Processes and Outcomes in the European Schools Model of Multilingual Education

Alex Housen
Vrije Universiteit Brussel and Fund for Scientific Research-Flanders

Abstract

This article discusses aspects of the European Schools model of multilingual and multicultural education, with a particular emphasis on its language component. European Schools (ES) cater to a linguistically and culturally diverse population and operate in up to nine languages at the same site. Pupils receive most of their education in their respective first languages but are required to learn at least two other languages in the course of their schooling. The complex structure of the ES program, with its teaching of languages and other subjects in the target languages and its regular mixing of different language groups, has been designed to promote multilingual proficiency and cultural pluralism at no cost to academic development. Key features of the ES model are outlined, and its outcomes are critically evaluated.

Introduction

In the past few decades, bilingual and multilingual education[1] has received ample attention from researchers and policy makers. Most of this attention has been devoted to the Canadian immersion model (Johnson & Swain, 1997). Other models have received far less attention. One such model is that of the European Schools (ES). The ES have been in operation for nearly 50 years in several member states of the European Union (EU) and have gained a firm reputation as institutes of both linguistic and scholastic excellence (Baker, 1996; Hamers & Blanc, 1989). Recent years have also seen a growing interest in ES as a model for developing multilingual education and second language education elsewhere (cf. European Economic Community, 1990; Skutnabb-Kangas, 1995). In this light, it is important to draw attention to the available research on processes and outcomes in these schools and to the lessons that can be drawn from their experience. Sections 1 and 2 of this article present an

overview of the ES model, with special attention given to its language component. Section 3 evaluates the outcomes of this model, again with special attention to linguistic outcomes. Section 4 considers some wider implications the ES experience may have for multilingual education in general.

Structure, Population, and Objectives of the European School Model

A proper understanding of the organisation and functioning of a bilingual/multilingual program requires clarity about its target population, the context in which it is implemented, and its proclaimed philosophy and objectives. An appreciation of what a bilingual program sets out to do—how, for whom, and what it professes to be—is very necessary to avoid criticism based on mistaken assumptions about the program evaluated. This section outlines relevant features of the ES model, with particular attention given to its language component. Fuller discussions of the ES model can be found in Swan (1996) and Baetens Beardsmore (1993, 1995), on which the following sections are based.

The Schools and Their Population

The ES model grew out of a private initiative in the 1950s, prompted by a group of parents—foreign civil servants working for the European Coal and Steel Community headquarters in Luxembourg. They felt that their children's specific linguistic, cultural, and academic needs were insufficiently met within the Luxembourg school system. Today, ES are public institutions controlled by the authorities of the member states of the EU. There are currently 10 schools in six member states of the EU, all in or near towns with a high concentration of EU officials. There is one school in each of the following locations: the Grand Duchy of Luxembourg (Luxembourg), Italy (Varese), the Netherlands (Bergen), and the UK (Culham). There are two schools in Germany (Karlsruhe and Munich), and four schools in Belgium (three in Brussels and one in Mol). Two new schools open in 2002 in Frankfurt (Germany) and Allicante (Spain), and there are plans for two more schools (one in Brussels and in Luxembourg).

ES are intended primarily for the education of the children of EU officials, but others, including migrant children and host nationals, also attend. Many ES pupils are examples of what Baetens Beardsmore (1979) calls "highly mobile children," that is, children who reside in a foreign country for potentially short periods of time due to the nature of their parents' employment. About 17,000 children are currently enrolled, representing over 50 nationalities and over 30 different language backgrounds. Each school consists of several language sections, which collectively cover the 11 official languages of the EU (Danish, Dutch, English, French, Finnish, German, Greek, Italian, Portuguese, Spanish, and Swedish). Most children utilize one of the official

languages of the EU as their home language and several already speak two or more languages, to various degrees of proficiency, upon entry.

The ES population contains both language majority and language minority children but the former are always in the minority in any given school. Thus, most ES pupils are language minority children in the sense that their home language is not the majority language of the host community where the school is located. However, ES pupils are not minority children in the socio-economic sense of the term. Although it is not part of any policy, most students come from middle class families, which contributes to the ES' reputation as elitist schools (Hamers & Blanc, 1989; Baker, 1996; Sears, 1998). When possible, efforts are made to enroll children from non-EU officials (including host nationals and immigrant children) to avoid "ghetto-ization" and to balance out the numbers in the various language sections. Moreover, education in the ES is free, though children of non-EU officials pay a modest annual fee. This fee may be waived for social reasons.

Objectives and Philosophy

ES are distinctly multilingual and multicultural, not only in terms of their pupil population but also in their organization, ethos, and goals. These goals are manifold, involving both maintenance and enrichment—academic, linguistic, and cultural.

The primary concern is with academic development. The ES offer full education from kindergarten to university entrance level. The program is divided into three cycles: two years of kindergarten (ages 4 to 6), a five-year primary cycle (grades 1 to 5; ages 7 to 11), and a seven-year secondary cycle (grades 6 to 12; ages 12 to 18). Basic education in each school is provided in one of the 11 first language (L1) sections.[2] All language sections in all schools follow the same curriculum that leads to the European baccalaureate. This program allows for easy integration into any European school system and access to universities worldwide.

The second mission of the ES is to develop a pluralistic identity and to prepare pupils for life in linguistically and culturally heterogeneous societies. This implies additive multilingualism, with high levels of functional proficiency and literacy in *at least* two languages, the child's home language and one of the three working languages of the ES, French, English, or German. Teaching of this first foreign language (or L2) is started in primary school, with further languages added in secondary school.

The notion of cultural pluralism envisaged by the ES model entails two seemingly contradictory goals, namely the maintenance of the child's distinct home culture and national identity on the one hand and the development of a supra-national, "European" identity. Minimally, ethno-linguistic prejudices and overly nationalistic sentiments are to be prevented.

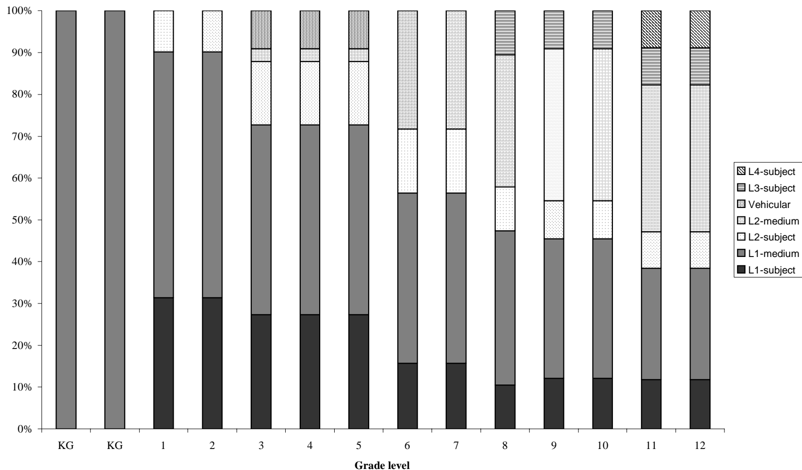
A further tenet of the ES model is that all pupils (and teachers) are equal, and that no pupil, sub-section, or language be privileged, academically, linguistically, or otherwise. All pupils follow the same curriculum and must learn at least one other language through which they will be taught and examined according to the same criteria as L1 pupils.

Languages and the Curriculum

Language distribution in the curriculum

The pupil's L1 is taught as a subject from grades 1 to 12, and it is the language in which the pupils first learn to read and write. The L1 is the dominant medium of instruction until at least Grade 8. Only in the final grades does the total amount of instruction in the L1 drop below 50%, allowing for more instruction in the pupils' foreign languages (see Figure 1).

Figure 1. Language distribution in the ES curriculum.



KG = Kindergarten; Vehicular = the language used during European Hours (this language may not be the L2 of a given pupil).

Foreign language learning formally starts with the introduction of the L2 in the first year of primary school. The actual choice of the L2 (English, French, or German) is the prerogative of the parents and remains valid for the child's entire school career. The L2 is first taught as a subject for one 30-minute period a day in grades 1 and 2 and for one 45-minute period a day in grades 3 to 5. The L2 remains compulsory as a subject throughout schooling for at least three periods a week and is taught to mixed groups of pupils from different L1 sections. The L2 becomes a medium of general instruction in Grade 3 for one period a week in physical education. It is also often used during the European Hours—an activities class in grades 3 to 5 which aims to

integrate children from various language sections to play, communicate, and make them aware of their common European background.

The L2 is used for up to 25% of the instruction time in the last three years of primary school. By Grade 8 it reaches 50% and up to 70% in the last two grades of secondary school, with subjects such as history, geography, arts, music, religion, and economics taught in this language (see Figure 1).

A third language (L3) is studied in grades 8 to 10. The L3 can be any of the 11 EU languages not yet studied (except for Irish nationals, who have compulsory Irish, and Belgian nationals, who must take their other national language, Dutch or French, if this has not yet been studied as L2). In the last two grades of secondary school the L3 is optional. Finally, pupils wishing to specialize in modern languages can further opt for a fourth language (L4) in the final two grades of secondary school.

Figure 1 illustrates the distribution of languages in the ES curriculum based on the example of a hypothetical pupil who in the final grades of secondary school has opted for an L4 and continued L3-subject instruction, but has no elective courses taught through the medium of his/her L3.

Various types of support are provided for pupils with inadequate mastery of the L2. Such children are first sent to "catching-up classes" during the periods when their classmates have L2 as a subject. They are not separated, however, when the L2 is used for teaching content matter. If they experience difficulty, they receive after-school tutoring until they are up to class level. "Support classes" are further provided for secondary school pupils with general or language-related learning difficulties.

In sum, the ES model aims at linguistic enrichment through a transition from instruction in the pupil's L1 to instruction in both the L1 and the L2 (and sometimes the L3). In contrast to other enrichment programs that involve a radical L1-L2 switch (e.g., early total immersion), the transition in the ES is gradual. The L2 is first used in a small number of non-academic subjects only, then gradually increases as the pupils progress through the program. The transition is also partial. Although the L2 may become the prime medium of instruction for certain pupils at the end of secondary schooling, it is never the sole medium of instruction. Finally, this transition occurs (relatively) late. Specifically, the L2 is not used as a full-fledged medium of instruction for cognitively demanding and decontextualised subjects until secondary school. This is when pupils have had time to acquire the prerequisite skills for academic language use (including literacy) in both their L1 and their L2.

Teaching Staff

All ES teachers are appointed by their respective national education systems and are native speakers of the languages they use as the medium of instruction. All teachers and support staff must be bilingual and know at least one of the three working languages of the ES (English, French, or German). Few ES

teachers have received special training for teaching in multilingual schools. Some have a qualification to teach their own language as a second or foreign language, but most of the teachers learn how to teach multilingual groups of non-native pupils while on the job and in the in-service training programs organised by the schools. All teachers subscribe to the ES model's philosophy, namely that of multilingualism and multiculturalism as both desirable and viable educational goals.

Materials for L2-Subject and L2-Content Teaching

Textbooks and materials used in L2-subject classes in primary school and in the lower grades of secondary school tend to be specifically designed as foreign language materials for younger learners. Materials for L2-subject teaching in the upper grades of secondary school are often designed for (monolingual) native speakers of the language and are supplemented with authentic and teacher-made materials.

Methods for L2 Teaching and Assessment

In general, communicative teaching methods prevail in the L2-classrooms in primary school. Pupils are not forced to use their L2 at this level but its active use is always encouraged. With the youngest children in the first three grades of primary school, the underlying language curriculum is rarely taught explicitly. The role of the L2 teacher is to provide exposure to, and practice in, useful structures and vocabulary by creating contexts that mimic real life. Strategies include handwork activities, projects, games, songs, drama, and film, together with short field trips and one or two longer stays (up to a week) in a country where the L2 is spoken. Less "communicative" strategies may also be employed in the early stages of L2 teaching, including repetition, pattern drilling, explicit error correction, and simple metalinguistic explanation. Systematic analytic teaching of the L2 and grammar instruction is officially deferred until secondary school.

The language skills needed for studying fiction texts or acquiring information from non-fiction materials are also demonstrated and practised in the L2-subject classes in the intermediate and higher grades. The specific language skills required for success in L2 medium classes are the province of both the L2-subject and L2-content teachers in secondary school. The structural underpinnings of such skill areas as note taking, summary, and the writing-up of science experiments, are explained to the pupils and practised in authentic contexts.

Preference is given to informal continuous assessment of language development rather than to formal achievement testing, which is deferred until the fourth year of secondary school. Only at the end of secondary schooling are ES pupils expected to attain near native levels of proficiency in their L2. This is assessed in a series of final oral and written examinations taken in the L2 for all the subjects taught through the L2 (i.e., L2-subject, geography,

history, economics, sociology, religion, arts, physical education, and some advanced elective science courses). Course standards and examination criteria for obtaining the European baccalaureate are said to be as high as those in academically demanding national monolingual education systems (e.g., the French Lycées and the German Gymnasia), even for courses and exams taken in the L2.

Social Engineering and Extra-Curricular Support for Language Learning

The multilingual environment of the ES themselves and the process of social engineering provide additional reinforcement of the formal language learning process. Social engineering here refers to the deliberate mixing of pupils from different national and linguistic backgrounds for as many subjects and activities as possible (Baetens Beardsmore,1995). This mixing is started in the first grade of primary school in the L2-subject classes and increases as the pupils get older. The aim of social engineering is both to minimalise fragmentation of the school population on nationalistic-linguistic lines (a risk inherent to the presence of different language sections on the same site) and to enhance the foreign language learning process. Everyone in the ES regularly interacts in a foreign language, both inside and outside the classroom. The linguistic environment outside the school may provide a further extra-curricular source of contact with the foreign language. In 7 of the 10 ES, one of the three L2s is the dominant language of the wider environment.

Outcomes

The ES program has not seen an extensive external assessment so far. Consequently, knowledge of its actual outcomes is neither as detailed nor as comprehensive as in the case of, for instance, Canadian immersion programs.

Academic Outcomes

Most observers point to the high success rates of ES students on the final examinations leading to the European baccalaureate (in excess of 90%) and to the large proportion of ES pupils who progress to higher education, often in countries where the L2 rather than the L1 is spoken. These success rates indicate that the multilingual environment of these schools and their use of an L2 as a medium of instruction do not impede academic and intellectual development. More critical observers have pointed to the fact that ES pupils are held back in secondary school if their overall attainment does not meet the educational goals set for the grade. Similarly, they have to leave the school after having been held back twice. This practice, plus the fact that less academically inclined pupils may leave the program on their own accord, has to be taken into account when interpreting the reported high levels of academic success in the ES (Hoffman, 1998; Housen, 1997).

Socio-Cultural Outcomes

It is particularly difficult to evaluate the success of the ES's goal in achieving a complex multicultural identity that combines a pupil's own national and cultural identity with a supranational European identity. A study among 17- and 18-year-olds in one of the ES in Brussels (Housen & Baetens Beardsmore, 1987) revealed that while most primary school pupils still select friends from their own L1 section, friendship relationships become distinctly cross-linguistic during the course of secondary school. Furthermore, the motivation to learn other languages for both instrumental and integrative purposes increases accordingly. Participant observations and interviews further revealed that although some of the older pupils still predominantly perceive themselves in terms of distinct national group membership (e.g., as either British, Italian, or French), many others could not fully identify with a specific national-cultural group any longer. When asked, these pupils would, often after some hesitation, say that they felt "European" but they were often unable to specify what that entailed. This seems to suggest that the European identity envisaged by the ES model is still somewhat negatively defined, that is, as the lack of a specific national identity. Finally, the study revealed that pupils' attitudes toward other nationalities, cultures, and languages are subtle and positive, and that nationalistic antagonism and ethno-linguistic tensions across the various language sections are rare. In sum, it seems that the ES experience, like the immersion experience (Genesee, 1987), can bring about a shift of attitudes and reduce the dividing influences of nationalism and ethnicity.

Linguistic Outcomes

Two series of studies conducted at the University of Brussels report on the linguistic outcomes of the ES model. The first series of studies evaluated global levels of achievement in French as an L2. The second series investigated the development of specific aspects of pupils' linguistic competence in English as an L2.

Global evaluations of L2 achievement

Baetens Beardsmore and his colleagues measured global levels of proficiency of French-L2 of 13-year-old pupils in the ES in Brussels (Baetens Beardsmore & Swain, 1985; Baetens Beardsmore, 1993). The tests and evaluation procedures were adapted from those used in previous research of Canadian immersion programs and later the Luxembourg system of trilingual education (Lebrun & Baetens Beardsmore, 1993). Frequent comparisons with these two other bilingual/multilingual programs were made throughout the evaluation. Thirteen year olds were chosen because the tests had been specifically designed for this age group. Additionally, this age represents an important juncture in the ES pupils' education when the L2 begins to be used for studying more decontextualised, cognitively demanding subjects such as

geography and history. The test battery used consisted of three tests. Two tested comprehension and one, a cloze test, measured global L2 knowledge. The results are summarised in Table 1 (adapted from Baetens Beardsmore, 1993, p. 110). They suggest that levels of French-L2 achievement obtained in the ES in Brussels at the intermediate stage of schooling are comparable and probably even superior to those obtained in the Canadian French immersion schools and in the Luxembourg schools, in spite of less formal classroom contact with the language. The researchers explain these results by the self-initiated use of French by the ES pupils inside and outside of the classroom and the presence of the language in the wider environment. These two factors are often lacking in the Canadian immersion context.

Table 1

French-L2 Achievement Scores for ES, Grand Duchy of Luxembourg and Canadian Immersion Pupils

	ES Brussels (N = 80)	**Canadian Immersion** (N = 80)	**Luxembourg** (N = 179)
L2 used in wider context: Total L2 class contact hours:	yes 1,325	no 4,450	yes 1,450
Test scores:			
Written comprehension (max. = 22)	15.6	14.6	15.3
Auditory comprehension (max. = 22)	17.7	14.9	14.8
Cloze test (max. = 44)	22.0	19.9	21.3
Total (max. = 88)	55.3	49.4	51.4

Baetens Beardsmore and collaborators predicted that levels of L2 proficiency in the ES approximate native-like norms by the end of secondary schooling if the L2 is also available in the wider environment (e.g., French-L2 in the ES in Brussels). When this is not the case, slightly lower levels of L2 proficiency should be expected (e.g., German-L2 in the ES in Brussels).

The situation of the L3 in the ES is less clear. Empirical studies on L3 achievement are still lacking. Examination results involving the L3 are less homogeneous than those involving the L2. If the L3 is one of the three official working languages, available as a medium of instruction in option courses,

and/or spoken in the environment outside the school, L3 proficiency tends to be high and may even exceed L2 proficiency (Housen & Baetens Beardsmore, 1987). When these conditions are not fulfilled, proficiency in the L3 is generally weaker than in the L2.

Discrete Components of L2 Development

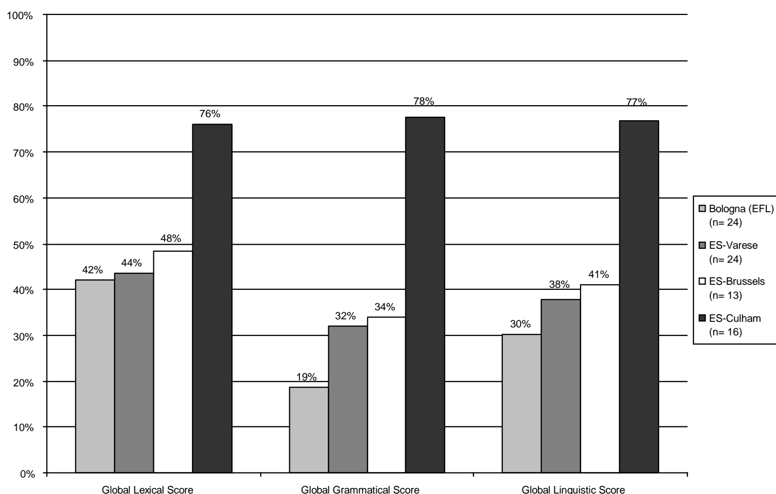
Further information about the process of L2 learning in the ES comes from two recent studies, referred to here as Study A and Study B (Housen, 1997, 2002; Housen & Pallotti, 2002). These two studies investigate the development of specific components of the linguistic competence in English-L2 by ES pupils from different age levels, different L1 backgrounds and different schools through analyses of their oral production in standardised interviews. The interviews consist of both informal free conversation and semi-guided speech tasks designed to elicit a wide variety of linguistic forms in the L2 (e.g., picture descriptions, story retellings).

Study A

Study A compared levels of English-L2 achievement of 53 Italian-L1 pupils in grades 3 and 4 in the ES of Varese (Italy), Brussels (Belgium), and Culham (UK). These three schools differ in the role and status of the L1 (Italian) and the L2 (English) inside as well as outside the school. English is very much a "foreign" language in the context of the Varese school, while it is a "second" language in the Culham school. The schools in Brussels represent a midway position with neither the L1 nor the L2 being a vehicular language in the out-of-school context. All pupils had approximately 250 hours of classroom contact with English at the time of the study. Two comparison groups were used. There were 10 Grade 4 native English-speaking pupils from the English L1 section in the ES of Brussels, and 24 Grade 5 Italian pupils from two monolingual Italian schools in Bologna (Italy). The Bologna pupils had also studied English for approximately 250 hours as part of the Italian English-Foreign Language (EFL) curriculum.

Standardised quantitative measures were used with all five groups to establish levels of productive oral proficiency in English. A first set of measures tapped aspects of the pupils' lexical proficiency (lexical richness and variation). A second set assessed aspects of their grammatical proficiency, including their morphological richness, morpho-syntactic accuracy, and their syntactic complexity. Figure 2 shows the global lexical and grammatical proficiency scores obtained by standardising and averaging over the scores of the various indices. The scores of the native speakers were taken as a benchmark (100%) and the scores of the L2 learners were expressed as a percentage score relative to the native speaker scores.[4]

Figure 2. Linguistic English-L2 proficiency scores of Italian-L1 students in three European Schools and a traditional EFL program (in percentages relative to native speaker comparison scores = 100%).



Comparisons of the lexical proficiency scores indicate that whatever distinguishes the English-L2 learning experience in the ES in Varese and Brussels from that in conventional EFL classes in Bologna, does not lead to faster lexical growth, at least not after 250 hours of classroom contact with English. However, the ES experience does have an early positive effect on the development of grammatical L2 proficiency; the grammatical skills of all ES pupils are superior to those obtained by the EFL pupils in Bologna. The scores of the pupils in the ES in Varese and Brussels are comparable. Differences in the sociolinguistic status of the L1 between the Varese context (where Italian is prominent both inside and outside the school) and the Brussels context (where Italian is prominent neither inside nor outside the school) do not affect English-L2 development in the first three years of primary schooling. Differences in the status of the L2, however, are clearly felt; the Italian pupils in the ES in Culham have clearly developed a more elaborate vocabulary and accurate grammar in English than their peers in Varese and Brussels. This finding echoes those of Baetens Beardsmore & Swain (1985) on the learning of French-L2 in the ES in Brussels. The role of English as a lingua franca inside and outside the school in Culham provides the English-L2 pupils there with additional input and output opportunities. This role also creates a more fertile climate for language learning. It renders the learning of English in Culham more pertinent to the pupils' immediate communicative needs than in Brussels or Varese, thus enhancing language learning motivation. What is striking is the magnitude of these effects; the Culham pupils outperform the

pupils in Brussels and Varese with some 30% points in the lexical domain, and nearly 50% points in the grammatical domain.

Study B

Using the same type of data and measures as Study A, Study B compared patterns of English-L2 development by 92 Dutch, French, and Greek-speaking pupils across five different grade levels (Grades 3, 5, 7, 9, 11) in the ES of Brussels. Twelve of these pupils were studied longitudinally over a period of three years (from grades 3 to 5). Native English-speaking pupils again served as comparisons. This time the comparison group consisted of five Grade 5 and five Grade 7 pupils from the English-L1 sections in the ES of Brussels.

Although the Dutch, French, and Greek pupils in this study learn English under the same curricular conditions (i.e., the same amount and type of classroom contact with the L2), the three groups are not the same in terms of the extra-curricular conditions of their L2 learning experience. French being the lingua franca both within the ES of Brussels and in the wider, out-of-school context, it was hypothesised that the French-speaking pupils perceive the learning of English-L2 as less pertinent to their communicative needs than the Greek and Dutch pupils. The Dutch pupils in turn were predicted to perceive the learning of English as slightly less pertinent than the Greek pupils because Dutch, in contrast to Greek, is one of the official languages in the bilingual capital region of Brussels, although its presence in daily life is not strongly felt. In addition, the three L1 groups also differ in the degree of typological proximity between their respective L1 and the target language, Dutch being the closest to English, followed by French and Greek, in that order. It was hypothesised that this factor would also affect the rate and outcomes of English-L2 learning by the three groups. Figures 3 and 4 summarise the results of Study B.

The Dutch pupils dispose of a richer vocabulary and a more elaborate and accurate grammar than the French and Greek pupils, who are very much comparable. The difference is most pronounced in the early phases of education (i.e., primary school). The Greek and French pupils eventually manage to catch up with their Dutch peers in the course of secondary schooling as far as lexical growth is concerned and by Grade 11 all three groups have comparable lexical proficiency scores. All three groups also make significant progress in the domain of grammatical development, but this time, the Dutch pupils maintain their lead through the end of secondary schooling.

According to Housen (2002), typological proximity between the L1 and the L2, rather than sociolinguistic status of the L1, is the most likely explanation for the differences between the Dutch versus the French and Greek pupils. The many lexical and grammatical cognates in English and Dutch probably give the Dutch learners of English a considerable headstart in the learning process. Although the Greek pupils in the ES in Brussels were predicted to perceive the learning of English as the most pertinent to their needs, they did

Figure 3. Global lexical English-L2 proficiency scores of French, Greek, and Dutch-speaking students in the ES in Brussels (in percentages relative to native speaker comparison scores = 100%).

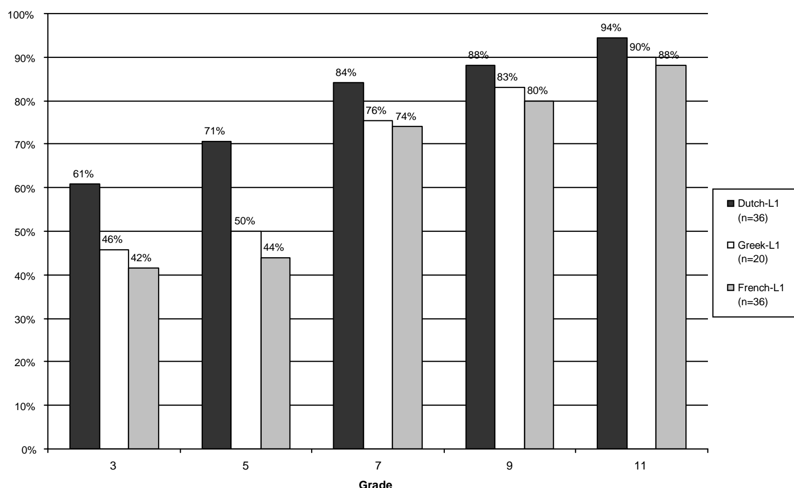
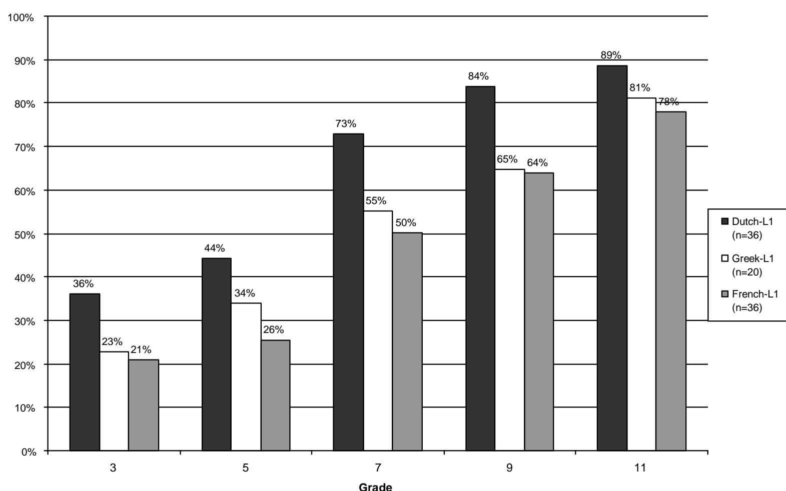


Figure 4. Global grammatical English-L2 proficiency scores of French, Greek, and Dutch-speaking students in the ES in Brussels (in percentages relative to native speaker comparison scores = 100%).



not learn English significantly better than the French pupils, who were predicted to perceive the learning of English as the least pertinent to their needs.

Figures 3 and 4 further show that although L2 progress in the ES is generally a gradual and incremental process, a developmental "spurt" can be observed between the fifth and the seventh grade (i.e., at the transition from primary to secondary school), particularly in the domain of grammar learning. Housen (2002) attributes this spurt to two developments in the L2 curriculum. The first is the increase from Grade 6 onward in the use of the L2 as a medium of instruction, first in content lessons such as arts, music, and complementary activities, and later in history, geography, and Social Studies. This development not only increases the amount of input available for language learning but also, and perhaps more importantly, the opportunities for pupils to produce the kind of comprehensible output which Swain (1985) has proposed as necessary for grammatical growth in a L2. Classroom observations in the ES have revealed that there is little opportunity for pupils to produce such comprehensible output in the lessons at primary school, given the early emphasis on the development of receptive skills in the L2. This is in contrast to the L2-subject and L2-content classes in secondary school, where pupils must regularly produce self-sustained oral and written discourse in their L2, thus promoting lexical and particularly grammatical processing of the language.

A second possible explanation for the observed developmental spurt is the provision of analytic and form-focused instruction in the L2-subject lessons in secondary school. Previous research has identified this type of instruction as necessary for the acquisition of lexical precision and grammatical accuracy in an L2 (Harley, 1993; Hammerly, 1991). As we have seen earlier, this type of instruction is rare in L2-subject classes in primary school, where the focus is on the L2 as a means for language play and for exchanging meaning and content. However, it becomes an important component of L2 teaching in secondary school.

Synthesis of Program Outcomes

Although there remains much to be learned about the processes and outcomes of the ES program, the combined information from internal assessments and external research warrants a positive evaluation, particularly of the languages component of the program. Research on L2 learning in the ES system suggests that global levels of L2 proficiency are *at least* comparable to those attained in other tried models of bilingual/multilingual education and probably close to monolingual native speaker norms by the end of secondary schooling (with some variation depending on the availability of the L2 in the wider context). This is achieved at no apparent cost to the pupil's L1 or their academic development. As the number of pupils who attain high levels of proficiency in a third and perhaps a fourth language becomes known, the ES program may be referred to as an additive multilingualism program.

The studies reviewed here further provide evidence of ES pupils' ability to produce their own independent, grammatically accurate, and lexically precise sustained discourse in an L2, even in contexts where additional, out-of-school support for L2 learning is absent (e.g., English-L2 in the ES in Brussels). This is one of the most impressive achievements of the ES program and stands in sharp contrast to many Canadian immersion programs. Pupils of these Canadian programs by the end of secondary education continue to reveal striking grammatical inaccuracies in their writing and speaking (Swain, 1985; Hammerly, 1991). The L2-subject teaching throughout the ES program, the component of analytic, form-focused L2-instruction in secondary school, and the general concern with accuracy, precision, and appropriateness that permeates all classes in the ES, contribute to this outcome.

On a more critical note, the available research also demonstrates the often extensive range of variation in the rate and outcomes of foreign language learning in the ES, particularly in early and intermediate stages of schooling. Depending on factors such as L1 background and the status and availability of the target language within the schools and their wider context, different pupils experience the learning of a foreign language in quite different ways. One of the tasks of future research on the ES will be to investigate L2 learning and teaching in the lower secondary school grades. This is particularly necessary in the L2-content classes to see if and how pupils of lower L2 ability manage to keep up, catch up, or give up and leave the program.

Implications

Given its complexity, and the dearth of research-based knowledge about its functioning and outcomes, it would clearly be inappropriate to transplant the ES model to different contexts. Nevertheless, from the insights gained so far, supported by insights from other bi and multilingual programs, several general observations can be made for ensuring successful bi/multilingual education and second language education in general. Four points are selected for consideration. They pertain specifically to the development of bilingual/ multilingual competence through L2/L3 education and leave aside the issues of academic and socio-cultural development.

Time and Timing of L2 Education

Starting age of L2 education

Perhaps one of the most controversial issues in language education is the question of age. Although there is no conclusive research on the subject, there may be important cognitive, social, psychological, and psycho-linguistic arguments and some advantages for introducing an L2 at an early age in a school setting (Harley & Wang, 1997; Peltzer-Karpf, 1997). The available evidence suggests that, all other things being equal, late L2-starters have a diminishing initial superiority in L2 proficiency, particularly in the domains

of literacy and other aspects of academic language proficiency. Young L2-starters eventually catch up in all these domains of language and maintain a later superiority in speaking proficiency. There is anecdotal evidence from the ES, which corroborates this view. Children who enter the program beyond Grade 5 have been found to attain lower levels of productive oral L2 proficiency than children who start the program from the beginning, despite the extensive remedial L2 teaching provided to them.

Length of L2 education

Given the gradual and lengthy nature of the development of L2 proficiency in a school setting, L2 education should be allowed to span both primary and secondary education (and preferably beyond). This has the additional advantage of providing an important element of continuity in the curriculum.

Amount of L1 and L2 education

The time devoted to the L1, L2, and any further languages in the curriculum will depend on a variety of factors. These include the socio-linguistic status and role of the languages involved, the availability of extra-curricular input and output opportunities inside and/or outside the school, and the ultimate goals of the program. These goals include whether to develop high levels of bilingualism or multilingualism and biliteracy, or to develop more limited or partial bilingualism/biliteracy. As a general principle, there should be as much curricular support for the L1 (through L1-subject and L1-content teaching) as is necessary to avoid L1 impairment, and as much support for the L2 (and L3) as possible. Concretely, this means that unless the L1 is dominant in the wider environment of the school, it is advisable to devote no more than 50% of the timetable to the L2 in the first five to eight years of schooling.

Integrating Language and Content

Experiments with immersion education have shown that L2 or L3 learning is more effective when it is integrated with meaningful and significant content. In school, this means integrating language instruction with academic instruction so that students are taught academic subjects through the medium of the target language, taking into account their language needs. This provides essential input and output reinforcement for the L2 learning process and also generates the pertinence that Baetens Beardsmore & Kohls (1988) identified as an important factor in the success of L2 programs. In addition, content-based use of the L2 is also different from its subject-based use, extending the range of input types to which pupils are exposed. For these reasons, it is recommended that at least one general subject be taught through the medium of the L2. Activity-based lessons like physical education, music, arts, and even basic science subjects create opportunities for contextualised and cognitively-undemanding input and output. They provide opportunities for introducing basic vocabulary items and basic speech acts. After a few years, subjects like human sciences and social studies provide a suitable context for

introducing pupils to increasingly more decontextualised and cognitively demanding L2.

Need for Independent Self-Sustained Output

The immersion experience has shown that the use of the L2 as a medium for teaching content mainly promotes the development of receptive skills. The exigencies of traditional classroom discourse—which is still typically teacher-dominated—rarely provide sufficient opportunity for pupils to produce the sustained L2 output considered necessary for the development of full productive language proficiency. Therefore, use of the target language as the medium of instruction needs to be complemented by communication-rich social contexts in class and elsewhere in the school that promote spontaneous continuous output. The carefully engineered ES program teaches languages and other subjects in the target language and regularly juxtaposes different language groups, creating daily possibilities for communication in the language inside and outside the classroom.

Need for (Formal) L2-Subject Teaching

Research on second language acquisition suggests that the comprehensible input and output provided by content-based L2 instruction, or by informal interaction in the L2, may still not be sufficient to obtain full proficiency in the L2 (Ellis, 1990; Harley, 1993). The ES experience in L2 teaching provides evidence supporting the hypothesis that in many bilingual education contexts there is a clear need at all stages for "structured exposure" to the L2. This should be in the form of L2-subject teaching to supplement the "language in use" component of L2-medium instruction. In addition, it shows the need for this L2-subject teaching to be analytic and form-focused at some stage of schooling. This helps pupils acquire the less accessible aspects of the target language and ensures high levels of linguistic accuracy, precision, and appropriateness (cf. Doughty & Williams, 1998). Withholding such analytic instruction heightens the risk of arrested grammatical development (fossilization), particularly in contexts where critical levels of comprehensible input, output, and motivation cannot be guaranteed.

Conclusion

The ES experience shows that even in the most complex of situations the potentially conflicting demands of academic, cultural, and linguistic development in multilingual education can be reconciled. At the same time, the ES experience shows that such reconciliation is by no means self-evident,

requiring careful planning and considerable investment. Additionally, success in multilingual education is ultimately determined by a myriad of factors, curricular as well as extra-curricular, some of which may well be beyond the control of program designers. More research is needed to establish the exact weight of these factors, and their interactions, in determining outcomes in the ES and in multilingual education in general.

References

Baetens Beardsmore, H. (1979). Bilingual education for highly mobile children. *Language Problems and Language Planning, 3* (9), 138–155.

Baetens Beardsmore, H. (Ed.). (1993). *European models of bilingual education*. Clevedon, UK: Multilingual Matters.

Baetens Beardsmore, H. (1995). The European School experience in multilingual education. In T. Skutnabb-Kangas (Ed.), *Multilingualism for All* (pp. 21–68). Lisse, The Netherands: Swets & Zeitlinger.

Baetens Beardsmore, H., & Swain, M. (1985). Designing bilingual education: Aspects of Immersion and 'European School Models. *Journal of Multilingual and Multicultural Development, 6* (1), 1–15.

Baetens Beardsmore, H., & Kohls, J. (1988). Immediate pertinence in the acquisition of multilingual proficiency: The European Schools. *The Canadian Modern Language Review, 44* (2), 240–260.

Baker, C. (1996). Foundations of Bilingual Education and Bilingualism (2nd edition). Clevedon, UK: Multilingual Matters.

Doughty, C., & Williams, J. (Eds.). (1998). *Focus on form in classroom second language acquisition*. Cambridge, UK: Cambridge University Press.

European Economic Community (1990, May 21–23). *Secondary Schools and European/International Education in Europe: Mobility, Curricula, and Examinations*. Presented at the Joint Conference of the Commission of the European Communities and the Council for Cultural Co-Operation of the Council of Europe, Namur, Belgium.

Ellis, R. (1990). *Instructed second language acquisition*. Oxford, UK: Blackwell.

Genesee, F. (1987). *Learning through two languages: Studies of immersion and bilingual education*. Rowley, MA: Newbury House.

Hamers, J., & Blanc, M. (1989). *Bilinguality and bilingualism*. Cambridge, UK: Cambridge University Press.

Hammerly, H. (1991). *Fluency and accuracy: Toward balance in language teaching and learning*. Clevedon, UK: Multilingual Matters.

Harley, B. (1993). Instructional strategies and SLA in early French immersion. *Studies in Second Language Acquisition, 15,* 245–259.

Harley, B., & Wang, W. (1997). The critical period hypothesis: Where are we now? In A. M. B. de Groot & J. F. Kroll (Eds.), *Tutorials in bilingualism: Psycholinguistic perspectives* (pp. 19–51). Mahwah, NJ: Lawrence Erlbaum.

Hoffmann, C. (1998). Luxemburg and the European schools. In J. Cenoz & F. Genesee (Eds.), *Beyond bilingualism: Multilingualism and multilingual education* (pp. 143–174). Clevedon, UK: Multilingual Matters.

Housen, A. (1997). Teaching and learning second languages in the European Schools. In K. Karavas-Doukas & P. Rea-Dickins (Eds.), *The teaching of foreign languages in primary schools in Europe* (pp. 40–53). Coventry, UK: University of Warwick Press.

Housen, A. (2002). Patterns of second language development in the European School system of multilingual education. In D. So & G. Jones (Eds.), *Education and society in plurilingual contexts*. London: Longman.

Housen, A., & Baetens Beardsmore, H. (1987). Curricular and extra-curricular factors in multilingual education. *Studies in Second Language Acquisition, 9,* 83–102.

Housen, A., & Pallotti, G. (2002). Interlanguage development at primary school: The acquisition of English by young Italian-speaking learners in different socio-educational contexts. In P. Rea-Dickins (Ed.), *The teaching and learning of foreign languages in European primary schools*.

Johnson, R. K., & Swain, M. (1997). *Immersion education: International perspectives*. Cambridge, UK: Cambridge University Press.

Lebrun, N., & Baetens Beardsmore, H. (1993). Trilingual education in the Grand Duchy of Luxembourg. In H. Baetens Beardsmore (Ed.), *European models of bilingual education* (pp. 107–122). Clevedon, UK: Multilingual Matters.

Peltzer-Karpf, A. (1997). Early foreign language learning: The biological perspective. In B. Kettemann & I. Landsiedler (Eds.), *The effectiveness of language learning and teaching* (pp. 90–104). Vienna: Zentrum für Schulentwicklung-Bundesministerium für Unterricht und kulturelle Angelegenheiten.

Sears, C. (1998). *Second language pupils in mainstream classrooms: A handbook for teachers in international schools*. Clevedon, UK: Multilingual Matters.

Skutnabb-Kangas, T. (Ed.). (1995). Multilingualism for All. Lisse: Swets & Zeitlinger.

Swain, M. (1985). Communicative competence: Some roles of comprehensible input and comprehensible output in its development. In S. Gass & C. Madden (Eds.), *Input in second language acquisition* (pp. 235–253). Rowley, MA: Newbury House.

Swan, D. (1996). *A singular pluralism: The European schools 1984–1994*. Dublin, Ireland: Institute of Public Administration.

Wolfe-Quintero, K., Shunji, I., & Hae-Young, K. (1998). *Second language development in writing: Measures of fluency, accuracy and complexity*. Honolulu, HI: University of Hawai'i Press.

Endnotes

[1] The terms "bilingual" and "multilingual" education will be used in free variation. As the discussion will show, the ES are multilingual in their composition and offer bilingual education (instruction in two languages) to all pupils and trilingual education (instruction in three languages) to some pupils.

[2] No European school has all 11 L1 sections on site. The larger schools (e.g., in Brussels and Luxembourg) have up to nine L1 sections. Smaller schools have fewer sections.

[3] The traditional distinction between a second language and foreign language is problematic in the context of the ES. "Foreign language" and "other language" are used here as cover terms for all languages in the ES other than the pupil's first language (L1). Second language (L2) and third language (L3) are respectively the first and second foreign languages studied by ES pupils as part of their curriculum. A pupil's L2 and/or L3 can either be a 'second language' (i.e., spoken in the larger environment) or a 'foreign language' (not spoken in the larger environment).

[4] The linguistic measures used in Study A and Study B have all been previously established as reliable and valid proficiency diagnostics (see Wolfe-Quintero, Shunji, & Hae-Young, 1998). For further details about the methodological procedures and results of these two studies, refer to Housen (2002).