Commission 2.7 Africa

Implications of a Developmental African Research Program for the Design of ECD Services in Rural Communities

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World Conference on Early Childhood Care and Education
27-29 September 2010
Moscow, Russian Federation
Implications of a Developmental African Research Program for the Design of ECD Services in Rural Communities

by

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Presentation to
Moscow World Conference on ECCE,
September 2010
Follow-up to a symposium on Strengthening Africa’s Voice in, and Africa’s Contributions to, Child Development Research” (Alan Pence, Chair), at

4th African International ECD Conference –

*From Policy to Action: Expanding Investment in ECD for Sustainable Development.*

*Dakar, Sénégal*: 10 – 13 November 2009
The Dakar Framework for Action

• was adopted by the World Forum on Education held in Dakar, Senegal in 2000.
• reaffirmed the vision set out in the World Declaration on Education for All in Jomtien in 1990), and specified
• Six internationally agreed education goals that aim to meet the learning needs of all children, youth and adults by 2015.
Goal 1: expanding and improving comprehensive ECCE, especially for the most vulnerable and disadvantaged children was operationalised for Sub-Saharan Africa (Johannesburg 1999) as follows:

- Ensure that early childhood development (ECD) programmes are expanded two-fold by the year 2006, and
- that they offer safe, secure and stimulating environments.
- Countries should work towards providing access to ECD programmes to all children from ages 3 to 6 by the year 2015.
Quality, relevance, and practicability are conspicuously absent from this formulation:

- Effective implementation of safety and stimulation, and
- Affirmative prioritising of access by the most vulnerable and disadvantaged children
- Both require specific quality criteria.
- Quantitative expansion of the small number of existing urban elite preschools that mimic Western practices could be largely irrelevant to the parental ethnotheories of most rural families and financially impracticable on a large scale.
Sociocultural conditions in most post-colonial African states

- Rural-urban contrasts in life-style
- Linguistic diversity
- Rapid social change
- Widespread biculturation
- History of Western colonial occupation
Sociocultural conditions in most post-colonial African states (continued)

- Low prevalence of literacy
- Widespread poverty
- HIV/AIDS pandemic
- Military conflicts
- Limited institutionalisation of systematic research
New responses are needed in Africa to the challenges of
• increased levels of poverty
• family fragmentation
• displacement

in the wake of wars and diseases that have ravaged the continent in the past three decades
Sociocultural context cannot be ignored in the design of effective Early Childhood Education and Care

- Most African children are born and grow up in rural areas
- Most of their families are poor and have limited literacy
Research on children’s development in Africa’s poor rural communities

• is scarce and has received little attention from ECEC policymakers
• has documented distinctive strengths as well as challenges.
• Biological cause and effect relationships are universal (eg J. Shonkoff )
• but they are moderated by sociocultural processes that vary across settings
Programmatic inquiries in Zambia between 1971 and 2009 have generated four African contributions to developmental science:

- an African assessment tool: the *Panga Munthu* Test
- an African psychological construct: *nzelu*
- an African social problem: the extractive definition of scholastic success
- an African educational strategy: *Child-to-Child*
Each of these research outcomes is African in the sense that the evidence supporting its validity consists of behavior and reflections of African persons living in Africa rooted in African cultural practices.
a cognitive assessment tool: the Panga Munthu Test
A new cognitive test developed to tap into skills fostered in rural African settings

The Panga Munthu Test

(make a person test)

Building on experimental research showing that the medium of clay elicits stronger cognitive performance by African children than the media of pencil & paper, or construction blocks

( Serpell, 1972, 1979; Ezeilo, 1978; Kathuria & Serpell, 1998; Stemler, Grigorenko et al, 2008 )
Panga Munthu Test
Panga Munthu Test products
by Chipata District primary schoolchildren 2006
Panga Munthu Test (PMT)

• Assesses cognitive processes such as pattern reproduction (emphasised by Vygotsky, Wechsler, Sternberg, and others)

• 25-point scoring system focused on level of detail included in the child’s model

• Standardised 1978 on a nationwide sample of primary schoolgoing children in Zambia

• Norms by age and by grade

• Revalidated 2008 on a larger sample of primary school children in Eastern Zambia
The *Panga Munthu Test*

Most other, currently available tests for children aged of 5 – 12 presuppose general exposure to Western cultural practices and artifacts (such as pencil drawing, blocks), rare among Africa’s children in subsistence agricultural or pastoral communities.

The *Panga Munthu Test* presupposes only familiarity with the widespread play activity of clay modeling, and seems to tap a dimension of cognition more relevant to the home environment than to the demands of school.
The *Panga Munthu Test*

therefore may be especially suitable for the assessment of children with less formal schooling than is prescribed by official public policy,

e.g

• street children
• children orphaned by AIDS
• child soldiers
• forced migrants, etc
An African psychological construct: *nzelu*
Linking developmental outcomes to socialisation goals and eco-cultural context

A cultural, quasi-ethnographic study based on semi-structured interviews with a purposive sample of adults in Chewa villages (1973-74):

“Estimates of children's intelligence in a rural African community” (Serpell, 1977)

“Wanzelu ndani ?” (Chapter 2 of Serpell, 1993)
Complementary indigenous dimensions of intelligence in a rural African community

**Intelligence, wisdom**

( *nzelu* )

**cognitive alacrity**  **social responsibility.**

( *chenjela* )  ( *tumikila* )

( terms from *Chewa* culture (eastern Zambia)
(reported by Serpell, 1977, 1993)

similar conceptualizations have been documented for
Bemba (northern Zambia)  **mano**  (Kingsley, 1985)
Baoule (Cote d’Ivoire)  **ng’louele**  (Dasen et al., 1985
Djerma-Songhai (West Africa)  **lakkal**  (Bissiliat et al., 1967)

and in several other indigenous African cultural traditions
(Grigorenko et al., 2000;
Mukamurama, 1985;
Reynolds Whyte, 1998;
Super, 1983)
Indigenous Chewa perspective on children’s intellectual and moral development

- *Nzelu* includes both *ku-chenjela* and *ku-tumikila*
- *Ku-chenjela* without *ku-tumikila* is dangerous
- Responsibility for child socialization is shared communally
- Play activities require no supervision and provide opportunities for practice and elaboration of desirable skills, and of dispositions some of which are desirable

(Serpell, 1977, 1993)
a social problem:

extractive definition of scholastic success
Trace study methods

- Interviews with a community peer who had completed a university degree
- Annual updates on progress of schooling, reasons for continuing or dropping out
- Informal assessments of literacy and numeracy
- Reflections on significance of schooling, and ratings of peers on various personal attributes
The extractive definition of scholastic success

- Young adults who stopped schooling after a few years often attributed their ‘failure’ to lack of *nzelu* (intelligence)

- Yet the structure of formal educational provision requires most of those who start out in Grade 1 to ‘drop out’ long before completion of the full 12-year curriculum

(Serpell, 1993)
Figure 7.2. Extractive Recruitment Model of Schooling

Narrowing staircase
Educational alternatives to the narrowing staircase model

• Apprenticeship
• School Production Units
• Health Education
• Child-to-Child
an educational strategy: 

*Child-to-Child*
WATCH THE DIRECTION OF THE LINE SHOWING THE CHILD’S GROWTH

Reasons for special care

GOOD
Means the child is growing well

DANGER SIGN
Suggests feeding the child at least 5 times each day

VERY DANGEROUS
Child may be ill, needs extra care. Refer the child to the next level of health care

Kg
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1

Birth-1 year

1-2 years

2-3 years

4-5 years

Kg
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1

These foods are good for children. Also use other foods that are grown where you live.

Groundnuts, Green leaves
Beans, Fish with
Nshima or Porridge
Milk if available

Continue breastfeeding. Encourage mother to feed the child with extra food at least five times a day; in between meals.

Mato, Mango, Groundnuts, Sweet Potato, Milk
Grade 5 students studying growth-charts at Kabale Primary School, Mpika, Zambia
Participatory learning activities at Kabale Primary School and their developmental affordances

- **Growth monitoring**
  as an introduction to primary health care

- **Nurturant care of younger children**
  as a contribution to family life, and as priming for adulthood

- **Study teams**
  as an opportunity for cooperative learning

- **Peer mentoring**
  as an opportunity to comprehend curricular materials through explanation

- **Drama**
  as an opportunity for appropriating alternative perspectives through subjunctivization

  (Mumba, 2000; Mwape & Serpell, 1996; Serpell, 2008)
Integration of health and education services: primary school teacher, student and young child at local clinic

African cultural practices inspired the Child-to-Child approach

The approach was later disseminated by the CtC Trust, and re-appropriated by African teachers as a way of incorporating indigenous insights into the formal educational process

Building the cultivation of social responsibility into the primary school curriculum

(Pridmore & Stephens, 2000; Udell, 2001)
Professor Bame Nsamenang
Universite de Yaounde, Cameroun

has written extensively about the important role that elder siblings play in the traditional child-rearing practices of the Nso and other peoples of West Africa.

Implications for policy have been elaborated by Pence & Nsamenang (2008). *A case for early childhood development in sub-Saharan Africa*. Working Paper No. 51, Bernard van Leer Foundation
Ms Linda Bierstekker, Early Learning Resources Unit, Cape Town, South Africa will present examples of current innovatory programmes in South Africa that include the recruitment of elder siblings to participate in the systematic stimulation and education of young children in disadvantaged communities.

• at a special event session of this conference on Intergenerational Learning:

18:30-19:30, TODAY Room: Enisei (English, French)
Teachers can be sensitized to other dimensions of personal development by developing rating scales for the assessment of their students’

- cooperativeness
- taking responsibility
- nurturance

(Serpell & Mwape, 1997; Adamson-Holley, 1999)
Four African contributions to developmental science

- an assessment tool: the *Panga Munthu* Test
- a psychological construct: *nzelu*
- a social problem: the extractive definition of scholastic success
- an educational strategy: *Child-to-Child*
Four major implications for ECD Services in Rural Communities

• Focus on local strengths

• Incorporate participation by preadolescent children

• Use indigenous African languages

• Affirmatively include children with special needs
ECCE capacity building in Africa: strategic implications

1. Human resource development

Recruiting and training community/family motivators,

• skilled in communicating (& listening)
• committed to serving low-income communities
• willing & able to reside in rural areas
• flexible & creative with limited hi-tech resources
More relevant and cost-effective than current strategy of many African governments, namely

Training teachers/managers/professional caregivers
• skilled in hands-on techniques
• oriented to a career based in specialised centres
• dependent on specialised hi-tech tools & facilities
• reluctant to work outside a centre, especially in a rural area
ECCE capacity building in Africa: strategic implications

2. Educational technology

• Web-based material dissemination in many different languages

• Distribution of ICT hardware to widely dispersed, easily accessible existing facilities (e.g. primary schools, health centres, community centres)
More relevant and cost-effective than current strategy of many African governments, namely

Construction of dedicated buildings
to house gatherings of preschool-age children for classroom-style interactions with specialised teachers
Caveat

• Africa’s children are not all living in rural communities

• Africa’s urban settings have their own unique parameters with different affordances from those I have presented here.

• The next slide illustrates the radical changes that can be envisaged in some parts of the continent.

• The statue is located on the campus of the University of Botswana
University of Botswana, Gaborone
Mothers of Manenberg, a marginalised urban neighbourhood of Cape Town, South Africa, explaining their home-made, photo-illustrated ECD storybooks

Courteousy of Brenda Sonn, University of Western Cape: September 2010
Consistent recommendations in the UNESCO Africa Regional Report on ECCE

improve access to and use of basic quality services including

•(i)... target prospective teachers and care givers in the rural areas where the challenge for qualified personnel is highest; empower young parents especially working mothers and helpers who need professional guidance and support on childcare and development issues);
Consistent recommendations in UNESCO Africa Regional Report on ECCE (cont)

• ii) curricula with cultural and positive African values);

• iii) increase the awareness of families and communities of their responsibilities in taking care of their children and the ECCE;

• iv) more inclusive and equitable ECCE policy based on a cartography of where are the very big gaps and needs to be corrected (children in rural areas, minorities, HIV-AIDS affected or infected)
References available by email request:

email:
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Selected articles accessible for download at:
http://unza.academia.edu/RobertSerpell

See also:
K. Marfo & A. Pence (Eds) “Strengthening Africa’s contributions to child development research” (downloadable pdf at www.srcd.org)