

| |
|---|
| Reference: CUHK402-HSS-12 <i>please insert ref. above</i> |
|---|

The Research Grants Council of Hong Kong
Prestigious Fellowship Scheme under the Humanities and Social Sciences Panel
Completion Report
(for completed projects only)

Part A: Project and Award Holder

1. Project Title

A Review of "Universal" Models of Word Reading in Relation to Chinese Learning
Ref. No.: CUHK402-HSS-12

2. Award Holder and Academic Department/Unit Involved

| Name/Post | Unit/Department/Institution | Contact Information |
|------------------------------------|-----------------------------------|---|
| Catherine A. McBride, Professor | Department of Psychology/ CUHK | Office: Rm 359, Sino Building, CUHK email: cmcbride@psy.cuhk.edu.hk |

5. Workplan

5.1 Workplan as per original application

1. Gather both empirical and review papers and chapters to integrate into my proposed review paper
2. Create five tables from the literature search on different studies highlighting the importance of word vs. character learning, radical awareness, morphological awareness, and nonlinguistic (mostly visual or writing) skills and a table highlighting similarities and differences of Chinese expert and developing readers as compared to alphabetic expert and developing readers in other aspects as well
3. Create online website identifying practical aspects of many of our research studies and those of others on young Chinese children's earliest literacy development.
4. Write the review paper on universals and specifics of Chinese literacy development and impairment as compared to those from alphabetic orthographies

5.3 Realisation of the workplan

(maximum 2 pages; please state how and to what extent the work as stated in the workplan has been achieved; give reasons for under-achievements and outline attempts to overcome problems, if any)

I focused on all four aspects of the workplan. A significant amount of my time was spent in gathering various references on reading of Chinese by adults and children and by native and non-native speakers of Chinese. I produced several tables from this synthesis. At the same time, however, I realized that for the final review paper, what was required was not so much a synthesis of all of this work but, rather, illustrations of each of the points I was arguing in the review paper. Thus, the final review paper contains two tables on semantic radicals and on characters, respectively, and two figures, showing, respectively, how radicals, characters, and words interact and also some differences between simplified and traditional characters in appearances. The tables I have retained for reference. However, ensuring an exhaustive list of all studies for these tables was challenging. Ultimately, in the workplan, points 1 and 2 were merged, as I reviewed papers and worked on tables to note trends simultaneously.

Point 3 of the work plan was ultimately the most challenging and rewarding for this fellowship. I wanted to create a website that would be of use to the general public based mostly on research I have carried out with colleagues in the past 15 years or so. The text, layout, and sections were carefully planned. It is available here:

<http://chinesearlyliteracy.co.nr/>

At the time of the write up of this report, the site has been viewed by over 3700 users. The illustrations and Chinese translations were created by my Research Assistant, Ms. Natalie Wong. Once we had the basic text, set-up, and design, I sought feedback on the website in all aspects from colleagues and former students, and we responded to suggestions for improvement of it by changing some of the content and illustrations slightly.

Creating this website meant that I had to identify all published papers of mine that dealt with preschool (i.e., kindergarten level) reading skills for Chinese children and then summarize findings from each for the layman. I also organized these papers, totaling approximately 45, into different areas of research. Perhaps most importantly, I reflected on these papers and on what, ultimately, these individual research findings have to offer the public, both preschool teachers and parents (in addition to beginning learners of Chinese) vis-à-vis helping beginning Chinese learners to learn better. "Learning tips" on the website summarizes these conclusions. This aspect of the fellowship took quite awhile to implement, and we are still adjusting the website to accommodate to suggestions of others. For example, we are starting a blog attached to the website, where I and other colleagues (friends, former students, professors from other parts of the world) can write short pieces for laypersons on

HSSFPs 7

different aspects of early literacy development. Everything on the website is available in English, simplified Chinese, and traditional Chinese. Organizing the site was rewarding but time-consuming.

Writing of the paper, i.e., point 4 of the workplan, was also a big part of this fellowship year. It took more time than I expected to determine exactly what approach would be better for talking about the extent to which Chinese literacy learning is special in the field of reading development and impairment. I had at least two options. One option was to do a relatively thorough review of alphabetic literacy findings and trends and then to compare Chinese to that. The other option was to focus on Chinese literacy and mention explicit comparisons of Chinese with alphabetic reading when that seemed most relevant and important. I opted for the second option after some false starts. I reasoned that at this point in the history of literacy development research in children, there is enough known about alphabetic literacy development by those who would read this type of paper that it was not necessary to have long discussions of these in my own work. Rather, I made the paper relatively succinct (32 pages of text; 5 tables/figures; 12 pages of references—this part was tough because this paper is arguing for the uniqueness of Chinese in diverse ways, so many references were included) and focused on how Chinese is learned and what that pattern may suggest for development. Apart from the ideas I said I wanted to flesh out in my proposal, I additionally included a short section on dyslexia and how my ideas might relate to concepts of dyslexia in Chinese. As a review paper, this work may be appealing to those specifically interested in either modeling of reading development and impairment across cultures or to those who are interested specifically in Chinese literacy. I thought that this paper would be particularly easy to read and absorb for researchers.

6.3 Realisation of the dissemination plan

HSSFPs 7

(maximum 2 pages; please state how and to what extent the output as stated in the dissemination plan has been achieved; give reasons for under-achievements and outline attempts to overcome problems, if any)

This fellowship has resulted in a review paper (please see attached) that was submitted for publication first to the journal called *Brain and Behavioral Sciences*. The paper was rejected because the editor wanted me to emphasize more the comprehensive models of reading development and impairment in alphabetic orthographies before talking about the Chinese aspects of reading that make it unique. (Email is attached.) The paper has now been submitted to *Psychological Bulletin* for review instead. Given the style of the paper and the fact that psychologists interested in reading research tend, by habit, to require a review of the literature on English before they consider research on Chinese, I may have to submit this article a few more times before it is published in a venue that fits well with my focus. I have tried to aim for top journals first, but I am not sure of what the decisions might be. Revisions may be required. This is the ongoing process of publication.

The website has been finished and sent out to some different colleagues (pictures of the website and the press release for it are attached). One set of colleagues are at Hong Kong Institute of Education and Hong Kong University, teachers in different areas of literacy development. I was hoping the website might prove useful for their students in undertaking various literacy related assignments. One colleague, Professor Kevin Chung from IED said, "I like your website very much! It's easy to follow and has very good information for researchers, teachers, and parents. I have forwarded it to my colleagues who are involved in teaching and research in the area of speech, language, and literacy." Another, Professor Xiuli Tong, from HKU, said that her students "find the website very useful."

I also sent the link for the website to those who belong to the network for the Society for the Scientific Study of Reading. These are mostly professors interested in literacy worldwide, and I received several very nice comments, including "useful and timely" (from a researcher in India), "interesting" from a professor in Israel, "useful, professionally and personally" from an American professor, "very exciting" from a professor in the UK, "thanks for this fascinating website" from an Israeli researcher, and "this website points in the direction for new research and practice" from a professor from Portugal.

I am happy to forward these comments to the Panel if interested. Three more extensive comments on this website were particularly appreciated, and these follow:

1. From Debra Jared, Professor, University of Western Ontario: "How timely! I am just now working on a chapter for an Oxford Handbook that is to cover bilingual reading in adults as well as reading development in bilinguals. For the development section I wanted to focus on a few longitudinal studies in a range of contexts, and intended to include one of your studies. This website has made my search easy! Great site."
2. From Frederick Morrison, Professor, University of Michigan: "This looks really useful and I like the combination of practical tips with the research base. This could serve as a model for other's efforts. I will circulate as widely as I can."
3. From Susie Russak, Lecturer, Tel Aviv: "I think the site you built is absolutely amazingly, its beautiful and clear and user friendly and full of information at so many levels:

for parents, teachers, researchers interested in getting a big booster shot about chinese literacy acquisition.”

Many of my colleagues in various Chinese institutions have also commented and given suggestions on the website. Those supportive of the work come from all over Hong Kong as well as Beijing Normal University, Tsinghua University, University of Macau and others. An important issue for this work for the future is how to keep the website relevant and available for use. We are negotiating with the Education Department in Hong Kong to see if this could be linked to their website. We are also seeking partners to link the website to educational online resources in Mainland China and Taiwan. A press release on the website is scheduled to take place soon. Our plans for blogging and updates will hopefully keep the site accessible to the Chinese and western public for awhile.

7. **Other impact** (e.g. award of patents or prizes, collaboration with other research institutions, knowledge transfer, etc.)

I am very grateful to have had the privilege of having this fellowship not only because of the paper I have submitted for publication and the website we have opened up for the public, but also for the opportunities that have come partly as a result of this time. For example, I gave the following keynote speech to an audience of approximately 200 participants this past year, based in large part on my fellowship work:

McBride, C. (2013). *(How) is Chinese special? Unique features of the Chinese orthography and implications for early literacy development*. Keynote presentation presented at the 2nd International Conference on Psycholinguistics in China, Fujian, China (November 23, 2014)

I also worked closely with Professor Nirmala Rao, Dean of the Graduate School at Hong Kong University, and other colleagues, on an Optimus grant (UBS) application devoted to promoting early development and learning in children from ethnic minorities. This grant has been submitted, and I do not know the outcome. However, it is aimed at kindergarten-aged children, and in the proposal, we were able to mention the website developed for this Prestigious Fellowship time as one example of outcome-based measures we hope to continue to develop, not just for native speakers of Chinese but for all aiming to learn Chinese. If we are awarded this grant, this will be a good collaboration making use of the talents of both sides from CUHK and HKU.

During this fellowship period, I also submitted and was awarded a Collaborative Research Fund grant. I am the project coordinator, working with people from HKU, City University of Hong Kong, and Hong Kong Institute of Education, as well as those who are overseas. The project focuses on the development and impairment of word reading in Chinese and English in Hong Kong Chinese children from

behavioral, genetics, and neuroscience (using EEG methodology) perspectives. This is a twin study, co-directed with Professor Connie Ho (psychology department) of HKU and Professor Mary Waye (chemistry department) of CUHK. The project will involve a huge sample of twins, and we are grateful to have been awarded approximately HKD7.7 million for it. Some of the ideas for this grant came directly as a result of this fellowship, because the review paper for the fellowship really focused my ideas on comparing explicitly how children learn to read Chinese differently from learning of English.

During the period of this fellowship, I also agreed to revise a book I published in 2004 entitled *Children's Literacy Development*. The revision, with a special focus on Chinese literacy skills, is due to the publisher by February of 2015. Again, this fellowship helped me to organize the proposal for the revision because of the emphasis on contrasting Chinese and English literacy skills.

Overall, I am extremely grateful to the UGC for affording me this great opportunity to have one year of fellowship time to focus on Chinese literacy skills, explicitly, in comparison to what has been written about related to alphabetic literacy skills development. Thank you.