
The function of foreign language at the school-leaving examination and language-of-education pedagogy in bilingual education

Introduction

In the second half of the 1980s, there were 14 grammar schools in Hungary that launched the bilingual education experiment with state initiative and subsidy. The languages of instruction were English, French, German, Italian and Spanish. It was a considerable progress in comparison with the only Hungarian-Russian Grammar School. The government had to act as a programme developer because it was highly necessary to educate from the typically monolingual Hungarian population a future social elite that can speak foreign languages. It was only allowed to learn Russian in the public education that functioned in a closed language policy framework during the Cold War. The lack of the other foreign languages was a real barrier in the European and international economic relations. In the second part of the 1980s, the hunger for foreign language learning became more and more serious among the ever opening political environment. Everybody sought to learn a so-called Western foreign language.

After the 1989 political changes, an open and democratic public education system developed, the new „open language” policy took effect not just on the development of foreign language education but on the bilingual school network as well. On the latter area, this meant an increase in the number of schools, and the emergence of new models in addition to the original centralized model. A very demonstrative and convincing example of these changes is given by the fact that in 1987 and 1988 the number of bilingual grammar schools was fourteen, whereas in 2008 two hundred bilingual institutions were counted (Vámos, 2008:13) in the whole public education system (all levels included). Considering Hungary’s territorial size, it means that a 2-3% of primary schools and 10-12% of secondary schools have become bilingual institutions involving English, French, Chinese, German, Italian or Russian languages as target languages. This is also why it seems reasonable to investigate the relationship between the pedagogical freedom of choosing the language of instruction and the rules governing the public education.

The following paper presents some results of a series of research conducted by the Eötvös Loránd University of Budapest and the Association for Bilingual Schools between 2006 and 2009. The aim was to reveal the features of language use in the bilingual education in with the mirror of the results of the school-leaving exam. First, the type of bilingual education to be examined is defined, and then the context, the questions and the characteristics of the research are introduced. Finally, the results are shown and conclusions are drawn.

Theoretical considerations

The typology of bilingual schools

The research of bilingual schools often puts first the definition of the term 'bilingual education' adopted in the research because such an abundance of terminology exists that is advisable to define the object of the research at the beginning to avoid the eventual misinterpretations. The first step in giving a typology of bilingual education is dated to the 1970s (Fischman and Lovas, 1970), and focused on the objectives of the establishment of institutions. Nowadays Baker's 1996 typology (Baker, 1996) is often referred to, in which forms of „low” and „high” efficiency were classified. Minority languages are rated in the first group (general characteristics: Submersion, Segregationist, Transitorinal, Mainstream, Separatist), whereas the majority language is classified in the second group (Immersion, Maintenance/Heritage Language, Two-way/Dual Language, Bilingual Education in Majority Languages). In Hungarian bilingual education, there exist programs for minorities, which can be labelled as Maintenance/Heritage Language type, and there are some related to foreign language teaching (Bilingual Education in Majority Languages form). Coonan for example kept the term *Bilingual Education* in situations in which two (or even more) intermediary languages are used in language teaching, and categorized it further. Her typology is built up on the relationship between the language and the school curriculum (Immersion, Language medium teaching, Content-based language instruction, Language-enriched content instruction, Teaching content through a foreign language, Content-based bilingual education, Mainstream bilingual education, Plurilingue education). In Europe the CLIL/EMILE term¹ is also used (Marsh and Langé, 1999, Eurydice, 2006:8).

The relationship between the subject and the language of instruction in bilingual schools

In bilingual education, the relationship between the different languages of instruction, their connection to subjects that is, the way the languages of education are applied, is a fundamental issue. From this point of view, the subject-language structure, the assignment of languages to curriculum-requirements or the language use in the teaching-learning process can all be subject for analysis. It is a pedagogical question what kind of influence the language of instruction has on the subject knowledge, and on learning effectiveness? Programmes and models developed for both minority language and foreign language education (Baker, 1996, Freeman, Freeman and Mercury, 2005) face the following dilemma: how to balance L1 and L2? One of Soltero's more useful sections deals with code-switching. Not only does she explain the phenomenon which is essential for those without previous training in bilingual education, but she also reveals that contrary to common belief, children will not become "confused" by using two languages and that they, like all other children, will be proficient communicators in both languages (Soltero 2004).

In the present paper the relationship between the language and the teaching content, and the connections between the language-switching are dealt with, in the type of Bilingual Education in Majority Languages.

The research context: the bilingual education in secondary schools in Hungary

¹ http://www.ecml.at/mtp2/CLILmatrix/EN/CLIL_windows_EN.htm

After the 1989-1990 transition, an open and democratic language-of-education policy emerged, which is hallmarked by the Public Education Act (1993), the National Core Curriculum (1995), and the regulations for the school-leaving exams (1997). Bilingual schools receive a supplementary normative budget support, the basis of which is the order n^o. 26/1997 (VII.10) MKM on the orientations of bilingual school education. It has been in effect up to now (2008) that it is allowed to teach foreign languages, and, apart from Hungarian Grammar and Literature, all subjects can be taught in foreign languages. For a financial support, at least three foreign-language subjects must be ensured, and the ratio of the foreign language has to be at least 35%. Moreover, in secondary schools, the yearly curriculum allows for 800-1300 lessons held in the target language. The school curriculum prescribes that the students should reach the C1 competence level according to CEFR² until their last year of schooling (depending on the structure of the school, the 12th or 13th academic year). Students have to pass an entrance exam when applying for the secondary school, which focuses on cognitive competences rather than foreign language competences. The school-leaving exam in Hungary is based on a two-level examination system, which is standardized and unified in every school type. The school-leaving exam in foreign language means a B1 level of language knowledge at intermediate level, or a B2 level of language knowledge at advanced level of the examination. Thus for graduates from the bilingual schools, the school leaving certificate includes a C1 language examination certificate as well, only if the student proves a B2 level language knowledge as well as passes at least two subjects in the foreign language. The tasks of the final examination for students taking the exam in foreign language are similar to the ones for those taking the exams in Hungarian (mother tongue); these are just translated to the target language. Students taking the exams in foreign language have 30% additional time for solving the exam tasks; and the use of a monolingual dictionary³ is allowed.

In their pedagogical programmes, the schools should meet the above listed requirements by defining the subjects to be taught in the target language. These usually include the compulsory subjects of the school-leaving exam, Mathematics and History. Moreover, it was observed, that in classroom situations teachers use a language-switching (changing the language of instruction to mother tongue) in situations when the subject formally should be taught in the target language, or when the subject content in the curriculum is given in the target language (Vámos 2007).

Objectives and Questions of the Study

According to several research projects carried out between 2006 and 2009, in 70% of the secondary schools, teachers can decide whether to include the mother tongue in teaching the subjects in the target language. Their decision is filled with aspects of language pedagogy that is, e.g. the linguistic solutions of the given content widely differ in the two languages therefore there is much to be accounted for. The results of students taking exams in foreign language are not inferior to the national examination results taken in Hungarian. Simultaneously, it can be ascertained that:

² Common European Framework of Reference for Languages: learning, teaching, assessment (CEF) www.coe.int/dg4/lingusitique

³ Government Order 100/1997. (VI.13.) on issuing the regulations of the school-leaving exam

1. Students have confidence in the success of future final examination according to the role the two languages of instruction played in their teaching; the language component of their subject knowledge.
2. The aim of using the target language at the actual final examination is mainly for proving foreign language competence, while earlier the subject content was in the focus of teaching.
3. With the simple (word by word) translation of the examination tasks, the final examination practically requires a C2 level of language knowledge.

The questions may refer to the characteristics of language switching and to how these changes are related to the language of the examination and to the subject knowledge?

Methodological considerations (Participants, Procedures, Instruments)

Sampling and applied research tools:

- Survey with 722 students from 15 randomly selected bilingual secondary schools in 2006
- Survey with 122 bilingual institutions selected by quota sampling (the sample is representative considering the target language, the school type and area of location) as follows: 122 heads of institution, 504 teachers from which 42% teach subjects in a foreign language, 37% target language teachers, 21% Hungarian language teachers
- Secondary statistical data analysis (using the database of the Ministry of Education and Culture): the database of the final examination results on national level for the 2008 academic year, the 5982 students' final exams results from the 76 secondary schools selected with the quota sampling

Data were processed with the SPSS for Windows program, relationships were evaluated with the Chi-square test ($p < 0.05$).

Results

Language switching in bilingual schools and in the classrooms

According to the 2009 survey, the 52.4% of the participant teachers fully reject switching language to the mother tongue during the instruction, 36.9% of teachers are partially permissive, and 10.7% of them accept this possibility (N=504). If we only consider the sub-sample of teachers (N=211) who are teaching subjects in a foreign language, the result is that 23.1% of the teachers do not switch to the mother tongue in teaching, the instruction is exclusively in the foreign language. Depending on the syllabus, 14.6% of the teachers switch the language of instruction to the mother tongue, 3.8% of them do so occasionally, and 1.4% of them use the mother tongue only for terminology explanation. 76.9% of the teachers claimed that there were cases when spontaneous language switching occurs as well. According to 75.7% of teachers, it is up to them to decide whether to include the mother tongue in teaching, and only the others stated that the school was to prescribe the language switches.

The reason for language switching

30.8% of the participating high school teachers and 45.2% of the vocational secondary school teachers state that more information can be transmitted in the mother tongue than when teaching a subject in foreign language. Their opinion on language switching during the classroom instruction is as follows:

Grammar school:

- Language can be switched any time: 0.0%
- Only when it is very necessary: 59.7%
- If it has a purpose: 66.7%
- If it is justified by the teaching process: 25.6%

Vocational secondary school:

- Language can be switched any time: 8,2%
- Only when it is very necessary: 44,8%
- If it has a purpose: 79,3%
- If it is justified by the teaching process: 49,4%

In the two school types, the opinion of the teachers who do not accept the idea that less can be taught in the foreign language are more similar to each other than the opinions of those who agree with the idea. This view is more typical among vocational school teachers than among high school teachers.

The impact of language switching on the opinion of the students and their way of thinking about the results of their exams

The specificities of language switching have an impact on students' attitudes to taking exams in a foreign language and their exam perspectives. According to the 2006 survey there is a significant relationship among the language of instruction, the language prescribed in the curriculum and applied in the classroom, the students' relationship with the exam-language, and the language they prefer for optimising their knowledge (Figure 1.).

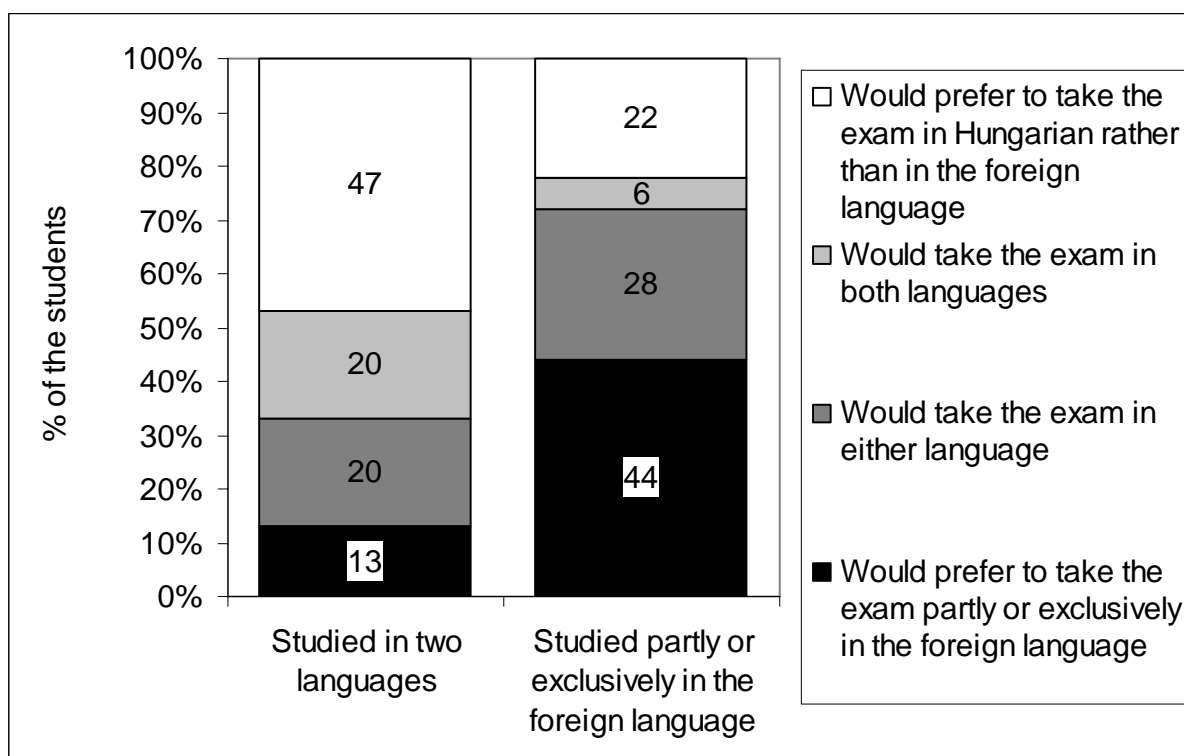


Figure 1. Relationship among the language of instruction to which language is the target to optimise their knowledge

In case of History, language switching is characteristic both in the curriculum and in classroom situations. According to the curriculum, in many schools world history is taught in the target language, whereas Hungarian history is delivered in Hungarian. In the classroom context it can be observed that when teaching foreign-language topics, the teacher switches the language of instruction. Among students who learned or mostly learned the subject in the target language, 40% presume the final exam to be more successful in the target language. Others (27.8%) are of the opinion that the exam outcome depends on the language of the exam, and that the subject knowledge is independent from language and can be transferred from one to another. From those having learned the subject with topic-related or temporal language switches, only 13% were ready to take the exam in the foreign language, and 18% were of the opinion that their knowledge was “language-free”. More than half of these students felt insecure to take the exam in the foreign language, and they would be more confident if the mother tongue could be used during the exam. Mathematics is learned in the target language in almost every school, without thematical or temporary language switching. In schools where this is kept (see the 2006 survey), a relatively high percentage of the students are knowledge-confident and the ratio of those claiming to be able to transfer their knowledge was also high (54%).

The results of the medium level final examination in the sample

In the year 2008, a total of 124122 students sat for 480 235 exams altogether, and 417 971 of these were intermediate language exams. Exams were taken in a foreign language in 22 out of the 186 exam-subjects.⁴ The 5636 students attending the 76 bilingual secondary schools

⁴ www.okm.gov.hu

included in the research sample, completed 52% of the total number of exams in a foreign language in the given year (N=9134). Their exam results in comparison with the nationwide figures indicate a knowledge-asset on the part of the bilingual-school students; in History, the difference is 4.8% in favour of the bilingual students, whereas in Mathematics, it is 8%. The History exam results of students from the secondary grammar and vocational schools follow the national examination results trends of these school levels. The Mathematics exam results show less difference between bilingual grammar and vocational schools, than what can be seen in nationwide data referring to the school-types (Table 1.).

School leaving examination data (%)		National data	Bilingual data
History	Secondary school average	61,6	66,4
	Grammar school average	71,7	74,8
	Vocational secondary school average	59,1	66,7
Mathematics	Secondary school average	46,9	64,9
	Grammar school average	59,1	66,6
	Vocational secondary school average	41,8	60,6

Table 1. Results of the school-leaving exam according to school types (%)

The cumulated foreign language exam results in History follow the distribution observed in the national grammar schools. The corresponding figures in Mathematics show a significant difference. Nevertheless, the exam results of bilingual secondary vocational schools significantly differ from the national exam results at this school level (Figure 2.).

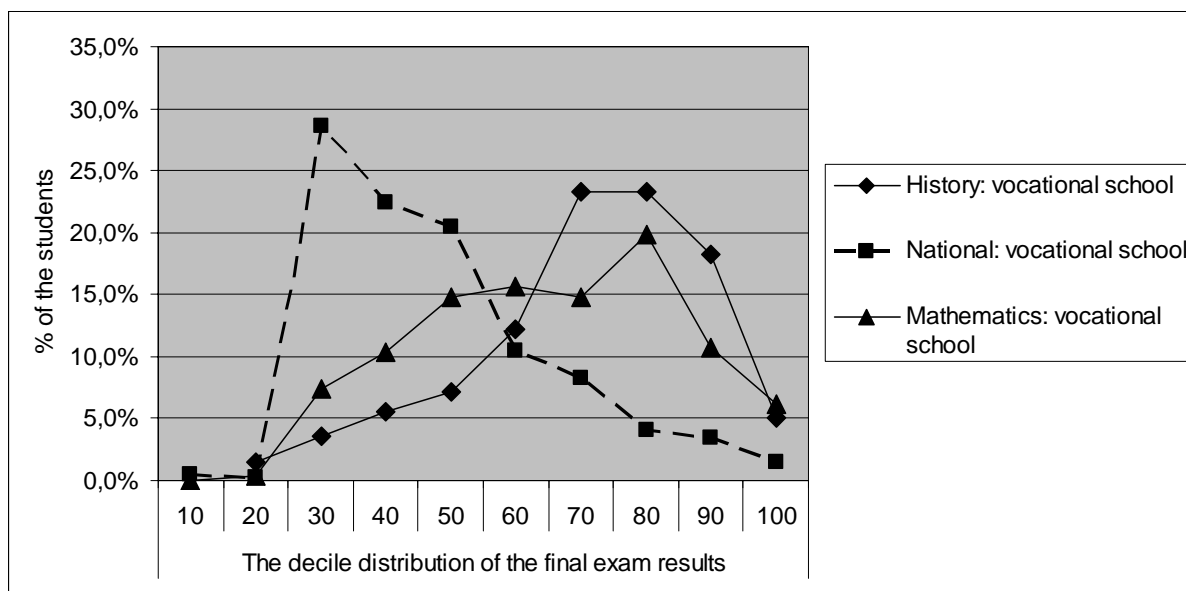


Figure 2. Exam results in secondary school in History and in Mathematics compared to the national average

Conclusion and further questions

1. The declared division of subjects and the languages used in teaching is only partly realized in classroom practice. In many schools, teachers can decide when they switch to the mother tongue of the students and most of them do so in classroom situations. One of the reasons can

be that in the bilingual programs, the relationship between foreign language and subject knowledge development has not been clarified yet; on this area, there is still empirical learning.

2. Students may come to feel uncertain about the language-component of their own knowledge due to the language-distribution of the subject syllabuses and the extensive use of the mother tongue in the classroom. With foreign-language instruction and the determined preservation of the foreign language (which may be supplemented by minor, planned, didactics-based language switching it can be achieved that students feel secure about their knowledge in the given foreign language and their mother tongue as well.

3. Students participating in bilingual programmes achieve better results at the final exam than those studying in Hungarian in the same school type and sit their exam in Hungarian. It is interesting, since the curriculum of the bilingual programmes set the language level at C1, however, as they have to work with the translated version of the Hungarian-language exam, they have to take the exam at C2 level, with a language competence close to the mother tongue. According to the teachers, less knowledge of the same subject can be transferred in a foreign language than in the mother tongue. There are further questions such as to what extent this 'less' means a more certain and more systematized knowledge owing to the use of foreign language, and whether learning in a foreign language, problem-solving and thinking are organized into a quality surplus leading to a better result or the result can simply be explained by the selective entrance procedures.

4. The results of the final exam taken in a foreign language in History are slightly above the national average, whereas at Mathematics they are even better in comparison. In the latter case, the difference between the school types is significant, but it can also be characterised by the fact that the results in the vocational schools lag less behind those of the grammar schools than in the nationwide figures. It has not been proved, yet it cannot be denied either that the results in Mathematics were better due to the differences observed between the two subjects in the use of the language of instruction, and that the less articulated surpass of the national figures in History can be explained by the bilingual nature of the subject and the frequent language-switches. Other possible reasons and the impact of language-use on learning success are to be explored by further research and a more extensive analysis of the existing database.

References

1. Baker, C. (1996). *Foundations of bilingual education and bilingualism*. Clevedon-Philadelphia-Adelaide: Multilingual Matters
2. Coonan, C. M. (2002). *La lingua straniera veicolare*, UTET, Torino
3. Euridyce (2006). *L'enseignement d'une matière intégré à une langue étrangère (EMILE) à l'école en Europe*. AÉAC
4. Fishman, J. and Lovas, J. (1970). Bilingual education in a sociolinguistic perspective. *TESOL Quarterly*, 4, 215-222.
5. Freeman, D, Freeman, Y. and Mercuri, S. (2005). *Dual language essentials for teachers and administrators*. Portsmouth, NH: Heinemann
6. Marsh, D., Langé, G. (1999). *Implementing Content and Language Integrated Learning*, University of Jyväskylä, Jyväskylä. Soltero, S. W..2004. *Dual Language: Teaching and Learning in Two Languages*. Boston: Pearson Education
7. Solteno, S. W. (2004). *Dual Language: Teaching and Learning in Two Languages*. Boston: Pearson Education.

8. Vámos, Á. (2007). Kétszintű érettségi vizsga a két tanítási nyelvű középiskolákban. *Új Pedagógiai Szemle* 3. 114-125.
9. Vámos, Á. (2008). *A kétnyelvű oktatás tannyelvpolitikai problémátörténete és jelenkora*. Budapest: Nemzeti Tankönyvkiadó.