

EARLY CHILDHOOD DEVELOPMENT AS AN INVESTMENT

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It is a pleasure for me to be in Malaysia and to have the opportunity to speak to you today. although this presentation is made in conjunction with the Conference that will begin tomorrow, I suspect it will differ from most. I will not be talking very much about early childhood development methods or curricula or training or specific preschool practices. I will, instead, focus on early childhood development as an economic and social investment. Because "investment" is always investment to some end, this presentation is, in a sense, about what kind of world we want to live in in the 21st century and about how early childhood development programs fit into our thinking about that future.

When I last visited Malaysia, in 1978, it was a different country. The dynamic economic growth and related changes that have occurred since then provide a particularly good backdrop for the discussion of the topic I was asked to address: early childhood as an investment. I have the impression that the very success of the Malaysian experiment poses a host of questions for early childhood educators and others as they consider whether and how to invest in the early childhood years.

For some people, the very idea of thinking about childhood as something in which to invest is abhorrent. The word "investment" conjures up visions of stocks and bonds and economic wheeling and dealing. Treating people as investments is dehumanizing, the argument goes. People are not "resources" related to the processes of production and consumption, to be dealt with in a cold and calculating manner; they are human beings with feelings and frailties. Some critics would say that treating early childhood as an investment robs children of their childhood by placing emphasis always on future returns rather than on simply enjoying childhood while it is happening. Children become cogs in the great productive machine.

Although I come from an economist's background, I must admit to a certain sympathy with those who criticize an investment approach to childhood, **if** the idea of investment is linked to a conception of economic development represented narrowly by indicators of increased economic production and/or of higher levels of consumption of goods and services. Indeed, while I will argue in this presentation that investing in early childhood can be an extraordinarily good economic investment with a high economic return to both individuals and society, I do not think this is the main reason why increased and concerted attention should be given to early childhood. To my way of thinking, the moral and social outcomes associated with attention to the early years provide an even more important rationale for investing time and energy and money into improving the development of young children than do the economic reasons. And, I believe that keeping these broader outcomes as a central part of our investment calculus will help us to keep focussed on the human dimensions of development.

Investment: the importance of a broad view

One general dictionary definition of "to invest" is "to spend time and effort with the

expectation of some satisfaction." It may be surprising to many of you to learn that the theoretical models of economists respect this broad definition even though applications of these models tend to be restricted to spending time or effort with the expectation of monetary -- or those outcomes to which a monetary value can be attached. But if we accept the broad definition, as I do, we open the door to other expectations and satisfactions. Accordingly, any discussion of investment should include non-monetary as well as monetary satisfactions. In this vein, and taking into account the theme of "Excellence in the 21st Century" that frames the conference, let us think a moment about the kind of society, ideally, we would like to see 50 or 100 years from now. As a nation, what would give us satisfaction? What should guide our investment?

A statement from the Sixth National Plan of Malaysia, 1991-1995, provides a good starting point for the reflection. The Plan sets out a notion of "balanced development" as follows:

"Firstly, the principle of growth with equity is fundamental to insure the realization of a fair and equitable distribution of national wealth. Secondly, a balanced societal development is conducive to the maintenance of social and political stability. Thirdly, the nurturing and molding of a Malaysian society with high moral values and ethics as well as positive attitudes are fundamental towards the creation of a responsible, resilient, progressive and caring society.... The balanced development of the economy is essential to ensure stable growth, minimize social conflicts, promote racial harmony and enhance national unity."

This brief statement contains a variety of social goals that go well beyond economic goals. It sets out the desire for a policy that will lead to:

1. A society that continues to grow economically, but also:
2. An equitable society (defined mainly in the Plan in terms of distribution of wealth)
3. A stable, united and governable society, free of social conflicts, and with racial harmony.
4. A moral and ethical society with people who are responsible, resilient, progressive and caring.

Some version of these various goals is commonly found in national plans as countries define their utopias. Words may differ somewhat. "Justice" or "democracy" may be given particular prominence. Or, specific reference may be made to gender equality. Or, equality may be defined in social terms rather than in relation to the distribution of wealth. But the main point is that, as a nation, it is necessary to balance various goals and to go well beyond purely economic and material satisfactions, both in the present and when looking to the future.

The multiple goals suggested in the Malaysian statement are not necessarily in opposition

and may even be complementary. But the problem is that tensions among them arise in practice, particularly when policies that emphasize economic growth are put side by side with policies that are supposed to help promote equity or stability. In Latin America, where I live, we have seen in many countries that an emphasis on economic growth and on productivity has led to a less equitable distribution of national wealth. We have seen that the so-called "neo-liberal" economic policies have made life much more difficult for the poor, both because they have even less money (what growth there is accrues to the upper classes) but also because reductions were made in social programs directed toward the poor. We have seen a reaction to these policies that in some countries has strained national unity and has even led to internal uprisings. It is widely felt also that, with economic advance, cherished values seem to be eroding. In brief, there are important tensions between the monetary or material and the non-monetary satisfactions that we seek. This may not be the case for Malaysia or for other countries at the present time where recent rates of economic growth have been so high that it has been possible to improve levels of life for all. But I would argue that the tensions will emerge as, inevitably, growth rates slow.

These tensions seem to be magnified by the process of "globalization" we are experiencing

- The process of opening markets to worldwide competition tends to favor the rich and larger established firms and to increase inequalities.
- The growth of worldwide communication networks seems to have a homogenizing effect on culture; still we espouse respect for and even celebration of diversity. The spread of television feeds consumerism.
- The need to compete in an international market place and the increasingly powerful presence of multi-national corporations creates some confusion with respect to what constitutes a national policy and in whose interests policy is being fashioned
- The doctrine of the free market puts in question at least some of the functions of the Welfare State model. Indeed, the welfare state as we have come to know it is waning, but we are not sure how to respond to the continuing need for programs that satisfy the basic needs of disadvantaged groups.
- Globalization breeds fragmentation and discord within nations, in part as particular ethnic groups try to reassert their identity and their distinctive cultures and values erode

As we face the 21st century, then, we are challenged not only to grow economically, but also to find ways of maintaining and reinforcing the social pacts that define nations and their social policies, of responding to the basic rights of citizens to liberty, equality and livelihood, of celebrating diversity rather than erasing it., and of maintaining cherished values such as altruism, cooperation and solidarity in the face of the global onslaught of consumerism, competition and individualism. Investments, and particularly social investments should be judged in relation to all of these goals, not just in monetary terms.

Investment in early childhood development has the potential to help satisfy each of these desires. In the next section I will try to back up that statement by responding, from several points of view, to the question, "Why should we invest in early childhood development." Subsequently,

I will offer some comments on "How should we invest in early childhood development?"

WHY INVEST IN EARLY EDUCATION?

Twenty-five years ago, it was necessary to dwell at length on answers to this question because considerable skepticism existed regarding the value of early interventions. Moreover, early upbringing, including education, was thought by many to be the exclusive province of families and not an area for government involvement. Today, skepticism, although still present to an important degree, appears to be diminishing, challenged by both a growing body of knowledge and by new demands related to changing economic, social, demographic, political and educational conditions and ways of thinking. The new demands are related to urbanization, the increased presence of women in the paid labor force, the globalization mentioned above, the shifts in family structure, the increasing importance given to formal education. These and other changes have pushed governments to get involved and to support (but not replace) families in the process of fostering early learning and development, this even in the face of pressures to reduce government. They have pushed international organizations to pay much greater attention to early childhood development in their programs and their financing than in the recent past.

What is the basis for this increasing willingness to invest in early childhood development?

Advances in our knowledge

First and foremost, mention must be made of advances in our knowledge. Scientific findings from a variety of fields have demonstrated that early childhood programs can yield rich benefits to children, not only individually and immediately, but also socially and economically over a lifetime in terms of the child's ability to contribute to family, community and the nation. Evidence from the fields of physiology, nutrition, health, sociology, psychology and education continues to accumulate to indicate that the early years are crucial in the formation of intelligence, personality and social behavior. For instance, research suggests that most of the development of intelligence in children occurs before the age of 7 (Bloom, 1964). Moreover, during the first two years of life, most of the growth of brain cells occurs, accompanied by the structuring of neural connections in the brain. This process is affected by nutritional and health status but also by the kind of interaction a child develops with the people and things in the environment. (Dobbing 1987) If the brain develops well, learning potential is increased and chances of failure in school and in life are decreased. We now know that educational programs promoting improvements in interaction and stimulation during the early years can promote brain development and learning potential.

Scientific findings also show us that children with consistent, caring attention are generally better nourished, are less apt to be sick and will 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 occurs not just when children are deprived of food

or health care, but because the stress caused by psychological and social neglect affects the immune system and because lack of physical interaction in the earliest months negatively affects functioning of growth hormones. These findings reinforce a holistic view of education directed at integrated attention to physical, mental, social and emotional development. They suggest the need for a multi-faceted, multi-sectoral and integral program approach to children, beginning with the very first months and years of life. This contrasts with an approach that is concentrated on intellectual development during the immediate year prior to entry into primary school.

In brief, science supports our common sense notion that good things can happen to children if they are well cared for. And it has helped us to identify better ways to provide that care.

But what does this mean for nations? What evidence do we have that investment in early childhood development will lead to the various satisfactions noted earlier? What are the benefits to be expected?

1. Economic benefits: increased economic productivity, employment opportunities and cost savings.

Let me begin with possible economic benefits. Even without turning to the ample scientific literature which links improvements in schooling and learning to increased employment and economic productivity, common sense again 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 than a person who has not. It makes sense also that early preventive efforts will result in cost savings later on. But let us look also at results from the literature that confirm these common sense ideas.

Linking early childhood interventions to subsequent economic productivity and employment involves tracing a chain of relationships.

- Working backwards, we know from an extensive research literature that grew in the 1980s, that economic productivity is related to schooling because schooling is associated with important changes in outlooks affecting adult behavior (e.g., Inkeles and Smith, 1974) and because schooling helps 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). Schooling facilitates greater technological adaptiveness (Grawe, 1979). It relates directly to both increased productivity by farmers (Lockheed, Jamison and Lau, 1980) and by workers in the informal sectors (Colclough, 1980).
- We now know also that various kinds of early interventions can improve the preparedness of children for school, in terms of their physical growth, mental capacities and social adjustment. These preschool gains can lead, in turn, to increased enrollment, and to

improved progress and performance in school. This is evident from a review I did in 1992 of 19 longitudinal studies, all carried out in countries of the "Majority World" and all of which compared children who had participated in various kinds of preschool interventions with children from similar settings who had not (Myers, 1992). In that review, for instance:

- 10 of the 14 studies that reported effects on repetition showed less repetition and better progress through school for children who had participated in an early childhood program. Of the four that showed no effect, one was carried out in a system with automatic promotion so no difference would be expected.

- Of 14 studies reporting on academic performance, 8 indicated that children from early intervention programs performed better; in one case, positive effects were found in a rural, but not an urban context.

But potential increases in economic productivity for the society related to investment in programs of early education go beyond those resulting from changes in the child: they are also brought about because many early childhood education programs are often childcare programs as well, permitting increased labor force participation by women and freeing older siblings (usually girls) to learn and earn at a higher level. In many cases, women without access to child care and development alternatives are unable to consider employment in more economically productive jobs outside the home because they must care for young children at home. An evaluation of the Colombian Home Day Care Program (Ortiz, et.al., 1992) showed that 20% of the women with children in the program changed their employment status after placing their children in childcare.

From an economic standpoint, an early childhood development program may be considered a good investment if the ratio of benefits to costs is high. Although rarely attempted, cost-benefit calculations indicate a potentially high rate of return to investments in early childhood. Data from the High/Scope Perry project in the United States suggests that the returns on a preschool investment can be as high as seven-fold (Schweinhart, 1993). To arrive at this calculation, estimates were made for differences in the economic productivity over a lifetime of the two groups of children -- with and without preschool -- and for a variety of cost savings associated with reduced levels of crime, less need for remedial programs and less demand for other social programs.

The idea that early investment may save costs later on provides us with a more general way to look at how good an investment in early childhood development may be. When this is done, we see several ways in which programs may pay for themselves by reducing future costs. they may, for instance: a) reduce inefficiencies in school systems by reducing repetition and dropout (see Myers 1992; the evaluation of PROAPE in Brazil [Ministerio da Saude 1983] showing that pre-school costs were more than recovered because repetition was reduced in the first two primary school years); b) reduce work losses by assuring that children of workers are well taken care of, removing a concern and making it less necessary for parents to take time off

from work (Galinsky, 1986); and c) reduce health costs because good care and education involve preventive measures (Evans, 1993).

These economic arguments for investing in early childhood programs have gained force in relation to the broad shift in economic policy occurring emphasizing open economies which require a well-educated and flexible labor force in order to compete globally. The need to improve the human resource base of a country has taken on ever greater importance. Improving that base is a process that begins well before children enter into school.

Let us turn now to other outcomes from early childhood development that we might include in our judgement of whether or not an investment in early childhood development is a good investment.

2. Reduced inequalities

The unhealthy conditions and stress associated with poverty are accompanied by inequalities in early development and learning. These inequalities help to maintain or magnify existing economic and social inequalities. In a vicious circle, children from families with few resources often fall quickly and progressively behind their more advantaged peers in their mental development and their readiness for school and life and that gap is never closed. Research carried out in Chile, for instance, shows poverty-related differences in psycho-motor development emerging clearly by 18 months and increasing from there onward, such that 40% of all children from poor families show delays in their development by age 5.¹

The Headstart program in the United States took its clue from research indicating that disadvantaged children could benefit from early interventions (Hunt, 1961; Bloom, 1964). Evidence from the evaluations of US programs strongly bears out that position (Berruta-Clement, et al., 1984; Lazar and Darlington, 1982). Another finding of the review of 19 studies carried out in countries of the Majority World and mentioned above was that children who are at a disadvantage can not only benefit, but often benefit even more than their more privileged peers from programs of early childhood development. This was true of children in India, where the disadvantage was linked to caste, and in Morocco and in several Latin American countries where rural children profited more than urban children. I did not include in that review a study from Malaysia with a similar finding that was recently brought to my attention.

If the above is correct, by failing to intervene in an opportune way to foster early childhood learning and development where conditions are difficult, governments tacitly endorse and strengthen existing inequalities related to caste or poverty or ethnicity. Ironically, one

¹50% of the children were found to be delayed in their language development, 30% in their visual and motor development, and 17% in their gross motor development. These findings were reported in Seguel, Izquierdo and Edwards, 1992.

argument sometimes used against early education programs is that they are discriminatory -- favoring the upper class. This is certainly true if no special effort is made to direct programs to the poor and/or if programs of early education, care and development are left only for those who can pay for them. But it is not true if programs are carefully directed toward those most in need.

A study of pre-primary programs in Thailand, now five years old, concluded that,

"....student achievement can be boosted by expanding access to pre-primary schools or by increasing the duration and instructional effectiveness of existing pre-primary programs. We expect that such changes, if targeted to rural areas and areas with large poverty concentrations, would also reduce inequalities in the distribution of student achievement." (Raudenbush, Kidchanapanish and Kang, 1991)

Another dimension of inequality is gender inequality. These inequalities begin to appear before children enter primary school. Evidence from India (Lal and Wati, 1986) and from Guatemala (Klein, 1979) suggest that early childhood programs can favor girls. This may occur at least in part because the expectations of parents regarding the education of their female children is raised as a result of their participation in a preschool program.

In brief, if a goal of early childhood development programs is to help to even out social differences, then extra care must be taken to be sure that programs are directed specifically to disadvantaged groups. And care must also be taken to see that the quality of the programs provided is good.

3. Strengthening values

Another important social reason for attending to the early education of children, whether in homes or in organized programs outside the home, is that the social and moral values guiding societies begin to form in the earliest months of life. In societies concerned about the erosion of values, a strong incentive exists to strengthen values through early childhood programs both by strengthening the resolve and actions of parents, and by providing appropriate environments within which children can absorb culturally desirable values.

There is a strong theoretical base for suggesting that values and moral judgement are influenced in important ways during the early preschool years (Piaget and Inhelder, 1969; Kohlberg, 1976). We know also that religions and socialist societies have placed a great deal of emphasis on socialization to a particular point of view during the early years. The Jesuits, I believe, have a saying: "Give me a child for the first seven years and you can have him for the rest of his life."

Although I am sure there are studies of early childhood development programs that

concentrate on social values and moral upbringing, I do not know of a study that tries to trace long-term effects of early childhood interventions on values.

4. Political benefits: unity

Although children cannot vote, politicians, particularly at local levels, are coming to appreciate the fact that children can provide a rallying point for social and political actions building consensus and solidarity in the communities in which the children live. In general, parents are concerned about a better future for their children and are often willing to collaborate and sacrifice to that end. This mobilizing potential of preschool programs can help to reinforce participatory decentralization and local democracy.

In general, as democracy has spread, dependence on a well-educated citizenry has increased. Without education, democratic systems can more easily be distorted and controlled than with education. An investment in preschool programs can be an investment in creation of a more educated citizenry. Indeed, the form and content of most preschool education lends itself to producing those citizen traits considered essential to democracy -- even more than the form and content of most primary schooling as presently constituted. Whereas primary schooling continues to be oriented toward an unquestioning "frontal" method of imparting knowledge and is based on an essentially authoritarian relationship between teacher and child, an essential premise for most preschool programs is that a child learns best by doing and exploring and questioning, with teachers accompanying this process.

Summary

The growing literature showing the basis in early development for success or failure in later life and the associated economic, social, political and demographic arguments presented above, taken together, provide a strong rationale for investing in the development and learning of children during their preschool years. Indeed, the main question for education policy makers today is not so much **whether** investments should be made in early education but is, rather **how** to invest so that programs will be effective in providing the various economic, social and political benefits cited, yet also efficient and affordable.

How should we invest in early childhood development?

This question can be approached in many ways. For instance, we might discuss the advantages and disadvantages of programs directed toward children versus toward parents or caregivers. Or, as I have done on other occasions, we might think in terms of a set of complementary strategies that include direct attention to the child, support and education of parents, programs of child-centered community development, efforts to strengthen the broad

social institutions with responsibility for programs of early childhood development, and programs that are directed toward changing laws and/or the public view of childhood. All of these, in turn can be approached with a variety of models, methods, curricula, etc (Myers, 1992).

Still another road into questions of "how" to invest is to specify various criteria that we think will help our investments to pay off with respect to the multiple goals set out. On other occasions I have set out such a discussion, looking at such criteria as: focus, integration of components, community participation, cultural relevance, quality, cost and coverage.

On this occasion, I prefer to approach the question of "how" in a slightly different manner by looking at three varying social strategies that might dictate how to invest in early childhood development.² You will see that these have some relationship to the previous discussion of goals and particularly to the goal of equity. They turn around the relationships among equity, quality and diversity. My discussion is motivated by the fact that many countries have been compelled to rethink their social programs in relation to the advance of free-market economic policies and to the waning of the welfare state as we have known it, but in conditions where it is clear that a large portion of the population needs help simply to survive, say nothing of improve in ways that will moderate economic and social inequalities. Nations are faced with a problem of how to define and approach equity under conditions of extreme poverty when the tendency is also to try and shift responsibility from governments to the people, including the poor.

How do nations invest to overcome inequities?

1. Invest in improving access to opportunities for learning and development. Here, equality is defined narrowly in terms of the possibility of access to some kind of program. The focus is on building centers and on numbers of children (or parents) enrolled in an early childhood development program. Closing the equity gap means closing the enrollment gap. Unfortunately, little attention is given quality in this approach. When that is done, quality is defined in terms of inputs to the learning and development process and minimum standards are defined for the inputs. In general, the models applied in this strategy are uniform, and the standards set for the inputs are not at the level of those of the middle class. Overcoming the equity gap means providing the same minimum package of inputs to all.

2. Invest by providing more to those with less so as to improve results. This strategy has three main elements: defining the populations who do not perform well by some standard, determining and implementing the actions are needed to overcome the deficit, and monitoring results to see if inequalities (defined by results rather than by opportunities) are reduced. Here the idea is not only to provide a minimum package of inputs so we can point to equality of opportunity, but also to provide additional inputs where needed to overcome a deficit. These "extra" inputs might include such items as incentives to get good teachers to go to and stay for a

²I am indebted to Sylvia Schmelkes for helping to clarify the ideas presented in this section. See Schmelkes, 1996.

period in rural areas or programs of special support for children who have severe learning disabilities,

This strategy represents a definite advance over one that centers on equality of opportunity. However, in most cases a strategy of positive discrimination is not monitored in terms of results. And, more importantly, when it is, the results that are sought are uniform results defined by the values and norms and culture of the middle (or dominant) class in a country. Closing the equity gap means bringing children up to a particular standard, indicated by performance on a scale of development or a test. This is not a bad goal to seek, but the obvious tendency is to homogenize and seek equity by reducing (or ignoring) cultural differences under a hidden assumption that the culture that sets the standards is better.

There is a growing tendency to focus investments on so-called disadvantaged populations (rural, urban marginal, indigenous) and provide them with what in the United States was termed a head start. And there is some evidence, cited earlier, that this does bring relative improvements in results.

3. Invest by providing more to those with less, but in ways that respect diversity.

This third strategy builds upon the earlier two but adds respect for diversity. The strategy is not content with the idea of defining deficits by a common standard and filling in the holes. It seeks out, as well, strengths and valued abilities of particular cultures and reinforces them. It involves constructing programs of early childhood development with the different communities to be served rather than imposing a standard program upon them. It involves defining results that are equitable, but not necessarily identical (for instance, language ability would be measured in reference to a different language from the dominant language.)

This third strategy, which celebrates and seeks to preserve a measure of diversity introduces complications. First, because it implies a diversity of programs rather than one standardized program it is more difficult to administer and to evaluate. Second, it means giving communities a greater say in programs, which, in turn means letting go of a certain degree of power exercised from the center. It probably means a degree of decentralization. Third, it is entirely possible that such programs will have a less favorable cost-benefit ratio than more homogeneous programs of the type outlined in the first two strategies -- if that ratio is calculated only in terms of greater economic productivity. But if we add in the other benefits, including equity and the preservation of cherished values, for instance, the investment may have a very high pay off indeed.

Pursuing equity and quality while respecting diversity also requires a shift in thinking about what it means to "go to scale" with a program. In most cases today, we think of scale as the extension of the same program, with the same model and content, to an ever larger number of children. If we take diversity seriously, we must think of scale as extending coverage through a variety of programs which, when added together constitute scale.

If I had additional time, I would pursue further the implications of this third model in relation to the identification of different childrearing patterns and practices among different social groups and the incorporation of the results of such an exercise into early childhood development programs. I hope that we may be able to take up that idea during a discussion period.

In closing, let me reiterate several points:

1. There is strong evidence that investing in early childhood development can have a high pay off in strictly economic terms.

2. When the potential of such programs for reducing inequity, strengthening values, and promoting unity is added in to the equation, the returns can be even higher and the case for investment is even more compelling.

3. In the process of investing in early childhood development, quality and equity should be given an important place, but the definition of both should incorporate respect for diversity. In so doing, we can hope to maintain and enhance democratic values, foster and preserve social vibrancy and responsibility, and celebrate the human condition.

Thank you.

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