

16 DECEMBER 2011

9:00am – 17:30pm

NIE3-01-LT9

# Becoming Biliterate in Singapore

A Symposium on Sociolinguistic,  
Psychological, and Educational Studies  
of Biliteracy

**CENTRE FOR RESEARCH IN PEDAGOGY AND PRACTICE  
NATIONAL INSTITUTE OF EDUCATION**

华文 Biliterate  
Dwibahasa  
Bahasa Melayu English தமிழ் 双语  
பைலிடரேட்

An Institute of



[www.nie.edu.sg](http://www.nie.edu.sg)

# Becoming Biliterate in Singapore

16 DECEMBER 2011  
9:00am – 17:30pm  
NIE3-01-LT9

Time	Event	Speaker
9:00-9:20	Welcome Address	<b>Lee Wing On</b> Professor and Dean Office of Education Research National Institute of Education
9:20-10:20	Diversity and Overlap in Literacy Skills for Children Learning L1 Chinese and L2 English: Implications for Educators	<b>Catherine McBride-Chang</b> Professor, Department of Psychology & Director, the Developmental Centre The Chinese University of Hong Kong, Hong Kong
10:20-10:50	Tea Break	
10:50-11:50	Predicting Spelling Development in Specific Types of Bilingual Children	<b>Susan Rickard Liow</b> Associate Professor, Department of Psychology & Programme Director for MSc (Speech and Language Pathology), DGMS, Yong Loo Lin School of Medicine National University of Singapore
11:50-12:30	Private Language Management in Singapore: Which Language to Practice and How	<b>Xiao Lan Curdt-Christiansen</b> Assistant Professor English Language & Literature Academic Group National Institute of Education
12:30-13:30	Lunch	
13:30-14:30	Variations in Second Language Reading Development: Transfer, Accommodation and Assimilation	<b>Keiko Koda</b> Professor of Second Language Acquisition and Japanese Department of Modern Languages Carnegie Mellon University, USA
14:30-15:10	Biliteracy Learning as Curricular Appropriation: Effects of a Culturally-Responsive Pedagogy	<b>Lawrence Jun Zhang</b> Associate Professor English Language & Literature Academic Group National Institute of Education
15:10-15:40	Tea Break	
15:40-16:20	The Neural Network of Reading Changes with Experiences: Evidence from Cross-Linguistic Studies	<b>Fan Cao</b> Nanyang Assistant Professor Division of Linguistics and Multilingual Studies Nanyang Technological University
16:30-17:30	Roundtable Discussion: Nurturing Biliteracy among Children in Singapore	All speakers and the audience

# DIVERSITY AND OVERLAP IN LITERACY SKILLS FOR CHILDREN LEARNING L1 CHINESE AND L2 ENGLISH: IMPLICATIONS FOR EDUCATORS

**Dr. Catherine McBride-Chang**

Professor, Department of Psychology & Director, the Developmental Centre  
The Chinese University of Hong Kong

To what extent do literacy skills in diverse languages overlap and develop, and how should they be taught? To address these issues, I will present analyses from data on Chinese children in Hong Kong and Beijing on a) percentage of overlap and characteristics of poor word recognition in first language (L1) Chinese and/or second language (L2) English and b) longitudinal predictors of writing composition in Chinese and English. Our data show that the overlap in the status of “poor reader” in Chinese and English is only moderate and that those who are poor in reading words in both orthographies tend to be particularly slow compared to any other group. Reading difficulties in Chinese may be associated with a greater variety of cognitive difficulties (i.e., multiple deficits) than are those in English. At the higher-order level of writing composition, among these native Chinese speakers in our longitudinal study, longitudinal correlates center on fluency in L1 Chinese and knowledge of L2 English vocabulary words in English. Findings suggest several approaches to biliteracy teaching of young (kindergarten and primary school level) children: First, aspects of phonological awareness, morphological awareness, and orthographic processing should all be explored when teaching those with specific word learning difficulties. For children with reading difficulties, implicit patterns should be made explicit as much as possible. Second, fluency should be targeted at all levels of literacy training. Third, writing is a window into literacy skills at multiple levels and should be encouraged as much as possible. As teachers encourage this writing, they should conceptualize it as representing at least two separate processes, i.e., first-draft writing as a free-flowing of ideas, and editing as a more mechanical process. All three of these emphases apply to literacy skills development in both L1 and L2.



## About the Speaker

Catherine McBride-Chang earned a B.A. in psychology at Oberlin College and received her Ph.D. in developmental psychology in 1994 from the University of Southern California. She then went on to be a Postdoctoral Fellow at Florida State University, sponsored by the McDonnell Foundation's Cognitive Studies for Educational Practice. In 1996, she moved to The Chinese University of Hong Kong, where she is presently a professor and director of the Developmental Centre on campus. McBride-Chang is particularly interested in reading development and impairment across cultures, languages, and orthographies. She has served on grants for the governments of Hong Kong, China, Australia, and the United States. She has also published papers on various aspects of reading related specifically to Chinese, Korean, Dutch, English, Hebrew, and Spanish, as well as on some large-scale cross-cultural literacy data sets with more than 200,000 participants. McBride-Chang has published approximately 130 articles on a variety of topics in developmental psychology, including parenting, child abuse, peer relations, creativity, and reading development and impairment. She has also edited one book (2003, Praeger) entitled *Reading Development in Chinese Children* (with Professor H.-C. Chen) and written one book entitled *Children's Literacy Development* (2004, Oxford University Press). Catherine McBride-Chang currently serves on the Research Grants Council Grants panel in Hong Kong and acts as an Associate Editor for *Developmental Psychology*, the *Journal of Research in Reading*, and *Reading and Writing*, in addition to the Education section of the 2nd edition of Elsevier's *International Encyclopedia of the Social and Behavioral Sciences*. She also serves on the editorial boards of the *Journal of Experimental Child Psychology*, *Scientific Studies of Reading*, *Reading Research Quarterly*, *Journal of Educational Psychology*, and the *Educational Researcher*. She is a Fellow of the Association for Psychological Science and is Incoming President of the Society for Scientific Studies of Reading.

# PREDICTING SPELLING DEVELOPMENT IN SPECIFIC TYPES OF BILINGUAL CHILDREN

**Dr. Susan Rickard Liow**

Associate Professor, Department of Psychology &  
Programme Director for MSc (Speech and Language Pathology), DGMS,  
Yong Loo Lin School of Medicine  
National University of Singapore

Proficient spelling is a critical component of fluent writing and academic achievement. Learning to spell in English is an especially difficult task because the mappings between speech sounds (phonology) and letters (orthography) are not always predictable (Seymour et al, 2003). Despite this, the main conclusion from research on unilingual speakers is that sublexical-phonological processing ability, particularly phoneme awareness, is the best predictor of both reading and spelling skills (e.g., Byrne, 1998; Caravolas et al, 2001). This finding is important for optimizing self-teaching (Shahar-Yames & Share, 2008), routine classroom teaching (Rayner et al, 2001), and children at-risk of difficulties (Hatcher et al. 1994). However, early linguistic experience has an impact on the cognitive processes that are developed for reading and spelling (Caravolas & Bruck, 1993). This suggests there should be predictable differences in the visual-phonological processing balance for different types of bilinguals learning English even when they are studying in the same classroom.

During the presentation, I will summarize the results of six experiments on the balance between lexical-orthographic and sublexical-phonological processing for Mandarin-L1, English-L1 and Malay-L1 children learning to spell in English in Singapore. An experiment on the development of phonological awareness in Mandarin-English speaking children will be used as the starting point (Yeong & Rickard Liow, submitted), and then three investigations of local kindergarten children's spelling will be described with particular reference to the impact of home languages on phonological representations (Rickard Liow & Lau, 2006; Yeong & Rickard Liow, 2010; 2011). Findings from two studies of primary school children's spelling (Rickard Liow & Poon, 1998; Rickard Liow, Wong, Yap & Tng, submitted) will then be presented as evidence that the processing diversity observed in kindergarten children is enduring. The practical implications from this series of experiments will be considered and opened for discussion.



## About the Speaker

After her PhD in Cognitive Neuropsychology (London), Susan trained and worked as a Clinical Psychologist in the UK NHS. She has taught a range of undergraduate modules in abnormal and cognitive experimental psychology at the National University of Singapore (NUS) over the past 20 years and supervises postgraduate research on language processing in Mandarin, Malay and English. Since 2007 she has held a joint appointment as Programme Director of the Masters (Speech and Language Pathology) in the Yong Loo Lin School of Medicine <http://www.med.nus.edu.sg/dgms/SLP.shtml>, and as Associate Professor of Psychology <http://www.fas.nus.edu.sg/psy/people/aprof.html>. Her main research interests are cross-linguistic comparisons of normal and abnormal language, reading and spelling in children and adults.



# PRIVATE LANGUAGE MANAGEMENT IN SINGAPORE: WHICH LANGUAGE TO PRACTICE AND HOW

**Dr. Xiao Lan Curdt-Christiansen**

Assistant Professor, English Language and Literature Academic Group  
National Institute of Education, Singapore

Drawing on the theoretical framework from language policy and home literacy practices as the analytical tools, this inquiry explores and documents how Family Language Policy (FLP) is planned and managed by 284 sets of parents of primary 1 children in Singapore with regard to parental involvement and investment in their children's language and literacy education. Examining the characteristics of Singapore's multilingual nature and cultural diversity, this talk focuses on the extent to which language policies at governmental and institutional levels influence and interact with family language policies, and how these interactions between macro-level language policies and micro-level management in private domains influence the patterns of language practice of bilingual families. Data sources include the de facto language practices in home domains, and the explicit and observable language management, such as biliteracy resources and private tutoring, provided by parents. The study indicates that the disparate language managements, employed by parents from different socio-economic backgrounds, reflect a complex mosaic of practices evoked by the political structure in this multilingual society. The results of the study suggest that Singapore's educational system and medium of instruction policy, which emphasize meritocracy and priority of English language, may continue to perpetuate social inequality through unequal access to schools of quality, private language management instruments and natural language inputs.



## About the Speaker

Xiao Lan Curdt-Christiansen received her PhD from McGill University in Montreal, Quebec, Canada. Currently she is assistant professor at the National Institute of Education, Nanyang Technological University in Singapore where she teaches undergraduate and graduate courses in language and literacy education. Her research encompasses ideological, socio-cultural-cognitive and policy perspectives on language learning with particular focus on children's bilingual education and biliteracy development. She has been involved in several largely funded local and international research projects. Presently, she is a PI of a bilingual research project examining the relationship between primary school children's metalinguistic awareness and academic performance in Singapore. Her publications have appeared in *International Journal of Educational Research*; *Language Policy*; *Canadian Modern Language Review*; *Language and Education*; *Language, Culture and Curriculum*; *Sociolinguistic Studies and Heritage Language Journal*.





# VARIATIONS IN SECOND LANGUAGE READING DEVELOPMENT: TRANSFER, ACCOMMODATION AND ASSIMILATION

**Dr. Keiko Koda**

Professor of Second Language Acquisition and Japanese  
Department of Modern Languages  
Carnegie Mellon University, USA

The ultimate goal of reading is to construct text meanings based on visually encoded text information. Extracting linguistic information from print is an essential requisite in all languages, but the procedure optimal for this operation varies from one language to another. Such variation has significant implications for second-language reading research and instruction. Unlike monolingual reading, second-language reading entails continual interaction between transferred first-language skills and second-language print input and incessant adjustments in accommodating the disparate demands each language imposes.

In this talk, I will explain how second-language reading development is constrained by language-specific demands both within and across languages, and how such constraints engender systematic variations in learning to read across diverse learner groups. I will then discuss their implications for second-language reading instruction and assessment.



## About the Speaker

Keiko Koda is Professor of Second Language Acquisition and Japanese in the Department of Modern Languages at Carnegie Mellon University. Her major research interests include second language reading, biliteracy development, psycholinguistics, and foreign language pedagogy. She has been involved in a number of projects related to second language reading research and assessment in collaboration with Development Associates, Center for Applied Linguistics, Educational Testing Service, American Council on the Teaching of Foreign Language, and the US Department of Education among others. She has served as a member of the editorial boards of many highly regarded journals, including *Reading Research Quarterly*, *Reading and Writing*, *Research in Second Language Learning*, and *International Review of Applied Linguistics in Language Teaching*. She was also a member of the National Literacy Panel. She has edited and co-edited special issues of *Language Learning* and *Reading in a Foreign Language*. Her recent publications include *Insights into Second Language Reading* (Cambridge University Press, 2005), *Reading and Language Learning* (Blackwell, 2007) and *Learning to Read Across Languages* (Routledge, 2008).

# BILITERACY LEARNING AS CURRICULAR APPROPRIATION: EFFECTS OF A CULTURALLY-RESPONSIVE PEDAGOGY

**Dr. Lawrence Jun Zhang**

Associate Professor

English Language & Literature Academic Group  
National Institute of Education, Singapore

Literacy learning is often reported as a challenge to many learners in schools (Snow, 1998). The level of difficulty exacerbates when learners are “coerced” to learn two languages without a choice, as is the case in Singapore. This is because some learners have low levels of motivation for learning the “other” “less important” language due to the dominant use of English in society at large. Mandated in the national curriculum as part of a state language policy, all school-age children attending state schools are required to learn two languages as their regular curriculum contents. These two languages are ultimate determinants to the learners’ success in gaining admission to local universities. Hence the importance attached to the two languages is never under-estimated by parents. Given the unique linguistic and cultural background, against which a government-designated bilingual policy has been implemented since early 1980s, how to help bilingual/biliteracy learners achieve success through a culturally-responsive pedagogy in the classroom becomes significantly essential. In this talk I report on an intervention study focusing on improving reading and writing performance of Singaporean bilingual/biliteracy learners in two elementary schools through the use of a “culturally responsive” pedagogy. I will also discuss the implications of such a pedagogy for schools whose operations share similarities with the two participating schools.



## About the Speaker

Lawrence Jun Zhang (PhD) is Associate Professor at NIE-Nanyang Technological University. His interests lie in learner metacognition, language/literacy pedagogies, language-teacher cognition, and NNEST identities in New English contexts. He serves on editorial boards of *RELC Journal*, *TESOL Quarterly*, and *Metacognition & Learning*. Having published articles in *Applied Linguistics Review*, *Language Awareness*, *Language & Education*, *Instructional Science*, *Journal of Second Language Writing*, and *Journal of Psycholinguistic Research*, he has recently co-edited a book, *Asian Englishes: Changing Perspectives in a Globalised World* (Pearson, 2011). The recipient of the “TESOL Award for Distinguished Research 2010” for his article published in *TESOL Quarterly* (44:2) by the TESOL International Association (USA), he is Principal Investigator of an MOE/OER-funded project, “Enhancing Singaporean Students’ Motivation, Efficacy, Engagement, and Self-Regulation for More Effective Bilingual/Biliteracy Learning.”

# THE NEURAL NETWORK OF READING CHANGES WITH EXPERIENCES: EVIDENCE FROM CROSS-LINGUISTIC STUDIES

**Dr. Fan Cao**

Nanyang Assistant Professor  
Division of Linguistics and Multilingual Studies  
Nanyang Technological University

Typical reading acquisition and reading development is associated with specialization to one specific writing system at the neurological level. In the talk, I will address this issue by comparing reading development in two very contrastive writing systems: Chinese and English. Chinese reading development is characterized by increased involvement of visuo-orthographic areas in both hemispheres and decreased involvement of phonological region in left superior temporal gyrus. English reading development is characterized by increased involvement of orthographic and phonological areas in the left hemisphere and decreased involvement of non-linguistic visual processing in the right hemisphere. When there is a reading disability, reduced activation has been found in orthographic and phonological regions in English and Chinese. Reading disability is associated with a failure of specialization to one specific writing system.



## About the Speaker

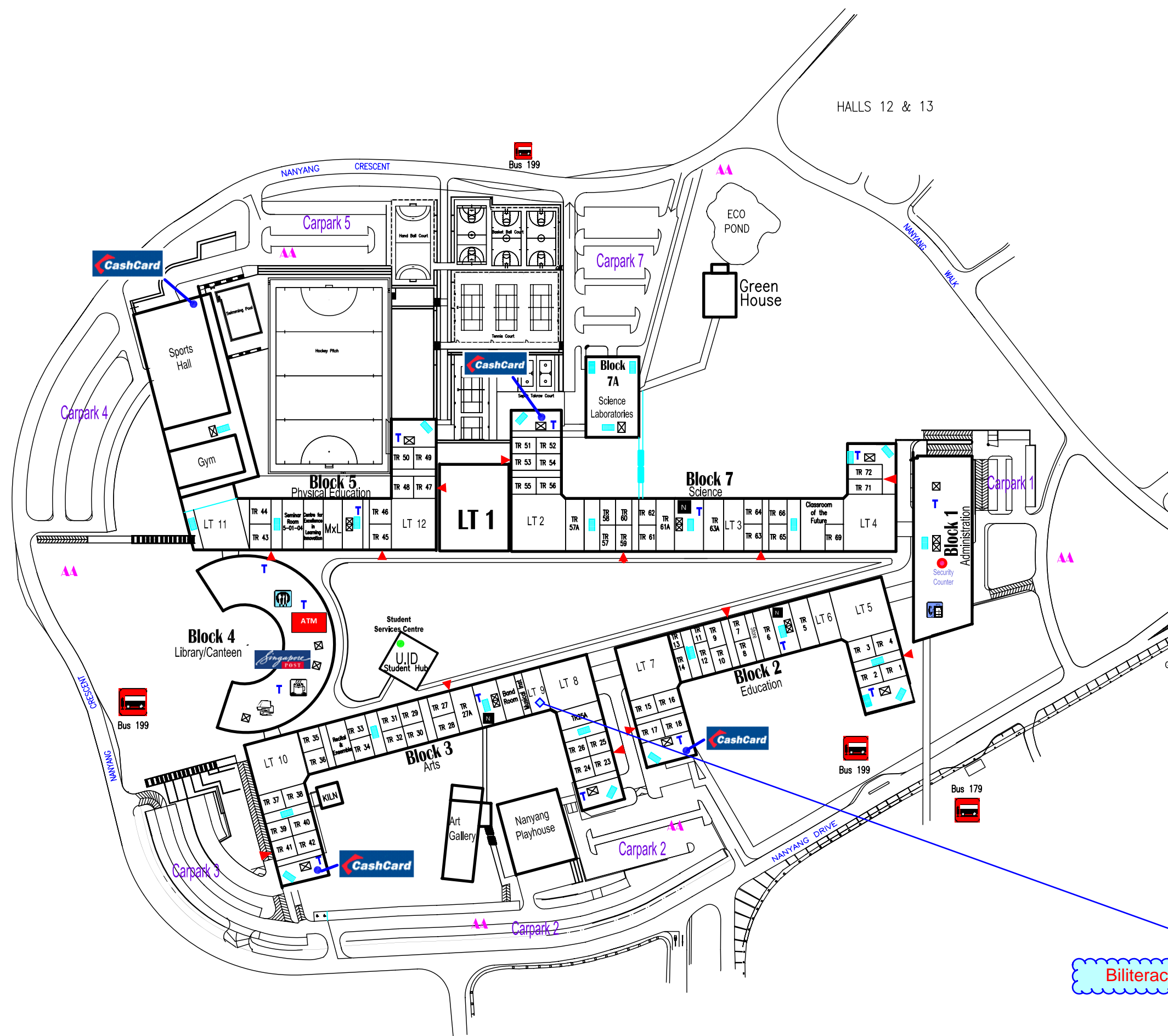
Fan Cao received her PhD from the Department of Communication Sciences and Disorders, Northwestern University in 2009. She worked with Dr. Charles Perfetti as a post-doc for two years at Learning Research and Development Center, University of Pittsburgh. Currently, Fan is a Nanyang Assistant Professor at the Division of Linguistics and Multilingual Studies, Nanyang Technological University. She is interested in Developmental Cognitive Neuroscience and Educational Neuroscience in general. Her research areas include reading development and disorders, and second language learning using fMRI and ERP.



# NIE Location Map

## LEGEND

	Assembly Area for Emergency Evacuation
	Book Shop Block 4, Basement 1
	Bus Stop Bus Service 199 & 179
	Cash Card Top Up Blocks 2, 3, 5 & 7 Basement level
	Cafe Block 4, Level 3
	Canteen Block 4, Basement 1
	Emergency Phone Dial 3999 or 3000
	Lift
	Public Phone
	SAM Machine Block 4, Level 1
	Toilet All levels at lift lobby and both ends of building
	DBS/POSB ATM Block 4, Level 1
	Nursing Room Blocks 2, 3 & 7, Level2



All Lecture Theatres and Tutorial Rooms are located at Plaza Level 1st Storey except for:

- NIE3-B1-17 and NIE3-B1-22 @ Block 3 Basement 1
- NIE3-02-03 @ Block 3 Level 2
- TR573 and TR574 @ Block 5 Basement 1

**Biliteracy Symposium Venue**