Education for Bilingualism in International Languages in a Monolingual Socio-Linguistic Context[1]

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In Colombia, both national policies and individual school policies concerning bilingual education in international languages[2] have been poorly supported on the existing knowledge on bilingualism and first language acquisition. This article looks critically at the type of knowledge that should assist decision makers when designing proposals aimed at developing foreign language communicative skills in the school setting and for the vast majority of the Colombian population, to an extent students can be considered fully bilingual.

Keywords: *education for bilingualism, bilingualism in a monolingual context, bilingualism in international languages, bilingualism in Colombia.*

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[2] This critical literature review presents the theoretical basis for national or institutional policy decisions to stimulate the learning of any international language (English, French, German, Italian, etc.) in a monolingual context like the one in the majority of the Colombian territory. Although at least some of its content could be used to inform policies in territories where indigenous or creole languages are used, its purpose is to present knowledge which refers directly to situations within our socio-linguistic context where society functions monolingually. The specific contexts in which indigenous and creole languages occur in our country are bilingual to some degree, and so the knowledge in this review has to be used differently to illuminate language and educational policies that would preserve and stimulate the development of these languages and of Spanish, respect the cultures of the communities that use them and facilitate their interaction. The question of the learning of a third, international language in these contexts would have to be considered as a different problem entirely.

La educación para el bilingüismo en lenguas internacionales en un contexto sociolingüístico monolingüe
En Colombia las políticas nacionales y las de instituciones escolares individuales diseñadas para lograr el bilingüismo en lenguas internacionales han estado pobremente sustentadas en el conocimiento existente acerca del bilingüismo y acerca de la adquisición de una primera lengua. En esta revisión bibliográfica resumo y discuto críticamente el conocimiento que debe ayudarnos a tomar las mejores decisiones para lograr, por medio de la educación, habilidades complejas en una lengua extranjera en la mayoría de nuestra población, hasta un punto en que podamos considerar a la gente bilingüe.

Palabras clave: *educación para el bilingüismo, bilingüismo en contexto monolingüe, bilingüismo en lenguas internacionales, bilingüismo en Colombia.*

Éducation pour le bilinguisme en langues internationales dans un contexte sociolinguistique monolingue
Les politiques nationales et celles des écoles en Colombie créées pour arriver au bilinguisme en langues internationales ont été pauvrement soutenues par la recherche sur le bilinguisme et l'acquisition d'une première langue. Dans cette analyse bibliographique, je résume et assume une position critique face aux connaissances qui doivent nous aider à prendre les meilleures décisions pour atteindre des habiletés complexes dans une langue étrangère chez la plupart des personnes de notre pays à travers l'éducation, jusqu'à ce qu'on puisse les considérer bilingues.

Mots clés: *éducation pour le bilinguisme, bilinguisme en contexte monolingue, bilinguisme en langue étrangère, bilinguisme en Colombie.*

INTRODUCTION

Bilingualism in international languages has been pursued as an educational goal in individual private schools for several decades in Colombia. It also presently constitutes a national educational policy, aimed at providing the majority of Colombians with the educational, professional, and cultural advantage of ample skills in an international language other then Spanish. But what bilingualism means and how to achieve it in the sociolinguistic context in which most of us live have been poorly supported on the existing knowledge from theory and research.

Our country has been generically defined as multilingual because it includes territories where indigenous and creole languages are used in

some communities. But we must acknowledge that the majority of our territory is monolingual in Spanish, and so are the communities where the majority of our young population are educated. In contexts in which Spanish is used as the only language of communication, supporting language acquisition in Spanish and an international language to a level that can be called bilingual demands that we recognize the knowledge that best informs decisions on how to reach this educational objective. It also demands that we interpret this knowledge properly for a type of context in which it did not originate, the monolingual one.

Some of the most important decisions necessary when pursuing bilingualism as an educational goal have to do with the following aspects:

- The definition of the desired and possible best bilingual profile of the learner, in terms of communicative skills and performances in both target languages;
- The connections to be made between the acquisition processes in both languages;
- The appropriate time (age) to start the development of the second language;
- The bilingual curriculum, including the ways and media through which language skills will be learned and their implications for the curricula of other learning areas involved.

The type of bilingualism to be looked for educationally in a community and a society should be defined, first of all, on the basis of a good understanding of the developmental characteristics of the learners, including first language development, and the characteristics of their language and language use in society, including the communicative needs they face in the sociolinguistic contexts in which they grow and function (Snow, 2007). For this reason, achieving high-level bilingualism in school in a context in which two languages or more are already used socially is different from achieving it in a monolingual context. Decisions should be different, also, according to the attitudes existing in society towards the use of the languages in question (Snow, 2007). What follows is a literature review in which I critically summarize the knowledge from theory and research on language acquisition and the acquisition of bilingualism that I consider key to these decisions, and so key to the development of our own, effective models of education for bilingualism.

LITERATURE REVIEW

Problems with Decisions Already Made

The educational decisions related to bilingualism in international languages whose consequences can currently be observed in Colombia have been institutional and have favored a very small minority of children in especially positive socio-economic conditions in private schools. Then, since 2003, the National Ministry of Education has put together a set of policies to extend the benefits of bilingualism equitably to the majority of Colombians in public schools (Ministerio de Educación Nacional de Colombia [MEN], 2005). At a time when providing education for bilingualism has become a desirable national goal, decision-makers and the teachers who have to implement the policies are looking at the experiences of bilingual schools to try to emulate them.

Unfortunately, the quality of the language development these schools support has rarely been an object of research,[3] so we do not really know how successful this education is in terms of linguistic outcomes. They are just socially accepted as positive. Actually, research on bilingual schools in our country and abroad is scarce and has concentrated in the description of bilingual policies (e.g., Araújo & Corominas, 1996; De Mejía, Ordóñez & Fonseca, 2006), the use of the two languages (e.g., De Mejía, 1998), the description and effectiveness of specific classroom practices (e.g., Magaña, 1995; Marulanda, 1995; Casallas & Londoño, 2000; Castaño, 2007; Barragán, 2007a; 2007b), and more rarely the treatment of culture and phenomena related to identity in these schools (Buitrago, 1997; Hinojosa, 1999; De Mejía, 2002; Spezzini, 2002; 2004).

There are three main problems in the way the administrators in these schools, and now national policy-makers, have used existing knowledge in making educational decisions related to education for bilingualism in our country: Firstly, they have adopted educational models that are originally monolingual or applied policies that have been designed for socio-linguistic contexts and phenomena foreign to us, and they should not. Secondly, they have supported their decisions on only partial knowledge (e.g., only the positive findings) from research done in these

[3] Ordóñez (2000; 2004a; 2005) is the only study in Colombia that thoroughly analyzes the language development of adolescents with 10 years of schooling in an elite bilingual school in Bogotá, in both Spanish and English.

foreign socio-linguistic contexts, and they should consider all available information. And finally, in our monolingual Spanish environment, they should have used the extensive knowledge that exists on the acquisition of a first language, but they have not.

The first problem is multi-layered and is the one that has misled bilingual schools, and now the national policy, the most. On one hand, the models followed by our so-called bilingual schools were originally taken from those of international schools established in the country since the first half of the 20th century, in order to provide the children of foreigners working here with the education they would receive in their countries of origin. These were American, French, Swiss, Italian, or German schools, not bilingual in nature (De Mejía, Ordóñez & Fonseca, 2006). Even today bilingual schools approach American associations of schools, again not bilingual in nature, to get internationally certified (De Mejía, Ordóñez & Fonseca, 2006).

On the other hand, when policies and programs adopted in Colombian schools are originally bilingual, they have originated in countries where 'societal bilingualism' occurs, so two or more languages are in contact for geographical, historical, social or political reasons (Appel & Muysken, 1987). For example, our bilingual schools today offer a limited set of variations of immersion programs created in bilingual English-French Canada. These programs were established in the late 60's under the pressure of English-speaking parents who wanted the quality of the instruction and status of French, a minority language there, to improve across the country. As a result, the children in some Canadian immersion programs tend to come from middle- or upper-middle-class homes where attitudes towards bilingualism and biculturalism are positive, development in the first language is well-supported as is the development in French, and academic achievement is highly regarded (Trites & Price, 1978, as cited in Carey, 1984; Weininger, 1982). These conditions for the first and the foreign languages cannot be expected in most of our Colombian territory.

More recently, when establishing the national Colombian policy to support bilingualism, decision-makers adopted the foreign standards of the European Framework for Languages (Council of Europe, 2001) to define the linguistic skills to be developed and the level they have to reach. Although bilingualism and multilingualism in international languages

are natural phenomena in many countries and regions of Europe and the needs, resources, and opportunities for the use of more than one language are relatively easy to find there, these conditions do not apply to the majority of Colombians. We cannot, therefore, expect standards established for sociolinguistic contexts as different as the European ones to be achieved in Colombia to levels and in time frameworks even similar to the ones described in the European framework.

The second problem is also quite serious: We only know about positive effects of the bilingual policies that some of our private schools have adopted from abroad, like those of Canadian immersion programs. Similarly, we only know evidence to support policies like beginning the development of a second language as early in life as possible. In the latter case, for example, evidence is claimed partially from research on bilingualism carried out since the 1960's, which has explored possible cognitive advantages of early bilingualism, and partially from the hypothesis that there is a "critical period" for learning languages (Lennenberg, 1967). But the research on cognitive advantages of bilinguals has been mainly done in very young bilingual children who have acquired their two languages at home. This normally happens because their parents speak different first languages, are bilingual themselves and have concertedly surrounded their children with a consistently bilingual communicative environment, the conditions for what has been termed 'individual bilingualism' (Appel & Muysken, 1987). Also, there are as ample and strong arguments against the existence of a "critical period" as there are for it (e.g., Marinova-Todd, Marshall & Snow, 2000).

In general, not so desirable consequences of bilingual programs, evidence that beginning early in some conditions is not necessarily the ideal decision, and methodological problems that experts have found in the research that supports the ideas we like and use about bilingual programs have been totally ignored by our decision-makers. In the same way they have ignored the ample existing knowledge on the development of the first language during the school years, which constitutes the third major problem, and probably the most important one, of our policies for bilingualism.

The Needed Knowledge

Considering all the pertinent knowledge from research and theory about language acquisition and the acquisition of bilingualism and interpreting it specifically for our contextual conditions would probably point to institutional and national policies quite different from those followed by our bilingual schools and recently formulated nationally. It may even point to many policy variations, when related to the local sociolinguistic characteristics of individual communities in our country. The literature we need to take into account to see this relates mainly to the definition of what bilingualism and bilinguals are, the role of schooling in language development, and ongoing debates about the ideal age to begin acquisition of a second language, the role of schooling in late acquisition of a second language, and the relations between the acquisition of the first language and that of a second language.

Bilingualism, Socio-Linguistic Context, and Education

There is not a unique definition of bilingualism about which consensus can be found. Today, the most adequate definitions have to do with the conception of language as an instrument and means of communication, so they refer to the actual use of more than one language. They go from definitions like Grosjean's (1985), totally referred to contexts in which bilingualism occurs in a society, and Hornberger's (2003), more easily adaptable to a diversity of contexts: According to Grosjean a bilingual individual uses two languages regularly in his or her daily life. Hornberger, in turn, draws attention to biliteracy as the phenomenon to define, meaning the use of two languages around writing. She invites us to consider multiple possibilities in the development of skills in two languages, in a way in which a bilingual individual can be located at any point on several continua of bilingualism which intersect in complex ways. The continua are "…first language – second language, receptive – productive, and oral – written language skills continua; through the medium of two (or more) languages and literacies whose linguistic structures vary from similar to dissimilar…and to which the developing biliterate individual's exposure varies from simultaneous to successive…" (Hornberger, 2003, p. XIV). This complex picture of bilingual skills allows the consideration that any person who is developing the ability to use two languages can, at any given point, use them at different levels, for

different communicative functions, in response to particular and widely diverse communicative needs and using a variety of media and linguistic manifestations and styles.

The flexibility and variety that this latter definition allows us to see invites the description of diverse bilingual profiles appropriate to diverse contexts and learners. It helps us make the first necessary educational policy decision: the definition of the combination of bilingual abilities that should constitute a desirable educational goal. In combination with the realization that acquiring at least a second language is immensely advantageous educationally and professionally in our globalized world today, this definition of bilingualism and the understanding of our mostly monolingual socio-linguistic context for international languages should lead us to an adequate definition of educational goals.

As to socio linguistic context, research indicates that the social, socio-economic, cultural, and linguistic phenomena of the contexts in which a child develops and is socialized affect his specific developments and have to be seriously considered in making decisions about educational policy. The same should apply to decisions pertaining to the bilingual child (Appel & Muysken, 1987; Ordóñez, 2004a; 2005; Snow, 2007). As the theory about bilingualism and bilingual education has originated in questions and research on naturally occurring situations of social and individual bilingualism, it is necessary to interpret and use it very carefully in specific contexts different from these.

This is why, for example, adopting Canadian immersion programs in our schools, knowing that they emerged for different contextual reasons and function in different contextual conditions already pointed out above, is not appropriate. Those conditions, and especially the fact that a genuinely bilingual environment is readily accessible in Canada have been pointed out as possible factors leading to positive outcomes of French immersion there (Weininger, 1982; Carey 1984; 1997). The specific sociolinguistic and cultural factors playing out in Canada also cloud the interpretation and use of research findings on Canadian immersion programs for program design in different societal contexts (Carey, 1984; 1997). Carey (1997) points out that, even in Canada itself, while in English speaking regions French immersion programs have come to be perceived as instruments for promoting national unity and opening professional doors, in French-speaking Quebec bilingualism

and early bilingual immersion are regarded by many as the road to the disappearance of the use of French from the province. This should influence both the modalities o bilingual education applied in schools in the different regions and the results from research carried on their outcomes.

In a different socio-linguistic context, in the United States, bilingualism is not positively identified with a highly sophisticated set of skills or regarded highly as a desirable educational goal. Many so-called bilingual programs in the US were originally designed to transition non-English speaking immigrants into all-English schooling. Quite often the result was subtractive bilingualism (Lambert, 1975), as the minority language was gradually lost while the high-status, majority language was acquired. In these circumstances, the accepted advantages of bilingualism are short-lived (Hakuta & Diaz, 1985).

In Colombia the situation of present bilingual schools offering Canadian immersion and of bilingualism in international languages pursued nationally is considered additive, because learning a foreign language in addition to our Spanish is believed to be highly regarded by most. Nevertheless, research on how additive the treatment of bilingualism really is in our bilingual schools has not been done[4]. And the high regard for this type of bilingualism is not necessarily true everywhere and at all socio-economic levels in Colombia (e.g., Sánchez & Obando, 2008). Actually, there are no immediate reasons whatsoever for people to use an international language in real life in most of the country, so it is difficult to find support in the social context and in the family for its learning (e.g., Cárdenas, 2006). Consequently, even pushing for the learning of an international language at a national level, let alone adopting foreign features of bilingual education in our schools, when attempting to bring the benefits of bilingualism to Colombian children is questionable.

We do know from research in Colombia, on the other hand, that from a faulty adoption of immersion programs and an erroneous conclusion from contextual analysis of our monolingual context, bilingual schools tend to take Spanish for granted and make better planning and

[4] Again, Ordóñez (2000; 2004a; 2005) is the only study in Colombia that thoroughly analyzes the language development of adolescents with 10 years of schooling in an elite bilingual school in Bogotá. It reports problems in the language development of the participants in both Spanish and English but does not establish a probable cause.

provision for the acquisition of the chosen foreign language (De Mejía, 1998; De Mejía, Ordóñez & Fonseca, 2006). This tendency ignores the existing knowledge about the development of bilingualism, when it is actually considered as the development of two (2) languages, and the importance of formal education in the development of the first language after 4 or 5 years of age (e.g., Barriga Villanueva, 1998; 2002). In all contexts of languages in contact, but especially in ours, where this contact is only artificially provided in school settings, it is important for educational policy-makers to consider and use the knowledge on the acquisition of the first language in their decisions. Linguistic skills are in full potentiality for development in monolingual social and educational contexts (Ordóñez, 2004a; 2005), and the advantages of a second language have to be actually added to those of a highly developed mother tongue without affecting the latter negatively via its neglect in education.

Bilingualism, Monolingual Context, and the First Language

When the acquisition of two languages is not simultaneous from birth, research on first language acquisition provides many arguments about the importance of first language development prior to second language acquisition and of the need not to neglect the development of the first language in school. Until the 70s it was believed that at five years of age the acquisition of first language or at least of its basic elements had been completed (Brown, 1973; Antinucci & Parisi, 1985; Ervin Tripp & Miller, 1986); but since Carol Chomsky did her research on the comprehension of complex syntactic structures from 5 to 9 years of age (1969), it has become clearer that the full development of linguistic skills in the first language is not even well advanced by age five. And as research adopts the view of language as communication, more and more evidence of this appears (Ordóñez, Barriga, Snow, Uccelli, Shiro & Schnell, 2001). At five children are just beginning schooling, which expands their experience in social interaction making new demands on their use of language in different communicative situations (Barriga Villanueva, 1998; 2002). This includes the development of literacy and of the academic skills necessary to deal with different content areas and classroom discourses, which in turn means developing language skills to handle tasks for which the contextual support of social conversation

is unavailable or irrelevant (Cummins, 1991; Snow, 1983, 1990b; 1991; Ely, 2005).

Under the influence of schooling and literacy, children acquire new and more differentiated forms of discourse (e.g., Hicks, 1991). Their linguistic repertoire gradually grows in quantity and complexity of words and morpho-syntactical elements from their expanded social world and their contact with written texts (Stanovich, 1986). This allows for ever increasing expressive option (Berman, 1993; Berman & Slobin, 1994) and interpretive skills. Even though the basic morphological and syntactic features of a language may be in place by age 5 or 6, acquisition continues with new forms, new combinations of forms, and uses of old and new forms for old and new communicative functions (Berman & Slobin, 1994; Crowhurst, 1979; Scott, 1988).

During the school years, for example, children's semantic systems become more complex as they learn new words and concepts and establish diverse links among old and new words and concepts, developing semantic networks (Pan, B., 2005). As their understanding of words as objects separate from their referents increases (metalinguistic awareness), children acquire literacy and develop the use of metaphors, puns, and the language of humor, play, aggressiveness, irony and sarcasm. These developments are further stimulated by interactions with peers, books and the media (Ely, 2005).

Exposure to written text, specifically, is recognized as an important predictor of vocabulary growth and, thus, as a key to access to increasingly complex morphological and syntactical means to express meanings. As the language structures that we are exposed to in print are different, mostly more complex, than those encountered in speech (West, Stanovich, & Mitchell, 1993; Miller & Weinert, 1998), literacy constitutes a most important stimulus for language development. Evidence for this is strong in the area of vocabulary growth (Stanovich, 1986; West et al., 1993; Stanovich, Cunningham, & West, 1998). Furthermore, there is some evidence that reading also provides opportunities for syntactic growth (Purcell-Gates, 1988). Constructions typical of written text are only found in the spontaneous speech of people who have reached more advanced levels of formal schooling (Miller & Weinert, 1998).

Thus, syntactic and morphological developments are not complete by the time children enter school. Neither the construction of some

formal features nor their use in discourse is fully controlled by children at the end of the preschool years. Examples of this come from studies in the development of different languages. In English, for example, preschool children are just beginning to understand and use relative clauses (Pan, 2005). Spanish-speaking children begin using these clauses earlier but increase their use and the functions they fulfill in discourse after 5 years of age (Zorriqueta, 1988; 1996). Also in English, the use of pronouns in anaphoric reference in discourse only develops after age 5 (Bamberg, 1987; Karmiloff-Smith, Johnson, Grant, Jones, Karmiloff, Bartrip, & Cuckle, 1993). French-speaking 10-year-old have not fully acquired yet all the functions of different verbal past forms in their first language (Bonnotte & Fayol, 1997). Similarly, Spanish-speaking children do not systematically change tense and aspect for discursive purposes until after age 5, and only older children use a variety of morphological, syntactical and lexical means of expressing temporal contrast meaningful to narrative discourse (Sebastián & Slobin, 1994). This richness of the Spanish language in the expression of time shows limitations in Colombian adolescents who have studied English for ten (10) years in a 50%-50% immersion bilingual school in Bogotá (Ordóñez, 2004a; 2005)

In addition, school increasingly demands from children the use of their metalinguistic skills and their skills with decontextualized language to define words, narrate occurrences, and describe or explain phenomena out of the immediate space and time. As a consequence, children's narrative skills develop immensely after age 5, as do their skills in the production of other forms of extended discourse like descriptions, explanations and definitions (Snow, 1990b; 1991; Snow & Kurland, 1996). In general, participation in teacher and student group discussions socializes children into learning activities involving complex thinking (O'Connor & Michaels, 1996) and, so, increasingly complex language.

Finally, the expanded social world of the school poses demands on children's metapragmatic awareness (Hickmann, 1985). Thus school-aged children gradually increase their knowledge of how to use language in culturally appropriate ways in interactions with different social partners, their ability to explain the rules overtly, and their ability to consciously break those rules for special communicative purposes (Ely, 2005). As the formal and syntactic elements of language, these social and cultural

rules of the use of language in communication vary from language to language.

Sophisticated development of language skills is a fundamental educational goal that should be achieved to the highest possible level in a monolingual socio-linguistic environment. This achievement depends on creating enriching environments linguistically, academically and culturally in schools. This is an even more important challenge in schools which aim at the development of sophisticated skills in more than one language. If this is going to be the case in all our schools in Colombia, it is very important to know, also, that first language development is the variable that research has consistently found to correlate positively to socio-economic level and to indicators of educational success (e.g. Snow, Burns & Griffin, 1998). The importance of native language development for the majority of Colombian children must be acknowledged and ensured as other educational goals are accommodated in our national curriculum. For this reason, decisions such as the age or grade in which a foreign language is introduced in school and the school time and academic areas dedicated to its development should be carefully considered. It is reasonable to hypothesize that a too early and too intensive introduction of a second language in our schools may somehow affect the high quality of first language outcomes possible in a monolingual environment.

Time to Introduce the Foreign Language

As I pointed out before, when bilingualism does not occur naturally from a bilingual family upbringing or a bilingual societal environment, it is a commonly held belief that the earlier a second language is acquired, the better. Arguments related to cognitive advantages of bilingualism have been used to support this as an educational policy in bilingual programs, but for us to use it to support early bilingual education in our context is misleading for several reasons.

First of all, the quality of the design of the studies has been questioned. Their findings suggest that bilinguals possess enhanced metacognitive and/or metalinguistic abilities, such as greater flexibility in the development of word concepts (Cummins, 1978; Bialystok, 1988; Yelland, Pollard & Mercuri, 1993), more grammatical awareness (Galambos & Hakuta, 1988; Galambos & Goldin-Meadow, 1990), and more efficient problem-solving skills in tasks requiring control of attention

(Bialystok & Majumder, 1998). Enhanced metalinguistic awareness would allow bilinguals to analyze the form as well as the content of language, supposedly enabling them to appreciate non-literal uses of language such as puns and other plays on words, irony and figures of speech very early in their language development (Hakuta, 1990; Snow, 1990a). In addition, bilinguals' knowledge of different semantic networks associated with the same words in different languages is believed to enrich the connections they can make between meanings and allow them to create richer metaphorical links (Romaine, 1995).

But specifically the sampling strategies and methodologies used in these studies are suspect (Hakuta & Diaz, 1985; Hakuta, 1987; Reynolds, 1991). It has been noted, for example, that due to the very different sociolinguistic circumstances in which monolingualism or bilingualism occurs, it is impossible to ensure that there are only linguistic differences between samples of monolinguals and bilinguals in a study. The actual objects of research have also been put into question (Hakuta, 1987; Carey, 1997). Carey (1997), for example, went as far as to describe the concept of 'cognitive flexibility,' claimed to be one of the advantages of bilinguals, as "rather vague." He went on to regret that "few bothered to ask the question of whether becoming bilingual was as effective in producing cognitive flexibility as ... studying mathematics, doing Miller's analogies, or engaging in creative thinking" (Carey, 1997, p. 213).

A second reason relates to contradictory findings. Like many other researchers during the 60's and the 70's (See a review in Hakuta & Diaz, 1985), Bialystok (1988) found that only balanced bilingual children performed better on metalinguistic tasks requiring high levels of analysis. Nevertheless, in her own later research (Bialystok & Majumder, 1998), none of the 3rd grade balanced bilingual participants showed advantages over monolingual children in problem-solving tasks requiring high levels of analysis.

Finally, the relevance of research findings on cognitive advantages of bilingualism is even more uncertain in relation to situations of bilingual acquisition after 4 or 5 years of age. Evidence for cognitive and metacognitive advantages apply mostly to very young children raised bilingual, who are balanced bilinguals in preschool and the first years of primary school (Hakuta & Diaz, 1985; Hakuta, 1987; Bialystock, 1988; Bialystok & Majumder, 1998). As similarly high skills

in the first and second languages may never result, at least as early as primary school, from bilingual education of originally monolingual children, the consideration of possible cognitive advantages of early balanced bilingualism may be irrelevant. And in any case, there is evidence supporting the fact that bilingual metalinguistic superiority is, basically, the anticipated appearance of skills that come naturally with first language development within a linguistically rich environment (Aronsson, 1981, as cited in Romaine, 1995; Snow, 1990a). Also, cognitive and linguistic advantages in late bilinguals may be a function of high skill development in the first language (Carlisle, Beeman, Davis & Sphraim, 1999; Cummins, 1993).

The need for early acquisition has also been supported by research evidence showing poorer ultimate levels of attainment in different areas of second language learning in older than younger learners (Oyama, 1976 & Patkowsky, 1980, as cited in Snow, 1987) and great variability in second language proficiency among learners who begin later than earlier (Johnson, 1986, as cited in Snow, 1987). This, in turn, has been supported by extending to second language acquisition the notion of a *critical period* for first language acquisition related to maturation processes in the brain, supposedly ending at about puberty. This theory implies that language learning occurring after this critical period will be less successful than normal first language learning (Lennenberg, 1967).

In relation to the former type of evidence, it comes from early studies which were few and had design limitations that have been pointed out by Snow (1987). Problems include the distance of the skills tested from actual language use, the failure to consider schooling as an important predictor of some of the tested skills, and the lack of control for degree of bilingualism. Problems like these have continued to occur in research and limit the interpretation of its results. Furthermore, in a study carried out among newcomers to Holland at different ages, Snow & Hoefnagel-Höhle (1978) identified 12 to 15-year-olds as more efficient second language learners than 3 to 5-year-olds. Early research on French immersion programs in Canada also reports that older learners learn more in a given unit of time than younger learners, probably because of their superior academic, cognitive, and meta-linguistic ability (e.g. Carey, 1984; Fathman, 1975; MacLaughlin, 1982). Specifically, some of this research points to older students progressing more rapidly in literacy

related learning in a second language (e.g. Genesee, 1987; Cummins, 1983; Krashen, Long & Scarcella, 1979). Research referenced more recently by Geneese (2004) confirms this result but also balances it with findings supporting early introduction of the second language. Genesee concludes that the available evidence suggests that second language acquisition can be effective in both situations, if quality instruction is provided (Genesee, 2004).

As to the so called critical period for language acquisition, Snow (1987) discussed and rejected possible claims associated with a strong formulation of the hypothesis based on data that show second language acquisition in young children as actually slow, difficult, and not perfectly successful in the short term in most language domains. Even in the case of the acquisition of phonology, which is supposed to occur for a first language during the first two or three years of age, Snow's research (1987) suggests that it rather occurs in full over a period of several years and that many adults are fully capable of controlling the phonological features of a second language. She concludes that the general perception of poor phonological achievement in adult second language learning may be due to faults attributable to instruction rather than to limitations related to brain maturation. In fact research has revealed evidence of amazing capacities of the human brain and its natural tendency towards flexibility, but very little has been done in terms of exploring the relationship between quality of instruction in a foreign language and its effects on learner performance.

Furthermore, Marinova-Todd, Marshall & Snow (2000) have more recently reviewed research which has been used to support a critical period for second language acquisition and qualified the most common arguments as insufficient. They attribute the common use of these arguments to three fallacies: misinterpretation of research findings (e.g. the fact that children who learn second languages earlier apparently reach higher ultimate attainment than older learners should not be interpreted as proof that young children learn more easily); misattribution of findings, mostly from neurophysiological studies (e.g., differences in the localization of languages learned at different ages have not been related to differences in second language proficiency); and misemphasis placed on findings about unsuccessful adult language learners instead of on the many who reach near-native levels of proficiency in a second language.

Finally, research done in the 70's associated earlier and more extended exposure to the second language with higher levels of proficiency. Nevertheless, a number of more recent studies indicate that cumulative exposure alone may be less important than intensity. Then, for example, later but more concentrated exposure to the second language may be as effective as earlier and less intensive exposure. In addition, instructional factors have been proven important in the prediction of the effectiveness of immersion second language outcomes (Cummins, 1983; Carey, 1984; Genesee, 1987). It seems, then, that beginning the development of a foreign language early and intensely in school may not be an actual necessity in order to achieve a good level in its development. Other variables such as the quality of instruction (e.g., the relation of instruction to the real needs of the learners and communicative authenticity) or the balance between age and intensity of use may be a lot more important to consider.

Bilingual Curriculum and Academic Skills and Content

In a recent summary of concepts important to bilingual development from the Canadian point of view, Genesee (2004) defines bilingual education as education that aims to promote bilingual proficiency by using two languages as media of instruction in the curriculum. He indicates that each language should be used in 50% of the courses different from language courses. He also defines bilingual skill as the ability to use the two target languages effectively and appropriately for authentic personal, academic, social and/or professional purposes. Even in the context of foreign language teaching a currently recognized methodology is content-based learning.

This points to the curricular decision to use the second or foreign language as the medium of instruction for academic areas like science, social sciences, and mathematics. In this way, skills in the two languages are not only acquired through their study and use in the context of linguistically focused activities, but also when they are used, supposedly authentically, to communicate in the oral and written media in the context of the disciplines. In this way students artificially encounter the need to handle the rich lexical, syntactic, expressive, and pragmatic features of the discourses in the academy in order to learn content areas beyond language. But research and theory have also produced evidence that

makes subject-matter learning in a second language from an early age and for learners who have not attained a comfortable level of use in the second or foreign language an educational practice we need to question.

Research derived from performance-based models of second language acquisition, for example, reveals difficulties in second language learners in tasks in the second language requiring short term memory, word comprehension, syntactic comprehension, problem solving, speed of reading, and reading comprehension (Cook, 1993). Also, research based on approaches to second language acquisition which consider language as one area of knowledge acquired through general information processing skills (Cook, 1993) shows general slowing down of both linguistic and cognitive processing in second language learners performing tasks in the second language. This has been attributed to overloading of the processing system with more information than monolinguals have to attend to. Another reason may be the additional demands of processing information expressed in a low-proficiency language.

On the other hand, efficient transfer of academically-mediated skills from the native to the second language has been theoretically proposed by Cummins (1980; 1981; 1983). He makes a distinction between the basic linguistic skills needed for interpersonal, social communication (BICS) and the skills necessary for dealing with academic communication (CALP), two different sets of skills that develop in different ways and at different rates (Cummins, 1979a). Cummins describes a possibly common underlying proficiency between a first language and a second one, that allows development of proficiency in the first language to contribute to development in the second one, arguing that it is more characteristic of the context-reduced and cognitively demanding academic language activities like attending an academic lecture or reading and writing on a newly learned topic. He distinguishes language activities like these from social ones in which the participants share many contextual and information clues and do not need to produce elaborated messages (Cummins, 1980; 1981; 1983). The less common underlying ability probably relates to the higher variation of skills in this interpersonal area due to cultural and individual factors.

All this may imply that the development of second language proficiency, especially in the academic context, can build on the proficiency in the native language, an idea which had already been

proposed by Widdowson (1978). Actual transfer of academic and literacy skills has been reported from the first to the second languages (Cummins, 1979b; Verhoeven, 1991; Verhoeven, 1994; Jiménez, Montenegro & Moya, 2007). The need for high development of skills in the first language as a prerequisite for their development in the second language seems to be especially true for academic skills like writing paragraphs (Lanauze & Snow, 1989), defining terms (Snow, Cancino, De Temple, & Schley, 1991; Ordóñez, Carlo, Snow & McLaughlin, 2002), and reading (Jiménez, García & Pearson, 1995; Carlisle, Beeman, Davis & Sphraim, 1999).

Nevertheless, according to Cummins (1977) the transference of academically-mediated skills only occurs when general linguistic skills have been developed to an appropriate level in the second or foreign language. This seems to add meaning to the findings of research based on information processing skills mentioned above (Cook, 1993), pointing towards excessive cognitive demands on the skills of bilinguals who are in the process of acquiring their second or foreign language and have to attend to the comprehension of both meaning in the content areas and meaning of the lexical, syntactic and pragmatic systems of their still low-proficiency language.

Turning to direct effects of pedagogical and curricular practice, evaluations of French immersion programs in Canada have produced contradictory empirical findings about the effects of early immersion education on the academic achievement of students. They have reported that anglophone early immersion students experience no lags in academic achievement as a result of instruction in French and that students who begin French instruction in grades 6 or 7 experience temporary underachievement in some academic subjects but seem to recover quickly, scoring as well as students taught in English by the end of secondary school (Genesee, 1987; Cummins, 1995). But Cummins (1995) himself points out that relatively high rates of student drop-out have characterized Canadian French immersion programs from their beginnings. He cites Keep (1993, in Cummins, 1995), who reports drop-out rates from 43 to 68% by grade 6 and from 88 to 97% by grade 12, with academic and behavioral problems as major predictors.

Findings about lack of negative effects of immersion on academic achievement also seem incompatible with findings that the comprehension skills (oral and in reading) of immersion students in

French are lower than their comprehension skills in English, especially during the first several years of French instruction (Hammerly, 1989). This raises doubts about the level of sophistication possible in French instruction of academic subjects, the actual possibility of later recovery from underachievement, and the adequacy of standardized tests for the evaluation of actual levels of attainment. In fact, some research studying the progress of French immersion students in their first year at university found that they still took longer to read texts, had lower comprehension abilities and spent more time on academic assignments in French than in English (Carey, 1991).

In a completely different sociolinguistic environment, research on immigrant populations and school success in the United States has shown that, even though conversational skills are acquired relatively rapidly, it may take around seven years for a speaker of another language to acquire academic proficiency in English comparable to that of a native speaking peer (Cummins, 1981; Collier, 1987; 1989). Also, only high degrees of bilingualism have been associated with academic achievement in immigrants (Fernandez & Nielson, 1986), while it has been recently reported that reading achievement is lower for children of Hispanic backgrounds than for English monolingual children (August & Hakuta, 1997).

Furthermore, the type of classroom environment most desirable today for the learning of what we call content areas does not focus on the learning of content as the understanding and memorization of information. Rather approaches are favored to the learning of the disciplines which better relate children to what people who know them actually do in the real world (Ordóñez, 2004b). This makes those environments more demanding in communicative terms, as they should be more consistent with constructivist descriptions of human learning.

Constructivism pictures children and adolescents making their own constructions of meaning within the disciplines by acting more like natural, exact and social scientists who ask real questions, observe and register observations, formulate hypotheses and design ways to check them in solving real world problems in collaboration with others (Ordóñez, 2004b; 2006; Perkins, 1998; Brown, Collins & Duguid, 1989; Boix-Mansilla & Gardner, 1998; Díaz Barriga, 2003). They have to constantly communicate with themselves and with others through a variety of oral, written and electronic media in order to make their

comprehension increasingly more complex in the process (Bruffee, 1999; Knoblauch & Brannon, 1983; Tolchinsky & Simó, 2001). Constructivism also talks about reflexive learning as the most effective, so learners have to constantly talk and write for themselves and others about what and how they progressively understand (Dewey, 1991; National Research Council, 2000; Ordóñez, 2004b; 2006; Perkins, 1992; 1998). This makes it more difficult to understand that they can learn effectively in a language they do not handle well. Some evidence of problems that learners experience in their construction of knowledge, attitudes and skills in Science has already been observed formally and informally in innovative learning environments consistent with constructivist principles established in English in bilingual schools in Bogotá (Molano, 2006; Castaño & Ordóñez, 2007), even comparing learning outcomes in Spanish and English (Barragán, 2007a; 2007b). It would be important to expand this kind of research and to do it also in other academic areas, at different grade levels, and in different socio-economic conditions.

CONCLUSIONS: HOW TO USE ALL THIS

Bilingualism is a worthy educational goal within any foreign language curriculum, especially if we adopt an ample definition of the phenomenon like Hornberger's (2003). This depicts different continua of bilingual skills within which an individual's possibilities to communicate in two languages can be described. Every foreign language teacher should aim at enabling his or her students to actually do things in real life, communicatively, in the new language. In addition, it is unrealistic to think that we, as a society, can remain oblivious to the global reality of a multilingual, multicultural world. But educational decision-makers, both institutionally and nationally, need to recognize both the knowledge and the contextual variables to be taken into account to produce realistic policy for bilingualism in our mostly monolingual contexts. They also need to take a more comprehensive educational view to better ensure that policy towards bilingualism supports added educational value without generating important costs. This is because sophisticated language development in Spanish and optimum achievements in learning in all academic areas must continue to be the central outcomes of our schools.

At present, the sources that policy-makers acknowledge to support educational decisions for bilingualism are knowledge about bilingual education in bilingual socio-linguistic contexts or in contexts where a second language is readily available for communication, like Canada and Europe; and the experiences of our own elite bilingual schools. The first source has to be considered more critically, because it only takes into account positive findings from research done in contexts completely different from ours. As for the second one, a lot more research is needed to understand their linguistic outcomes expand their benefits to all Colombians. In addition, knowledge about the acquisition of the first language has to be considered as an important source of information.

The first decision policy-makers and teachers have to revise is that of the type of bilingualism they want and can produce effectively and massively in Colombia. This must be based on an objective and informed vision of the realities and possibilities of the socio-linguistic contexts in which Colombian learners of a foreign language socialize. The resulting bilingual profile has to lead to curriculum design that takes into account the development of skills in the two (2) languages of interest. Curricula have to balance all the possibilities for communicative and disciplinary learning that schooling opens to children in both languages, and which do not occur in merely social contexts. They also have to use the enormous possibilities open to development in the foreign language if skills in it are built on skills in the first language. Curricula, then, have to connect the development of both languages and also connect it to disciplinary learning.

Curricula design informed by this knowledge should include decisions on when to introduce the foreign language and what to teach in it, besides the language itself. The question has to be asked of what the possible effects may be of choosing some disciplines to handle in one language or the other and what could happen to native language development if some areas are completely neglected or at least not handled systematically and to a high level of sophistication in it.

Then, policy-makers have to consider more seriously the needs that bilingualism as a goal creates in teacher professional development. Researchers in Colombia have analyzed the quite complex nature of the professional development needed from the new national policy and discussed the importance of adapting its goals and methods to the

realities of our context also in that sense (e.g., Cárdenas, 2006; González, 2007). I call attention to the fact that these teachers need to possess the ample and complex knowledge that I have summarized in the present article, in order to be able to discuss and challenge policies, understand what is needed to achieve bilingualism, and participate in designing proper policies at local and institutional levels. If this does not happen, it is very improbable that they can convert policies imposed on them into pedagogical practice in their classrooms. Teachers are the ones who determine how policies play out in classrooms, and providing them with the necessary professional development is yet another complex challenge in the way to reaching bilingualism as a national goal.

In addition to handling the knowledge outlined here, teachers able to pursue bilingualism with their students need to be bilingual. They have to have experienced the process of acquiring skills in two languages and done it to sophisticated levels and in a reflexive way. They also need to understand and perform communication that works in different contextual and cultural circumstances. Finally, they need to possess tools to understand the specific socio-linguistic contexts in which their learners function, so they can help them develop two languages in harmony and for extra additive purposes.

In the case that we continue believing that teaching academic subjects other than language in the foreign language is necessary in reaching bilingualism in schools, the bilingual teachers must have experience in handling both languages in the learning of the disciplines. In order to acquire it, future teachers must have experienced and reflected on human learning that needs time, uses previous knowledge and experience, needs autonomous effort and support from expert guides, that occurs individually but is stimulated in collaboration with others (Ordóñez, 2004b; Ordóñez, 2006). And they should understand how communication is a means for all this.

If our foreign language teachers are bilingual and knowledgeable about bilingualism, acquisition of language, and the learning of other disciplines, they will be prepared to participate in curriculum design and to support it pedagogically in the classroom. Knowledge and the analysis of their own and their learners' contextual conditions will give them the ability to be critical and participative in political decisions that affect them and their students.

The newly stated national purpose of bilingualism should help us realize the complexity of what we need to know and do in order to make it work as a realistic educational goal. We need to revise what we are already doing institutionally to support bilingualism as an educational goal. We also need to revise what we are doing to help our future teachers become able to support learning conducive to bilingualism. The knowledge exists in our country and the people with experience in becoming bilingual in a socio linguistic context like ours do too. We now need to seriously begin the critical task of using this knowledge and experience to inform academic and administrative educational analysis and revise policy decisions.

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