



The qualified early childhood teacher: a must for achievement in later schooling

Caribbean Union of Teachers, 4th Educational
Conference, with Barbados Union of Teachers and
UNICEF:

Teacher quality and student performance

Barbados, December 2008

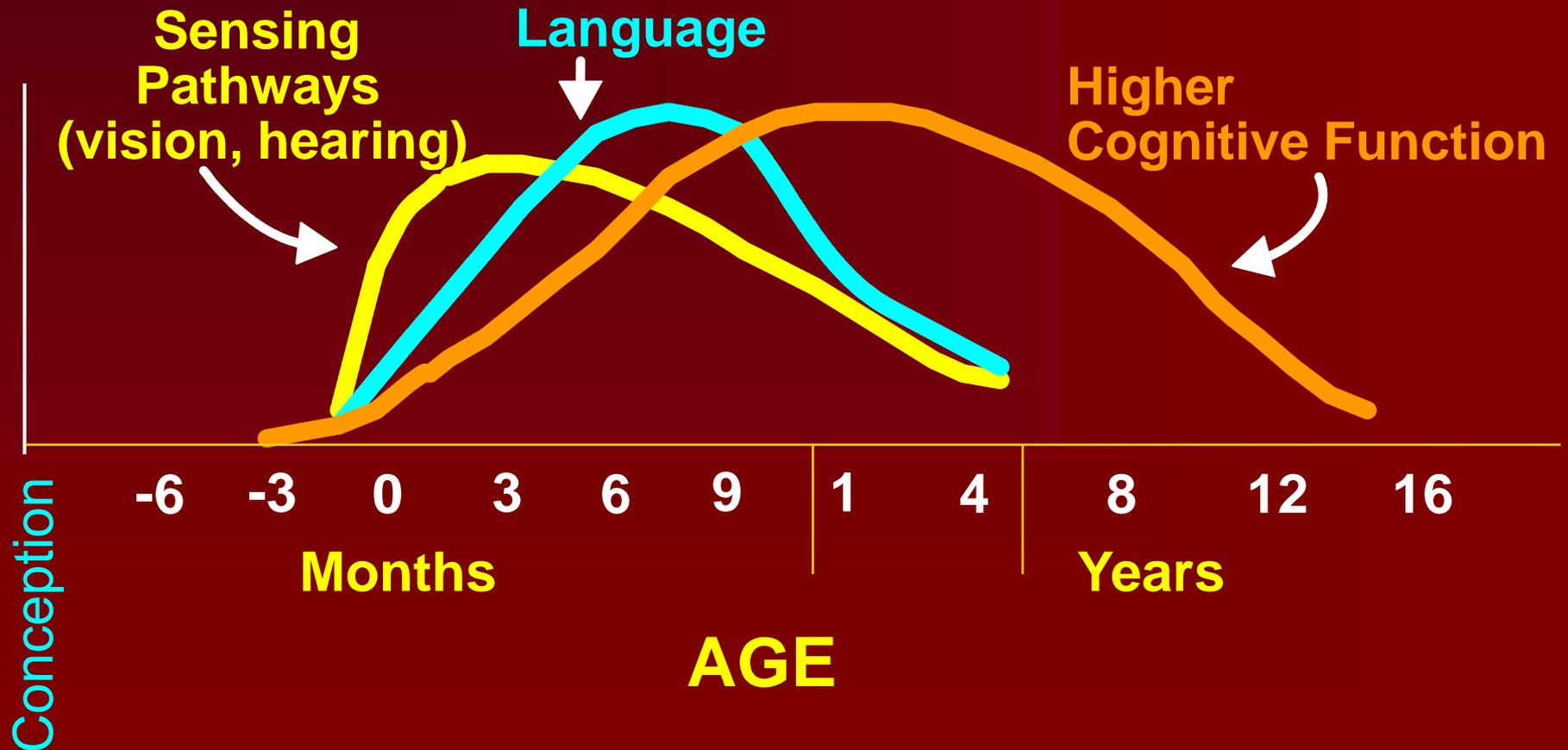
The presentation

- The evidence linking importance of early childhood education for later achievement in schooling and in life
- The evidence linking the qualified early childhood teacher with better outcomes for children's development
- The challenge to producing and maintaining qualified early childhood teachers
- Contribution to the Call to Action Statement of the Conference

The scientific evidence – period of most rapid brain development

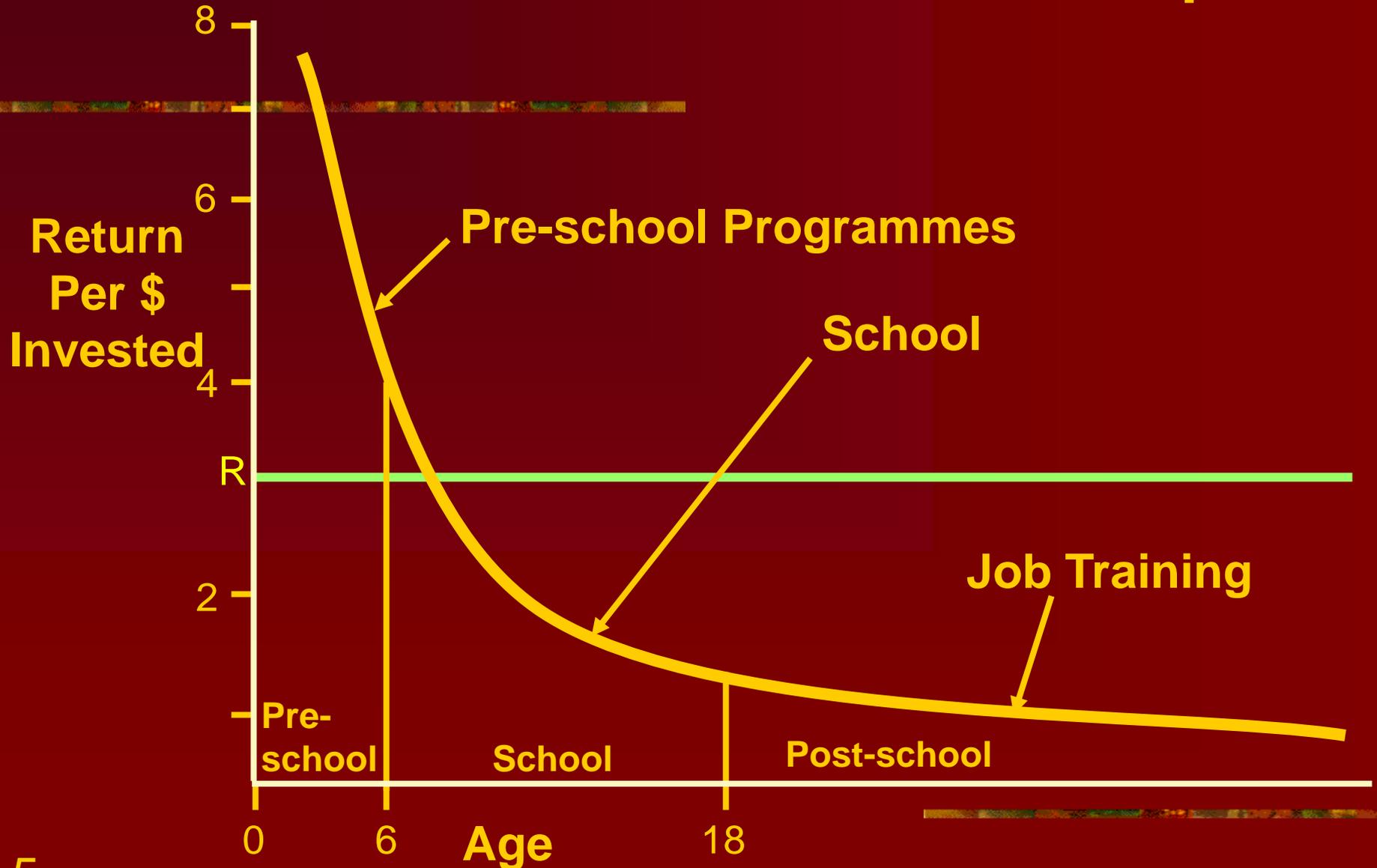
1. At birth brain connections are relatively few – 50 trillion - these are determined by genes from parents
2. In first few months, connections increase by 20 times to over 1,000 trillion - these are determined by a baby's experience
3. Experiences determine which channels are formed and repeated experiences make these channels stronger and stronger - channels that are not used fade away
4. Experiences of love and affection wire channels for these emotions, BUT experiences of anger and aggression also wire channels for these emotions

Cognition builds on neural pathways started before birth, long before schooling



See [From Neurons to Neighborhoods](#), 2000.

The economic evidence ... preschool gives the best rate of return to human development



Research in the Caribbean: what makes the *difference* for children's outcomes?

- Longitudinal research in Jamaica on a national sample of 6 year olds entering primary school in 1999 found that most children attended early childhood facilities at an early age, from 3 years old, and that facilities lacked material, space, furniture and programme structure
- 69% of the sample followed up and assessed in 2003
- Children from lower socio economic status performed significantly less well than their peers with higher socio economic status – and the gap was widening
- Those in attendance at higher fee paying schools had improved academic and behaviour outcomes

See Report of the Profiles Project by Maureen Samms-Vaughan, Planning Institute of Jamaica 2004

Perry Preschool; Effectiveness of Pre Primary Education ; Abecedarian

- Preschool experience - compared to none - enhances children's development
 - Promotes schooling, reduces crime, promotes productivity in the workplace, reduces teenage pregnancy
- The *earlier* it begins the greater the impact on intellectual development, sociability, concentration and independence
- However, the **quality** of the programme is critical to the outcomes - especially the teacher training and pedagogy

Quality needs staff well trained and educated beyond secondary level ...

- To engage parents in how & what their children are learning and doing
- To understand and address gender differences in learning and performance
- To enable continuity between home, pre-primary and primary school
- To foster inclusion and use of mother tongue communication
- To help children learn to take care of themselves and each other and to resolve conflicts

.... and curricula, materials and pedagogy

- Children who use a large number and range of learning materials at age 4 have higher cognitive development at age 7
- Children who had higher educated teachers at age 4 perform better in language at age 7
- Where children are enabled to make choices about what they do *and* to work in small groups *at least 50% of the time* language and cognitive development are enhanced at age 7
- Where teachers and caregivers support children's learning in small groups, they are more able to support and respond to children's individual needs, abilities and diverse languages

See: IEA Preprimary Study, High/Scope Foundation, 2007. (15 country study)

What do we have in the Caribbean?

- Caribbean Learning Goals and Outcomes 0 to 8 years developed with 18 countries in 2004 - wellness, resilience, valuing culture, effective communication, intellectual empowerment, and respect for self, others and the environment – but, not all countries have the capacity to develop curricula or implement
- Teacher qualifications and caregiver certification – established in some countries but needing expansion and progression routes to degree level, not yet established in half the countries of the region
- A promising example: St Kitts Nevis' programme is impacting on the quality of learning environments.
www.cavehill.uwi.edu/bnccde/sk&n/conference/papers/JBrown.html

Pedagogy, Leadership, Structured support...the case of St Kitts Nevis

- In 1981, the Government collaborated with the High/Scope Foundation to train early childhood care-givers and teachers in the “Plan, Do, Review” pedagogy.
- Strong leadership by successive heads of early childhood education combined with Government support through policy, salaries, professional development, regulation, equipment and materials for centres
- In 2007, a survey of the quality of the learning environments found good quality in government centres but two thirds of private centres achieving only a minimal standard, reflecting challenges with overcrowding and insufficient learning activities

Quality of Early Childhood Learning Environments

St Kitts Nevis (Nov 2007): % of centres in each rating

Items	Inadequate	Minimal	Good	Excellent
Space & Furnishings	15	46	39	0
Personal Care	0	26	74	0
Language/Reasoning	2	35	46	17
Activities	26	46	28	0
Interaction	2	7	65	26
Programme Structure	9	19	39	33
Parents & Staff	15	52	33	0
TOTAL SCORE	4	54	42	0

Quality of Early Childhood Learning Environments

Windward Islands: % of centres in each rating

Country	Inadequate	Minimal	Good	Excellent
Antigua Barbuda 2007	59	39	2	0
Dominica 2007	59	35	6	0
Grenada 2005	54	18	10	18
St Kitts Nevis 2007	4	54	42	0

See Reports of the Surveys of the Quality of the Learning Environments in each country, Ministries of Education with support of UNICEF Barbados & Eastern Caribbean Office. The surveys used Early Childhood Environments Rating Scale – Revised Edition (1998) by Harms, Clifford and Cryer (*details in the notes*)

Teacher and caregiver training and qualification

Country	Formal qualification	In service training
Antigua Barbuda 2007	30%	18%
Dominica 2007	1%**	53%
St Kitts Nevis 2007	28%	55%

See Draft Early Childhood Policies for the respective countries,
Ministries of Education

** 50% by 2011, Associate Degree now underway at the State College

The challenge for early childhood education in the region

- 87% of services in 14 countries surveyed in 2006 are provided by community organisations, churches and private operators – governments need to develop policy and quality assurance systems
- Access to services across the region varies widely: day care and home visiting (5%-53%) and preschools (59%-95%) – affordability is an issue in expansion
- 6 countries provide **qualification** training for early childhood teachers; 3 countries require some post secondary training for lead staff at pre schools and 2 for day care centres - expansion of training needed on an equitable basis with primary education

The qualified early childhood teacher valued – case studies from Jamaica

- Does the type of training a teacher receives (primary or early childhood) really matter in the first two years of primary school?
- Early childhood trained teachers provide more appropriate pedagogy in Grades 1 & 2 e.g. organisation of learning environments, working with parents, facilitating children's choice of activities (Davies 2004)
- Quality of school leadership critical in the recruitment of and support for early childhood teachers in Grade 1 & 2 (Davies 2008)
- Improvement in Grade 1 Literacy and numeracy test scores – 20% higher results – after recruitment of early childhood trained teachers (Davies (2008))

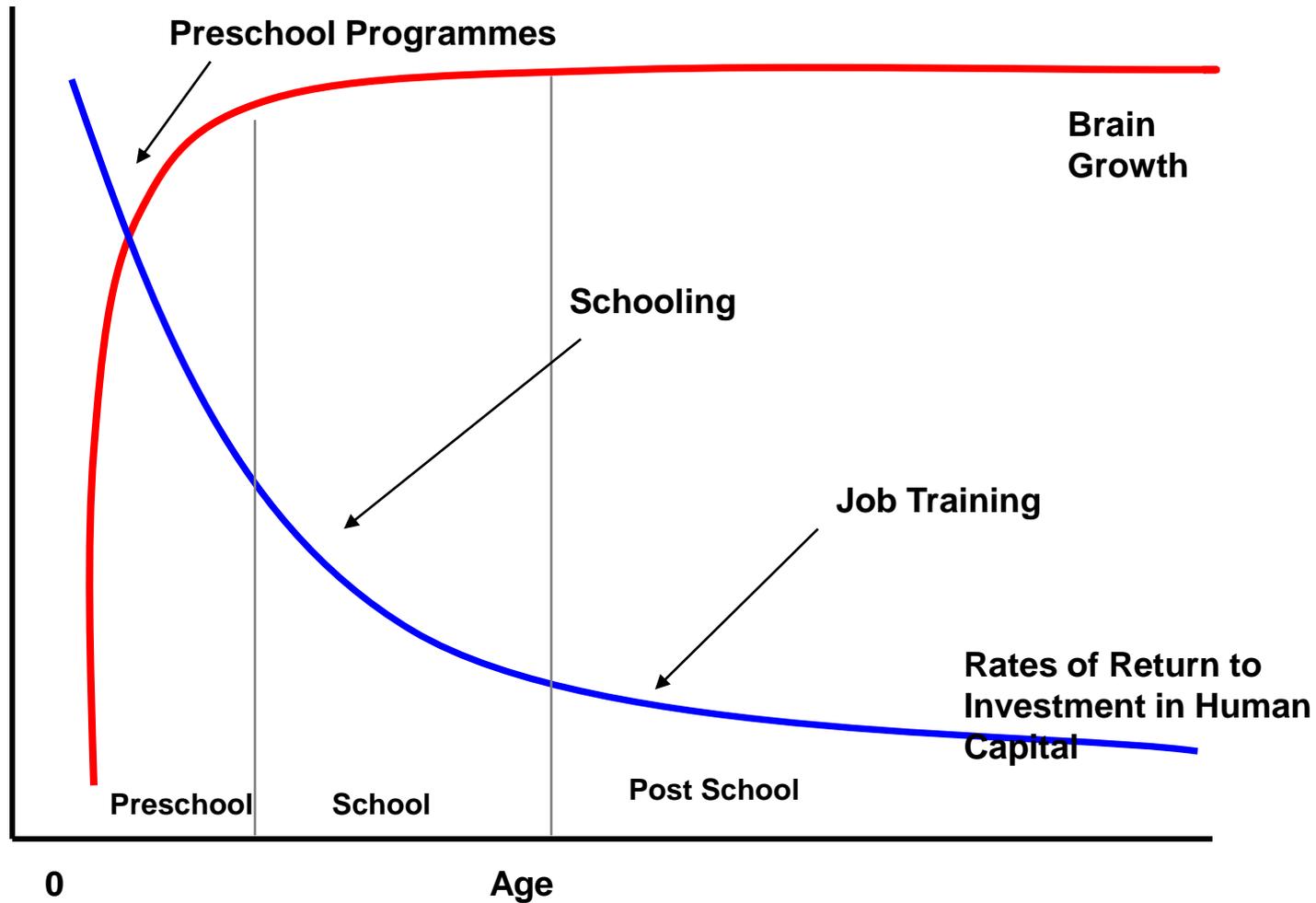
What does the early childhood teacher do *differently*? – case study responses

- His or her focus is child ***development***
- Children say learning in Grade 1 is doing things which are 'fun' - playing, doing games, reading stories
- In Grade 2, children say they like learning new things, parts of the body, singular and plurals
- Teachers observe that early childhood training enables effective response to children's learning needs through play and making learning fun
- Principal observes that early childhood trained teachers bring life to what they do (e.g. dramatisation), arrange the learning space/classroom dynamically to generate excitement and focus on work with parents

Call to action – for the early childhood teacher

- Support use of early childhood pedagogy in Grades 1 and 2 of primary schooling
- Access early childhood teachers to professional development and a seamless qualification structure
- Encourage membership of early childhood teachers in teaching unions
- Facilitate formal recognition and classification of early childhood teachers in the public service
- Participate in transition planning, primary schools and early childhood facilities, including joint orientation processes for parents and children

Brain Growth and Rates of Return



Source: Heckman & Carneiro Human Social Policy, 2003, RAND, Benefits and Costs of Early-Childhood Interventions, A Documented Briefing, Lynn A. Karoly, Susan S. Everingham, Jill Hoube, Rebecca Kilburn, C. Peter Rydell, Matthew Sanders, Peter W. Greenwood, April, 1997