This paper examines the needs of young children in the Caribbean region with an emphasis on early childhood development programs in addition to early childhood education. The paper maintains that the first 3 years of life are critical for brain development; parents and caregivers should be enabled to provide appropriate experiences, and children have a right to develop to their fullest potential. Early intervention prior to entering school has long-term effects, and the results of research in the United States and in Turkey are cited. The paper also points out the moral and social values connected with early childhood intervention, and the role of early intervention in helping children benefit from primary education. Additionally, a wealth of research points to links between improving the levels of schooling and economic productivity, especially by enabling increased labor force participation by women. The paper notes that early childhood education and development (ECED) reduces social, economic, and gender inequalities, and is especially important in Caribbean countries, where one-third of all children live in poverty and fall quickly and progressively behind more advantaged peers. Additionally, ECED may enhance social equity through improving boys' school preparation and improving expectations for girls' achievement. Early education and development can also provide a focus to mobilize poverty eradication efforts. The paper cites increased child survival rates, changing family structures and childrearing practices, rural-urban migration, growing participation of women in the labor force, the challenge to men to participate equally in nurturing and household contexts, and the relevance of schooling content and methodologies all as reasons for increased investment in ECED programs. (KB)
Why do children of the Caribbean need programmes of Early Childhood Education and Development?

1. The first three years of a child's life are critical for their development

At no point in the development of scientific research into the development of the human brain has there been a moment such as the present for proving that this statement is true. Recent research shows how the electrical activity of the brain cells changes the physical structure of the brain. "There is a timescale to brain development, and the most important year is the first,". A child's brain needs the stimulation of experiences in the environment from birth in order to develop to its full capacity. What this means for children deprived of such stimulation is that their brains suffer.

"Experience is the chief architect of the brain".

Children who don't play much or who are rarely touched develop brains 20% to 30% smaller than normal for their age. For a child who has experienced abuse or emotional neglect, the effects may be impossible to erase at a later stage. Before birth, changes in a child's environment in the womb caused by the mother's malnutrition, drug abuse or viral infection can damage developmental processes resulting in epilepsy, mental retardation and other negative effects on the brain.

Parents and carers can be enabled to provide the experiences

The development of high quality ECED programmes can at least arrest negative brain development and at best provide the environment for the development of the child to his or her full potential. Where could programmes start except with the parent or child's carer? The research data show the importance of hands on parenting, of finding time to cuddle a baby, talk with a toddler and provide infants with stimulating experiences. Even if we cannot change what happens before birth, we can change what happens afterwards. Scientists have described these first years as providing sensitive points, like "windows", through which it is possible to make critical inputs in a child's development to shape and stabilise brain development, and create long lasting structures. In addition, unless micronutrient and protein-energy malnutrition is prevented or corrected by age two or three it is very difficult to reverse the damage later.

A child's development is more than a need; it is a human right

Bob Myers in the The Twelve Who Survive³, and in a number of subsequent publications including those specifically looking at needs in the Caribbean, makes eight arguments for investment in ECED programmes. His first argument is a human rights argument: children have a right to live and to develop to their fullest potential. In this context, most Caribbean Governments have ratified the Convention on the Rights of the Child which promotes not only the survival but the fullest development of every child. This recent research demonstrates how we cannot ignore the environment within which children are born and

---

¹ NEWMAN F, (1997) President of the USA Education Commission, quoted in same article, p35.
² PERRY B. Dr., (1997) Baylor College of Medicine, Houston, as quoted in Time Magazine, 10 February, p39.

---
live in the first years of life, and their right to conditions which afford them their rights as human beings. In thinking about the implications for ECED programming in the Caribbean, what more persuasive argument do we need for not only support to parents but for good, affordable day care? It is not a luxury or a fringe benefit for welfare mothers and working parents but essential brain food for the next generation.

2. Early intervention in the years before school entry has long term effects.

The scientific argument for investment in ECED programmes is based not only on the immediate benefits for the child and its parents, in terms of the development of intelligence, personality and social behaviour, but on the long term outcomes and benefits in terms of the child’s ability to contribute to the community and the nation.

Rich experiences really do produce rich brains

It is becoming increasingly clear that well-designed pre school programmes can help many children overcome glaring deficits in their environment. If the opportunity to provide programmes of high quality is not lost, the new environments created can model children’s minds in the ways in which Caribbean societies aspire. There is solid research in support of high quality ECED programming from across the world, perhaps the most well known of which is the Highscope/Perry Preschool longitudinal study which followed a set of disadvantaged African American urban children exposed to a high quality ECE programme, and a control group, for over 20 years. The test groups at age 27 were interviewed and with corroborating independent data produced the following findings: the experimental group had 1/5 to 1/3 the arrests of the control group, received less welfare assistance in their adult lives, had higher school achievement and literacy scores, had 1/3 more numbers graduate from high school, made more long lasting marriages, had fewer out of wedlock births and displayed greater social responsibility. Positive results similar to those of the Perry study came from a longitudinal study providing parent training at home and in groups in low income urban communities in Turkey. The impact of the improved parenting skills was still measurably strong when the subjects were found ten years later - measures such as higher participation of the father in family life, higher grade achievement and better school performance of the students.

Surely this is also an issue of moral and social values?

Yes it is. As Bob Myers points out in his social and moral values argument, through children humanity transmits its values. To preserve moral and social values - or to change them ‘for the better’ - one must begin with children. Values such as living together harmoniously or appreciating and protecting the environment begin to take hold in the preschool years and can be promoted through childcare and development programmes. In the examples of the studies in the USA and Turkey, the child’s experience of the stability of family life supported by high quality ECED Programmes and the associated confidence and self esteem which comes with achievement, assisted them to break the intergenerational cycle of family breakdown (of which crime, poverty and low academic progress are contributing factors).

Can children benefit from primary school without previous enrichment?

Most Caribbean governments only begin their formal investments in people with major public expenditure for primary education, after critical shaping has already taken place. Despite high primary enrolment in the English speaking Caribbean, much more could be achieved to reduce primary repetition and drop out

---

rates by ensuring that children have developed sufficiently to make the transition into school in the first place. As poor children enter primary school, UNICEF cites the close association between lack of achievement and low self esteem and anxiety. Another key factor is inadequate nutrition; poor academic achievers weigh less, have a poor history of having breakfast, have low haemoglobin levels and visit a clinic for illness several more times than higher achievers. This is a much more fundamental problem than lack of 'readiness' for school. Based on the scientific research above, remedial education if undertaken at age three or four may be far more effective than at a later stage. If it is not undertaken, the research seems to support the Caribbean experience that "eight is too late" - half of our children graduating from primary school will have repeated at least one year and a quarter will have dropped out.

3. **Investment In ECED Increases future economic productivity and employment**

This is not only an economic argument but one that makes common sense. "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." Bob Myers cites the wealth of research which points to the links between improvements in the levels of schooling and improvements in economic productivity: schooling helps to build skills such as the ability to organise knowledge into meaningful categories, to transfer knowledge from one situation to another, and to be more selective in the use of information; it facilitates greater technological adaptiveness; it relates directly to both increased farmer productivity and productivity in the informal market sector. UNICEF and World Bank research show that an extra year of primary education increases the future productivity of a person (in terms of hourly wage) between 10 and 30%.

**Integrated approaches to investment pays off for the child**

But there is little value in schooling even at primary level which is inaccessible to those children who are unable developmentally to benefit from it. Whilst urging the investment at primary level and beyond, the literature from the World Bank demonstrates the potential of an integrated approach to investment across sectors which will yield net gain to be reinvested back into early childhood education and development. Targeting only one aspect for intervention (for example increasing child survival) will yield some gain. However, targeting more than one aspect for interventions such as child survival and school performance will increase the net gain for reinvestment. "ECED is an investment of which we can expect a future pay off. There is nothing that forces us to start such investments at age 6, with primary education". That pay off is estimated to be sevenfold in the Highscope study - a benefit cost ratio of over $7.00 was returned to the public for every $1.00 invested.

**ECED investment reduces economic strain on societies**

Not only does the child benefit; ECED programmes enable increase labour force participation by women, and free older siblings to go to school or to get a job. Furthermore, there is a savings potential and programme efficacy argument: Bob Myers cites studies demonstrating the potential of ECED programmes to reduce work losses because children of workers are well cared for; to reduce health costs because good care involves preventive measures; to reduce inefficiency in the school system by reducing repetition, drop out and remedial programmes; and to reduce costs related to social welfare and crime.

---

7 UNICEF (May 1995) The Economics of Child Poverty in Jamaica, CAO, Bridgetown, Barbados
8 MYERS, R.G (1995) Early childhood care and development programs in Latin America and the Caribbean. IDB, Washington
9 UNICEF (1996) Policy Documents Regional Perspective, ROLAC, Santafe de Bogota, Colombia
4. ECED reduces social, economic and gender inequalities.

In much of the English speaking Caribbean, one in three children are living in poverty. Although traditionally child rearing has been a role ascribed to one gender in the home context, increasingly it is the women who head 30-40% of the region’s households and whose participation in the labour force steadily increases. The human waste incurred by the neglect of ECED investment is evidenced by the high costs of corrective and remedial programmes for addressing problems as they surface in later life from chronic malnutrition, births to unprepared and immature teenage mothers, numbers of children engaged in child labour and prostitution, numbers of children in the poorest quintile of society who leave secondary institutions without certification, barely literate, and end up in the ranks of the unemployed, the rising instance of child abuse and child rape, and the sharp increase in crimes committed by the under 25’s.

The gap between rich and poor never closes

The circle in which poor children find themselves is a vicious one. 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. Governments can intervene to foster early childhood development; failure to do so is a tacit endorsement and strengthening of the inequalities which exist.¹¹

The precarious position of boys and the disadvantaged position of girls

Contradictory patterns in the region of apparent advantage or disadvantage to boys in the education system are indicative of huge changes taking place in Caribbean societies from the family to the wider institutions in society. Whilst there is evidence in some areas that boys are less prepared on entry to school than girls, and are later outnumbered by girls in achievement and enrolment at tertiary level by as much as 2 to 1, it is also true that girls still experience discrimination in low expectations in the outcomes of the investment in their education. ECED programmes in the region have demonstrated that expectations of girls’ achievements can be raised in high quality programmes, and that investment in programmes can increase women’s productivity and result in savings to society. However, the precarious position of male children in the region emerging from recent research needs to be addressed in ECED programmes.¹² Both these strands in wealth and gender inequalities make up the social equity argument.

Eradicating poverty: the social mobilisation argument

In all Caribbean countries, the need to address poverty eradication has produced commitments and plans of action. In communities where political or social tensions make it difficult to mobilise people for actions that will be to their benefit, children can provide a rallying point for actions which promote consensus and organisation for the common good. From such a focus on children, both direct actions in support of ECED or indirect actions in support of community improvements in health, sanitation and nutrition that benefit children are also likely to benefit parents, families and the wider community. “The benefits are evident in improved self-confidence, in the emergence of leaders, and an increased community organisation and social action” as Bob Myers documents in his political argument.¹³

Integrated approaches to ECED must reflect a world changed by social and economic conditions

Children survive worldwide at an increasing rate - now 14 in every 15, compared to 5 out of 6 in 1960, but other changes challenge the vision and will of government to act in the best interests of the very young child: changing family structures and childrearing practices, rural-urban migration, growing participation of

¹¹MYERS, R.G. (1995) these two sections are drawn from Myers’ formulation of arguments for ECED
women in the labour force, the challenge to men to participate equally within nurturing and household contexts and the relevance of schooling content and methodologies are all arguments which constitute a strong rationale for supporting increased investment in ECED programmes. No one source of energy or funding (family, community, governmental, non-governmental) is sufficient; just as the arguments for ECED are interwoven, the approaches need to be integrated by those and for those affected. 13

Prepared by Sian Williams
Caribbean Child Development Centre
University of the West Indies
Mona, Kingston 7, Jamaica
for UNICEF Caribbean Area Office, Bridgetown, Barbados
March 1997

13 MYERS, R.G. (1995) with many thanks to Bob Myers' work in identifying the research and the arguments
I. DOCUMENT IDENTIFICATION:

Title: WHY DO CHILDREN OF THE CARIBBEAN NEED PROGRAMMES OF EARLY CHILDHOOD EDUCATION AND DEVELOPMENT

Author(s): SIAN WILLIAMS

Corporate Source: University of the West Indies, Mona, Kingston 7, Jamaica

Publication Date: March 1997

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic/optical media, and sold through the ERIC Document Reproduction Service (EDRS) or other ERIC vendors. Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following two options and sign at the bottom of the page.

- [ ] Check here for Level 1 Release: Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical) and paper copy.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

________________________________________

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- [x] Check here for Level 2 Release: Permitting reproduction in microfiche (4" x 6" film) or other ERIC archival media (e.g., electronic or optical), but not in paper copy.

The sample sticker shown below will be affixed to all Level 2 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY

________________________________________

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but neither box is checked, documents will be processed at Level 1.

*hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic/optical media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.*

Signature: SIAN WILLIAMS

Printed Name/Position/Title: SIAN WILLIAMS, HEAD OF CENTRE, M.A.

Organization/Address: CARIBBEAN CHILD DEVELOPMENT CENTRE, UNIVERSITY OF THE WEST INDIES, MONA, KINGSTON 7, JAMAICA

Telephone: (876) 927-1618

FAX: (876) 977-7433

E-mail Address: siann@uwimona.edu.jm

Date: March 1997

Sign here please

2nd Caribbean Conf. on Early Childhood Ed "TOMORROW BEGINS TODAY" (Barbados, W.I, April 1-5 (over))
III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

Karen E. Smith
ERIC/EECE
Children's Research Center
University of Illinois
51 Gerty Drive
Champaign, Illinois, U.S.A. 61820-7469

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

(Rev. 6/96)