

MultiLila - Multilingualism and multiliteracy workshop

Multilingualism and educational challenges

28 and 29 November 2019, Fitzwilliam College, University of Cambridge

28 November, Thursday

9.00 - 9.30	COFFEE	
9.30 - 10.15	The MultiLila project	Ianthi Tsimpli (Cambridge)
10.15 - 11.15	Educating children with disabilities in	Nidhi Singal (Cambridge)
	India: a missed opportunity for systemic	
	educational reform	
11.15 - 11.30	COFFEE/TEA BREAK	
11.30 - 12.15	Do schools teach mathematics?	Minati Panda (JNU, Delhi)
	Redefining the learning goals for the	
	urban poor, migrants and multilinguals	
12.15 - 13.00	Language mixing and translanguaging:	Amy Lightfoot (British
	observations and possibilities	Council, Sri Lanka)
13.00 - 14.00	LUNCH	
14.00 - 14.45	Does narrative ability and story grammar	Lina Mukhopadhyay (EFL-U,
	knowledge differ in L1 and L2? A cross-	Hyderabad)
	lingual comparison of Indian learners	
	from challenging contexts	
14.45 - 15.30	Multilingualism and cognitive skills in	Suvarna Alladi (NIMHANS,
	school children in the MultiLila project	Bangalore)
15.30 - 16.00	COFFEE/TEA BREAK	
16.00 - 17.00	On the relationship between socio-	Cécile De Cat (Leeds)
	economic status and language exposure	
	as predictors of language proficiency in	
	bilinguals	
17.00 - 17.30	Wrap up	
19.00 - 19.30	DRINKS RECEPTION	
19.30 - 23.00	DINNER	

29 November, Friday

9.00 - 9.30	COFFEE	
9.30 - 10.30	The longitudinal relationship between	Ludovica Serratrice
	vocabulary and grammar in EAL learners	(Reading)
10.30 - 11.15	How ready are Indian children for English	Jeanine Treffers-Daller
	medium instruction? An analysis of the	(Reading)
	productive vocabulary of low SES children	
	in state schools in Hyderabad	
11.15 - 11.30	COFEE/TEA BREAK	
11.30 - 12.15	Reflections on a teacher training	Rama Mathew (Delhi)/Amy
	workshop on multilingual practices	Lightfoot (British Council)
12.15 - 13.00	Semantic fluency	Theo Marinis (Reading)
13.00 - 14.00	LUNCH	
14.00 - 15.00	From Mother Tongue instruction in	Ricardo Sabates
	Complementary Education into Official	(Cambridge)
	Language of Instruction in Government	
	Schools in Ghana: Does the pathway	
	make a difference to sustained literacy?	
15.00 - 15.30	COFEE/TEA BREAK	
15.30 - 17.00	Roundtable discussion: Language	Ganesh Devy, Dhir Jingran,
	challenges in Indian schools, chaired by	Ajit Mohanty
	lanthi Tsimpli	

ABSTRACTS

Educating children with disabilities in India: a missed opportunity for systemic educational reform

Professor Nidhi Singal, Faculty of Education, University of Cambridge (sn241@cam.ac.uk)

In India, over the past few years, a growing number of children with disabilities are attending mainstream schools. However, while there is evidence of increasing learner diversity in classrooms, there is little interrogation of how schools are responding to these changes. There is a lack of understanding of teachers' practices- what they say and do (or are unable to do) in creating inclusive learning environments. There is also very limited refection on the experiences of children, particularly as reflected in basic learning outcomes.

This presentation draws on both quantitative and qualitative across a range of research projects undertaken in different parts of India (extending to over a decade), particularly in government mainstream schools. Insights based on classroom observations and teacher interviews highlight the real challenges that teachers face while working in under-resourced classrooms, while also highlighting their limited repertoire of pedagogical skills. Children's performance on basic literacy and numeracy tests shows rather poor learning outcomes for many, but more so for children with disabilities.

Thus, while efforts in India are focused on including children with disabilities in mainstream classrooms, limited attention has been paid to asking questions such as, what is it that we are including these children into. This focus on *what* is significant given the growing dissatisfaction with the general education system in India. Rather programmes and interventions continue to be focused on 'fitting' children with disabilities into a mainstream system, which is fraught with systemic problems that remain largely unaddressed. Inclusive education demands a rethink of the mainstream education system, so that learning will be possible for all children, including those with disabilities.

Do schools teach mathematics? Redefining the learning goals for the urban poor, migrants and multilinguals

Minati Panda, School of Social Sciences, Jawaharlal Nehru University, Delhi

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Multilingualism in mathematics classrooms has been underpinned historically either by a deficit discourse that viewed languages other than the language of instruction as a "problem" or by sheer neglect of everyday multilinguality that has positive cognitive, social and academic affordances. Everyday literacy and numeracy practices are suppressed in favour of monolingual school practices as the former is believed to be interfering or delaying the learning of formal concepts and methods. In the last two decades, the everyday entered the school curriculum and textbooks of primary classes in India only to establish a bridge at the beginning of learning. This entry of everyday didn't value the language(s) in which the knowledge is coded, it rather entered through objects and experiences coded in the school language. The worse came in the current decade when the states like Delhi changed the medium of instruction from Hindi to English without any commitment to children's languages and everyday cognition. The present paper raises a fundamental question about if urban schools teach any mathematics to the poor who are migrants and multilingual often speak languages other than school language. It engages with mathematics learning at two levels: firstly, it presents the basic numeracy and meta-mathematics scores of poor and migrant children in Delhi against their cognitive, linguistic, socio-economic, curricular and pedagogic contexts and, secondly, it argues that the schools don't teach mathematics to the poor and migrants as they don't build on the linguistically and cognitively

developed conceptual capacities of these children. Both migration and poverty create certain kinds of opportunities for the children to develop advanced knowledge of quantities and relations early on in their lives. The capacity to compare, assess, metaphorize and translanguage develop more among these children. Unfortunately, these skills, as well as the knowledge, are underutilized because of schools' over-reliance on literacy skills, school-based algorithmic practices, use of fixed mathematical registers and monolingual or bilingual (in two dominant languages) ideology of the school.

The paper is based on a study carried out in three different sites in India although it uses the first phase data from only one site, Delhi. The students from class IV are administered various literacy, numeracy, working memory, and narrative retelling tasks. The language use practices of the classrooms and the socio-economic context of the children are also studied. The analysis of mean difference showed boys and the children from Hindi medium schools having an advantage over others in literacy and numeracy skill I and the boys and the slum children outperforming others in numeracy task II. The mean difference of gender and the school sites (slum and nonslum) was insignificant on Ravens and flankers test. The stepwise regression analysis reveals that the predictor variables, combined literacy skill, N back scores, gender, and ravens score explained a total of 51.5% of the variance in Numeracy I, combined literacy skill, N back scores and gender explained 27.1% variance in the numeracy II. In other words, the working memory, literacy skill and gender appear to be the strongest predictors of children's performance in the two numeracy tasks. However, the finding that the children performed better in the numeracy task II (word problems and meta-mathematics) that require complex mathematization when the questions are presented. The literacy development does not match the linguistic complexity of the word problems and metamathematical question. The better performance of children from Hindi medium schools and slum schools in subtraction task, word problems and metamathematics, a strong positive correlation between the mental state terms in Hindi and numeracy tasks and between working memory and multilinguality reveal that if the schools build mathematics pedagogy on the children's multilingual oral and metacognitive, the learning of mathematics will certainly be improved. The classroom language use data shows zero use of English in English medium schools in Delhi and teachers translanguaging in 60% of the time in mathematics class. The paper, therefore, raises serious doubts about the feasibility of running an English medium education in the school Government schools located in slums and poor neighborhood. It rather strongly recommends a shift in the language policy of the schools towards higher use of children's linguistic registers, metaphors, experiences and oral mathematical logic in the class. It recommends developing better reading and comprehension skills using multilingual pedagogy, building early mathematics pedagogy on the principles of oral mathematization and metacognition and avoiding coaxing children to use school registers only. A longer time span may be allowed for a shift from oral discourse to school mathematics registers than it is hitherto given. The learning goals, therefore, need to be seriously redefined and recontextualized in the case of urban poor, multilingual and migrants.

Language mixing and translanguaging: observations and possibilities

Amy Lightfoot, Regional Education and English Academic Lead (South Asia), British Council, Sri Lanka (<u>Amy.Lightfoot@britishcouncil.org</u>)

A key finding from the classroom observation data collected during the MultiLila project shows that teachers are regularly using two or more languages in English and maths subject classrooms this is true of teachers working in both English and regional medium instruction schools. However, what is not clear is how purposeful the use of this 'language mixing' is. This talk will explore the practices of translanguaging and language mixing, drawing on evidence to explore the different ways that this is used. It will also identify ways that we can support teachers to take a more structured approach to improve learning, giving examples of further work done in this area in India.

Does narrative ability and story grammar knowledge differ in L1 and L2? A cross-lingual comparison of Indian learners from challenging contexts

Dr. Lina Mukhopadhyay, Department of Training and Development, The English and Foreign Languages University, Hyderabad (<u>linamukhopadhyay@efluniversity.ac.in</u>)

Children from multilingual backgrounds have been found to enjoy cognitive flexibility benefits over their monolingual counterparts. However in some contexts of second and foreign language learning such benefits do not seem to be very distinctly found. There could be a host of reasons like low SES, quality of input in instructional contexts, and language policy and prestige associated with learning the second/foreign language to explain the absence of such benefits. We explore the context of India with regard to children who study in challenging contexts with low SES family background and very little exposure to school skills outside of the classroom. We examine the multilingual resources of such children in L1 and L2 as expressed through their narrative abilities and attendant cognitive skills to make connections between the elements of story grammar or the macro structure of narratives.

The presentation will focus on cross-linguistic narrative abilities and macro structure knowledge of 270 children aged between 8 years and 11 years in any one of the three languages - English, Hindi or Telugu - based on an oral retelling task of two stories from the Multilingual Assessment Instrument for Narratives manual (2012). Narrative abilities need to deploy both linguistic and cognitive skills and are acquired early on owing to the oral tradition of using narration as a life experience. The cross-linguistic comparisons of children's performances will help us answer the following research questions:

- (i) Are narrative abilities as macro structure knowledge and (lexical knowledge related to accessing the theory of mind) comparable across L1 and L2 of young ESL learners?
- (ii) What role does individual multilinguality play in narration?
- (iii) Can SES and quality of instructional input explain the levels of linguistic and cognitive abilities as employed in narrative retelling in L1 and L2 of these multilingual learners?

Multilingualism and cognitive skills in school children in the MultiLila project

Professor Suvarna Alladi, National Institute of Mental Health and Neuro Sciences (alladisuvarna@hotmail.com)

Research suggests that multilingualism is associated with a cognitive advantage in children, especially in the domains of cognitive control and working memory/executive functions. The advantage has been attributed to the constant monitoring and switching between languages by multilinguals. This raises the possibility that multilingualism could potentially influence learning outcomes in children studying in multilingual environments. However, several other important factors are known to affect learning outcomes, such as socio-economic, demographic, cognitive and pedagogic factors. In the Multilia project, one of the aims was to study the relationship between multilingualism and cognitive skills in socio-demographically and linguistically diverse contexts of primary school children in India. All children were evaluated using cognitive tasks that measured general intelligence, updating, inhibitory control and semantic fluency. 852 children studying in schools with English or Hindi/Telugu as medium of instruction, were evaluated in the cities of Delhi and Hyderabad. 352 (41.3%) were multilingual and used more than one language at home. In this talk, we will report the relationship between multilingualism and cognitive skills in the two different cities, and across sociodemographic factors. We will discuss whether a cognitive benefit was found under any specific circumstances for multilinguals. This will enable a deeper understanding of the interplay between multilingualism, cognitive factors and how these affect children's learning outcomes, in the Indian context.

On the relationship between socio-economic status and language exposure as predictors of language proficiency in bilinguals

Professor Cécile De Cat, Director of Language@Leeds, Linguistics & Phonetics, School of Languages, Cultures and Societies, University of Leeds (C.DeCat@leeds.ac.uk)

Many studies report that socio-economic status (SES) predicts language proficiency both in monolinguals and in bilinguals. This has been shown with respect to vocabulary [1], morphosyntax [2] and receptive grammar skills [3]. SES is usually interpreted in this context as a proxy for input quality [4], although there is as yet no consensus on how this should be measured. It is also unclear how SES itself should be operationalised: should it be based on affluence measures (such as parental occupation)? on parental education? on composite measures?

In this presentation, I compare three alternative measures of SES as predictors of language proficiency in English as the school language in 5- to 7-year-old bilinguals (assessed via a Sentence Repetition test [5]): (i) parental occupation, (ii) a composite measure of parental occupation and education, and (iii) a composite measure based on indicators of low SES risk.

On the assumption that the impact of input quality will be modulated by input quantity, I explore the relationship between SES and cumulative English exposure, and show that the two interact in complex ways. On the assumption that some language phenomena require more input than others [6], I also explore whether SES and cumulative exposure have a stronger impact on aspects of language that remain challenging for monolingual children with comparable amounts of cumulative exposure to English. Timing of acquisition is operationalised as (i) Difficulty Level in the Sentence Repetition test, and (ii) accuracy scores focusing on different dimensions (lexical, inflectional, functional).

[1] Hoff (2006); [2] Chiat & Polišenská (2016); [3] Gathercole et al (2016); [4] Hart & Risley (1995); [5] Marinis & Armon-Lotem; [6] Tsimpli (2014)

The longitudinal relationship between vocabulary and grammar in EAL learners

Professor Ludovica Serratrice, Centre for Literacy and Multilingualism and School of Psychology & Clinical Language Sciences, University of Reading (<u>l.serratrice@reading.ac.uk</u>)

A robust finding in the developmental literature is the positive correlation between lexical and grammatical skills that has been observed both in monolingual [1] and in bilingual children [2]. What is less clear is the directionality of the developmental relationship between vocabulary and grammar, i.e. whether the size of children's vocabularies determines their grammatical knowledge, whether their grammatical skills predict their vocabulary size, or whether both are mediated by a third factor [3][4]. Little is yet known about the vocabulary-grammar relationship in longitudinal studies of children with English as an Additional Language (EAL) by the time they enter formal education, and this is where this study makes a novel contribution.

In this talk I will report the findings of a longitudinal study of 89 EAL learners tested three times at 6-monthly intervals over the first two years of primary school in England. Measures of vocabulary breadth, vocabulary depth and grammar were collected at all time points and measures of English input at time 1. A series of bivariate growth models showed a correlation between levels of vocabulary and levels of grammar knowledge, but failed to show any correlation between their growth, suggesting that vocabulary and grammatical skills are correlated in EAL children, but these abilities grow independently. English input at time 1 predicted higher levels of both vocabulary and grammar and also steeper growth in vocabulary depth.

[1] Dale, P. S., Dionne, G., Eley, T. C., & Plomin, R. (2000). Lexical and grammatical development: A behavioural genetic perspective. Journal of Child Language, 27(3), 619-642.

- [2] Kohnert, K., Kan, P. F., & Conboy, B. T. (2010). Lexical and grammatical associations in sequential bilingual preschoolers. Journal of Speech, Language, and Hearing Research, 53(3), 684-698
- [3] Hoff, E., Quinn, J. M., & Giguere, D. (2018). What explains the correlation between growth in vocabulary and grammar? New evidence from latent change score analyses of simultaneous bilingual development. Developmental Science, 21(2), e12536.
- [4] Brinchmann, E. I., Braeken, J., & Lyster, S. A. H. (2019). Is there a direct relation between the development of vocabulary and grammar? Developmental Science, 22(1), e12709.

How ready are Indian children for English medium instruction? An analysis of the productive vocabulary of low SES children in state schools in Hyderabad

Professor Jeanine Treffers-Daller, Department of English Language and Applied Linguistics, University of Reading (j.c.treffers-daller@reading.ac.uk)

In this paper I will argue that the vocabulary knowledge of primary school children in Grades 4 and 5 in India is unlikely to be sufficient to understand aural and written language in the EMI classroom. The data stem from stories and ASER literacy scores from 89 children in primary schools in Hyderabad, which will be analysed with respect to their lexical complexity. Discrepancies in children's own productive vocabularies and the words that are used in the textbooks will be highlighted, and implications for EMI practice in primary schools will be formulated.

Reflections on a teacher training workshop on ML practices

Professor Rama Mathew, University of Delhi (<u>mathewrama@gmail.com</u>) Amy Lightfoot, Regional Education and English Academic Lead (South Asia), British Council, Sri Lanka (Amy.Lightfoot@britishcouncil.org)

This presentation aims to look a little critically at the two day teacher training workshop that was conducted for 20 odd teachers in Hyderabad in February 2019 and the subsequent follow-up work we did with some of the teachers. While the workshop introduced teachers to strategies of enhancing multilingual practices in the classroom and provided opportunities to actually practise some of them in micro-teaching contexts, some questions remained unanswered about teachers' earlier orientation to (good) teaching making it difficult for them to absorb and use ML practices.

The follow-up work with four teachers in two schools (in this case) including classroom observation and discussion with teachers afterwards, revealed some interesting insights that we need to critically examine. For example, how important is it for the teacher to have had an experience of ML practices during her school education to be fully convinced of the need to adopt such strategies? In low-cost EM schools, it seemed as though children, even with 3 years of EMI, had become incapable of using either English or their MT even for basic purposes.

We will discuss these issues with actual examples from the workshop as well as the follow-up activities.

Multiliteracy in the UK in action: learning to read in the home language supports literacy skills in the majority language

Professor Theo Marinis, Department of Linguistics, University of Konstanz and University of Reading (<u>t.marinis@uni-konstanz.de</u>)

Growing up bilingually and acquiring two languages in their spoken and sometimes written form has been shown to influence literacy development positively (Durgunoglu, Nagy and Hancin-Bhatt, 1993; Niolaki and Masterson, 2012). However, it is not clear whether learning to read in the

home language supports literacy skills in the majority language and whether this changes over time. In this talk I will present results from a short longitudinal study addressing language and literacy development in primary school children in the UK who acquire Greek as a home language and English as a majority language compared to monolingual English children. 40 Greek-English speaking children and 40 monolingual English speaking children participated in the study when they were in Year 1 and 3 in primary school and then again when they were in Year 2 and 4. They completed tasks measuring phonological awareness and reading decoding in Greek, the home language and English, the majority language. Parents completed the LITMUS-PABIQ questionnaire (Tuller, 2015) to obtain language history/use data. The Greek-English children were dominant in Greek before entering primary school but they were dominant in English at the time of testing. In line with their language dominance, their performance was better in English than Greek across school years and tasks. Importantly, bilingual children were more accurate than monolingual English children in phonological awareness and reading decoding tasks. The results confirm that language dominance affects language and literacy development and suggest cross-language transfer of phonological awareness and reading decoding skills. Reading instruction and/or learning to read in a language with transparent orthography (Greek) can benefit literacy development of a language with opaque orthography (English).

From Mother Tongue instruction in Complementary Education into Official Language of Instruction in Government Schools in Ghana: Does the pathway make a difference to sustained literacy?

Dr. Ricardo Sabates, Faculty of Education, University of Cambridge (<u>rs867@cam.ac.uk</u>) Co-authors: Emma Carter, Pauline Rose, Kwame Akyeampong

This paper presents evidence on literacy trajectories for children in Ghana who enrolled in a Complementary Basic Education programme taught in mother tongue and transitioned into government schools. At the point of transition, we find that children who enrolled in government schools where the language of instruction differed from instruction in their mother tongue did not perform as well in literacy. After a year in government schools, those taught in another local language caught up. By contrast, those who transitioned into English did not. Our evidence reinforces the benefits of mother tongue and local language instruction for progress in literacy.