

The Effectiveness of Bilingual Education

Chapter 12 in Baker (2017) *which students are urged to study* discusses the effectiveness of bilingual education where it is mentioned that “in the history of research in bilingual education, it is possible to find research support for most of the forms of bilingual education by selecting and emphasising a particular study” (p.244). The chapter also makes a very valid point in emphasising that effectiveness can be assessed on *different levels* ranging from the individual student, to the classroom, the school and to an aggregation of schools which adopt a certain model, but that it is also influenced by a multitude of variables:

Effective bilingual education is not a simple or automatic consequence of using a child’s home language in school (as in heritage language education) or a second language (as in immersion education). Various home and parental, community, teacher, school, stakeholder and society effects may act and interact to make bilingual education more or less effective. Any effectiveness equation is complex, variable across region and politics, multivariate, and often contested. (Baker, 2017: 246)

In the context of the USA, the chapter refers to various reviews of research which have been conducted with a view to inform policy-making in the provision of ‘bilingual’ education for language minorities, such as that of K.A. Baker & de Kanter (1983) for example which proved to be controversial and questionable in many respects, including the narrow range of outcomes being measured, its ideological bias as well as the methodological reliability of its sampling procedure. The discussion which ensues and which refers to additional reviews illustrates the range of variables which need to be considered and which explain how, even when employing the opinion of experts, one cannot guarantee total agreement on issues of effectiveness.

The conclusion of the expert panel of the US National Research Council (The Committee on Developing a Research Agenda on the Education of Limited English Proficient and Bilingual Students) whilst emphasising the need for all minority language students to be functional in English and to be given the same equal opportunities through academic provision as others, also highlighted the benefits of proficiency in a language *other than English* and an understanding of different cultures “in an increasingly global market and political world”.

However, as Baker (2017: 250-251) points out, the essential and most significant conclusion of the expert panel of the US National Research

Council was that trying to prove the effectiveness of various models of bilingual provision on a continuum of inferiority-superiority only succeeds in oversimplifying and polarising conclusions, since all models can be effective under varying circumstances “depending on the subtle chemistry of interacting ingredients, environments and processes (p.251), the key issue being to find “ a set of programme components that works for the children in the community of interest, given the goals, demographics, and resources of that community” (August & Hakuta, 1997, 147). Baker (2011:261) refers to Brisk’s (1998) list of five “situational factors” which impinge on the possible achievements of students in bilingual education and their schools, these being:

- linguistic
- cultural
- economic
- political
- social

However, whereas it is agreed that these factors have a particular effect on *linguistic* acquisition, they may also be said to be applicable to children’s education generally.

Chapter 12 in Baker (2017) proceeds to examine recent reviews and research on three ‘strong’ models of bilingual education, namely: Dual Language, Immersion and Heritage Language, mentioning that these three have a large body of research attached to them which allows one to provide an overview of the conclusions compared with the relative dearth of evaluations of other models. Since the chapter provides a detailed discussion of each of these models, what follows is only designed to provide *a summary* of the research findings related to each as discussed in Baker (2017).

1. Dual Language Education

Evaluations of the effectiveness of this model and reviews of related research indicate relative success in producing bilingual, biliterate, curricular and multicultural competences. Some studies, however, are methodologically questionable due to having small samples, uncontrolled variables such as social class, being insufficiently longitudinal and not paying sufficient attention to variations in programmes. However, as Dual Language education is chosen selectively by parents and excludes a random selection of a population, it is difficult to ascertain whether or not extraneous characteristics such as student socio-economic background, parental support and motivation or the intelligence level of the students themselves are the actual contributory ingredients in the success of these

programmes or the programmes themselves. However, the comprehensive Lindholm-Leary (2001) evaluation of Dual Language schools (pp.252-253) provides convincing evidence that “DL programs are effective in promoting high levels of language proficiency, academic achievement and positive attitudes to learning in students” (Baker, 2017: 253). Since, in comparison, English learners in submersion mainstream classes fail to make the necessary linguistic progress which enables them to understand curriculum content sufficiently, even after ten years of English language instruction, it seems that parents supporting Dual Language education are recommending that the model should be expanded in order to raise the linguistic and academic achievements of other minority (and majority) language children.

Similarly, in comparing the performance of children in elementary Dual Language education with those in other programmes, research by Thomas & Collier (2002) concludes that Dual Language bilingual education at this *elementary* level is “the *optimal program* for the long-term academic success of language minority students” (Baker, 2017: 253). Thomas & Collier (2000) compared the linguistic development of language minority children in the English language in different bilingual education programmes, namely:

- Two-way bilingual education
- Late-exit transitional bilingual education
- Early-exit transitional bilingual education
- ESL pull-out programmes

Whereas there was no significant difference between any of the programmes at the kindergarten stage through to Grade 2 (but with ESL ‘pull-out’ pupils beginning to show greater progress in English in the early stages), however, by Grade 6, students in Dual Language and Late-exit transitional programmes were already ahead of the others in English language achievements and close to the performance of native-speakers. On an ‘English language achievement scale’ of 1-100, this performance was around the 50th percentile. However, by the time they reached Grade 11, the achievements of students in Two-Way Bilingual Education was above the average levels of native-speakers, being around the 60th percentile, the results for the four programmes being as follows (see Baker, 2017:254):

- Two-way bilingual education: 60
- Late-exit transitional bilingual education: 50 (native-speaker average)
- Early-exit transitional bilingual education: 30-40
- ESL pull-out programmes: 20

Even so, criticism was levelled at the Thomas & Collier (2000) study for reasons such as being based on selective research studies and well implemented programmes (i.e. not necessarily being typical of all Dual Language provision) and lacking in details about the 700,000 language minority students on which the language progress trajectories were based and which spanned the period from 1982-96 (Baker, 2017: 254).

2. Immersion Bilingual Education

As stated on page 257 of Baker (2017), “There are four decades of research and reviews of immersion bilingual education that paint a relatively uniform picture of success” with the conclusions of those conducted during the 1980s (e.g. Swain & Lapkin (1982)) being replicated by those of more recent years (e.g. Swain & Johnstone, 1997) and highlighting four major outcomes:

(a) The learning of the second language:

The evidence shows that students in early total immersion become more proficient in the use of a second language than those experiencing the ‘drip-feed’, sporadic teaching methodology of mainstream education with foreign language teaching. By the age of 11 years, performance levels similar to those of native speakers are achieved in the receptive skills of listening and reading although not in the productive skills of speaking and writing (Swain & Johnstone, 1997) (see previous discussion on immersion education). Reviews, however, attest to the fact that most students become ‘competent’ in both languages. Baker (2017: 257) raises an important issue by stating that “bilingual ability is not the same as being functionally bilingual”. This reflects the fact that use of the second language amongst immersion students may well be confined to the classroom and may not even reach the school playground, let alone the speech community. However, the community itself may also fail to provide the opportunities to engage in spontaneous conversation in the second language or the cultural occasions which would make this possible.

(b) The learning of the first language:

Due to placing the emphasis initially on the use of the second language in the early stages (approximately three years) of immersion education, the first language of students in *early total* immersion education tends not to develop to the same extent as that of students in mainstream education (as would be measured by school tests as opposed to the vernacular). However, despite this early lag, by the 6th Grade their proficiency in their mother tongue has generally caught up with that of their monolingual

peers, including the productive skills of speaking and writing, so that early total immersion in the second language does not adversely affect the first. Any differences which do appear between the two linguistic groups tend to advantage immersion students which seems to be linked to the cognitive benefits of bilingualism discussed in module ECDA-7004, such as metalinguistic awareness for example.

The linguistic development of the first language of students in early *partial* immersion education also seems to follow a similar path despite having greater first language content. Any significant differences in performance between them and mainstream pupils disappear by the end of elementary school, although they do not surpass them in first-language performance as in the case of early *total* immersion students.

Late immersion education has no adverse effects on the performance of students in the mother tongue either so that Baker (2017: 258) can summarise the evidence concerning the effects of immersion second-language education on the development of first language proficiency as follows:

The evidence suggests that immersion children learn a second language at no cost to their first language. Rather than acting like a weighing balance, early total immersion, in particular, seems more analogous to cooking. The ingredients, when mixed and baked, react together in additive ways. The product becomes more than the sum of the parts.

(c) The effect on other curriculum areas:

The evidence suggests that the attainment of competence in two languages is not detrimental to progress across the school curriculum and that the curricular achievements of early total immersion students are generally equivalent to those in mainstream education.

Evidence relating to those in early *partial* immersion education however shows a tendency, especially in the initial stages, to lag behind those in mainstream education. This may be due to the fact that the second language in which they study *other* areas of the curriculum is not sufficiently developed for that purpose which also applies to late immersion students. Whereas this reminds us of the BICS / CALP issue, discussion in Baker (2017: 259) centres on the need for language proficiency and development to be assisted by the adoption of “bridging programmes” involving, possibly, a content teacher of a particular subject and a language teacher working together.

However, generally, and particularly in the case of early total immersion, the evidence shows that most children can acquire competence in a second language relatively easily without adversely affecting their

progress in the curriculum. Some research data shows that immersion education can also be beneficial to lower ability as well as ‘language impaired’ children and that those of below average IQ are not disadvantaged when compared with being placed in monolingual education.

(d) Attitudes and social adjustment:

The danger of evaluating the outcomes of bilingual education only in terms of gaining *linguistic proficiency* is a valid issue which is raised occasionally in this module. However, there is some evidence that immersion education has a positive effect on pupils’ attitudes to education and their motivation, particularly amongst those in early total immersion programmes, with the response of parents also showing satisfaction with their children’s academic and social development. Here again, however, one must ask to what extent one can ascribe these added benefits to the educational programme rather than students’ upbringing and parental values.

Despite the predominantly positive evidence which surrounds immersion education, particularly early total immersion, Baker (2017: 260) lists seven limitations to which authors have drawn attention more recently and which were not perhaps expressed as being characteristic of the earlier evaluations:

(i) Canadian immersion students do not always become grammatically correct in their use of French and can be lacking in an ability to adopt appropriate styles of language to fit different social contexts. This was an issue referred to earlier and forcefully expressed in the words of Hammerley (1989). Baker (2011: 268) refers to the inappropriate use of “tu” or “vous” and the restricted use of verb tenses as examples (also observable in the language of children in Welsh immersion education), ascribing these characteristics to “the functionally restricted language of the classroom” and suggesting various practical solutions.

(ii) Students who have been educated in Canadian immersion programmes tend not to use the language after leaving school, and those who do are very few in number due to lack of opportunity, lack of confidence and a preference for English. Neither do they engage more with francophones than mainstream students do, nor with French culture or seek opportunities to speak French. The immersion experience, therefore, does not lead to any degree of enculturation, and French remains largely the language of the classroom.

(iii) Baker (2011: 260) states that identifying the crucial interacting factors which combine to create effective immersion education is difficult since there are other intervening variables such as teaching techniques, students' motivation and ethnolinguistic vitality that can influence results. Although some of these, arguably, do not apply more to language than they do to education generally, nevertheless, issues such as the *intensity* of language learning as opposed to the *length* of the provision is a very valid consideration when evaluating programmes of second language acquisition.

(iv) Parents' deliberate opting for immersion education can have an adverse effect on various aspects of mainstream education involving a change in the linguistic and ability profile of classes as well their sizes and age-range.

(v) Immersion education which enables children to acquire a second language can be instrumentally motivated and seen by parents as a form of social or economic mobilisation. Children from higher socio-economic backgrounds are substantially represented in Canadian French immersion education which can provide anglophones with linguistic and cultural capital to gain a range of advantages in Canadian society and further career opportunities. This, however, can generate conflict in that francophones perceive such developments as competition and a threat to the strength of the linguistic asset which they already possess and are able to trade in the employment market. As Baker (2011:271) states: "immersion education is seen as a Trojan horse of further English assimilation by some francophones".

(vi) Research in immersion education has concentrated predominantly on *outcomes* with very little attention paid to the learning process from the experience and perspective of the student. In drawing attention to the fact that "we still know little about students' immersion learning processes from the perspective of the learner", De Courcy (2002:3) highlights the crucial role of internal or private speech in the immersion experience and in the acquisition of a second language through creating new sentences by speaking to oneself. Such a process contributes to *comprehensible input* (receptive skills) as well as *comprehensible output* (productive skills).

(vii) Since immersion bilingual education in Canada involves two major international languages, there is a danger in generalising from the *additive* context of the Canadian immersion experience to other contexts across the world where at least one of the two languages may be in a

diglossic and *subtractive* situation. Any such generalisation should bear in mind that:

1. Immersion education in Canada is optional in which the conviction and motivation of parents who have opted for this provision is high and could play an influential role in its outcomes.

2. Immersion classrooms tend to be linguistically homogeneous where pupils start at a similar level, thus assisting the efficiency of the teaching methodology and the curriculum structure.

3. There is respect for the child's first language, thus creating an additive ethos. Parents also usually play an important role in the immersion movement and establish a positive and supportive relationship with staff and administrators.

4. Teachers in Canadian immersion education programmes are dedicated to the programmes. This high level of commitment is also characteristic of teachers in Welsh-medium education, as evidenced in research carried out by Roberts (1985), a characteristic which is recognised as having been a crucial component in the expansion of the system in Wales.

5. Canadian French immersion education must be seen in a wider political context than simply that of an *educational* model of second-language acquisition since it is underpinned by a particular social, cultural and political ideology as well as aims and motives of anglophones from a higher socio-economic group who seek social, economic and career advantages for their children. Ironically, however, as mentioned previously, despite contributing to the vitality of the French language in Canada, some francophones "question whether an increase in bilingual Anglophones will simply act to deprive them of their historical advantage in occupying bilingual jobs." (Lapkin et al., 1990: 649)

3. Heritage Language Education

Reviews of heritage language education apply mainly to the northern hemisphere although those related to the southern hemisphere are increasing. Generalisations from these reviews collectively point to four main aspects of the effectiveness of this model of bilingual education.

(a) It enables children to maintain their competence and use of their home language, especially when compared with those who are placed in mainstream or transitional education and who, either partly or totally, lose

command of their mother-tongue. In such linguistic provision, minority language children often deliberately avoid using their home-language, an aspect of language attrition which, as mentioned previously, can also affect self-esteem and be psychologically damaging.

(With regard to pupils who transfer to Heritage Bilingual Education from immersion classes, NFER (1992) research (based on the results of standard assessment tests in Welsh as a first language for pupils aged 14) showed very little difference between the performance of pupils from Welsh-speaking homes and those from non-Welsh-speaking homes).

(b) The use of the first or heritage language in education, therefore, can enhance a child's sense of identity and self-esteem. Perceiving the home language as being respected by the school, regardless of its 'public' status even as a minority language, can also be interpreted as an acceptance of the home culture and values, thus improving the student's sense of belonging, motivation and curricular performance.

(c) Children in Heritage Language Education perform as well as those in mainstream education in other areas of the curriculum, including mathematics and science. Therefore, there is no disadvantage or loss in studying the curriculum through the medium of the home language, albeit a minority language. To the contrary, academic performance can often be superior to the performance of students in mainstream education.

In Wales, Standard Assessment Tests (SATs) were conducted at various stages of academic development across the primary and secondary sectors up until the middle of the 2000s. In SATs conducted at the end of Key-stage 1 for 7 year-old pupils who had received statutory education since the age of 5, the performance of fluent bilingual pupils was higher. Research conducted by the National Federation for Educational Research (NFER/BGD, 1991) showed that the performance of pupils in Welsh-medium schools was higher in Mathematics and Science. Similarly, research conducted independently by Leeds University (Shorrocks, 1992) also showed that pupils fluent in Welsh had higher results in Mathematics and Science than those who were not fluent.

(d) Whereas the third outcome above may not be surprising since education in one's home language is what majority language children generally receive and expect, yet the fourth outcome "tends to go against 'common sense'" (Baker, 2011: 262). Evaluations show that when children in Heritage Language Education are tested in the language of mainstream education such as English, their performance is comparable to that of their mainstream peers. "The explanation seems to lie in self-esteem being enhanced, and language and intellectual skills [being] better promoted by education in the home language" (Baker, 2017: 262)

resulting in linguistic skills acquired in the first language being transferred into the second language, a cognitive process which Cummins (1981) explains in terms of the Interdependence Hypothesis. Evidence from the Assessment of Performance Unit which the British government had established in the 1970s also seems to confirm this outcome. Based on research data in the achievements of pupils in the English language, Thornton (1986: 61) observed:

...the mean scores for second-language speakers (all but a handful of whom were native speakers of Welsh) were fractionally higher than those for monolingual English speakers.

McCarty (2008: 249) states that Heritage Language bilingual programmes “ensure that Native children receive an education that is pedagogically sound, culturally based, and linguistically and academically empowering”.

(e) Additional benefits which emanate from an effective bilingual education model such as Heritage Language Education are, of course, the *cognitive* advantages studied in module ECDA-7004: Cognitive Aspects of Bilingual Education, but which have also been mentioned in the course of this module.

As Baker (2017: 262) points out, however, despite the positive aspects shown in evaluations of Heritage Language Education, some concerns are also expressed by Canadians on the basis of political ideology and the perception of this linguistic provision as a challenge to existing power relations. Whereas *official* policy supports French language education as well as English, providing such support to other ‘heritage’ languages is seen as a step too far. Due to the financial implications and the possible effects on the mainstream educational system, attitudes are, therefore, demonstrated more in terms of tolerance of other ethnocultural communities rather than support. Furthermore, language diversity in Canada has increased in the wake of higher levels of immigration since the mid 1980s owing to deliberate government policies to attract immigrants in reaction to a lower birth rate and an ageing population.

Despite what might be seen as some *public* concerns and regardless of certain obstacles such as the shortage of teachers and teaching materials, the opinions of those involved in Heritage Language Education, including parents, are very positive. As shown in Baker (2011: 273), the Canadian Education Association summarises the advantages as:

- positive self-concept and pride in one's background
- better integration of child into school and society
- more tolerance of other people and different cultures
- increased cognitive, social and emotional development
- ease in learning of new language
- increased probability of employment
- fostering stronger relationships between home and school
- responding to the need and wishes of a community