very different way than if the majority of the population is employed in either the industrial or service sectors. The unemployed and informal sector or agricultural workers, for instance, will not, typically, have access to government social services.

- *Community organization and tradition*: Working in well-established communities with solid organization and a tradition of community work will, in theory, be much easier than working with new heterogeneous communities. If community organization does not exist, one of the goals of an early childhood program may have to be to promote the creation of such organization.

- *Family structure and functioning*: ECCD programs where a large percentage of children live in homes where the father is absent, or where the father is present but does not participate in childrearing, must be necessarily different from those where the father is not only present but participating. A tradition of male dominance in families will provide a different context for programs than a setting in which domestic decisions and work are shared or where women are dominant.

- *Educational levels*: A population with a high proportion of nonliterate people will have to be approached in a different way from a literate population. In addition, childrearing practices are likely to be different. Although the literature shows that more educated (really more schooled) parents will be more likely to have less children and to care for them better, it is important not to assume that the more highly schooled or educated will always be better caregivers. If one looks at the growing evidence of family disintegration and social problems among youth in the First World where schooling levels are high, the relationship of schooling/education to social and emotional development must be questioned.

- *Political climate, stability or unrest*: A country that is at war, experiencing internal conflict, or recovering from conflict will provide a very different context for ECCD programming from one that is stable, democratic, and peaceful. This dimension will not only affect the location and continuity of services, but may require major adjustments in content -- for instance, the inclusion of methods that help children deal with the trauma of war.

- *Governmental organization*: The degree of centralization or decentralization and of sectoralization will influence programming possibilities and processes, affecting levels of participation and integration, both of which are deemed important for ECCD programming.

- *Economic policies*: Programming for ECCD a neoliberal framework will be different from programming a welfare state.

Many of these contextual factors will be related to and can help to define a population of children who are at risk of delayed or debilitated development. At risk children are characterized by such factors as poverty, a low educational level, families that are not intact, and conflict or recent migration.

This brief treatment of variations in context suggests that **various models or technologies will be needed if a program covers various contexts**.

Inserting Programming into a Broader Social Policy

Programs should be included in a broader social policy framework that includes a policy with respect to children and, more specifically with respect to children from conception until entrance into school. This is important for several reasons. First, it calls attention to a particular segment of the general population that does not enjoy government representation and does not command power. It signifies at least one level of commitment to investing in the welfare of children and in the future that they represent. Second, ECCD cuts across many fields and sectors; thus, and a common policy can facilitate linkages across fields. A policy that indicates how children should be treated is a critical aid in mobilizing resources and experience from various sectors.

Third, unless a broad social policy deals explicitly with children, they will be treated as a residual under the assumption, partially true but weak, that general improvements in such areas as health, agriculture, education or employment will automatically lead to improvements in the welfare of young children. It does not necessarily follow, for example, that because the health care system improves, the health or general development of young children -- or of young children who live in conditions of poverty -- will also improve, since improvements may occur in hospitals or for diseases that are primarily adult illnesses. On the other hand, unless the health care system makes an explicit effort to provide preventive as well as curative care for young children, it will be difficult to improve the general development of young children, including their mental and social development. Similarly, providing additional budgetary resources for education does not necessarily mean that young children will benefit. Education budgets tend to concentrate on schools, beginning with primary school, but not including learning during the preschool years. A social policy that is explicitly concerned with development during the early years would help to counter that tendency.

The Convention of the Rights of the Child, to which all Latin American countries are signatories, provides an appropriate framework for ECCD programming. In many countries, efforts have been made to convert the provisions of the Convention into national policy favoring children. Mechanisms have been developed in some places to promote and monitor that process. In Brazil, the rewriting of the Constitution to incorporate various provisions of the Convention provided an opportunity to set a policy and legal framework for work with children that has facilitated the advance of ECCD programs.

Political Will Is Important, but Not Always Essential or Constructive

The question of political will is very important to the formulation of social policy In order for early childhood care and development programs to take their place alongside other social pro– grams, it is important to be able to count on, or to develop, political will, both at the national and local levels. Lack of political commitment, reflected in a scarcity of resources and sometimes linked to bureaucratic inertia, can easily lead to ineffective programs. Without political commitment, it is difficult to obtain and sustain government funding for programs targeted to poor families, even in cases where community volunteer activity is strong.

Political commitment must go beyond in speeches and general policy documents. Indicators of political commitment include: the establishment of a legal framework that, beginning with the Constitution, strongly supports children's rights, the provision of a strong institutional base from which to carry out child care programs and a willingness to strengthen those institutions, the selection of well–qualified personnel to key policy making positions, planning and the execution of programs related to children, improvements in budget allocations, and adequate and active systems for monitoring the status of children. It is normal to expect that the indicators used in monitoring systems be applied to judging, let us say, programs of immunization, but they have not generally been applied to programs directed toward improving the mental and social development of children during their preschool years.

At least two cautions should be expressed with respect to making political commitment a prerequisite for ECCD programming:

With commitment often comes a strong and natural desire to use programs to political advantage. This can easily lead to a position in which appointments to programs are made using purely political criteria, to the detriment of the programs themselves. Or, politics may dictate a policy of premature expansion so that credit can be taken for reaching a large number of children with the result that programs of doubtful quality and with little or no impact are put in place using resources inefficiently. Attaching programs to expressions of political will may be counterproductive. In such cases, a slower, alternative strategy may be called for. For instance, instead of expanding preschools centers it may be more appropriate to mount a program focussing on the parental education through the mass media, something that might be done irrespective of political will. Alternatively, the appropriate strategy may be to work with NGO.

The Latin American experience suggests that changes of administration have often had a negative effect on the evolution of child care and development programs. Political commitment and will in one administration does not necessarily carry over to another, and may even work against acceptance by a new administration that would like to do things in its own way. This suggests that those who have the best interests of children at heart must be prepared to look for ways to moderate these possible discontinuities linked to

political goals. For instance, although placing the First Lady of a country in charge of programs for children may help to create and draw upon political will, it may be better in the long run to create an agency headed by technically qualified person in order to ensure continuity in its attention to child care over time and the vagaries of politics.

IV. LESSONS LEARNED: PLANNING AND DELIVERING ECCD SERVICES

There are a number of activities or processes that are common to almost all projects and programs. These include: design and planning; selecting those who will administer and execute the program; training (initially and throughout); selecting participating groups; creating demand; delivering the service on site; supervising; administering; monitoring and evaluating; obtaining financing (initially and over the long term).

Planning

Experience provides a number of considerations that should be taken into account when planning an ECCD project:

Place child care and development in a larger social policy context. This point has been discussed above.

Avoid the tendency to promise too much too soon. Often for political reasons, there is a desire, expressed in plans, to deliver services to all parts of a country and to many children within a very short time. There is also a desire to do many things at once, at least in part as an outgrowth of the fact that early childhood care and development places emphasis on integrated attention to children's needs.

But ambition or political wishes can easily outrun capacity. In the early childhood field, many Latin American countries lack an available stock of human resources as well as experience with ECCD program implementation, making it difficult to move rapidly to scale with these programs. When rapid expansion is attempted, even in countries with a reasonable number of people trained to care for children, and even with a reasonable budget, program quality and impact suffer. Ambitious goals and objectives can create false expectations and may serve later as a basis for defining failure.

In light of the above, the planning process should be governed by:

- *modesty with respect to immediate goals*, even while setting out a comprehensive plan for long-run implementation;
- *selection of priority activities and/or populations based on a situation analysis* and

chosen according to agreed-upon criteria;

- a *careful phasing of activities*; and
- a *realistic timeline* governing the implementation process set out in a plan.

Define "scale" as the sum of varied program efforts directed to a target population rather than as the extension of one program model to all or large numbers of children. The most typical way to conceive of "scale" in the planning process is to think in terms of expanding one program model to cover all the children in a target population. The target population is taken as all children of a certain age. Focussing on one model makes administration easier in a centralized system and facilitates the calculation of coverage, but such a focus does not make it easy to respond to the exigencies of variations in cultural, economic, and geographic contexts. Trying to provide care to all children may indicate an idealistic or politically useful hope, but the fact is that not all children need the support of official programs, and that some children need that support much more than others.

As indicated above, there is a need to adjust programs to local circumstances. Later on the importance of fostering local participation will be stressed. Adjustment and local participation cannot be attained easily if one model is imposed as "the" model and if the vision of scale is the expansion of only one model. Variants are needed.

This leads to another vision of "scale" which is scale through association, i.e., scale achieved by piecing together results of extending several models, each of which may be relatively small (or medium-sized), each initiated and/or carried out with relative independence, and each approaching the problem in its own way, **but with a common goal or framework** (Myers, 1992, Chapter 14). Scale by association can be visualized as the process of putting together a puzzle. The puzzle has a framework. Each piece of the puzzle may be a different shape and the colors will differ as well, depending on the particular place the piece occupies within the larger puzzle. When all the pieces are in place, a complete and integrated picture will appear, and scale will have been achieved. The process of putting the pieces together must be a collaborative one with some general rules to guide it and some incentives along the way to help the picture emerge more rapidly. The vision of scale by association allows room for real local participation in the choice and operation of ECCD models appropriate to their context, something that is much harder to achieve through the extension of one predetermined model. Experience suggests that this multi-model approach to scaling up can be successful. (In contemporary Chile, for instance, at least three major and a variety of minor program models are being implemented for different populations and in different parts of the country. Together they add up to significant coverage.)

Plan in an integrated, multisectoral way. It is commonplace to lament the lack of integration within programs, beginning with conceptualization and planning. The sectoralization that characterizes most planning processes can be particularly harmful to programs of early childhood care and development that are premised on the idea that

integrated attention should be provided because development is an integral process. A growing literature suggests that integrated programs bring a synergistic effect, helping to make better use of the resources provided by each sector.

Integrated planning involves more than simply placing sectoral plans side by side so that, for instance, health, nutritional, and educational components are represented in a program. Truly integrated planning will foresee that these components get to the same children at the same time, and that health and nutrition components are able to provide an opportunity for learning, at the same time that educational components include health and nutritional content. Phasing can provide a useful way of working toward integration while getting programs up and running. The key, and more difficult, issue of delivering services in a multisectoral and integrated way will be treated below.

Plan in a participatory way. Despite various efforts to utilize systems of participatory planning, most planning tends to occur at the center and without direct participation of the people who will be affected by the proposed program. An increasingly well-established literature points to the benefits of planning with the people in an active way. A variety of methodologies that favor such participatory planning have existed for years (e.g. Bosnjak, 1982; Korton, 1980; Pantin, 1983).

Fostering participation is crucial to the process of respecting cultural differences and to beginning where people are. It is crucial as well to building a base for sustainability in programs, associated with a sense of ownership and empowerment.

Participation can, however, be threatening to those who hold the reins of control, whether at a national or village level. For participation to be effective and not overly conflictive, an ethos supporting participation needs to be present or created. This ethos is often present indigenous communities, for instance, making participation virtually mandatory. In some cases, participation supports democratic actions; in others, it is mandated.

Take a constructive rather than a compensatory approach to planning. There is a general tendency to plan child care and development programs as "compensatory" programs. This posture, while useful to the extent that it focusses on children who are deemed most in need, carries with it an unfortunate bias toward identifying only what seems to be wrong and trying to fix it. This contrasts with a posture that begins with existing strengths in child care practices, building on those strengths while seeking to modify harmful practices. Virtually all parents do some things well.

If a constructive approach is to be taken, plans should include activities that identify at the outset not only problems, but also strengths in order to build them while introducing new practices.

Build flexibility into plans. Plans tend to be rigid. Decentralized planning and seeking local participation can help overcome this tendency. However, even at local levels,

with adjustments made for local conditions and cultural differences, it will be necessary to incorporate into a plan possibilities of change over time as contingencies present themselves.

Think in terms of complementary approaches. The framework that was set out earlier in this document provides five complementary approaches for improving the care and early development of children. These should not be viewed as alternatives but should be seen as supporting strategies. There is a tendency to choose one strategy instead of working on several levels.

In line with the comments made above on scale, it is also important to look at various models within each strategy that can work in a complementary way. In a given community, for instance, some families will be well served by a half-day program of care and development carried out in a large formal center, but others will need full day care for their children and, therefore, a different and more flexible model such as home day care may be needed. In other cases, a mother will be able to stay at home with her children, but can profit from participation in a program of parental support and education involving home visits and/or participation in a group. In brief, a menu of options is called for.

Seek quality. The search for quality in programs must begin with the planning process. Although quality is not directly related to costs and there can be good quality programs offered at low cost (e.g., Swaminathan, 1985) it is difficult to plan a quality program if it is necessary always to select the lowest cost alternative.

Seek cost-effectiveness. When considering program options a criterion of cost-effectiveness should be applied. This does not imply seeking the lowest cost option. A fuller discussion of costs appears in Section V.

Many of the lessons from experience that have been touched upon with respect to planning will also be relevant to other processes to be discussed below. Before moving ahead to other activities and processes common to all programs, a consolidation of planning and program guidelines is presented in Box 3.

Box 3

Program Guidelines

Early childhood care and development programs should:

- ✓ Give priority to families and communities in which children are at risk of delayed or debilitated development.
- ✓ Form part of a comprehensive, multifaceted and integrated strategy.
- ✓ Be participatory and community-based.
- ✓ Be flexible and adjusted to different socio-cultural contexts.
- ✓ Support and build upon local ways that have been devised to cope effectively with problems of child care and development (i.e, be based on a "constructive" rather than a "compensatory" view).
- ✓ Be financially feasible and cost-effective.
- ✓ Try to reach the largest possible number of children who are at risk.
- ✓ Seek quality care.

The alert reader will recognize that there are some obvious tensions and potential tradeoffs among different guidelines. Simultaneously seeking scale, quality, comprehensiveness, adjustment to local conditions, participation, cost-effectiveness, and feasibility is bound to demand choices. But there are ways of reducing or working around such tensions. For instance, it is true that in large scale programs there is a tendency for quality to be watered down and for local participation to disappear. On the other hand, if scale is defined in terms of the sum of smaller programs and if the criterion for scale is not the entire population, but is defined in terms of those most at risk, the tension between scale and quality and between scale and maintaining or building local participation can be significantly moderated. If a program is to be large in scale, of good quality and comprehensive, costs may get out of hand, requiring compromises. There is a tendency to ask in such situations which of the program components can be cut or which will provide the most results. However, another way of compromising is to retain a comprehensive approach in the name of quality and effectiveness while reducing scale by targeting comprehensive (or converging) programs toward populations at risk, applying more rigorous criteria of risk. Another compromise is to phase in components over time, but instead of deciding that delivery of one component is universally most important, put faith in a local planning process to determine which of several components should provide the starting point for action in the

particular community.

In making these decisions, there will also be a tension between the primacy of political, social, economic, and technical criteria. The predominant political program criteria are size and control. Size indicates activity and presence and can help to provide political support; quality and effectiveness defined in terms of outcomes are less important. Control is usually exercised from the center (even in so–called decentralized programs which, in operation, provide a more efficient chain of command to be controlled from the center). The predominant social criteria are equality (bridging gaps, distribution), respect for culture, and social participation. A social focus suggests targeting groups at risk, constructive rather than compensatory programs that respect differences, and a participatory planning mode that works from the ground up. However, permitting participation that builds empowerment may be an anathema to dominant political forces because it implies ceding control so the political decision may be to avoid real participation.

The predominant economic criterion is cost–effectiveness. This criterion can lead to choice of program models that are the most effective, regardless of the population they serve best or can be applied within a social framework to the particular programs that are judged to be most equalizing and empowering. The economic criterion may trade off against a political criterion of reaching the most people possible. Finally, the predominant technical criteria are quality and improved outcomes. The application of a technical criterion may be influenced by fad and the desire to apply the latest technology. However, using the latest technology does not necessarily serve best children at risk or even improve outcomes. Moreover, increases in outcomes may be sought without consideration of cost.

Selecting the Populations to Be Included and the Models to Be Used

In order to choose a strategy and to fit a model or technology to the needs of participants and to the particular circumstances in which it will be applied, a decision needs to be made about what population the program is to serve. This might be done a priori (children in marginal urban areas with emphasis on children in female headed households) or might result from a situation analysis. In any event, a priori or no, a situation analysis is called for describing the condition of children and families as well as the context within which the program is to be carried out. In a previous section, various dimensions of the context that will affect ECCD programming were set out with the suggestion that some of these would also be useful when defining the population to be served by the program. In the best of all worlds, the situation analysis would be carried out with the participation of potential beneficiaries.

Ideally, a situation analysis should also provide information about the demand for different kinds of child care and development programs and should include an inventory of the institutional and human resources available to carry out a program. Finally, a review and analysis should indicate what models have been tried out within the country, with what

groups and with what success. In its programming, UNICEF regularly works with countries to carry out such situation analyses.

If the population to be targeted by the program is **under 3 years of age**, serious consideration should be given to parental support and education options (helping to build social networks that will reduce stress, or through home visiting or parental education classes or use of the mass media, for instance). This is so because many mothers do not want to put their young children in centers under the care of another person, because many mothers can combine their work with child care, and because center-based programs can discourage breastfeeding. Because these programs focus on the caregiver, they must be as sound in methods of adult education and interaction as they are with respect to information about child care and development. The parental support and education options can often be set in place at a much lower cost than center-based models because caregivers can be reached in groups and the frequency of contact will not need to be as frequent as in the case of programs that provide direct and daily care in centers. These programs would encourage taking advantage of existing health and other services.

Inevitably, some families will not be able to take care of even younger children at home because they will need to work to survive, and do so in jobs that are not compatible with child care. For these cases, some form of center-based program should be considered. As indicated earlier, these infant or nursery programs will require more intensive attention and a higher staff-to-child ratio than similar programs for older preschool children.

Whether or not very young children who need to be cared for outside the home should be cared for in a home day care setting or a nursery center will depend in part on the concentration of infants in a particular area. In many cases, the number of small children in a neighborhood area who need care outside the home does not justify a nursery center or even a day care home dedicated exclusively to under-threes. For this reason, it is common to find day care homes in which babies are cared for in the same home as older children. In such cases there is a tendency to neglect babies, to swaddle them and/or to place them in a location where there is little stimulation. This must be guarded against. In programs of child care and development for children under three, every effort should also be made to assure a strong health care and nutritional component.

If the main target population is to be children **aged 3 and above**, the demand for center-based care is likely to be higher. Moreover, as the children get older, they can benefit much more from interaction with each other. Here, then, some preference for centers emerges. To the extent possible, center-based programs should be combined with some kind of parental support and education.

When trying to decide between home day care or community centers that will be larger and bring together children in an institutional rather than a home setting, there is no rule of thumb to guide the decision. In general, home day care centers are thought to be more intimate places where greater personal attention can be given and where hours can be

more flexible. Home day care may also provide desirable benefits to the women who run the centers. But the degree of intimacy and personal attention depends on personality, training, and the number of children for whom a caregiver is responsible. With an adequate ratio and well-trained, loving caregivers, the environment in a larger community center can be better than that in a day care home. Occasionally, conflicts arise between natural mothers and home day care mothers because roles are confused, something that is less likely to happen in a larger center. However, if community centers are "borrowed" and are not dedicated exclusively to child care, the environment may not be conducive to good child care. In brief, the choice will depend more on the availability of facilities, the personalities and training of the caregivers, and such factors as the need for flexibility, as it will on whether care is given in a home or a community center.

In the final choice of strategies and models, the various criteria and compromises discussed in the preceding section will come into play.

Selecting the Administrative and Executing Groups

All programs need someone to see that what has been planned is being carried out efficiently and effectively. Primary responsibility for the execution of programs can be placed variously with government bodies, nongovernmental organizations, communities (defined in administrative and political terms or in terms of special groups organized at the community level such as women's groups), or organizations such as businesses or labor unions. In most cases, some combination will be required, sometimes related to differences in administrative and technical expertise, both of which are needed to execute a program, and sometimes related to the necessity of central coordination and monitoring vs. decentralized local adjustment to conditions.

Whatever category of executor is chosen from the four listed above, experience suggests that there is some advantage to locating responsibility for ECCD programs in an organization that is not placed within a particular sector, i.e., within health or education or agriculture. Rather, placement of responsibility in organizations that cut across sectors (welfare agencies, church organizations, women's organizations, community-development NGOs, etc.) will facilitate the integration of components within ECCD programs. It is possible that the same bureaucratic or organizational jealousies and competitions that exist among sectors will pertain to cross-cutting organizations, but that possibility seems to be reduced. In brief, one criteria for the location of administrative and executive responsibility will be the power to integrate the various components that should go into an ECCD program. In some cases, for government, that may be the office of the President; in others, a family welfare agency, and in others, a rural development authority.

In earlier paragraphs, we of the potential virtues of participation and of the necessity to view scale as the sum of a variety of more local initiatives and programs. This view favors locating administrative and executive authority in decentralized sections of the

government (municipalities, for instance) or in community groups. The Colombian Home Day Care System is administered nationally by the Family Welfare organization, ICBF, but day-to-day administration is handled through local community organizations that have responsibility for up to 15 day care homes in their community. When turning to community organizations, one device is to negotiate contracts with communities setting out clearly what the responsibilities and contributions will be for both the government and the community organization. Experience has shown that this is useful because it can provide some protection against a tendency in some communities for local control to be concentrated in the hands of a very few individuals with considerable power rather than in the hands of the community at large.

Indeed, it has often proven difficult to mobilize parents and community members to active participation in ECCD programs. Sometimes this is because the program has been introduced in such a way that it is seen as a service that is being offered (or imposed) and not as something in which the community has had a say. Their participation is (often rightly) seen as a kind of scam. Sometimes lack of participation is because community members are so busy surviving that they do not have time to participate.

Nevertheless, there are sufficient examples of community participation (see the cases of PRONOEI and PROMESA in Appendix 1, for instance) to show not only that involvement can be obtained but that it can be the basis for programming and be effective. For this to happen, the definition of participation must go well beyond simply expecting users of a service or community members to pay fees or paint buildings; it must also include participation in the planning of the program, in the selection of personnel, in the day-to-day administration (possibly with support from outside), and in monitoring and evaluation.

To the extent that local administration can be achieved, it brings with it some ownership of a program that is important in helping to sustain efforts and to facilitate functioning and adjustment within particular conditions, and in the face of a changing political environment.

Although much has been made in recent years of the **potential for NGOs to execute social programs**, including ECCD programs, the panorama of conditions and characteristics that permit that to happen effectively is not yet clear, particularly with respect to the administration of larger scale programs as contrasted with pilot or experimental projects. Nor has there been extensive experience in the ECCD field with administration of programs by NGOs beyond the pilot level. Nevertheless, several observations are offered, more by way of discussion than by way of direct guidance:

- The effectiveness of NGOs in larger programs will *depend on political position vis a vis government*.

- Effectiveness *depends on experience with and the authenticity of NGO nearness to the community*.

- Effective NGOs must include *not only technical expertise but also administrative expertise.*

- *Continuity is as important for NGOs as for governments.*

- We should *beware of wishful thinking that involving NGOs on a large scale in administration and support for ECCD programs is going to provide salvation.*

- *Governments need to avoid seeing NGOs as instruments.* Some are instruments created by governments and are not really NGOs. Others with more independence should be able to act on that independence and on their close relations to communities -- that is a strength.

  In most cases what will be needed is a partnership among the various forces.

Choosing Practitioners

Experience suggests that the community should have a hand in choosing the practitioners who will take care of their children, but that there should be fairly clear criteria for who can be chosen. Among these criteria are:

- *Love for children* (or sometimes, success in bringing up their own children). This criterion may be the most important of all.

- *Literacy.* Without literacy it is difficult to manage the administrative demands of a center. However, if there are several people in a center, it may be possible to include nonliterate caregivers. Additional education can bring with it additional appreciation for activities associated with the mental development of children, and it eases the job of training, but is not essential. Perhaps more important than a particular level of education is the ability to communicate.

- *Cleanliness and good health.* These criteria are too often overlooked.

- *A sense of organization.* A preschool teacher or a *madre educadora* must be more than a simple guardian of children; the task requires organization.

- Experience also indicates that there is an advantage to selecting *caregivers from the community who have both knowledge about the community and the trust of the community members.* Where an indigenous culture and language is dominant, this may be particularly important.

The reader will note that formal training in early childhood development has not been included as a primary criterion for selection of caregivers. This is so because it is possible

to train caregivers for the job. Where trained and properly titled early educators and caregivers are available, it is usually appropriate to select them to work in their area of expertise. However, if this involves assigning trained teachers to work in cultural contexts that are foreign to them, it may be wiser to select locally residents and train them.

Training[7]

Training can be delivered in a wide variety of ways: in formal programs in secondary schools or universities (Chile and Argentina have long traditions of training *parvularios* at the university level); in informal programs; in specially organized courses for ECCD practitioners (as is the case for most non-formal programs); on-the-job by previously trained staff or by supervisors; or through distance training (as in the case of the interactive radio training associated with the Bolivian Integrated Child Development Project). Although there is considerable debate about what training methods are best, it does seem safe to say that training should have a strong experiential component and supervised practice (not only theory), should be integral, should respond to trainees' needs, and should be continuous.

The need for continuous training on the job as well as initial training cannot be overemphasized. There is a tendency to frontload training, either by requiring caregivers who have passed through a formal course (assuming that the training provided in a formal educational institution is adequate), or by establishing special training at the outset of a program but providing little thereafter. In general, on the job training has been a weak link in early childhood programs. Refresher courses are not a particularly good investment in terms of training unless linked to practice and to some kind of follow-up. Although on-the-job training should be linked to practice and should be a role of supervisors, this is seldom the case (see section on supervision below).

An adequate process must be established for training new recruits who must fill in for practitioners who drop out during the course of a year. This is seldom done and it becomes a problem in systems with a sizeable turnover. One way of meeting this problem has been to establish a system of helpers who carry out some of the menial tasks associated with running a center, but who receive training that prepares them to fill in for, and eventually take over from other caregivers.

If the focus of the early childhood programs is on support and education of parents and other caregivers rather than on caring directly for children in centers, practitioners must be trained to work with and provide education to adults. This is seldom provided in early childhood training with, the result that practitioners find it difficult to provide parental support and education even if they are well versed in the content of child development and

---

[7]Various strategies for training are discussed in Issue No. 12 of **The Coordinators' Notebook** published by the Consultative Group on Early Childhood Care and Development.

- Effective NGOs must include *not only technical expertise but also administrative expertise.*

- *Continuity is as important for NGOs as for governments.*

- We should *beware of wishful thinking that involving NGOs on a large scale in administration and support for ECCD programs is going to provide salvation.*

- *Governments need to avoid seeing NGOs as instruments.* Some are instruments created by governments and are not really NGOs. Others with more independence should be able to act on that independence and on their close relations to communities -- that is a strength.

In most cases what will be needed is a partnership among the various forces.

Choosing Practitioners

Experience suggests that the community should have a hand in choosing the practitioners who will take care of their children, but that there should be fairly clear criteria for who can be chosen. Among these criteria are:

- *Love for children* (or sometimes, success in bringing up their own children). This criterion may be the most important of all.

- *Literacy.* Without literacy it is difficult to manage the administrative demands of a center. However, if there are several people in a center, it may be possible to include nonliterate caregivers. Additional education can bring with it additional appreciation for activities associated with the mental development of children, and it eases the job of training, but is not essential. Perhaps more important than a particular level of education is the ability to communicate.

- *Cleanliness and good health.* These criteria are too often overlooked.

- *A sense of organization.* A preschool teacher or a *madre educadora* must be more than a simple guardian of children; the task requires organization.

- Experience also indicates that there is an advantage to selecting *caregivers from the community who have both knowledge about the community and the trust of the community members.* Where an indigenous culture and language is dominant, this may be particularly important.

The reader will note that formal training in early childhood development has not been included as a primary criterion for selection of caregivers. This is so because it is possible

integrate into one service the delivery of, for instance, health and educational components. Government bureaucracies are vertically-organized, each with its own budget and forms of selection and rules of operation; trying to combine them is seldom fruitful. For that reason, it is useful to work toward the convergence of services on particular groups and communities or on one location (a community or home day care center, a preschool, a workplace, a health post, a community kitchen, a supplementary feeding center, or another location.) If this convergence can be obtained, it falls to the communities and the local institutions to integrate the services, in situ.

It also appears to be feasible to seek integration in the content of various programs. For instance, a psycho-social development component can be incorporated in health education programs directed to parents. This is seldom done because there is a tendency to think of health in physical terms and as the absence of disease. An example of this tendency, but also of a way to seek integration is the UNICEF publication, *Facts for Life*. This widely-distributed booklet was intended to provide parents with basic tips that would make their children more healthy. In the first version of the booklet, reference to psycho-social development was, for all intents and purposes, missing. In the revised edition, however, a full section was added dealing with psycho-social development. An integrated approach has also been taken in many Child-to-Child programs directed children aged 10–12 who care for younger siblings (see the Jamaican case in Appendix 1).

Many ways have been found to successfully integrate in missing components in services provided by different sectors. For instance, health posts in Chile have incorporated psycho-social development into their programs of maternal and child health monitoring for new mothers. The PROAPE program described in Appendix 1 was conceived as a nutrition supplementation program but was converted into an integrated programs of child care and development. Programs of nutritional recuperation have incorporated a psycho-social component with extraordinarily successful results (Grantham-McGregor, 1984; Monckeberg, 1986). Additionally, programs focussed on growth monitoring have taken advantage of the fact that mothers bring their children for periodic weighing to provide them with information about early childhood stimulation.

Box 4

Making Components Mesh in Order to Foster Integrated Early Childhood Care and Development (ECCD)

✓ Apply an integrated concept of child development within planning and training.

✓ Create plans of action for children that bring together health, nutrition and education.

✓ Foster the convergence of health, nutrition, and education services on agreed-upon groups, communities, and institutions.

✓ Strengthen the ability of community leaders, groups and institutions to bring services together at local levels.

✓ Incorporate missing components within existing sectoral programs. For instance:

- *Health*: Add attention to psycho-social components of ECCD within programs of Maternal and Child Health Care, and Health Education.
- *Nutrition*: Add attention to psycho-social components of ECCD within programs of Food Supplementation; Nutrition Recuperation; Growth Monitoring; and Nutrition Education.
- *Education*: Add health and nutrition components of ECCD by: placing immunization requirements for admission; instituting daily health checks; providing for services within the pre-school such as period examinations and provision of food; and building part of the curriculum around health and nutrition activities.

Similarly, preschool, child development and child care programs can integrate health and nutrition into their activities in many ways. Formal arrangements can be made with health posts for periodic check-ups including nutritional monitoring, sight and hearing. Cooperative arrangements can be made with food supplementation programs. Child care centers can be focal points for immunization or programs of micronutrient supplementation such as vitamin A. Preschools or home day care centers can create small gardens that both provide food and teach nutritional habits. Simple procedures can be introduced in centers to monitor a child's health and cleanliness (many centers regularly check fingernails and the cleanliness of hands). A curriculum can be built around health and nutritional themes. Feeding time can become a learning time for children through their participation in the process.

In brief, there is no lack of ways in which health, nutrition and stimulation/education components of an early childhood program can be brought together to take advantage of the synergistic effects such an integrated approach can bring.

Supervision

Supervision is one of the most important but weakest elements of most programs. This occurs for several reasons:

Supervision is not given an adequate place in the program design and plan. One solid study of successful intervention programs (Heaver, 1988) suggests that a characteristic of successful programs was a strong supervisory component in which the ratio of supervisory personnel to units under supervision was between 1 to 10 and 1 to 15, depending on the project circumstances. A ratio of 1 to 12 was recommended as an approximate ratio for supervision. In theory, this allows at least 2 visits per month to each unit even if a full day is required to visit a unit.

Supervisors do not get to the field. The number of units for which a supervisor is responsible may have little to do with the frequency of field visits. Failure to visit may be related to:

- *Transportation problems*. These problems may be due to a lack of project vehicles (or other means of transportation provided within the project), a breakdown of vehicles or a lack of gasoline provided by the project. Sometimes reliance on public transportation proves impossible and/or the project fails to budget adequately for these transportation expenses which come out of the pocket of the supervisor. Or, the problem may arise because vehicles that are supposed to be at the disposal of supervisory personnel are used by administrative staff with higher position and authority.

- *Motivational problems*. In some cases, appointed supervisors see their position as a sinecure and do not want to visit the field. Sometimes the lack of motivation is related to salary problems.

Supervision is defined as inspection. Traditionally, supervisors have been given the responsibility of inspecting those they are to supervise. Defining the role as one of inspection is very different from defining the supervisory role as one of providing continuous training on the job or of accompanying those who are actually implementing programs on site. Supervisors need training to adopt a more educational and supportive role in their work.

The selection process is faulty. Too often, supervisors are selected for political reasons or on the basis of criteria that have little to do with their practical knowledge of child

development, or of how to function in a child care and development program. When this occurs, it is difficult for supervisors to provide the methodological and content support that they should be able to provide.

Innovations that have strengthened the supervisory role include:

- *Bi-weekly or monthly meetings* of caregivers with the supervisor to plan jointly. Such meetings allow: a) identification of caretakers who need more help than others; b) other caretakers to provide solutions to problems; c) the possibility of calling on specialized personnel to make presentations or work with practitioners in a group (e.g., calling on a medical doctor to respond to questions about health problems that a supervisor may not be able to answer).

- *Recruitment to supervisory positions from within the ranks of the best practitioners*, disregarding formal educational requirements which might disqualify otherwise highly qualified candidates. This also motivates practitioners by creating a system of advancement.

- *Varying the ratio of supervisors to units over time* so that a supervisor has fewer units during the start-up period and more once experience in the field units is gained. Initially, the ratio may be 1 to 10 or less, but this may expand to 1 to 20 or more over time. Or, a mix of newcomers and more experienced practitioners may be sought, in which case, more experienced people may help the supervisor during periodic meetings.

- *Purchase of bicycles or motorscooters*. This solution can also be the cause of friction and needs to be considered with caution.

Monitoring/Evaluating

In general, systems of monitoring and evaluation of ECCD programs have been weak. When organized monitoring systems are set up, they tend to yield mountains of data that are not utilized because they are conceived as providing descriptive statistics rather than as a tool for continued planning. Rarely does the information collected get fed back to the people at the field level who are asked to cooperate in the collection of that data.

Evaluations tend to be linked to a monitoring process and to concentrate on the program process, answering the question, "Have we done what we planned to do, and if not why? Sometimes this is extended to the question, "Have we done it well?" with reference to the quality of the process (e.g., training). Less often, an attempt is made to find out if the program has actually had an effect on the children and other participants.

Part of the evaluation failure stems from the fact that evaluation is seldom built into a

program from outset or, if it is, there is so much emphasis placed on operational activities that no baseline data are collected, making subsequent evaluations of effects more difficult. Diagnostic evaluations seldom use participatory methodologies to define program priorities at local levels and/or to make adjustments in program models.

On occasion, solid evaluations of effects of larger scale programs have been carried out, as, for instance with the center-based PROAPE and PRONOEI (see Appendix 1) and Colombian Home Day Care (Castillo, et al., 1993) programs described above. In general, however, evaluation has been strongest when it is part of a research action project designed to test a particular model on a small scale. Evaluations of large-scale parental education programs have been weak, and there have been few longitudinal studies of the impact of early interventions on children in school, tracing them beyond the first or second year.

V. COSTS AND FINANCING

Based on existing studies and experience, what do we know about:

- *how much ECCD programs cost, overall, and per participant*?
- *how the various costs components behave*?
- *how reasonable and affordable the costs are*?
- *the cost-effectiveness of different types of programs*?
- *how ECCD costs are financed and how the burden of costs is distributed*?

What Do ECCD Programs Cost?

This apparently simple question is difficult to answer given the wide variety of program goals, activities, models, technologies, duration, beneficiaries, and context, as detailed below.

- *Goals*: for example, increasing coverage vs. affecting outcomes; cognitive development vs. integrated child development vs. rehabilitation; direct improvements in the child vs. changes in parental behavior.

- *Activities, content or number of services*: education, health, nutrition, family services.

- *Models*: center-based, home visiting, mass media approaches.

- *Technologies*: para-professionals vs. professionals; high vs. low child/staff and staff/supervisor ratios.

- *Duration*: hours per day, days per year, number of years.

- *The population served*: large or small; the age of children; healthy vs. handicapped or malnourished children; children only vs. children and their parents vs. children, parents and community members.

- *The program contexts*: concentrated vs. dispersed areas; high vs. low per capita incomes.

To help illustrate these differences, let us look at several estimates. In the PRONOEI program in Peru (Myers, et al, 1985 and Appendix 1), the cost per child per year was estimated to vary between $US28 and $US61 in the four Peruvian states where the program was located (average cost = $40). In this case, the basic program model, technology, age of children, and duration were the same across states, and all programs were located in rural areas. Yet, the per child cost differed. The reason for this cost differential had to do with enrollment levels (economies of scale) and degree of attention to community development components.

The cost of the Colombian Home Day Care Program (HDC) was estimated in 1992 as approximately $US298 per child per year (Castillo, Ortiz, and Gonzalez, 1993). This program has both day care and child development goals (as opposed to the child development goal closely linked to preparation for school of Peru's PRONOEI). The caregiver/child ratio is 1 to 15 in the HDC program, with volunteer help from parents on a rotating basis, (compared to about 1 to 30 in the PRONOEI model). Children remain in the day care home 8 hours a day (compared to 3 hours per day in the PRONOEI case).

The cost of Venezuela's home day care program in the mid-1970s (during the oil boom) was well over $US1,000 per child per year (de Ruesta, 1978). Although Venezuela's basic model was the same as the Colombian example (home day care), the caregiver/child ratio was 1 to 5, children were cared for during 12 hours, and a variety of supervisory and social services costs were also considered.

Adjusting for inflation (in order to facilitate comparisons over time) would provide an idea of the orders of magnitude for different models and technologies and the wide range of possibilities available. However, such a comparison would not provide a measure of cost-effectiveness (see below) or yield a very useful base for choosing among programs. Nor do the figures provide us with an accurate guide to budgeting for an early childhood program in another setting (even assuming the same model) where, for instance, salary levels may differ, the population to be reached may be more dispersed, etc. For this purpose, it is better to construct costs in a particular setting and for a particular model and then compare variations in costs for each of the major cost components.

Cost Components and Their Variation[8]

An examination of basic cost components yields further insight into the overall cost of an ECCD program. Program components are numerous, and they include: developmental costs, provision and upkeep of facilities and equipment, training, personnel (salaries and benefits), materials, food, health care services, and transportation.

Non-recurrent Costs

Clearly, non-recurrent costs should be amortized when calculating the per child costs of a program and when relating those costs to effects (see below). Unfortunately, however, this is not always done.

Program Development: Creating/Testing the Model, Technology and Materials

If a variety of technologies, models and ECCD materials have already been developed, used, and evaluated in a country, the developmental costs associated with putting a program in place may be minimal. Even so, however, some adjustments will be needed. Experience suggests the value of an adjustment stage for any model or material that is to be used, even though this may seem to be "reinventing the wheel." A continuing development process provides essential adjustments to particular contexts, helps locate possible administrative difficulties, and helps to develop "ownership" of the particular model(s) and materials to be utilized. The process of creating (or re-creating) and testing can also serve to train individuals who will later be responsible for applying the technology on a larger scale. In most countries of Latin America, experimentation with various models has been fairly extensive and full-blown pilot or experimental studies are probably not needed. Nevertheless, some allowance should probably be made for creation and testing of new materials and for monitoring and evaluating existing models.

Facilities: Choosing, Constructing or Up-grading

In many cases it may not be necessary to build new facilities because existing ones can be made available. In various programs, community centers, churches, union halls, market stalls, company facilities, private homes, and other places have been offered for use in center-based ECCD programs or parental education programs. In such cases, the cost of facilities is a contribution of the community (or organization or individual), and does not appear as a cost for the government program. Depending on the age of the children, the climate, and the type of ECCD program, it may also be possible to take advantage of outdoor spaces such as parks.

If existing buildings are to be used, it is important to ensure that:

---

[8]This discussion is focused primarily on center-based programs.

✓ Competing uses at other times do not unduly restrict the hours when children can come together, or restrict what can be done in the ECCD program.

✓ Taking advantage of existing facilities does not place the center in an out-of-the way location making participation difficult.

✓ Minimum standards are adhered to, including health standards.

If circumstances dictate construction of new buildings, several considerations should be kept in mind:

- *Community involvement in both planning and in the actual construction can reduce financial costs to the program*, through volunteer labor and the use of local materials.

- It is *probably cost-efficient to contract a local architect to supervise the work.*

- *"The best can be the enemy of the good."* That is to say, although attention should be given to minimum construction standards, these should not be so rigid that they raise costs to prohibitive levels.

Several programs (e.g., home day care in Colombia and Bolivia) have lent money to day care mothers (whose homes are used as the ECCD setting) to make needed improvements in their homes to bring them up to minimum standard. Mothers are required to pay back the loans through deductions from their earnings. In these cases, contracting qualified family members to do necessary work saves money and generates additional family income. Adequate supervision of the up-grading and commitment to the program by the mothers are vitally important to avoid situations such as was the case in Colombia where mothers dropped out of the program after finishing the home improvements and defaulted on their loans.

Equipment

Transportation and administrative equipment. Circumstances will dictate the combination of vehicles and office equipment needed for program administration, supervision and monitoring. Careful attention should be given to proper maintenance needs.

Equipment in centers. Most of the equipment needed in ECCD centers is simple and does not require sophisticated construction. As a result, the equipment to be used in centers can be made locally, helping to generate income in the community or it can be donated by the community. If this is done, it is important to ensure the quality of the tables, chairs, cabinets or playground equipment. If a program involves food preparation, special attention will have to be given to cooking equipment and utensils.

There is a trade-off between local production and national/central production or

purchasing of equipment because the purchase of standardized equipment can bring economies of scale and facilitates quality control.[9] If programs are large, national production or purchase can modestly stimulate national industry. On the other hand, central purchasing does not allow adjustment to local conditions, does not generate income locally, and does not promote local involvement in the ECCD program. Only in rare cases should importing equipment for ECCD centers be considered.

Training

Basic training of ECCD program participants is considered here as a non-recurrent cost because the results of the training will be used over a number of years. Accordingly, the cost should be amortized. If there is a high degree of turnover, however, it will approach a recurrent cost.

In most ECCD programs, it will be necessary to consider the costs of training for people at various levels in the program, from administrative personnel to supervisors to frontline caregivers and educators. When considering training costs, it will be necessary also to consider the trade-offs between longer, more formal and more expensive initial training (seen as a non-recurrent cost) in universities or normal schools followed by little training on the job, and shorter, less formal and less expensive initial training schemes (whether in universities or organized independently) followed by greater continuing on-the-job training (seen as a recurrent cost). Usually, when calculating the costs of training, the training that occurs in normal school or university programs is not considered to be a program cost because it has already occurred and is being covered by another part of the government or is paid for by individuals. Formal and extensive training results in higher salary expectations than initial training in short courses offered outside established institutions. And, the level and kind of training received may be linked directly to salary levels when pay scales are established, even though there is considerable overlap in the quality of the service provided among formally and informally trained individuals.

As indicated earlier, there is a tendency in most non-formal programs to skimp on initial training and in all programs to keep costs of ongoing training to a bare minimum.

In programs of parental education, it is often assumed that day care "attendants," preschool teachers or others who work with young children will automatically know how to deal with parents. However, the education of adults is very different from the care or education of young children. Thus, more attention needs to be paid to including a cost component for training in these programs.

---

[9]At a national level, for instance, it is easier to assure that equipment is durable and that, for instance, the paint used is lead free or that slides are constructed in a way that children will not run the risk of getting slivers.

Recurrent Costs

Salaries and Benefits

In most ECCD programs, as in most social programs, salaries constitute the major cost (although food costs may also loom large in ECCD programs). For that reason, every attempt is usually made to find ways to restrict or reduce salary costs. This may be necessary from a budgetary viewpoint, but can be counterproductive from a cost-effectiveness point of view.

Although some personnel costs are incurred in administrating a program, the bulk of the salary expense is used to pay for practioners who provide actual care to children (or who are involved in educating parents and community members). The most common strategy applied to reduce caregiver salary costs is to seek volunteer labor. This may be done in the strict sense that no remuneration is provided, but more often, the volunteers, who are not administrative or supervisory staff but actually deliver the service, are given a small amount of money which may be labeled a *propina* (tip) or *beca* (grant). This amount is usually well below the minimum wage. This may be rationalized on the basis of it being an emergency program or that the service is considered a community contribution. The volunteer strategy is often combined with the selection of caregivers from the community who lack formal training in early child care development and who then receive some para-professional training (i.e., the decision is to go with lower technology). In these cases, para-professional caregivers/ practioners remain off the official payroll (hence the label of "non-formal" even though what occurs in the centers may be very formal). They are also not eligible for benefits, further reducing costs.

This volunteer approach has worked well in some settings in the short run. Over a longer period of time, however, it has led to high rates of discontent, usually resulting in some sort of union or quasi-union organization and to high rates of turnover. The *propina* is seen as a low and unfair salary, and the sense of volunteerism is usually lost after a period of a few years. In addition, the approach is criticized as a form of exploitation of women, since in most programs more than 98 percent of the caregivers are women. The low pay reflects a societal bias which expects women to volunteer their labor as part of their maternal role. It is argued by some that this low-cost, para-professional strategy also leads to poor quality attention in the centers.

Payment levels will also depend, in part, on what hours caregivers are expected to work and what the duties assigned to them are. It will also depend on the pay rate of other employment alternatives available to caregivers. If unemployment is high, a caregiver may have little bargaining power. The remuneration level also depends on whether the caregiver perceives that program participation offers other benefits, for example:

- They get to take care of their own children at home and get paid something for it (although this may also be a factor in relatively high turnover rates, since as a

caregiver's children get older, this benefit is reduced or eliminated).

- An "in kind" benefit accrues in terms of food for the family.
- They gain position in the community.
- They gain a marketable skill.
- They enter into new social relationships that are rewarding.
- They get to improve the appearance and functioning of their home.

The salary also depends on:

- The level of poverty and education of the pool from which caregivers are drawn.
- what other people are earning and whether or not minimum wage laws are enforced;
- the point in time of the program (during initial stages or after the program has been functioning for several years).
- Whether there is a tradition of community service or whether there is an organized union.

Due to all of the above factors and the lack of an established market for these workers, setting an equitable and efficient price for the caregivers' labor is difficult. This difficulty is exacerbated by the fact that in programs that attempt to promote community participation, women are generally expected to volunteer their labor while men earn a minimum wage. Therefore, to promote comparable wages between men and women, one can argue that caregivers hired under "non-formal" arrangements should receive at least the minimum wage and should have access to social benefits. Salaries should also increase as training and experience accrues, just as would be the case in the formal education system, for instance. More programs are beginning to follow these salary and benefits ideas, but resistance arises because it increases costs for so-called non-formal programs.

The level of pay has cost and quality impacts in ECCD programs. First, high turnover is likely if workers receive low or no salaries. High turnover rates reduce returns to training and increase training costs. Furthermore, increased time dedicated to recruitment and training by project mangers decreases administrative effectiveness. Therefore, low pay may actually cost more in the long run. Second, although evaluations of non-formal programs assert that para-professionals can and do care for children in a way that produces desired developmental effects while also responding to custodial needs, even when paid less than minimum wage, it is probable that low pay will serve as a disincentive to the provision of quality service and could negatively influence the quality of the applicant pool of

caregivers. This is an area for future evaluation.

One recently evaluated program in a related sector which sheds some light on this issue of salaries and benefits is the Health Agent Program (Programa de Agentes de Saúde) in the state of Ceará in Brazil. This preventive health program, which began in 1987 as part of an emergency employment-creating program, directly contributed to a 36% reduction in infant mortality in 5 years and tripled vaccination coverage for measles and polio. The program employs and trains unskilled community members to serve as health workers to make home visits. When the program began, the health agents' salary accounted for 80% of the program costs; they earned minimum wage; worked under temporary contracts without job security or fringe benefits; and received three months of initial training. A recent evaluation of the program (Tendler and Freedheim, 1994) highlighted several reasons for the success of the program related to the treatment of the agents, which included:

- a rigorous process of meritocratic selection of the agents;
- extensive initial training, continuous in-service training and substantial feedback from supervisors;
- a salary higher than the agents' other options;
- unending publicity and repeated public prizes for good performance which conferred status on these jobs; and
- the high level of job satisfaction due to the variety of tasks involved, the level of discretion allowed for the agents to direct their own work and the satisfying relationships with community member-clients.
- Finally, when job security and fringe benefits began to become an issue, the state agreed to upgrade the status of a number of agents through a process of selection and further training, since they had assumed from the start of the program that they would eventually have to take such measures.

Food

Attending to the nutritional needs of children is consistent with an integrated view of child care and development programs and is crucial to program success, both for the potential effects on the poor child and because food helps attract children into the programs. In several large ECCD programs, outlays for food are greater than salary expenses. This results partly from the low wages paid to paraprofessional caregivers, and partly because the cost of delivering food can be relatively high, particularly if the food subsidy runs at 70 to 100 percent of the daily food needs of a child. In both the Colombian and Bolivian Home Day Care Programs, food costs account for more than half of total estimated costs.

The food cost picture is complicated by the fact that a number of ECCD programs depend on food subsidies from abroad (through the World Food Program or CARE, for instance). By depending on imported food subsidies, program costs to the government are reduced. However, this strategy has several disadvantages, including: periodic supply interruptions because of logistical problems, occasional contamination of food in storage, and the potential for undercutting local agricultural development as imported foodstuffs are substituted for local products (including those with high nutritional value, such as quinoa in Bolivia). Imported food subsidies also raise the question of sustainability, i.e., what happens when the subsidies end? Although food aid has occasionally involved monetizing contributions so that a direct transfer of funds is provided with which to purchase local commodities, this option has not been applied widely. And, at some point in time, food costs must be picked up by the government or absorbed by the community.

Comparing costs to effects clouds the issue even further In more than one major program (PROAPE and Colombian Day Care Homes, for instance), the effects of nutritional subsidies on nutritional status have been, at best, minimal. This is logical when one considers that:

- *Children are not in the centers during weekends* so the supplementation is not continuous and a less nutritious diet is provided at home (rarely do ECCD programs work with the parents to improve their habits of food preparation habits so as to provide better diets).

- *Unsanitary conditions in the home often result in cases of diarrhea*, counteracting potential benefits of subsidized feeding.

- *Families often look upon the subsidy as a substitute for food in the home rather than a complement to it.*

- *Children may not receive the amount they are supposed to receive*, either because they are used to eating less or because they are not given the full amount.

In addition, many ECCD programs are directed to children ages 4 and above. These children have already been affected by malnutrition and it is argued that the nutritional supplementation given at this time arrives too late. On the other hand, recent work suggests that the provision of relatively low-cost micro-nutrients may have an important effect on a child's ability to learn even at "older" ages.

In brief, nutritional supplementation strategies should be scrutinized and rethought, both in relation to their relatively high costs and to their effects. This is particularly so for strategies linked to cost-saving techniques that rely on import subsidies. Experience suggests that programs directed to younger children and associated with a system of weight monitoring, systems of locally administered purchasing, and programs of practical nutritional education for parents are promising avenues to boost the effectiveness of the nutritional

component of ECCD. Linking the nutrition component of ECCD to community kitchens should, in theory, help to increase effectiveness while reducing costs.

Health Care Costs

Most ECCD programs do not figure in health care costs because they are considered to be embedded, i.e., health care is supposed to be covered by the regular operation of the health system. That is so whether an ECCD center is small and health treatment is provided from a health post or if the center is large enough to justify having a nurse on the premises, placed and paid for by the public health care system. Whether or not they are covered by the public health care system, all integrated ECCD programs do (or should) have recurrent health care costs associated with the time that health personnel dedicate to treating children and with the use of medicines, facilities, etc.

To the extent that having to attend to children in ECCD programs on a regular basis represents an additional burden on the public health care system, there will be extra costs involved which will need to be budgeted. It is suggested that gathering small children together in centers may increase the burden on health personnel because it increases health risks through contagion. However, it has also been argued that the presence of children in ECCD centers can actually reduce health costs by making it easier for the system to carry out preventive measures, such as immunizations and periodic checkups, more efficiently. However, the cost of these potential effects have not been quantified.

The effectiveness of the health component of ECCD depends on the availability of a nearby health service, on the willingness of the health personnel to visit ECCD centers, and/or on the ability of the caregiver or community to bring children and health personnel together. It may also depend on the degree to which health centers are able to provide information and education to parents of the children in the centers, something that rarely occurs.

Unfortunately, it has often been difficult to coordinate existing public health systems with ECCD programs, partly because of sectoral traditions of bureaucratic territoriality. It also depends to a great extent on the ability of the caregiver to establish a good relationship with health care delivery personnel. Failure to establish that relationship and to take proper advantage of existing health facilities creates costs for both programs, which are as yet unquantified. One way of helping to overcome this turf gap is to bring children (and parents) to the health post rather than to expect or insist that health post personnel visit centers or homes.

Materials

The cost of materials is normally a relatively small part of the total cost of ECCD programs. As with equipment, programs have variously used strategies of (i) centralized purchasing and distribution, sometimes linked to creation of a special company or workshop

producing toys, or a printing house to produce booklets for the entire system; (ii) local purchase and production; or (iii) getting parents and teachers to make toys and donate materials. There exists a wealth of experience in making toys from recycled materials, partially as a strategy to reduce costs.

However, several caveats should be borne in mind when producing toys for ECCD programs.

- *Nationally and locally produced materials or toys should conform to safety standards.* For example, scissors should not have sharp points, paint should be not contain lead (in some areas, it can be difficult to find unleaded paint, requiring the use of imported pigments which raises the price of locally produced toys above that of imported toys). Toys should not have sharp edges or detachable pieces that can be swallowed.

- The use of recycled materials to create toys can reduce costs and can be useful for both caretakers and parents as an educational exercise, but *the use of recycled materials on a regular basis can also lead to the creation of toys that are quickly thrown away or that sit on shelves unused*, because they are too fragile or because they are treated as someone's untouchable creation.

- *It is not equitable for non-formal ECCD programs directed to poor children to have inferior materials* while formal programs for more privileged children (e.g., formal pre-schools or centers created for employees of the state) have access to superior materials. Such a situation could also create a negative image for the program.

Transportation

One recurring cost that is not often budgeted adequately is the cost of transportation, related in large part to program supervision. Even when vehicles are available, the lack of funds for fuel can measurably affect supervision. In some cases, supervisors are expected to cover out-of-pocket public transportation costs. In others, they are provided with a per diem that covers transportation as well as lodging. Sometimes per diems are used as ways of informally increasing very low wages because it is possible for supervisors (or caregivers attending a monthly meeting or a training session) to find lodging with relatives or friends.

Maintenance Costs

Maintenance and utilities should also be budgeted into program costs. These items are often expected to be financed by the community. However, it should first be ascertained if the community or users in fact have the wherewithal to pay for maintenance and utilities, which are important for the health and safety of the children.

Costs per Child

Once the total costs of a program have been determined, these costs are often converted into a cost-per-child figure that is then used to compare programs and to project budgets. This exercise needs to be handled and interpreted with care since it falls short of determining the cost-effectiveness because it does not incorporate any measure of what happens to a child (or a parent) as a result of participating in the program. However, the comparison can give the unfortunate illusion of a cost-effectiveness comparison to those who are concerned only with expansion and with the success of a program in getting children to participate. The per-child calculation is also often based on enrollment rather than actual attendance, which may turn out to be as much as 50% of the enrollment.
In addition, unless it is a calculation done at a local level for a particular center, the per child cost figure hides variations in context that affect costs and that are extremely important when projecting program costs to new areas or populations.

Cost-Effectiveness

This section discusses effects of programs (cost-effectiveness) without trying to assign those effects a monetary value (cost-benefit analysis is treated briefly below). If a per child cost of, for example, $10 produces little or no effect, it is obviously not a good investment, no matter how affordable that level of expenditure might be. But if a cost of $150 per child produces a very large effect, relative to other less expensive possibilities (say, an average increase in a developmental quotient score of 10 points or a reduction in repetition rates in primary school of 10%), it may be an excellent government investment, even though it appears to be relatively high cost, and even though the cost is high relative to the minimum wage. Accordingly, the most basic question is not whether costs are high or low, but whether or not they are high or low in relation to outcomes.

Barnett and Escobar (1990, p. 561) suggest that if a cost-effectiveness analysis is to adhere to the canons of economic analysis, it should, on the cost side, "...include the costs borne by a program's clients and their families as well as costs in the program budget. For instance, the cost to parents of providing transportation to a center should be included." This view, as applied to the ten cost components presented earlier, suggests that we should be sure to count all costs, regardless of who bears them (government, the community, individual users, NGOs or international organizations).

The main stumbling block to cost-effectiveness analysis is often not the calculation of costs but, rather, the definition and measurement of effects. Barnett and Escobar also indicate that, "Measurement of program effects should be expanded beyond measures of child progress to include effects on others such as the family, children's peers, the school system that children enter after intervention, and the intervention staff. For example, it might be found that two programs have similar costs and child outcomes, but that one is more economically efficient because it produces less staff stress." It is rare to find this kind of

complete program evaluation of benefits in ECCD programs (or, for that matter, in most social programs). For that reason, the effects of programs are more often than not underestimated. (Rather than enter into a lengthy discussion of potential benefits, a listing is provided in Box 5.)

Even if we concentrate on measuring the effects of child progress related to an ECCD program, we should, within a holistic view of child development, pay attention to the physical, mental, social, and emotional dimensions of development. Whereas the physical dimensions are relatively easier to measure and there is relative agreement among experts as to which indicators should be used, this is not the case when we turn to cognitive, social or emotional development. Nevertheless, progress is being made on these fronts and the lack of agreement has not prevented evaluators from developing and applying reasonable measurements in their desire to get at effects of children's development.[10]

An evaluation of the PRONOEI program found that participation in it had a significant impact on the cognitive development of children and their readiness for school. These effects did not, however, carry over into school in terms of lowered repetition, reflecting major problems of primary school availability, quality, organization, and management. Effects of the program on nutritional status were found to be moderate and indirect, and to differ by project site. Community involvement and awareness was found to have increased as a result of the project.

This information allows us to come to the conclusion that, in its own terms (i.e., in relation to the goals set for the program), the project was cost-effective because its costs appear to be relatively low and it achieved many, if not all of its hoped-for effects. But the information still does not provide us with a basis for deciding whether the PRONOEI model or another one would produce better results. To that end, comparisons were made (Myers, et al., 1985) with results of evaluations of two other non-formal ECCD models: a home-based alternative applied in both rural and urban areas and a peri-urban satellite model built around a resource center. The conclusions drawn from the exercise were:

- *The differences in per unit costs among the non-formal models are not dramatic.* Therefore, decisions about which program is most appropriate in the particular setting can be made based on the relative effects of the programs.

- Taken in their own terms, the three non-formal models are all moderately effective and all are less costly than the formal equivalent. However, *each program was directed to different groups and the effects measured were defined and/or measured in different ways*, according to the goals and structures of each program. (In the case of the formal system, no measures of effects were available.)

---

[10]Good discussions of this topic can be found in: Lucille Atkin, et al. **Paso a Paso. Cómo evaluar el crecimiento y desarrollo de los niños.** México, D.F.: Editorial Pax México, 1987.

Box 5

Potential Benefits of ECCD Programs

Children	*Psycho-social Development:*	Improved cognitive development (thinking, reasoning); Improved social development (relation to others); Improved emotional development (self image, security); Improved language skills
	Health and Nutrition:	Increased chances of survival; Reduced morbidity; Improved hygiene; Improved weight/height for age; Improved micronutrient balance
	Progress and Performance in Primary School:	Higher chance of entering; Less chance of repeating; Higher learning and better performance
Adults (program staff and/or parents) and Older Children	*Changes in general knowledge:*	Health and hygiene; Nutrition (related to own status; Leadership skills
	Changes in general attitudes and practices:	Health and hygiene; Preventive medical and monitoring/attention; Opportune treatment; Nutrition; Improved diet; Improved self-esteem
	Changes in relationships:	Husband-wife; Parents-older children; among children
	Improved employment:	Caregivers freed to seek or improve employment; New employment opportunities created by program; Increased market for program-related goods
Communities	*Changes in physical environment:*	Sanitation; spaces for play; new multi-purpose facilities
	Greater social participation	
	Improved solidarity	
	Community projects benefitting all	
Institutions	*Improved efficiency:*	Better health attention through grouping or changed user practices; Reduced repetition and dropout in schools
	Improved effectiveness:	Greater coverage
	Improved capacity:	Changes in ability/confidence or organization
	Improved practice & content:	Methods; curriculum content
Society	*A healthier population*	
	A more literate, educated population	
	Greater social participation	
	An improved labor force	
	Reduced delinquency	
	Reduced fertility and early births	
	Reduced social inequalities	

- *Rather than view the several non-formal programs as alternatives, they could be viewed as complementary options*, each with the potential for being cost-effective in particular situations and with particular age groups. A conclusion could not be drawn about non-formal vs. formal alternatives, in part because a measure of the effects associated with the formal system were missing.

A Note on Cost-Benefit

In order to characterize a project or program in terms of its ratio of costs to benefits, or to calculate a rate of return to the investment represented by the project, it is necessary to place monetary values on the effects. Although this is difficult to do, it is not impossible.

Perhaps the most complete cost-benefit evaluation of an ECCD program is that carried out for the High/Scope Perry Preschool Project in the United States (Schweinhart, et.al., 1993). In that case, children who were randomly assigned to participate in an intervention project at ages 3 and 4 and their counterparts who did not participate in the project have been followed up to age 27. From the results of the most recent follow-up, it is possible to measure earnings differences for the two groups and to project earnings profiles, and to calculate cost savings to society associated with such differences as lower crime rates, less dependence on welfare, and less need for remedial programs in school for project participants as compared with nonparticipants. When the monetized present values of these effects are compared with the project costs, the benefit-cost ratio is 7 to 1. The cost-benefit study suggests that:

- *The benefit-to-cost ratio for a preschool program can be high.*

- *Even a high-cost early intervention can be socially beneficial* (the per child cost of the project originally was almost $5,000 which, in 1962, was about one-third of per capita GNP).

- *The bulk of the benefits may accrue to taxpayers and citizens rather than to the individual program participants or their families.*

- *It is useful to look at a range of possible effects of early intervention programs when attempting to compare costs with effects or benefits.*

Another example of a cost-benefit study comes from Brazil, from an evaluation of the PROAPE program described in Appendix 1 (Ministerio da Saude, 1983). In this case, the only effect of the program that was translated into monetary terms was the reduction in primary school repetition. The cost-benefit comparison shows that the PROAPE program not only paid for itself, but resulted in a primary school cost savings during the first year, that was over and above the cost of PROAPE.

How Are Costs Covered?

ECCD programs can be paid for by governments, NGOs, employers, philanthropic or donor organizations, communities, or users. Or, as is usually the case, some combination of these. Costing exercises that attempt to arrive at total costs and also determine who bears each particular cost provide extremely useful information for policy purposes.

We turn again to the Peruvian PRONOEI for an example. In that case, the estimated yearly cost per child was US$40. This value included estimates of in-kind and labor contributions from the community as well as governmental and foreign assistance contributions. When the various contributions were sorted out, the public sector was covering US$19 (less than 50%) of the total cost, whereas foreign assistance covered US$11 and the community and users contributed US$10. We see that, although community members were not charged a fee to participate in the program, the community was covering 25 percent of the total costs.

The issue of who bears the costs becomes extremely important as programs expand and as additional resources are sought for funding. At present, considerable emphasis is being placed, for instance, on cost recovery from participants and on privatization. These strategies certainly have their place. Indeed, almost every family can make a contribution, no matter how small, to help cover the costs of a program from which valuable services are received. It may be wise to require at least a token contribution from all users of an ECCD service, with the rarest of exceptions for the destitute. However, it should be kept in mind, as illustrated in the High/Scope case cited above, that the social benefits of participation in an ECCD program may considerably outweigh the private benefits; if participation is desired, a subsidy may be required. It should also be kept in mind that not all people can contribute at the same level and that, in most programs, contributions are already being made by both users and communities that are not normally registered in cost calculations. Thus, it is important not to over-burden users if the service is to be used and if the social as well as private effects are to be realized.[11]

If governments are serious about redistributing wealth and if they take seriously a commitment to direct programs to low-income families and at-risk children, then they must realize that the ability of both individuals and communities to cover costs will be limited and subsidies will be necessary. This lesson from experience runs counter to the desires of many governments and funding agencies that seek to transfer the financing burden to communities and families over time. It suggests the need for new instruments of support and for an approach that emphasizes working in partnership.

---

[11]In a recent case study of a rural preschool in a small town in the mountains of Mexico, it was found that community members living in extreme poverty withdrew their children from the preschool when they were obligated by the community authorities to donate a significant block of their time to the school as a social service. The burden was too great, rending the requirement counterproductive.

The commitment by governments to mobilize resources to finance programs and cover costs of social programs (including ECCD programs) will, in most cases, be more important in determining the level of investment in ECCD programs than the actual cost of a particular program. If a program is really seen as a priority (whether for political reasons or because it is thought to be cost-effective), resources will be identified and mobilized -- even if that means reallocating them from other programs.

Searching for Lower Costs and More Efficient Solutions

In order to significantly expand ECCD programs, it is important to find lower cost, effective alternatives. Among the promising ways to lower costs and increase available resources needed for expansion and improvement of early childhood programs are the following:

- *Use existing resources more efficiently* (i.e. reduce wasteful mismanagement; decentralize some of the planning and implementation functions to improve community participation).

- *Combine the resources of existing sectoral programs* into a multifaceted program to take advantage of synergies among health, nutrition, education and/or other program components.

- *Coordinate disparate efforts* to favor the young child within sectors (e.g., adult literacy education and initial education, or health education with MCH).

- *Employ a less expensive program design, organization, and/or technology.*

- *Reallocate resources among or within sectors* when it can be shown that the reallocation will result in cost savings (as shown, for instance in the PROAPE case where by increasing the funding for early education, the efficiency of the primary schooling increased), thereby offsetting the reallocation.

- *Identify dormant resources* (e.g., buildings used only part-time; elders who have time on their hands and want something meaningful to do; student time that is being employed in tasks of little social value).

- *Seek economies of scale.*

- Depending on the particular economic and political circumstances, it may be possible to increase resources through *employer contributions.*

- Provide incentives to the private (profit-making) sector, to nonprofit, nongovernmental institutions in the social sector, and to communities (e.g., funding

on a matching basis; providing materials and/or training; linking programs to the health system) to organize and run ECCD programs for at-risk children. This would help to *create partnerships among governmental, nongovernmental, and community organizations*.

- *Make greater use of mass media and popular channels of communication* for both advocacy and education, at little extra cost.

- Foreign assistance can have a role to play in helping programs get started and should include a very strong training and capacity-building component. It needs to be selective so as to focus on children at risk, carefully phased, available over a sufficient period of time for a program to take hold, and designed to support local initiatives (rather than imported solutions).

VI. IMPLICATIONS FOR IDB POLICY AND ACTION

Against this background of experiences and lessons learned, what can the Inter-American Development Bank do to promote and strengthen activities directed toward improving early childhood care and development in the region? Answers to this question are suggested with respect to Bank policy, programming, and support for evaluation and research.

Affirm Bank Commitment to Early Childhood Care and Development

In section II, we noted the close fit between results of in ECCD programs and the general IDB goals of reducing poverty and promoting social equity. Effects of ECCD programs were cited on economic productivity, the potential for women's labor market participation, the potential to reduce social and economic disparities resulting from developmental differences among children which first surface during the preschool years, and on gender disparities.

The first step would be for the IDB to issue a statement linking ECCD programs with declines in poverty and social disparities. A policy statement affirming belief and interest in the potential efficacy of ECCD programs would provide a signal both to member countries and to the Bank's own staff. Such a policy statement would be crafted following several organized discussions based on this review paper and other documentation deemed appropriate. It would be useful as well if, related to this statement, the Bank published and distributed a revised and shortened version of this paper or -- of a similar document -- to its staff and to cooperating organizations setting out the basis for the Bank's position.

Link ECCD to Existing Programs and Lines of Action

This review and analysis has placed considerable emphasis on the integrated nature of early childhood care and development. Many Bank programs take an intersectoral view, and those that don't could be broadened include an early childhood care and development component. Thus, ECCD initiatives can be, but need not always be, self-standing programs with a special ECCD label. Let us take several specific examples:

The Integration of ECCD with WID Activities

Because the IDB is deeply committed to assisting member countries in their efforts to bring about the fuller integration of women into all stages of the development process and improvement of their socioeconomic situation (IDB, Current Status 1993), and because, child as indicated above, care serves this purpose, efforts should be made to integrate child care into present programming in conjunction with WID activities. Indeed, one of the most promising area for incorporating ECCD into ongoing Bank programs is in conjunction with the social policy line of action focussing on improving women's participation and production.

In a paper written for the IDB-ECLAC-UNICEF Forum on *Women in the Americas: Participation and Development,* Buvinic and Lycette (1994) argue convincingly that there is a "need to incorporate in any successful poverty reduction strategy policies and projects that reinforce the virtuous cycle between women's and children's well-being that can occur in poor families when women have increased income or control of income and avoid those that, by increasing a women's time burdens, can trigger a vicious cycle of deprivation between mothers and children." The authors go on to argue for schemes that deliver credit by replicating characteristics of informal sector lending, such as small initial loans at market interest rates, development of solidarity groups for microvendors, and few collateral requirements. They also argue that compensatory programs should include child care options.

One way in which the ECCD might be supported is to treat it as a microenterprise. Many families in which the works, and especially families where, the women are organized in groups for the specific purpose of obtaining credit and mounting microenterprises, should be able to pay for child care and development services. They may be willing to pay for a service that they think is more convenient and of better quality than that of the government. Thus, a loan package providing credit for the formation of microenterprises might include credit for establishing private child care centers, which would be treated as microenterprises. As part of the package, it would be possible also to consider support for training the women running the child care microenterprises. That training might be in the methods of early childhood care and education (if women already have some administrative skills), or in administration of a small enterprise (if women already have the care and education knowledge and skills).

The above strategy is feasible but limited because many families in which all

members must work cannot pay the for child care. But these families need child care. When a child care program is not available the only option is for the mother (or older female sibling) to stay at home or seek poorly paid work that can be carried out in the home or on a part-time basis. Recognizing this situation, one approach to solving the problem and a way of linking ECCD to poverty reduction and women's programs is to help governments establish child care programs favoring families of women working in the informal sector. These programs are usually located in areas where there is a high concentration of people employed in the informal sector. This is essentially the tack that has been taken by the Peruvian technical cooperation project providing multisectoral assistance to low-income groups.

Sometimes, however, the demand for subsidized child care and education services outruns the government is ability to provide the services. In these cases, community-based child care programs run by local women on a minimal budget or with support from nongovernmental organizations have arisen. As indicated earlier, however, it is difficult, if not impossible, for these centers to sustain themselves over time without continued financial support, beyond that which comes from charging fees and from sporadic contributions from the popular organizations that gave rise to them. Accordingly, it is suggested that the Bank seek ways to strengthen, sustain, and expand community-based child care services, helping to put them on a sound organizational and financial footing.

One option would be to help establish a child care fund, the explicit purpose of which would be to assist the formation and strengthening of independently-run child care centers in marginal urban areas. This fund could be constructed in partnership through one-time contributions from the private sector (local enterprise and philanthropy), the government, and international sources. The fund might be managed by a nonprofit intermediary organization. More specifically, proceeds from the fund might be used to (i) support training, including in management and administration skills, for child care service operators; and (ii) to help community-based centers develop associated income-generating projects or credit cooperatives, the profits from which would be used to cover part of the recurrent costs of the centers (that part which cannot be covered because low-income users are unable to afford the full user fees required to assure quality operation). Through the fund, a mechanism would be built to extend and sustain community-based programs of good quality for low-income families, that would not depend on the public purse or on the unsustainable sacrifices of local women working without adequate compensation or benefits.

ECCD and Education

There is strong evidence to indicate that early interventions can have a positive impact on the progress and performance of children in school. In many cases, this results in reduced repetition and dropout rates, improving the efficiency of the school system while helping to attain the goal of universal primary school education. However, it is not appropriate to place all of the blame for repetition and dropout on the faulty preparation of children for school; rather emphasis should also be placed on the relationship between ECCD

and primary schooling -- on the interaction between the preparation of children for school and the preparation of schools for the children they are to receive. This point of interaction, the point of transition into school, can provide an important focus for program actions education. Thus, primary school loans or grants, can include an ECCD component, with ECCD viewed as a supportive strategy directed to helping the more efficient functioning of primary school systems.

Another way of integrating ECCD into primary education is to support Child-to-Child programs. These programs (see the Jamaican example described in Appendix 1), provide primary school children with information about health, nutrition, and the psycho-social development of young children which they apply working and playing with younger preschool children, often their siblings.

As established in the World Conference on Education for All, basic education also includes literacy and adult education programs. The content of literacy programs or of adult education can be directed in part toward topics that will affect the development of very young children. The fact that a large number of participants in most such programs are women, or conversely, that women's groups often take as one of their activities self improvement of an educational sort, links this strategy to women's programming as well as to education.

ECCD and Health/Nutrition Projects

Statistics indicate that at least 19 out of every 20 children born in Latin America survive to their first birthday. Despite this ratio and the dramatic decline of infant mortality over the last 30 years, child health many programs continue to emphasize survival (defined as reducing infant or child mortality), and do relatively little to promote the broader health and development of young children from low income families who are at risk of delayed or debilitated development.

At relatively low marginal costs, it is possible to incorporate psycho-social components of an ECCD strategy into programs of maternal and child health care, into health education, and into home visiting programs run by the health sector. A strong argument can also be made for introducing psycho-social development into programs that place their main emphasis on food supplementation, growth monitoring, and nutrition education.

ECCD and Urban Programs

Urban migration during over recent decades have caused major disruptions in childrearing patterns and practices, often to the detriment of child development. To these essentially geographical and cultural changes must be added economic changes, including the increasing involvement of women in the paid work force and the informal sector. Recognizing these changes and with the information presented above, it becomes apparent

that child care services should be incorporated into multisectoral urban programs directed to low-income groups, bringing with them important synergistic effects. This might be done in conjunction with project such as urban community kitchens, work with women's groups, or health and nutrition. Child care services might also be seen as a component of programs to build municipal markets and urban housing programs.

Supporting Research and Evaluation Studies

Despite the studies cited in this paper, important gaps remain in the existing knowledge on ECCD, requiring further research and/or evaluation. The number of solid, well designed evaluations is not very high, particularly in light of the wide variety of early childhood projects and programs that are being planned or carried out. Moreover, many of the evaluations that have been done are evaluations of smaller pilot or demonstration programs in which the conditions for success are relatively good. These help to make the argument that positive results are possible, but we need a much greater knowledge base to answer questions about who benefits most from what types of programs under what conditions and at what cost, and particularly as programs go to scale. Some other research areas that need attention are described below:

Parental education programs. To date, most evaluations of larger programs have focussed on those that are center-based. That is, in part, because parental support and education programs have not been as prominent, remaining, for the most part, as smaller demonstration projects. We could now profit from solid evaluations of parental education projects.

We need to know a great deal more about a number of **process variables**. For instance, our knowledge about the role of NGOs as executors of projects is limited. We cannot point to good studies focussing on the role of supervision in the region.

Longitudinal studies. Impact studies have been, for the most part, cross-sectional at a point in time, or limited in time to a year or two. Support for longitudinal studies would make a considerable contribution to the field.

Indicators. There is a need for additional development and testing of ECCD indicators and measures that are appropriate to the particular countries in which they are to be used. In most Latin American countries, such instruments are missing or there is no agreement about which indicators and instruments to use. Creating such instruments, validating them and establishing country norms should be a high priority in order for countries to be able to monitor the psycho-social components of child development as they are now able to monitor physical development by means of indicators of health and nutritional status.

There is a need to describe and study **child care services that are being provided**

outside the formal system. Often these services are not registered and governments do not know the extent of coverage in these private and community-based centers. Nor do they have a good idea of the quality of the service being provided.

As the Bank supports new program initiatives, it becomes more able to ensure that sound evaluation is built into projects from the outset.

A Concluding Note

The social and economic goals, the existing program lines, and the varied and flexible financial instruments through which the IDB works place it in an excellent position to invest in programs of early childhood care and development. This can be done, in the first instance by incorporating ECCD into existing lines of program activity. In addition, the creation and operation of integrated child care services which respond to the needs of both women and children can be considered, by itself, a unifying social program activity line through which, for instance, actions in health, education, nutrition, and urban development can be brought together to benefit low-income families, women and children. It now remains for the IDB to signal its interest to the countries in the region, and to strengthen its own capacity to work with those countries in initiating, upgrading, and extending integrated child care services, thereby promoting both the cause of human and economic development.

REFERENCES

Atkin, L., et al. **Paso a Paso. Cómo evaluar el crecimiento y desarrollo de los niños.** México, D.F.: Editorial Pax México, 1987.

Barnett, S.W., and C.M. Escobar, "Economic Costs and Benefits of Early Intervention," in S. Meisel and J. Shonkoff (Eds.), **Handbook of Early Childhood Intervention.** Melbourne, Australia: Cambridge University Press, 1990, pp. 560–582.

Boinovsky, D. "Primary Care for Pre-School Children through Home Day-Care Centers," Description of a project carried out by the Social Services Secretariat of the Government of the Federal District in Brasilia. July, 1989. Mimeo.

Bosnjak, V. "Planeación y acción a nivel local con participación comunitaria," en **Proyectos locales y indicadores sociales: Implicaciones para la planificación regional y nacional.** Bogotá, Departamento Nacional de Planeación, en colaboración con UNICEF y la Fundación Ford, 1982.

Bustos, Carmen Luz. "Programa 'Conozca a Su Hijo,'" Santiago, Chile, Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas, 1994. Mimeo.

Buvinic, M., and M. Lycette. "Women's Contributions to Economic Growth in Latin America and the Caribbean: Facts, Experience and Options." Washington, D.C.: International Center for Research on Women, March 1994.

Carbonetto, D., et al. "Informe Final de Evaluación de la Asistencia de UNICEF al Gobierno del Perú durante el Período 1982-84." Documento de Evaluación No. 1. Lima, CEDEP, Septiembre, 1984.

Castillo, C., N. Ortiz, and A. González. "Los Hogares Comunitarios de Bienestar y los Derechos del Niño: el Caso Colombiano. Florence, Italy, The International Child Development Centre, May 1993.

CEDEP. "Estudio de Caso: Proyecto de Atención Integral al Niño y su Familia en los Pueblos Jóvenes del Cono Sur de Lima Metropolitana (Análisis Costo-Beneficio)." Lima, Agosto, 1983.

Centro de Perfeccionamiento Experimentación e Investigaciones Pedagógicas. "Programa 'Conozca a su hijo,' una alternativa de educación no convencional para niños menores de seis años de sectores rurales," Santiago, Chile, Ministerio de Educación, 1994.

Chávez and Martínez, C. "School Performance of Supplemented and Unsupplemented Children from a Poor Rural Area," in A.E. Harper and G.K. Davis (eds.), **Nutrition in Health and Disease and International Development: Symposia from the XII International Congress on Nutrition, Vol 77, Progress in Clinical and Biological Research.** New York: Alan R. Liss, Inc., 1981.

Chetley, A. **The Power to Change.** The Hague: Bernard van Leer Foundation, 1990.

Colclough, C. "Primary Schooling and Economic Development: A Review of the Evidence," Washington, D.C.: The World Bank, Staff Working Paper No. 399, 1980.

Cravioto, J., and R. Arrieta. **Nutrition, Desarrollo Mental, Conducta y Aprendizaje.** Mexico City: Sistema Nacional para el Desarrollo Integral de la Familia (DIF) y UNICEF, Abril de 1982.

de Ruesta, M. E. "Programa Hogares de Cuidado Diario. Estudio de Evaluación. Estudio Ejecutivo." Caracas, Venezuela: Fundación del Niño, Noviembre 1978.

Evans, J. "Child Care Programmes as an Entry Point for Maternal and Child Health Components of Primary Health Care," New York, the Consultative Group on Early Childhood Care and Development, and, Geneva, the World Health Organization, Maternal and Child Health and Family Planning, 1993.

Feijo, M. "Early Childhood Education Programs and Children's Subsequent Learning; A Brazilian Case," Unpublished Ph.D. Dissertation, Stanford University, 1982.

Franco, M., and A. Ciavatta. "Da Assistencia Educativa a Educaçao Assistencializada – um estudo de caracterizaçao e custos de atendimiento a crianças carentes de 0 a 6 anos de idade," Rio de Janeiro, Fundo das Nacoes Unidas para a Infancia, Centro Nacional de Recursos Humanos, 1983.

Filp, J., et al. "Relationship between Preprimary and Grade One Primary Education in State Schools in Chile," in K. King and R. Myers (Eds.), **Preventing School Failure: The Relationship between Preschool and Primary Education.** Ottawa: International Development Research Centre, 1983.

Filp, J., and E. Schiefelbein. "Efecto de la Educación Preescolar en el Rendimiento de Primer Grado de Primaria" el Estudio UMBRAL en Argentina, Bolivia, Colombia y Chile," **Revista Latinoamericana de Estudios Educativos**. Vol. 12, No. 1 (1982), pp. 9–41.

Forero B., and A. Cuervo. "Consideraciones sobre Evaluación de Costos en los Proyectos de Educación Inicial" en UNICEF, "Taller de Análisis de Costos de Programas de Desarrollo Infantil," Bogotá UNICEF, Oficina Regional para América Latina y el Caribe, Julio 28-31 de 1987.

Galinsky, E. "Investing in Quality Child Care". A Report for AT&T, New York: Bank Street College of Education, 1986.

Grantham-McGregor, S. "Rehabilitation Following Malnutrition," in J. Brozek and B. Schurch (Eds.), **Malnutrition and Behavior: Critical Assessment of Key Issues.** Lusanne, Switzerland: The Nestle Foundation, 1984.

Grawe, R. "Ability in Pre-schoolers, Earnings and Home Environment," Washington: The World Bank, Working Paper No. 322, 1979.

Heaver, R. "Improving Family Planning, Health and Nutrition Outreach in India: Lessons from Some World Bank Projects," Delhi, India, The World Bank, 1988. (Mimeo.)

Hebert-Jackson. **The Infant Center. A Complete Guide to Organizing and Managing Infant Day Care.** Baltimore: University Park Press, 1977.

Herrera, M. and C. Super. "School Performance and Physical Growth of Underprivileged Children: Results of the Bogotá Project at Seven Years." A Report prepared for the World Bank. Cambridge: Harvard School of Public Health, 1983.

Instituto Colombiano de Bienestar Familiar, Oficina de Planeación. "Hacia una Evaluación del Proyecto Hogares de Bienestar en el País. Resultados de la Aplicación de la Prueba Piloto, Cali - Cartagena. Tomo I." Bogotá, Diciembre de 1990. Mimeo.

Inter-American Development Bank. "The Current Status of IDB Activities in Women in Development and Recommendations for the Future: A Report to the Programming Committee." Washington, D.C.: Women in Development Unit/IDB, April, 1993. Mimeo.

Klein, R. "Malnutrition and Human Behavior: A Backward Glance at an Ongoing Longitudinal Study." In D. Levitsky (Ed.), **Malnutrition, Environment and Behavior.** Ithaca: Cornell University Press, 1979.

Knight, J. and S. Grantham-McGregor. "Using Primary School Children to Improve Childrearing Practices in Rural Jamaica," **Child: Care, Health and Development**, No. 11 (1985), pp.95-113.

Korton, D. "Community Organization and Rural Development. A Learning Process Approach." The Ford Foundation and the Asian Institute of Management, Makati, Metro Manila, The Philippines, April, 1980.

Landers, C., and A. Leonard. "Women, Work and Child Care," UNICEF Staff Working Paper 10, New York, NY: UNICEF Publications Division, 1992.

Latorre, C.L., and S. Magendzo. "Atención a la infancia en comunidades marginales," Santiago: UNICEF/Programa Interdisciplinario de Investigaciones en Educación, 1980.

Leslie, J., and M. Paolisso (Eds.). **Women, Work and Child Welfare in the Third World.** Boulder, Colorado: Westview Press, 1989.

Llanos, M., et al. "An Evaluation of the Ate-Vitarte Project," Prepared for the Bernard van Leer Foundation. The Hague, 1985.

Llanos, M., and D. Winkler. "Los Beneficios y Costos de la Educación Pre-Escolar No-Formal, El Proyecto Portage en el Perú," **Revista Latinoamericana de Estudios Educativos**, Vol. XII, No. 4 (1982), pp. 29-57.

Lockheed, M., D. Jamison, and L. Lau. "Farmer Education and Farm Efficiency: A Survey," **Economic Development and Cultural Change**, 29 (October 1980), pp. 37-76.

McKay, A. "Longitudinal Study of the Long-term Effects of the Duration of Early Childhood Intervention on Cognitive Ability and Primary School Performance." Unpublished Ph.D. Dissertation, Northwestern University, Evanston, Illinois, 1982.

Ministerio da Saude y Instituto Nacional de Alimentaçao e Nutriçao. "Analiçao do PROAPE/Alagoas com enfoque na área económica." Brasilia MS/INAN, 1983. Mimeo.

Monckeberg, F. "Nutritional Rehabilitation in Severe Early Marasmus," in **Proceedings of the XVIIIth World Conference of OMEP**, Jerusalem, Israel, July 13-17, 1986.

Myers, R. **The Twelve Who Survive**. London: Routledge, 1992. (In Spanish, **Los Doce Que Sobreviven**, Washington, D.C.: Panamerican Health Organization, 1994.)

Myers, R., et al. "Pre-School Education as a Catalyst for Community Development: An Evaluation of Project 527-0161." Lima, Perú: USAID, 1985. Mimeo.

Myers, R., and C. Indriso. "Women's Work and Childcare," a paper prepared for a workshop on "Issues Related to Gender, Technology, and Development," February 26–27, 1987, New York, the Rockefeller Foundation, 1987. New York, The Consultative Group on Early Childhood Care and Development. (Mimeo.)

National Association for the Education of Young Children (NAEYC). "Position Statement on Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8," **Young Children** (September, 1986), pp. 4-29.

Nimnicht, G., and P.E. Posada. "The Intellectual Development of Children in Project PROMESA," A report prepared for the Bernard van Leer Foundation. Medellín, Colombia, Centro Internacional de Educación Humana (CINDE), Research and Evaluation Reports, No. 1, October, 1986.

Pantin, G. **A Mole Cricket Called SERVOL.** Ypsilanti, Michigan: High/Scope Press, 1983. A Study prepared for the Bernard van Leer Foundation.

Pontífica Universidad Católica de Chile, Instituto de Economía. "Evaluación y Proyección del Programa CADEL." Santiago, Chile, UNICEF, 1989.

Richards, H. **The Evaluation of Cultural Action: An Evaluative Study of the Parents and Children's Program (PPH).** London: The MacMillan Press, Ltd., 1985.

Rogoff, B. "Schooling and the development of cognitive skills," in H. Triandis and A Heron (Eds.), **Handbook of Cross–cultural Psychology**, Vol. 4, Boston: Allyn–Bacon, 1980.

Schweinhart, L. H. Barnes, and D. Weikart, et al. **Significant Benefits: The High/Scope Perry Preschool Study Through Age 27.** Ypsilanti, Michigan: High/Scope Press, 1993.

Selowsky, M. "Nutrition, Health and Education: The Economic Significance of Complementarities at Early Age," **Journal of Development Economics,** Vol. 9 (1981), pp. 331–46.

Swaminathan, M. **Who Cares? A Study of Child Care Facilities for Low-Income Working Women in India.** New Delhi: Centre for Women's Development Studies, 1985.

Tendler, J. and S. Freedheim. "Trust in a Rent-Seeking World: Health and Government Transformed in Northeast Brazil," **World Development**, Vol. 22, No. 12 (1994), pp.1771-1791.

Triandis, H. "Reflections on Trends in Cross-cultural Research," **Journal of Cross-Cultural Psychology**, Vol. 11 No. 1 (1980), pp. 35-58.

UNICEF, "A Report on the Non-Formal Pre-School Education Experience in the Dominican Republic." Santo Domingo, March 1983. Mimeo.

UNICEF/New York. "A Promise Yet to Be Fulfilled," New York: UNICEF, 1985. Mimeo.

Zeitlin, M., H. Ghassemi, and M. Mansour. **Positive Deviance in Child Nutrition, with Emphasis on Psychosocial and Behavioural Aspects and Implications for Development.** Tokyo; The United Nations University, 1990.

APPENDIX I: PROGRAM EXPERIENCES

Strategy 1 -- Supporting and Educating Caregivers

Parent Education Project: Mexico

In 1982, a national of non-formal education program for parents and community members was launched by the Secretary of Public Education. The program was geared towards low-income families with children aged four and under, residing in poor rural and urban marginal communities. Its objective is to educate and empower parents by providing them with the necessary information to improve the care of, and interaction with, their young children.

The Mexican program rests on a system of successive training, where professionals hired by the central government work with state personnel to train supervisors who, in turn, train up to ten module supervisors, who then train and supervise up to 10 local promoters or community educators. The community educator works with groups of 20 parents, organizing orientation sessions and 40 group meetings throughout the year during which parents discuss ideas presented in a "Parent's Guide." Group meetings are backed by periodic home visits. Community educators are volunteers who live in the community and are given a gratuity for their service.

On average, this program reached about 200,000 children each year through their parents. At present an expansion of the program is underway in which the goal is to reach 1,200,000 children in the 10 poorest Mexican states. This is being done under a new administrative arrangement in which execution of the program has been transferred to the states as part of a general decentralization process; while supervision, coordination, and technical support are provided by the National Council for Promoting Education (CONAFE). Because this effort to go to scale is only now getting underway, an evaluation of the enlarged program and its functioning has not been carried out.

Conozca a Su Hijo: Chile

This non-conventional program model is directed toward improving the integrated development of low-income, rural children, age 0 to 6. More specifically, the goal set in 1986 when the program began was to help mothers in their role as facilitators of the development of their children by providing them with techniques that would help to improve the quality of family life. A pilot project, building upon the results of prior diagnostic research in the field, was carried out in a southern region of Chile with a high poverty index, linked to a program of artisan workshops being carried out under the Program of Minimum Employment. The evaluation of this program showed positive effects on both children and

mothers. Subsequently the model was extended to cover (at the beginning of 1994) approximately 3,800 children in 13 regions of the country. This is being done within the framework of MECE, a program implemented with World Bank financing, that is dedicated to improving the quality and equity of education in Chile.

In this parental education model, women meet periodically in a group to discuss topics related to the upbringing of their children, guided by a local *monitora* who works strictly on a volunteer basis. *Monitoras* are guided and supervised by an *educador* who by preference, is a qualified early childhood development professional. The method applied in the program (which is the same for monitors and educators) is active and participatory with an emphasis on learning through play. Learning builds upon the experiences of the group, seeking a synthesis between technical content and experience. Accompanying materials include manuals for the educator and the monitor, a workbook for parents, a didactic poster, board games, and a book for children ages 4 to 6 that serves as a basis for weekly work by the children with the help of their parents.

Proyecto Familia: Using Mass Media in Venezuela

Begun in 1980, *Proyecto Familia* was intended to promote the intellectual development of children from birth to six years of age by providing informal education to mothers, both through direct contact and through the mass media. In urban Venezuela, television is said to reach 96 percent of the population; in most rural areas, radio reaches more than 80 percent. To take advantage of this coverage and the existing communications infrastructure, *Proyecto Familia* produced an impressive number of television and radio programs and spots, slide presentations, and films.

This creative effort was put into effect with strong political backing and produced some excellent materials, but an evaluation in 1984 concluded that, overall, the effort constituted "a promise yet to be fulfilled" (UNICEF, 1985). Fulfillment was limited by the fact that the mass media were not linked to a system of interpersonal contacts. In urban areas, television viewers were able to identify the name of the project but there was no evidence that the approach had changed practices. After an initial run, it became difficult to convince commercial television stations that the messages should continue to be shown. In rural areas, however, there seemed to be somewhat better success. Radio messages were better accepted by local stations in search of program material and were broadcast more often. The messages were also partially linked to a system of interpersonal communication involving both rural extension workers and health personnel in primary health care centers.

Child-to-Child: Jamaica

Child-to-Child programs are designed for children who are usually between the ages of 8 and 15 and who are often caretakers of younger siblings, future parents, communicators of information to their parents and other caretakers, and community members, capable of improving conditions affecting health and development. The Jamaican Child-to-Child

program is directed specifically to improving the knowledge and caretaking practices of primary school children ages 9 to 12 and, through them, the knowledge of parents or guardians. Begun in 1979 on an experimental basis in only one school by the Tropical Metabolism Research Unit (University of the West Indies), the program was extended to 14 schools where an evaluation showed it to be well-received, and has now been incorporated into the regular primary school curriculum for the entire country (Knight and Grantham-McGregor, 1985).

The curriculum provides information about health, nutrition, psychosocial development, and dental care. Children are taught to make toys from recycled materials, and how to play with them so as to encourage younger child development. Immunization lessons deal with the purpose of immunization, the diseases that can be prevented, and the times when immunization should be done. The action-oriented curriculum includes role play, group discussions, demonstrations, toymaking, drama, and song. Most of what is imparted in a Child-to-Child program is already contained in the curriculum of the primary school. Adding some emphasis, relating the knowledge to activities, and presenting materials in a new, interesting and participatory way, however, can bring major benefits.

An evaluation of the pilot program showed that children improved significantly in their knowledge of all areas. In addition, the knowledge of parents and guardians improved as did their encouragement and support of play with younger children. Teachers also improved their knowledge of heath and development and were introduced to new forms of teaching.

When all costs of the project directed to children in 14 schools were estimated (teachers salaries for the time devoted to Child-to-Child, training costs, supervision, materials, curriculum development, and production of a curriculum package and evaluation), the cost was approximately $US15 per child per year. As the initial development costs were spread out over many more children with expansion of the program, the per child cost should have been reduced somewhat. However, the per child does not take into account the fact that parents and teachers also benefit. If that were done, the resulting per person cost would obviously be lower. The Jamaican program has been incorporated into the normal curriculum of the school system.

Strategy 2 — Attending to Children in Centers

PROAPE (The Preschool Feeding Program): Brazil
An Example of a Large, Non-formal Integrated Urban Preschool Center

Although this example is set within a program that took as its point of departure to improve the nutritional status of children, an integrated view was adopted from the start so that in addition to food and vitamin supplements, the program included supervised

psychomotor activities and a health component consisting of check-ups, dental treatment, vaccinations, and visual exams). In the model adopted by PROAPE, groups of about 100 children, ages 4 to 6 from marginal urban areas, were brought together in centers during weekday mornings. In one variant of the PROAPE model, children were supervised by a trained preschool teacher, assisted by volunteer mothers (or other family members) who participated on a rotating basis. In another, three trained paraprofessionals were paid 70 percent of the minimum salary for the 3-hour work day, assisted also be two volunteer mothers.

The PROAPE program contained a community element in the sense that paraprofessionals came from the local community, family members helped out in the program, and the locale was often donated by the community. However, administrative control over the program did not lie with the community and there was no specific attempt through the program to change the general environment of the community to favor the development of children. Program administration was with the government's responsibility, first through the Ministry of Health and later the Ministry of Education. Education of parents was not a specific strategy but occurred through the direct participation of parents in the centers on a rotating basis.

The prototype for PROAPE was a pilot program carried out in the city of Sao Paulo. An evaluation of that program suggested that school performance scores were better and repetition rates were lower among program children than among those who did not participate. The program was tried in the state of Pernambuco in northeast Brazil. Subsequently, it was extended to 10 states. Program evaluations consistently showed that the PROAPE model had a positive effect in reducing repetition rates in the first two years of primary school.

In 1982, a **cost-benefit study** was carried out in Alagoas with the program variant employing three paraprofessionals who received help from parents (Ministerio da Saude, 1983). The program was carried out in sites provided by the community. Supplementary feeding consisted of a glass of milk, and bread with jelly and margarine. Health care support was also provided. The study compared children who participated in PROAPE with children who participated in a form of preschool called a *Casulo*, children who participated in formal kindergartens, and children with no preschool intervention experience. The measure of effects for the various programs was a measure of the repetition rate for children with the various experiences. Table A shows that 73 percent and 76 percent of the PROAPE and Casulo children, respectively, passed the first grade, as compared with 63 percent of the formal kindergarten children, and 53 percent of those without a preschool experience.

Table A

A Comparison of Academic Performance of Children in the First Year of Primary School, with and without Preschool: the PROAPE program, Alagoas, Brazil

	PROAPE		Casulo		Kinder-garten		Children w/o Preschool Ed.	
	No.	%	No.	%	No.	%	No.	%
Registered children	184	100	557	100	320	100	2334	100
Children remaining until year end	150	82	517	92	291	91	2000	86
Dropouts	34	18	40	8	29	9	334	14
Passed	134	73	426	76	201	63	1245	53
Failed	16	9	91	16	90	28	755	33

Source: Ministerio da Saude e Instituto Nacional de Alimentaçao e Nutriçao. "Analiçao do PROAPE/Alagoas com Enfoque na Area Economica," Brasilia, MS/INAN, 1983. Mimeo.

Note: Prior to entrance in primary school, the different early intervention programs attended to children for different lengths of time: PROAPE, 78 days; *Casulo*, 180 days; and Kindergarten, 540 days.

The cost per child of the PROAPE program was estimated at US$28. The cost per child per year for the first grade of primary school was estimated at US$205. Using these figures and those in the table, we can calculate the cost of producing a first grade graduate as follows. First, assume that all 27 percent of the PROAPE children who did not complete the first grade in year one will repeat the year and will pass on the second try. Then make the same conservative assumption for the 47 percent of children without any preschool experience. Thus, the cost per child to complete first grade for a PROAPE child would be $260 ($205 per year x 1.27 years), and the cost for a child without preschool experience would be $301 ($205 x 1.47). This means that the average cost per child of producing a first grade graduate is at least $41 less for PROAPE children than for children without preschooling. This per child saving is higher than the original PROAPE per child cost figure of $28. In these terms, the PROAPE program not only paid for itself but resulted in a primary school cost saving in the first year over and above the cost of PROAPE.

The effectiveness of the PROAPE model is confirmed by a more detailed micro-level study of various preschool options carried out in 1983 (Franco and Ciavatta) in which the authors concluded that "...PROAPE constitutes an equalizing and efficient preschool education at low cost" (p. 116).

In spite of these results, the PROAPE program, as such, is no longer functioning. One explanation that has been given for the program's demise is that it was formalized out of existence. The Ministry of Education which took over the administration of the program did not easily incorporate a non-formal alternative into its operations and slowly adapted the non-formal model, creating formal preschool classrooms of 30 children each with a trained preschool teacher and setting aside paraprofessional and community contributions. Undoubtedly there are other explanations that may have more to do with political changes than with bureaucratic perspectives. But the basic point to be made is that reasons other than favorable cost-benefit ratios proved more important in determining the continuity of the program.

PRONOEI (Programa No-Formal de Educación Inicial): Peru
An Example of a Rural Non-formal Preschool Program

In 1967, a nutrition education project for mothers was begun in several villages in highland Peru in the Department of Puno. The infant mortality rate was then greater than 150 in the area, and malnutrition was widespread. The project, initiated by volunteers from a regional university, evolved into a community program that included the daily cooking of mid-morning snacks for young children. From this cooking program, a non-formal preschool also emerged that was intended to help the children to develop mentally and socially, and to prepare them for school (Myers, et al., 1985). Five years, later, as part of a major educational reform, the government adopted this model in launching a major ECCD initiative in the Department of Puno. The model subsequently spread throughout Peru, to at least 8000 (mostly rural) communities, offering an alternative to more expensive formal preschool centers.

In each PRONOEI center, or "Children's House" as they are called, approximately 30 children, ages 3 to 5, are care for during the morning by an "animator." Mothers of participating children take turns cooking the morning snack. Food is provided through an international program, supplemented by local contributions. The caregiver/animators (most of whom were men) are provided with training and periodic supervision. A general curriculum, based on Piagetian principles, was adopted to regional differences.

Although this was a center-based program, it also includes important elements of community participation and in some cases functioned as a bona-fide community development program, linked to local income generating projects. Community participation typically consists of provision of a site (and often construction of a building), selection of the animator who is paid a "gratuity" but is essentially serving the community as a volunteer, provision of some food, and management of the centers through a parent committee.

An in-depth evaluation of the program in 1985 showed that PRONOEI children were socially and intellectually better prepared for primary school than a comparison group of nonparticipating children. The difference appeared despite the minimal quality of many of the centers. Unlike the PROAPE program described above, the advantage provided to the PRONOEI children did not seem to remain in school as they moved through the primary school system, presumably because of the low quality of primary schools. The evaluation also indicated that the presence of preschools brought the discussion of children and women into community meetings that had concentrated previously on such male-dominated topics as land ownership, credit, and local politics.

Home Day Care: Venezuela

A home day care program was established in Caracas, Venezuela in 1974 to provide child care services to mothers working away from home. The government-financed program built upon, upgraded, and extended existing informal childcare arrangements developed by families in poorer neighborhoods. Day care mothers, who had to be at least 18 years old, received a small stipend (paid partly by the government and partly by the mothers using the service) to care for no more than five children under the age of six for 12 hours a day in their homes. Care included an established routine of health, nutrition, and educational services. The program equipped homes -- which had to meet safety and sanitary requirements -- with some furniture and materials.

To implement the program, the Children's Foundation, a quasi-governmental organization presided over by the wife of the president, worked with government agencies, including those responsible for housing, public works, health and social services, social security and nutrition. A technical support team, consisting of a social worker, health worker, and a teacher which serve groups of 20 homes, helped the day care mothers to carry out their task. Neighborhood coordinators were responsible for groups of 60 homes each. According to an evaluation of the program:

> "The day care mothers provided the children with the necessary custodial care, are alert to their basic needs, abide by the stipulated schedule, know the norms governing the program, have basic knowledge of the areas of health, nutrition and child development, prepare and serve meals, protect the children against dangerous situations, take care of the children's personal hygiene and give the children a home-like environment until the arrival of their mothers" (de Ruesta, 1978, p. 20).

Though less expensive for the government than formal day care in large nurseries, this program was still relatively costly (well over US$1,000 per child per year), limiting its growth to approximately 2000 homes. In 1989, however, the moribund program was given new life as part of a set of compensatory programs introduced by the government. Changes made in the program included: a shift from 5 to 8 children per home, a shift in supervision to one person for each 25 homes (instead of 3 people for 20 homes), incorporation of

nongovernmental organizations in program execution and of local communities in administration, decentralization, extension to poor families even if the mother was not working, payment waiver for families living in especially precarious economic conditions, and the introduction of a new modality called the multi-home in which 30 children are cared for by three caregivers. In 1993, the new program, currently being evaluated, care for to 239,000 children in 42,000 day care homes, with the participation of 297 NGOs.

Variations of the home day care model can be found in Colombia, Bolivia, Ecuador, Costa Rica and Brazil.

Strategy 3 — Community-based Programs

Several of the programs described above in the first two categories could also be described as community-based. In most cases, however, the principal goal of the foregoing examples was not framed in terms of changing the community environment; it was, rather, in terms of changing the child or the caregiver. Involving the community was seen as a means to that end as, for instance, in the case of PRONOEI. Another set of programs looks at the child as an entry point for community development which, in turn, is seen as the most appropriate means for fostering improved development of children in the long run.

PROMESA: Colombia
A Rural Community-development Initiative in the Chocó

The PROMESA project, designed to develop a better environment for the healthy development of young children, began in 1978 in four rural and isolated communities in the impoverished Chocó region on Colombia's Pacific coast. A nongovernmental organization, the International Center for Education and Human Development (CINDE), has acted as the external agent in the project during the entire period of its operation, providing training, administration, links to outside sources of funding, and field personnel for supervision.

Embedded in PROMESA was a concept of community development based upon the notion that individuals must be involved in their own process of development, and that for this development to occur there must be a simultaneous process of change in the intellectual, physical, economic, and sociocultural aspects of life. In initial contacts with the community, CINDE staff found an interest among mothers in the intellectual development of their children, but this interest soon broadened (CINDE, 1986, p.1).

> "The program began by encouraging groups of mothers, under the leadership of *promotoras*, to stimulate the physical and intellectual development of their preschool children by playing games with them. Gradually, during the meetings, the mothers started to identify other problems related to topics such as health, nutrition, environmental sanitation, vocational training, income generation, and cultural activities. Over time, therefore, as individuals gained

confidence and developed a greater understanding of their overall needs, PROMESA expanded into an integrated community development project, with the entire community participating in one or more aspects of the program" (ibid., p.2).

"A socio-cultural component fostered the cultural identity of the groups, especially by recovering and reviewing important aspects of their past history and culture. Part of this component includes the formation of groups whose objectives are to organize and become involved in different cultural activities, such as drama and music; local or folkloric games; and the study of native myths, legends, and natural medical practices. From the beginning, parents have been involved in different aspects of program planning and implementation, although this has varied from community to community according to the socio-cultural and political variables affecting the project at different moments. In fact, the parents themselves (or community leaders) have been the main educational agents and organizers of the program. Furthermore, most of the project activities have started outside the school or other formal systems" (ibid, pp. 3-5).

Over the years, the PROMESA project evolved to include:

- A program for mothers of preschool children designed to foster the intellectual development of children 3 to 7 years old during their daily interactions with the children and through the use of games.
- An early childhood stimulation program for mothers of children 3-years-old and younger.
- A nutrition program, providing food to preschoolers and nutrition education to mothers.
- A series of projects to improve the physical environment by building latrines, disposing of garbage, draining stagnant water, controlling animals and finding sources of clean water.
- A community-administered Primary Health Care program to overcome lack of a doctor.
- Training of *promotores* as a way of developing local leaders.
- Adult education and vocational training to improve income-generating skills as well as formation of production and marketing groups.

At present, PROMESA serves over 7000 families in three different regions of the

Chocó. Although the PROMESA idea and methods have spread, the program has been relatively contained. Applying this same method on a large scale, with the same degree of flexibility, sensitivity to cultural needs, and reliance on community members, with the intimate involvement of CINDE is difficult. Even the expansion within the Chocó region has required major adjustments as the model was applied within urban areas.