Bilingual curriculum construction in business education for non-key universities in China

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Abstract: Weak effectiveness of bilingual education is an especially obvious phenomenon in non-key universities of China where students have poorer English ground and bilingual curriculums are unconstructive designed partly because of the scarcity of teaching resources. This paper discusses failures of these unconstructive curriculum systems from the view of cognitive learning and points out that just because of the lags in BICS and CALP of students in non-key universities, metacognitive process should be substantially considered and completely integrated in construction of bilingual curriculum system including aspects of bilingual allocation, subject design, bilingual arrangement and prepostive training. This paper takes International Business Specialty in non-key universities as an example and highly involves writer's teaching experiences.

Key words: bilingual education; curriculum construction; metacognitive process; International Business Specialty; English skills

1. Introduction

China's bilingual education policy for higher education can be found for the first time in the document of Ministry of Education No.4 in 2001, which specified that national standard bilingual allocation of bio-technology, information technology, finance and law specialties should reach 5%-10% of total courses, and other specialties following it step by step. In 2004, Ministry of Education regulated again in document No.21 that the percentage of bilingual allocation in those specialties mentioned above here should be no less than 10% and the so-called bilingual class is defined as using English textbook and the percentage of English as curriculum instruction language should be no less than 50% of total leaning time. These two documents are very quantitative guidance for bilingual education in Chinese higher education we can find so far among many bilingualism promotion policies in a whole.

Under these policies, bilingual teaching construction of Chinese universities has been developing in a varied level and confronting oppugns and controversies since its launching. The biggest problem is its weak effectiveness which is an especially obvious phenomenon in non-key universities where students have poorer English ground. Although most Chinese students have had 6-years English learning experience during secondary education phase before they entering universities, some of them even have longer English learning starting from primary school, they always have indeed some very basic interpersonal communication skills (BICS) but lack cognitive academic language proficiency (CALP) (baker 2001, p. 169), which is essential in bilingual teaching since students have never been trained this way. Another cause is shortage of quality exposure—language outside classroom and

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teacher resource. Even for students studying specialties such as bio-technology, information technology, finance and law, which are stipulated to arrange no less than 10% courses as bilingual courses, they do not have rich exposure-language since in most of cases when there will be no more than 5 bilingual courses during 4-year universities according to the percentage. In non-key universities, the amount of exposure-language is even less due to the fewer amounts of bilingual causes and the scarcity of bilingual teachers. The tension between poor English skill of graduates of non-key universities and the employment skill requirement is getting very obvious especially for students of International Business Specialty to which English abilities are basic qualification and a fundamental competence. Studies about how to improve the effectiveness of bilingual teaching for discipline like international business area are urgently needed.

This paper thinks that there is a way to examine and improve present bilingual curriculum construction in many non-key universities in terms of cognition and discusses how to manage bilingual curriculum design, bilingual allocation and arrangement under contemporarily limited conditions in non-key universities based on some second language learning theories. A longitudinal curriculum structure is emphasized in this paper, which highlights the persistence, intensity, recursion and progressiveness of bilingual training from a cognitive view. This paper takes International Business Specialty in non-key universities as an example and highly involves the writer's teaching experiences.

2. Status quo examination

Although International Business Specialty is not nominated discipline to develop bilingual teaching by Chinese government, it universally adopts bilingual education in the world since English is the global business language. This specialty undoubtedly highlights the proficiency of English of students. However, according to writer's teaching experience in a Chinese non-key university, students normally have many difficulties in dealing with bilingual curriculum. It is thought that the failure of bilingual education in many non-universities especially for International Business Specialty lies in sparsely and immethodical bilingual curriculum distribution which mark the lack of consideration of cognitive process.

The first bilingual subject usually arranged in the sophomore year can only adopt 50% and English 50% Chinese even for those classes average English level is not bad. Students confronting an original English textbook and tons of academic vocabularies for the very first time have to spend a lot of time to get used to this new pedagogy. Confused, frustrated and lost students always find it needs triple or even more time devoting to this subject than any other. Getting through hardly, however, at the end of term, they usually acquire a little experience of how to use an original English textbook and how to think in English at more or less. "The learner can make sense of it, be receptive to it, and make an effort to process it" (Van Lier, 1996, p. 45). This is a very import cognitive experiment for a language learner and exact turning points out that refueling and encouragement are needed. According to Flavell (1979), students now are just at the beginning stage of metacognitive processes of bilingual education and need more training to reflect on learning and finish interaction between three types of knowledge. If they stop or interrupt from here and continue no further bilingual training continued, what they learn will be put on the shelf immediately and nothing can push them to make breakthrough. The amount of language exposure can hardly be fruitful without the students forcing themselves to regularly recall what has been introduced in classes (DU Jian-ying & George Blue, 2008). Unfortunately, many non-key universities have only one or two bilingual subjects sparsely and immethodical distributed in 4 years. A systematic construction is badly

absent no matter in subject design or bilingual arrangement or teachers' cooperation, ignoring the cognitive learning process.

3. Systematic construction of bilingual curriculum

Bilingual education pedagogy is the heart of the matter and curriculum construction that should be a pedagogic consideration. Bilingual education, especially in higher education, significantly involves cognitive approaches compared to grammatical and communicative approaches. The emphasis of cognitive approaches is on the learners' matacognititive processes, that is, the active control over the cognitive process that used in learning (Flavell, 1979). Bilingual education itself is regarded as a pedagogic revolution that students' learning occurs in the interaction between knowledge stored as schemata and production system which emphasize students' autonomy and reflection on learning. For students in non-key universities, active control over the cognitive process means that there should be a time quantity to be explicitly instructed with matacognitive learning strategies and actively integrate these strategies for both content and academic language development, and finally be able to manage their own learning and therefore reach both language and content targets of certain disciplines. Moving from overwhelmed to be confident for their learning is the turning point of learning process. Self-evaluation of English proficiency is the key factor to affect English proficiency (Asako Hayashi, 2005). Furthermore, a number of researchers point out that various language skills are required to succeed in an academic context. In order to gain academic language proficiency, students need to accomplish a variety of tasks in educational settings (Swain, 1984). Language proficiency and language use are highly correlated (Asako Hayashi, 2005). We have to point out that during metacognitive process supported by bilingual education, encouraged by autonomous leaning and under assistance of teachers. Students have chance to learn how to become wise learners, a soft skill is that many students in non-key universities extremely need and it can improve their academic learning effectiveness according to writer's experience. Cummins (1979) states that once the students' language proficiency reaches a certain level of competence, they are able to transfer the knowledge and skills in one language to the other.

Metacognitive learning process undoubtedly should be considered as the construction of bilingual curriculum system, which allows students to experience a relatively complete cognitive cycle as much as possible. As discussed above, too few or too fractured bilingual training or bad bilingual arrangement will be harmful to the development of metacognitive learning. This paper discusses systematical curriculum construction from longitudinal bilingual allocation, subject design, bilingual arrangement and structurally prepositive training.

3.1 Bilingual allocation

Bilingual allocation refers to the time allotment given to one language or the other in bilingual education. The variability of bilingual allocation in bilingual education program has to do with the resource available, including teachers and material, as well as social goals.

As mentioned above, Chinese government has given a minimum of bilingual allocation as 10:90 for four disciplines (Ofelia Garcia, 2009). That is to say, at least 10 percent of courses adopt English-Chinese based bilingual education and 90 percent of courses take place in Chinese. As for other disciplines, there is no specific requirement and normally lower than 10 percent in practice.

How to distribute such designated bilingual curriculums to four academic years is decided by every single university and is just what we should think very carefully in systematic curriculum construction. Normally,

bilingual teaching starts from the second academic year when disciplinary subjects introduced. Some theory-oriented subject is not suitable for bilingual teaching especially in non-key university, making bilingual subjects go to the second half of sophomore year in most of cases where some practical subjects begin to be arranged. From here, one bilingual curriculum is distributed to one term (one academic year includes two terms) consecutively until the first half of the fourth year. Normally the second half of the fourth year is for internship. Given this allocation, there are at least four subjects must be opened sequentially to bilingual teaching to keep training discontinuously and guarantee exposure-language at a very compromise manner, up to no more than 10 percent of bilingual allocation. However, even this model unfortunately rarely happens in non-key universities now due to shortage in teaching resource and naturally hardly adopt a higher bilingual allocation due to the same reasons. Sliding bilingual allocation is possible for its abundant resource, which means that as bilingualism develops, the allocation of time to different language changes. For example, start out with a 10:90 allocation, slide to 50:50. The sliding bilingual allocation, the percentage of subject or period of target language increasing by the time, is the superior choice and popular used by western bilingual education.

It has to be mentioned that no one allocation is better than other. And despite the myth that a 50:50 allocation is the best, research has shown that as long as the two languages are respected and given their appropriate value, bilingualism could be developed with a very unequal time allocation. Equity between languages does not always mean equality in time allocation (Ofelia Garcia, 2009).

However, the notion of "time of task" is still important and there is a direct correlation between the amount of L2 exposure in school and L2 achievement and appears to be lower limits to the importance of time although systematic evidence of the impact of such variation is not available (Fred Genesee, 2004). The bilingual curriculum system model in this paper is based on the minimum-four bilingual programs distributed to continue four terms. This model is regarded as the lowest limits of exposure and the basic framework for a systematic bilingual curriculum construction which could guarantee the minimum persistent exposure and non-disconnected process to employ bilingual education approaches progressively and most importantly, to make students really benefit from those wonderful bilingual education approaches. According to writer's observation of students' studying in non-key universities, more and persistent exposure of bilingual education is definitely good for students who spend less time on studying and need more cognition training than students of key-universities although there is no clear quantitive evidence what is the upper limits of exposure time that could substantially change the degree of achievement of English of non-key universities' students.

There have always been considerable controversies in the link between amount of L2 exposure and level of L2 achievement, however, clearly, time alone is not always the most significant predictor of L2 proficiency—The intensity of exposure and, most importantly, the nature and quality of classroom instruction are very important (Fred Genesee, 2004).

3.2 Design bilingual subjects

After deciding bilingual allocation, subjects taught bilingually are about to be decided and positioned in the longitudinal curriculum structure. Higher education is still characterized by transactional modes of educational delivery (largely imparting information) in certain sectors which are highly cognitively demanding and require academic language proficiency (CALP). It should not be assumed that non-native speakers who have attained a high degree of fluency and accuracy in everyday spoken English have the corresponding academic language proficiency (Cumins, 1981). Here, Cummins' model of bilingual pedagogy (2000, p. 71) is referenced as rationale. It makes clear that "language and content will be acquired most successfully when students are challenged

cognitively but provided with the contextual and linguistic supports required for successful task completion".

Context	Embedded
A	С
Cognitively	Cognitively
Undemanding	Demanding
В	D
Context	Reduced

Figure 1 Cognitive demands and contextual support in bilingual pedagogy

Cumin argues that optimal instruction for bilingual education occurs in quadrant B with content that is highly cognitively demanding—academically difficult—but that is presented in context-embedded ways, supported by visuals and manipulative, through co-operative learning and project-based lessons. For students in universities, disciplinary subjects taught in English are definitely academically difficult and avoiding theory-oriented subjects and adopting process-orientated, interactive subjects as bilingual program at the beginning of bilingual education is wise choices. Interaction-orientated or process-orientated subjects are chosen for adding contextually supportive and meanwhile those sectors in class teaching involved with English as the second language medium education are supposed towards interactional rather than transactional methodologies.

Bilingual curriculum design along time continuum is based the rule that the task of the teacher is to progressively take away the structure provided by the context-embeddedness, while keeping the high cognitive demands of the lesson. Thus, competent bilingual students can increasingly be faced with instruction in which tasks are not only cognitively demanding, but have little contextual support (Ofelia Garcia, 2009). That is to say, tasks in quadrant B is about to move to quadrant D. Clearly, a D quadrant task, which is both cognitively demanding and context-reduced, is likely to be the most difficult for students, particularly for non-native speakers at the beginning phase of bilingual education. However, it is essential that students develop the ability to accomplish such tasks, since academic success is impossible without it. In non-key universities, bilingual subjects choosing should be very carefully studied not only focusing on internationally-oriented specialties but also on vocationally-oriented specialties. As for International Business Specialty, International Business Practice, International Business Correspondence, International Business Negotiation and Cross-Cultural Communication are practically suitable to use bilingual teaching. If possible, Multinational Corporation, International Investment and International Financial also can be designed as bilingual subjects (All above subject titles are quoted from the university where writer is teaching).

3.3 bilingual arrangements

Educators must make decisions about how language will be used or arranged in the curriculum. Chinese government has stipulated that minimum English instruction should be 50 percent of total curriculum time. 50 percent to 100 percent English instruction arrangement is adopted in practice. Recent research has shown 100 percent of target language instruction is not the sovereign way to guarantee the effectiveness of bilingual education and code-switching, if properly understood and suitable applied, can in fact enhance cognitive skills for the content-matter of non-language subjects (Gajo, 2007; Serra, 2007). This finding rectify a misunderstanding in China that the more English instruction, the better bilingual education.

Teachers must monitor both the quantity and the quality of their code-switching. In terms of quantity, the main part of classroom instruction needs to take place in the language being developed. As for quality teachers, that should code-switch to offer meaningful instructional support and not merely to give orders, instructions, call attention, discipline, or follow the language input of the students (Van der Walt, Mabule & De Beer, 2001).

O'Neill and Velasco (2007) give three ways in which code-switching to home language could be useful and responsible pedagogical technique:

- (1) When providing the definition of a word;
- (2) When providing a linguistic summary;
- (3) When providing a summary of a lesson in one language so that students can derive more meaning, as well as focus on the language structures.

Proper bilingual arrangement is very important for non-key universities where students normally have poor English grounds. Minimum 50 percent of English instruction could be converted to 100 percent progressively according to students' English improvement during 4 years.

3.4 Structurally prepositive training

Cummins tells us that contextual support has internal and external dimensions. Internal contextual support refers to attributes of student—his or her prior experience and understanding. External contextual support refers to the aspects of the language input (Cummins, 2000). These two dimensions could be cultivated through prepositive training, say, EAP (English for Academic Purpose) class. EAP approach aims to develop the students' language skills in order to support their studies or researches in the content area (Flowerdew & Peacock, 2001), in other words, CBI (content-cased instruction) is a similar pedagogy to bilingual education, while traditional language education program usually focus on language itself. For International Business Specialty, EAP takes form of business English, that should be arranged as the transitional class to bilingual education even though there is general English class in freshman and sophomore years.

Some scholars suggest that EAP is not necessary while bilingual subjects are arranged. Arguably, students in non-key university are deadly need more English training, while EAP can, more and less, use the language as a medium of instruction and ultimately push students prepare vocabulary inventory for bilingual education followed or they will find they are on the moon during the class. EPA class can get much more internal and external contextual support for coming bilingual learning.

4. The example in International Business Specialty

The primary characteristic of systematic curriculum construction is to consider bilingual factors in terms of a whole curriculum system instead of a single subject alone. Put every resource you can get and plan a phased progressively system in which every step or period has its specified teaching objective, bilingual practice and assessment accordingly. The key point is that teachers responsible of different subject should sit down together and discuss how to harmonize pedagogic process and practice in order to prevent teaching on its own way. This coordination even can extent to teachers in English language department whose pedagogy directly affect the acquisition of bilingual education. That is a responsible education.

Now, taking the International Business Specialty as an example to discuss how to develop a bilingual curriculum system. Put International Business Practice as the first bilingual subject in the second half of sophomore year after the prepositioning theory-orientated subject The Theory of International Business taught in

Chinese and EAP Business English. International Business Practice is a very process-orientated subject which is suitable for being allocated in the early phrase of bilingual education. 50:50 bilingual arrangement is recommended. According to personal experience of writer, original textbook and 100 percent English slide make student stressful where teacher should spend some times on metacoginitive learning strategies, such as how to learn a bilingual subject, how to use a original textbooks, how to take notes, how to preview and review, how to do a English presentation, how to write a English report, etc. Chinese reference books are recommended in this phase and Chinese/English both are on the assessment paper. Chinese is used for students to understand disciplinary conceptions and key points. The objective of this phase is to let students catch some feeling and encourage so that them will not give up. Cross-Cultural Communication can be set in the first half of junior-year which still uses 50:50 bilingual arrangement. Presentation or acting or other performance is recommended in this phase to help students get contextual support during bilingual learning and to practice students' oral proficiency. Techniques of presentation and written report are further trained. International Business Correspondences can be allocated on the second half of junior-year which shares some common knowledge with International Business Practice but emphasizes writing skill in English. 30 percent Chinese and 70 percent English of classroom language are arranged and 100 percent English assessment paper is provided. Students strengthen their academic language learning through writing practice. The last term for bilingual teaching, the first half of senior-year, can adopt International Negotiation as bilingual subject which practice speaking, writing and listening very much together. 100 percent bilingual arrangement could be considered if possible. Students receive intensive training to get oral proficiency as much as they can.

5. Conclusion

It can be learnt from the example that what makes bilingual education complex is that one has to think not only of pedagogy, approaches and methodology, but also of how to allocate, arrange, and use the two or more languages in instruction. And only when developing a curriculum construction considering the relationship between curriculum, pedagogies, individual learners and communities of learners, bilingual development can be enhanced. (Ofelia Garcia, 2009).

Language learning is a lifetime work characterized in recursively developmental process. Although bilingual education in 4-year of university can not forge a students into a native speaker, efficient bilingual practices can indeed improve students' English and open a door to a passionate, lifetime language learning. For specialties like International Business or other business-based specialties, bilingual education is the way how student should live and study while bilingualism is the lifestyle of 21st century. For non-key universities, metacoginitive process involved curriculum construction can find a good way to improve students' skill.

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