

# Should We Start Teaching English at Primary Four? An Examination of Neurolinguistic and Sociolinguistic Perspectives on English Language Teaching

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This paper reviews the theoretical background for the alternative approach in English language teaching proposed in the Education Commission Report of the Working Group on Language Proficiency. First, the theoretical constructs of Cummins' Common Underlying Proficiency (CUP) model are examined. Two studies designed to test the CUP model are reported and findings are discussed with reference to the Hong Kong situation. Second, the Critical Period Hypothesis is described. Though there is no support for this hypothesis, the elements of time-on-task and cognitive maturity are brought up and weighted in the local context. Third, the sociolinguistic perspective of English teaching is investigated through two surveys, one with junior secondary students as subjects and the other with English teachers as subjects. Having considered all the research findings relating to age for English to be taught as a foreign language, it is suggested that English teaching be started early rather than late in Hong Kong. To improve on the current situation, the English teaching practice should be examined and an effective and enjoyable curriculum should be designed for the primary children.

這篇文章主要是介紹「語文能力工作小組報告書」提出小四才開始教授英語的理論基礎，文中介紹加拿大雙語教育家甘明志的語言能力轉移學說，也介紹有效啟蒙英語年齡的推理。文章接着介紹兩個以中英雙語學員為研究對象的理據，又介紹兩個英語學習態度的調查報告。最後，根據理論與本地研究數據，文章提出英語學習宜早不宜遲，但英語教學法則有待改善，才能使小學生有效地學習有趣的英語。

The Education Commission Report of the Working Group on Language Proficiency (the Report; Hong Kong Government, 1994) has given a comprehensive overview of the local language situation and recommended a number of useful measures to help improve English language teaching in Hong Kong. There is, however, one recommendation which surprises quite a number of teachers and this is in paragraph 3.43 (p. 50):

At primary level, one alternative approach likely to offer educational and language proficiency benefits would be one where the school concentrates for the first three years on developing the child's Chinese language proficiency in reading, writing, and oral expression in "high" Cantonese. By P4, the child would have a sound basis of mother-tongue skills needed for successful academic progress, and would be ready to start a three-year course of English as a foreign language, while continuing with Chinese language lessons. The aim of the three-year English course would be to provide an effective and en-

joyable experience of language learning, while at the same time preparing the child for possible entry to English medium secondary education.

Teachers are concerned because the proposed approach is at variance with the existing education system when most children start learning some English words in the kindergarten. Teachers also wonder why the "effective and enjoyable experience" of English learning cannot start at primary one since the Target-Oriented Curriculum has key stage one from primary one to three. Moreover, they are worried about a possible decline in English standard since Hong Kong needs English to maintain its position as an international commercial and financial centre.

Whether the alternative approach could offer educational and language proficiency benefits would certainly be an interesting topic for investigation.

## Theoretical Background for a Late Start in English Learning: Common Underlying Proficiency

It is believed that the theoretical basis for this new approach is Cummins' Common Underlying Proficiency (CUP) Generalization or Interdependence Hypothesis. The generalization states:

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To the extent that instruction in Lx is effective in promoting proficiency in Lx, transfer of this proficiency to Ly will occur provided there is adequate exposure to Ly (either in school or environment) and adequate motivation to learn Ly. (Cummins, 1981, p. 29).

Cummins, (1983) review of international bilingual education showed that virtually all the evaluation results were interpretable within the context of the Common Underlying Proficiency model.

When Cummins (1988) related his CUP model to the Hong Kong bilingual programme, he suggested that even though English and Chinese are clearly different languages, "Chinese instruction that develops Chinese literacy skills is not just developing Chinese skills, it is also developing a deeper conceptual and linguistic proficiency that provides a foundation for the future development of literacy in English" (p. 267).

Probably because of this model, the Report proposes to teach the Chinese language (but not English) in the first three years of primary and to start English in the fourth year. It suggests that, consequently, there will be a sound basis of mother-tongue skills for successful academic progress (Hong Kong Government, p. 50).

When we compare the Hong Kong proposal with the CUP model, there are probably three points to note.

First, Cummins (1981) stated that "transfer will occur provided there is adequate exposure to Ly (either in school or environment) and adequate motivation to learn Ly". In a lot of the studies he reviewed, the learners had adequate exposure to English since English was the dominant language of the community. In fact, he was arguing for bilingual education for minority children when the dominant language was the medium of instruction. His research with Swain on linguistic inter-dependence arrived at this conclusion:

In summary, the results of research on bilingual programmes show that minority children's L1 can be promoted in school at no cost to the development of proficiency in the majority language. (Cummins & Swain, 1986, p. 87).

Obviously, the Hong Kong situation is quite the opposite since the majority language is Cantonese and the minority language is English. Thus, there may not be adequate exposure to English for the transfer to take place. Whether there is adequate motivation to learn English (the second factor in the CUP model) will be discussed in a later section of this paper.

Second, quite a number of the studies quoted in Cummins were in the context of an immersion. That

is, the students learnt all academic subjects in the target language. In Hong Kong, English is learnt as a foreign language as one single subject in the primary curriculum. Whether this set of circumstances is comparable with the Cummins study is open to question.

Third, the evidence given in Cummins was based on correlations between performance in the two languages. However, it has to be emphasized that, when there is a high correlation between the two variables, it means there is a strong relationship but the relationship is not directional. Runyon and Haber (1991, p. 242) pointed out :

the relationship between two variables frequently carries with it the implication that one has caused the other. This is especially true when there is a temporal relationship between the variables in question, that is, when one precedes the other in time. What is often overlooked is the fact that the variables may not be causally connected in any way, but that they may vary together by virtue of a common link with a third variable.

They stated that correlational studies simply do not permit inferences of causation. In the case of successful English and Chinese learning going together, the writer of this paper suggests that there may be a third factor, a cognitive factor or a fourth factor, a sociolinguistic factor involved.

Hence, it seems that more research could be conducted to test the (CUP model) Interdependence Hypothesis to see if it can be used as the basis for curriculum design in the Hong Kong context.

### Testing the CUP with Chinese Learners of English

Two studies using English-Chinese bilinguals to test the CUP model are briefly described in this section. In Lai's study (1992) of 211 Hong Kong bilinguals (average to above average 7th Graders), the correlation between Chinese proficiency and Chinese reading was  $r = .73, p < .001$ ; but the correlation between Chinese reading and English reading was only  $r = .47, p < .001$ . Even though the correlation is significant, comparatively speaking, Chinese reading has a weaker relationship with English reading which does not seem to offer a strong support for the CUP model.

In Zhou's study (1994), 62 English majors in Beijing Foreign Studies University were invited to sit for a series of tests (piloted and validated) to evaluate Cummins' hypothesis. These students had 9 to 11 years of English instruction as a subject. Those in a group with a mean TOEFL score of 444.45 were considered to show low proficiency

( $n = 22$ ) while those in a group with a mean TOEFL score of 602.26 were considered to show high proficiency ( $n = 40$ ).

Findings indicated that there was a moderately high correlation between Chinese and English reading comprehension with the High group students ( $r = .51, p < .001$ ) and a low and non-significant correlation with the Low group ( $r = .11, p > .05$ ). This shows that there is a close relationship in reading comprehension in the two languages only in the High proficiency group.

Since correlational studies should not be employed to prove causal relationship, Zhou conducted a multiple regression analysis to look for the best predictor of English reading comprehension and she found that English working memory was the best, accounting for 21.3% of the variables while Chinese reading comprehension was the next with 15%. The data seem to suggest a kind of transfer when the English proficiency is high.

For languages learnt and for ways of exposure, Zhou's study more resembles our local situation than the Canadian immersion programmes. Hence, it would be useful to compare the Report's alternative proposal with it. Relating Zhou's findings to the Hong Kong situation, we can see that there may be some transfer when the learners reach a threshold level in English. Starting to teach English at primary 4 could delay the arrival of such a threshold level and transfer will, at least be delayed as a result.

### Neurolinguistic Perspective of English Learning

In the 1960's, some researchers considered early learning of a second language to be more effective since it mirrored L1 acquisition. On grounds of general neurological plasticity, Lenneberg (1967) postulated the Critical Period Hypothesis (CPH), i.e., language learning terminated at puberty. He maintained that language learning was difficult after puberty because the lateralization of language functions in the left hemisphere was thought to be completed by this age.

Genesee (1988) examined empirical evidence from other researchers as well as from his own and had these remarks on the CPH:

1. all aspects of second language learning appear to be learned more efficiently and therefore, possibly more easily, at least in the initial stages, the older the learner; and
2. nativelike levels of proficiency in the phonological, syntactic, and comprehension aspects of the second language can be attained by postpubertal learners. (Genesee, 1988, p. 104)

Since these studies reviewed only measured short term gains, we should only conclude that older learners can attain higher levels of proficiency in the short term.

Taking everything into consideration, Genesee (1978, 1988, p. 105) had this conclusion:

Second language learning that begins when the learner is young can benefit not only from the advantages associated with the possibility of extended time to learn but also from the advantages associated with cognitive maturity as the learner continues his or her education. Taken together, then, the cognitive factor and the time factor should favor an early start to second language learning..... Whether or not such advantages will be realized will depend to a significant extent on the nature and quality of the second language program. (Genesee, 1988, p. 105)

Van Els et al. (1984, p.109), having reviewed the series of studies on CPH, concluded that empirical evidence does not support the CPH and suggested that it is not age alone, but the learning situation in combination with age-related affective and cognitive factors which accounted for some of the variation in success between child and adult L2 learning.

Neurolinguistic research findings indeed seem to support a later start, i.e., teaching English at P4 in Hong Kong. But before we make that decision we must consider an important factor: the time on task or the duration for English learning. Since the duration of instruction correlates with second language achievement (Genesee, 1988), it means that there is a definite advantage to start teaching English early. Considering Genesee's overall view and the local situation, we can say that we have been doing the right thing to start teaching English at primary one.

It remains possible, indeed likely, that we may do much better if we examine and improve the quality of our second language programme. The Report points in the right direction when it aims "to provide an effective and enjoyable experience of language learning". Such a provision can, this paper claims, be done at primary one at no loss to the teaching of Chinese.

### Sociolinguistic Perspective of ELT in Hong Kong

Apart from "adequate exposure", Cummins's CUP model (1981) required "adequate motivation" on the part of the learners. Does the motivation of Hong Kong learners fit the CUP model? Findings from two surveys which tapped Hong Kong learners' attitudes towards English learning are reported here.

The first one was conducted in 1980 by a group of English teachers including the present researcher; the second one by the present researcher alone. Both

Table 1  
*Students' Attitudes towards English Learning*

1980 survey			1993 survey		
Statement	Number	%	Statement	Number	%
(1) How much do you like English?					
Very much	763	55	Very much	13	5.0
Fairly	534	38	Quite	153	58.8
Not at all	98	7	Dislike	90	34.6
			Hate	4	1.5
(2) Reasons for learning English					
Important in career	113	29.6	For future career	45	12.7
Tool to acquire knowledge	106	27.7	Tool to acquire knowledge	87	24.6
Compulsory subject	64	16.8	Compulsory subject	71	20.1
Important language	51	13.4	Important language	125	35.4
Own interest	48	12.5	Own interest	25	7.1

surveys had local junior secondary students as respondents; these students came from more than twenty schools and had a wide range of abilities. The results of two surveys illuminate student motivation.

From Table 1, we find that learners' motivation was mainly instrumental (Gardner & Lambert, 1972). They wanted English for their future career and for acquiring knowledge. The 1993 survey shows some possible effect of the social changes on language attitudes, for example, fewer students perceived the usefulness of English for career. Perhaps the flourishing China trade accounts for that. Perhaps the 1997 issue accounts for that as well since students do not see English as the Language of Wider Communication (Fishman, 1972). More respondents reported that English was learnt because it was a compulsory subject at school. Very few stated that they learned English because of their own interest; some even claimed that they hated the subject. All these points show that students' motivation is lower than a decade ago. Since these subjects are junior secondary students, it appears that age has not made their motivation stronger and a late start may not bring the favourable impact.

Teachers' perception of the motivation of students suggests a similar pattern. A survey conducted in early 1994 had two open-ended questions asking teachers ( $N = 117$ ) what enhanced or hindered learning English in Hong Kong.

The three top enhancers suggested by teachers were:

1. an environment for students to use English,

2. responsible, enthusiastic teachers having high English proficiency,

3. high motivation in students to learn.

The three top hinderances were:

1. no need to use English in daily life,
2. lack of motivation in students,
3. teachers' below average English level.

Clearly both teachers and students perceived a lack of motivation in the students. If we may generalize from the above mentioned data, it appears that there is inadequate motivation to sustain transfer from  $L_x$  to  $L_y$  even if the CUP model otherwise holds true for Hong Kong students.

Another factor working against the transfer is the low proficiency level of some English teachers, comparing the "adequate exposure" requirement in the CUP model. As teachers pointed out in the open-ended question (3) above and as shown in one of statements in the same survey, teachers' limited English proficiency is a problem, viz.

17. In general, teachers' oral proficiency is good enough.

Yes 20.5% Not Sure 46% No 33.5%

Probably because of the realization that some teachers' proficiency was not good enough, there was 100% agreement on the following statement:

25. The Education Department should supply good video programmes for junior primary pupils to learn English in an enjoyable manner, e.g., singing or reciting rhymes.

There were two other statements soliciting teachers' opinions on early or late start for English learning and the results are as follows:

19. English should be taught from kindergarten one onwards.

Yes 70% Not Sure 22.5% No 7.5%

20. English should be taught from primary three onwards.

Yes 10% Not Sure 22.5% No 67.5%

There is clear support from teachers for an early start in English learning. Perhaps they had time for learning in mind (cf. Genesee's review). Or perhaps they had the social mobility in mind. In Hong Kong it is in school that children from low income families learn their English. Their knowledge of English enables them to further their studies or to get a well paid job in this international business centre. Starting English at P4 would limit the low income group's chance to learn English; the high income group could send their children to private schools for the exposure. Thus there is the potential problem of English becoming the language of the elite rather than a useful means of communication for all.

Some educators are understandably concerned that if we teach English to very young children in a poor environment for acquisition (Krashen, 1985), they get very little from their school lessons. These educators believe that by starting English late, students will be mature enough to learn properly and not to waste time.

Other educators, however, hold a different view. They feel that the problem of insufficient English teachers can be partly solved by providing good audio visual materials together with lesson plans on the usage. Teachers will then become mere facilitators helping students to interact with the actors/actresses in the programme. Given that English lessons can be more enjoyable, young students can have a better foundation (especially in pronunciation and intonation) for their later learning.

The most important factor that affects the age at which English is taught in Hong Kong is the parents' attitudes. When the majority of them favour an early start for English learning, it will take a long time to convince them that the alternative route, i.e., English at P4, is equally viable.

### Conclusion

From Zhou's study on English Chinese bilinguals, we learnt that Cummins' CUP model is partially supported on the need to reach a threshold level. In the Beijing sample, it was the high TOEFL score students who seemed to have a transfer from Chinese reading to English reading. Because the Chinese reading factor only accounted for a small part of the variables, we can still consider the possibility of other common variables such as cognitive factors or social factors which contribute to the co-variation.

Even if we take the Common Underlying Proficiency model, neither the exposure nor the motivation is sufficient to guarantee worthwhile transfer from Chinese to English as shown by student and teacher data in Hong Kong.

Neurolinguistic studies yield little support for the Critical Period Hypothesis. On the other hand, there is some evidence to show that older learners can learn more efficiently. Taking the cognitive factor and the time factor into consideration, Genesee (1988) still recommends that second language learning should start early.

Since there is little social support for the late start of English teaching in Hong Kong, the latter part of that proposal in the Report should be

re-examined. Given the strong opposition from parents, it seems more promising to look into the different ways to make learning English more effective and enjoyable rather than drastically changing the existing curriculum.

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