









Research jointly supported by the ESRC and DFID

Multilingualism and Multiliteracy: Raising learning outcomes in challenging contexts in primary schools across India: *Project Rationale and Task Design*

Presentation at South Asia Panel Dr. Lina Mukhopadhyay

for Literacy Language and Development Conference 2017 tilingualism





INVESTIGATORS

• Professor lanthi Tsimpli Principal Investigator (PI), University of Cambridge, UK

 Dr. Lina Mukhopadhyay Co-Investigator (Co-I) & Presenter, The English and Foreign Languages University, Hyderabad, India

Other Co-Is

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Overview

Problem:

Causes of low learning outcomes of primary school children in multilingual India



Context:

Well-known
advantages to
being bilingual or
multilingual in
attention and
learning skills



Research question:

Why do some children in India not benefit from being bilingual or multilingual to the same degree as children in other contexts?

Team

Co-Investigator's

University of Reading

National Institute of Mental Health and Neuroscience (Bangalore)

Jawaharlal Nehru University (New Delhi)

The English & Foreign Languages University (Hyderabad)

Junior Researchers

India Partners

ASER

British Council

The Language and Learning Foundation

UK Partners

Bilingualism Matters@Reading

The Communication Trust

Reading Quest

University of Cambridge

7 consultants

(across the disciplines of linguistics, neuroscience, education and psychology)

- To explore how the complex dynamics of social, economic and geographical contexts affect the delivery of quality of multilingual education in India.
- To investigate how educational policy regarding the role of mother-tongue education (the three language formula) is implemented in schools, and how the language(s) of instruction impact on learning outcomes in basic literacy and numeracy but also higher level literacy skills expressed through critical thinking and problem solving in the language of education and in the development of English as a second language.

- To assess the cognitive abilities known to underpin learning and thought processes, such as working memory and executive control, in children educated in challenging contexts in India.
- To explore the relative contribution of geographic and socioeconomic factors of structural inequality in urban slums and remote rural areas to low levels of basic numeracy, literacy and dropout rates in these challenging contexts. To evaluate how negative consequences of these contextual factors on learning outcomes can be attenuated when mother-tongue education is available.

- To examine the link between the development of basic numeracy as well as understanding of mathematics with levels of math anxiety in school children as a function of gender inequalities over and beyond structural inequalities arising for children living in remote rural areas and urban slums.
- •To investigate the characteristics of teacher qualification and school pedagogies in the challenging contexts of urban slums and remote rural areas and effects on the teaching of literacy and numeracy on the development of critical thinking and problem-solving abilities.

- To invest in capacity-building through training RAs, Co-Is, junior researchers and PhD students in India in research ethics, design, methods, data entry and analysis. After initial training, Co-Is will be able to provide further training to further staff and students, leading to a significant future capacity building in India.
- To maximize the impact of our findings by engaging with policy-makers, educational charities, practitioners and teachers on specific policies to improve multilingual education in India and raise learning outcomes; to inform UK stakeholders about implications of the project for UK practice in educating children with English as an additional language in mainstream schools.

Target population

- 1200 children in 4th Std. to be tested at two time points (4th and 5th Std)
- 800 children living in urban areas in Delhi and Hyderabad (200 in slums, 200 in non-slums)
- 400 children living in rural areas in Bihar-Patna (200 in semi-urban, 200 in urban areas)
- Average ability children, no history of learning disabilities
- No children from upper end of middle class or above













Multilingualism and Literacy Project

Raising learning outcomes in challenging contexts in primary schools across India

Begin Trials

Before beginning trials ensure you have a backup copy of the data Forms will save over original data with the same filename should ammendments be needed

Surveys

Cognitive Tasks

Maths tasks

Language and Literacy Tasks

Surveys

Cognitive Tasks

Maths tasks

Language and Literacy Tasks

<u>Surveys</u>

Child Language Questionnaire

Household Questionnaire

Principle Questonnaire

Teacher Classroom Observation

Teacher Questionnaire

Surveys

Cognitive Tasks

Maths tasks

Language and Literacy Tasks

Cognitive Tasks

Ravens

Flankers

Mr X

N-Back

Surveys

Cognitive Tasks

Maths tasks

Language and Literacy Tasks

Maths_Tasks

ASER Numeracy

Maths Word Problems Std 4

Maths Word Problems Std 5

Maths Anxiety Questionnaire

Language and Literacy Tasks

<u>English</u>	<u>Hindi</u>	<u>Bhojpuri</u>	<u>Telugu</u>	<u>Other</u>
Narrative Telling				
Narrative Reteiling	Narrative Retelling	Narrative Retelling	Narrative Retelling	Narrative Retelling
Semantic Fluency				
ASER Literacy	ASER_Literacy		ASER_Literacy	ASER_Literacy