# We are IntechOpen, the world's leading publisher of Open Access books <br> Built by scientists, for scientists 

## 6,900

Open access books available

154
Countries delivered to

## 186,000

International authors and editors

Our authors are among the

most cited scientists


Downloads


Contributors from top 500 universities

WEB OF SCIENCE ${ }^{\text {N }}$
Selection of our books indexed in the Book Citation Index in Web of Science ${ }^{\text {TM }}$ Core Collection (BKCI)

# Interested in publishing with us? Contact book.department@intechopen.com 

Numbers displayed above are based on latest data collected.<br>For more information visit www.intechopen.com



# Limitations and Proposals for Improvement of the Bilingual Program of the Community of Madrid in Public Primary Schools 

Esmeralda Sotoca Sienes


#### Abstract

The aim of this study is to analyze the limitations of the Bilingual Program of the Community of Madrid and present proposals for improvement to solve them. The methodology used is based on the collection of information through different sources. The limitations indicated are as follows: the attention to the students with specific need of educational support; the coordination of teachers; teacher training; English language assistants; human resources; material resources; the motivation of students, teachers, and English language assistants; the methodology; the loss of content and vocabulary in the mother tongue; the need for language academies or extracurricular activities in English to complete training; and segregation. It is concluded that the greatest and most urgent limitation of the program is the attention of students with special educational needs. Proposals for improvement are presented, especially in relation to training and coordination with specialist teachers.


Keywords: bilingual education, bilingual program, limitations, proposals for improvement, primary education

## 1. Introduction

In this work, the basic characteristics of the Bilingual Program of the Community of Madrid (hereinafter, C.M.) will be analyzed, the factors that can influence the success of the bilingual programs will be presented, and the limitations and proposals for improvement in relation to this program will be shown. Finally, the conclusions that have been considered most relevant are indicated.

In the context of the European Union, language learning is one of their concerns. In this way, interest in the implementation of bilingual programs in schools in Spain has been growing in recent years, demonstrating that this fact is the proliferation of different programs in the autonomous communities. However, there are not so many studies that evaluate, analyze, or compare them and hence, the importance of studying the limitations and proposals for improvement in relation to these programs.

The Spanish Royal Academy (RAE) defines "bilingual" in reference to a bilingual school as one that provides its education in two languages. Article 17 of the Organic Law of Education (LOE) establishes that Primary Education (hereinafter, P.E.)
helps to develop in children the skills that allow them to acquire, in at least one foreign language, the basic communicative competence that allows them to express and understand simple messages and to deal with everyday situations. Order 796/2004 refers to bilingual education as the one that allows teaching in English at least one third of the weekly teaching schedule. In this way, the purpose of the C.M. Bilingual Program is not that the students are bilingual but that the students reach the highest possible level of linguistic competence in the second language.

The C.M. Bilingual Program was implemented in the 2004/2005 academic year in 26 public schools. Currently, more than 300,000 students, ranging from preschool to Baccalaureate and vocational training, benefit from these teachings. In the 2008/2009 academic year, it was also implemented in charter schools.

It is based on the Integrated Content and Language Learning approach, which is characterized in that the student not only learns English as a foreign language but also learns some of the subjects in English in order to acquire content in that language. The English language becomes a vehicular teaching language or learning language. The subject of First Foreign Language-English is taught in English, along with two other areas of the curriculum, social sciences and natural sciences preferably. All areas of the P.E. curriculum could be taken in English; however, an exception would be granted for mathematics and Spanish language and literature. The areas taught in English will follow the curriculum established by the C.M. and will be taught entirely in that language. The objective of communicative competence is to obtain an A2 level at the end of P.E. (according to the Common European Framework of Reference for Languages, hereinafter CEFR).

Teachers who teach subjects in English at Primary and Secondary Education must be qualified (with a C1 level of the CEFR) and the teachers who teach the Advanced English curriculum in Secondary must be accredited. These teachers receive a productivity supplement and are assisted by conversation assistants, who are native university graduates. There are specific foreign language training plans for teachers, coordinators, and management teams that include courses that are taught both in Spain and abroad, as well as online. There are also European training programs such as Erasmus + or Etwinning, international programs such as Global Scholars, the Twin Schools program...

The objective of this study is to analyze the limitations of the Bilingual Program of the Community of Madrid and present improvement proposals to solve them. The methodology used is based on the collection of information through different sources.

## 2. Factors influencing the success of bilingual programs

Below are a series of contributions from different authors regarding the factors that influence the success of bilingual programs. Thomas and Collier [1] indicate, among these factors, the potential quality of the type of program, the quality of the type of program in relation to its implementation, the breadth of the program's instruction focus, the quality of the school's learning environment, and the quality of available instructional time.

Lewelling [2] emphasizes factors that promote or inhibit success in the second language: cognitive development and linguistic competence in the first language, age, uninterrupted academic development, attitude, and individual differences.

Cummins [3] notes that the outcomes of bilingual programs can be improved by understanding the nature of the English language and its links to Spanish by teaching for L1/L2 transfer through bilingual instructional strategies, which promote L2 mastery and literacy, active promotion of literacy engagement, exposure of students
to creative activities in both languages, and encouragement of reading at school and at home (L1 is a speaker's first language and L2 is the second).

Thomas and Collier [1] point out a series of factors for a successful reciprocal immersion (a kind of bilingual education), which could be applicable to the C.M. Bilingual Program: A development over time of the bilingual instruction program of at least 6 years; focus on the core academic curriculum; quality teaching in reference to the four basic skills in both languages, in addition to integrating them into thematic units; curricular separation of the two languages of instruction without performing translations or repetitions of the subjects; representation of a single language for each teacher; reinforce the concepts worked through both languages in a spiral curriculum; use of the non-English language for at least $50 \%$ of instructional time; an additive bilingual environment that adds a new language at no cost to the first one; support an active collaboration between management teams, teachers and parents; promotion of positive relationships between classmates and between teachers and students; and highly qualified and competent teachers in the language of instruction.

Madrid and Roa [4] states:

> Studies on the evaluation of the effectiveness of bilingual education have been proposed from various points of view and have been developed around different groups of variables related to students, family, community, school, types of program, coordination and organization of the programs, teacher training, teaching and learning processes, exchanges and stays abroad, materials and resources, assessment techniques, and the results obtained by the students. Therefore, it is the success of bilingual programs that depends on the integration and harmonization of several factors that interact appropriately (Pérez Cañado, 2016; Ortega Martin, Hughes and Madrid, 2018). (p.85).

In the study by Madrid and Roa [4], teachers pointed out the importance of didactic preparation in CLIL, training in curricular content, and having sufficient human and material resources.

## 3. Limitations of the bilingual program of the C.M. and proposals for improvement

The limitations of the C.M. Bilingual Program that have been considered more important are listed below, as well as the respective improvement proposals. This program has numerous limitations, but also strengths compared to the bilingual programs implemented in other Autonomous Communities. Due to its long history, essential aspects such as teacher training and endorsement have been improved. However, the most significant limitations must be analyzed.

### 3.1 Specialized attention to students with a specific need for educational support

A pending and fundamental issue on the part of the Educational Administrations is the lack of support in the areas taught in English for students with special educational needs (hereinafter, SEN students). According to article 73 of the Organic Law of Education (LOE 2/2006, 3rd May [5]), they would be the students who require, during a period of their schooling or throughout its entirety, certain supports and specific educational care derived from disability or serious behavior disorders. The rest of the students with a specific need for educational
support have not been considered either, that is, the students who require different educational attention than the ordinary for presenting special educational needs, due to specific learning difficulties, attention deficit disorder and hyperactivity, high intellectual capacities, late incorporation into the educational system, or personal conditions or school history (article 71 of the consolidated LOE).

The C.M. [6] states that during the 2017/18 school year, the percentage of SEN students in nonbilingual public schools was 4.0 and $2.5 \%$ in bilingual public schools. He also points out that this difference is getting smaller, increasing the presence of SEN students in bilingual school centers.

The Federation of the Community of Madrid of Associations of Parents of Students "Francisco Giner de los Ríos" (hereinafter FAPA), in 2009, states that SEN students normally have problems acquiring the skills of the program and that they are not given an adequate answer. It also exposes the problems raised by students who do not join the program from the beginning (nonbilingual repeaters who enter the program by repeating the course) and students with extraordinary schooling (students who enroll after school has commenced).

Laorden and Peñafiel [7] indicate that more than two thirds of the management teams surveyed in their study state that the Bilingual Program makes intervention with SEN students difficult and makes it more difficult to cater to their needs. Very few claim that English classes motivate SEN students. One third points out the difficulties these children face that prevent them from following classes in English. A slightly lower percentage shows that they need more adaptations and have less follow-up. In relation to immigrant students whose mother tongue is different from Spanish, more than half of the respondents affirm that the project is carried out in the same way as with ordinary students, that is, they do not observe that the difficulties of the Bilingual Program affect them as much as the SEN students.

Arigita [8] found in her study on the Bilingual Program of the C.M. that the level of proficiency in English reached in the section "language to which the students are exposed: vocabulary-topics" by the students who finish the second year of P.E. is higher, in average values, in the group of students who do not have any students with a specific need for educational support. According to the author, the (significant) curricular adaptations seem to cause a slowdown in the teaching-learning process of the rest of the students and a decrease in the performance achieved at the end of the school year.

FETE-UGT Madrid [9] carried out a survey of teachers about the Bilingual Program of the C.M. and discovered that $94 \%$ of the Primary teachers and $87 \%$ of the Secondary teachers affirm that this program hinders the integration of the SEN students and students with a specific need for educational support in the areas taught in English. Among proposals to improve their integration they recommend: flexible groups or support teachers in the classroom, teach all the subjects in Spanish and that the SEN students receive more support sessions from the special needs teacher and the speech and language therapist while in the home classroom subjects are being taught in English, consider English as another instrumental area and that students can receive reinforcements in that area, and adaptation of curricular materials and special needs teacher also teaching subjects in English.

FETE-UGT [9] points out, among others, the following proposals taken from a teacher survey: a bilingual project that caters to the diversity of students; no more than 15 students per classroom, splitting groups of pupils into levels; teaching more subjects in English but with support for students who have difficulties; duplication of teaching hours, teaching science in Spanish and English for example; and use of texts in both languages.

Lova et al. [10], although their study refers to the bilingual program of another autonomous community in Spain, they discuss the theme of the adaptation of
students with a specific need for educational support to bilingual classes. These authors indicate that all the teachers surveyed highlighted the complexity of incorporating students who have taken nonbilingual courses and that when they repeat the course, they join bilingual courses. The teachers also included problems and difficulties with SEN students and immigrants. It also points out the importance of increasing support in subjects taught in English in relation to SEN students and immigrant students.

Acción Educativa [11] argues that it is necessary to guarantee that improvements in the educational system benefit everyone and, if this is not the case, priority should be given to the most disadvantaged, SEN students and students who present learning difficulties. It exposes the need to introduce measures to ensure equity and inclusion in bilingual programs, designing specific support programs for those who present greater difficulties. In addition, it includes as a proposal for improvement, the introduction of educational support and reinforcement measures that guarantee that all students are able to speak two languages at the end of their schooling.

In short, as proposals for improvement in relation to SEN students, I propose: (1) improve the training of the special needs teachers and the speech and language therapists in relation to SEN students care in the bilingual program, (2) specialize certain bilingual schools in the attention to SEN students, (3) counting with more material and human resources, (4) offer resources, support and adapt bilingual school centers that have preferential attention for students with autistic spectrum disorder, (5) use texts in both languages, (6) adapt curricular materials, (7) use a spiral curriculum that allows the same contents to be worked in areas taught in different languages, (8) design specific support programs for SEN students, and (9) provide more special needs teachers and speech and language therapists to bilingual school centers. With regard to this last aspect, it is necessary to incorporate teachers specialized in special needs with the bilingual endorsement, in addition to the special needs teachers who already provide support in instrumental areas. Additionally, in the schools in which said specialist already has the endorsement, he/she must be allowed to give the support in English and in the areas taught in English.

In reference to attention to diversity in general or students with a specific need for educational support, I propose, in line with what FETE-UGT points out in 2014, a ratio of no more than 15 students per classroom, split by levels or flexible groups, more support teachers within the classroom, work the same topics in subjects taught in English and Spanish so that students acquire vocabulary and content in both languages, use of texts in Spanish and English, adapt curricular materials in English...

Finally, it should be noted that the proposals made correspond to what was stated by Madrid and Roa [4] in the sense that the success of bilingual programs depends on the integration and harmonization of various factors that interact appropriately.

### 3.2 Coordination

Lova and Bolarín [12] affirm that CLIL methodology is based on the coordination effort between teachers and conversation assistants to guarantee the quality of teaching and the success of the bilingual program. They also consider that the coordination is carried out outside the school, since the exchange of experiences with other schools constitutes a training resource and an example of good practice, which could help the continuity of the program in Secondary.

Gerena and Ramírez-Verdugo [13] state that teachers report an increase in the teaching hour load with the bilingual program, as well as a lack of time to plan work with the team of teachers and assistants.

In the study by Laorden and Peñafiel [7], the management teams indicate that it would be positive if the teachers involved in the project had a greater time offload to dedicate to coordination and teamwork. They also expose the need for greater coordination through meetings within the school and with other schools.

Halbach [14] points out the importance that all teachers in bilingual schools coordinate their teachings on the topic being studied. It is about integrating the teaching of language, in addition to content teaching, while simultaneously teaching the same topic in the different subjects (not only those taught in English). Such an integration will support seeing it from different angles that together form a unit that has meaning and that students can remember. In this way, by coordinating all the subjects around a theme, the fragmentation of the curriculum and of the subjects taught in Spanish and English is avoided. The topics and vocabulary studied will be known by the students in both languages, further developing the mother tongue.

Durán [15] considers as one of the most positive consequences of bilingual programs the fact that they promote coordination and group work, especially among English teachers and other teachers in the bilingual program.

Thus, in relation to the improvement proposals, it is essential to promote and facilitate the coordination of the bilingual teachers, other teachers who teach the bilingual program group, the assistants, as well as the coordination with other schools. For this, the educational administrations should expand the human resources in the schools so that the teaching staff involved in the program are freed from certain teaching hours, as well as nonteaching hours, dedicating that time for coordination. This allocation of time during school and nonschool hours within the working day is necessary not only to maintain coordination sessions, but also to prepare materials, research, collaboration...

Taking into account that the contents should not be worked on in isolation but instead under a holistic vision, coordination is essential. For this, the different subjects should be worked on in a coordinated way, integrating the contents through different subjects taught in different languages (Spanish and English). In this way, for example, the contents that are studied in science, will also be worked on in the rest of the areas (Spanish language, mathematics...) to make sure that the students are learning content and vocabulary in English and Spanish. You could do readings, reading comprehension activities, dictation, problem solving... on the subject being studied in science. Only through close coordination of the teaching staff is this possible.

### 3.3 Teacher training

Gerena and Ramírez-Verdugo [13] point out that the primary and secondary teachers and the English language assistants of the Bilingual Program of the C.M. consider that not enough training is offered, and thus, they request more training and support in methodology and in the way of integrating assistants in the class.

Acción Educativa [11] argues that teachers who teach the second language must be required to have a sufficient level of communicative competence, as well as specific training on the alternation of linguistic codes and on CLIL methodology.

Laorden and Peñafiel [7] state that management teams indicate that the training received is scarce and perceive the need to continue training.

FAPA [16] states that there is a problem with the training and accreditation of teachers who are part of the program. They point out that, although this problem did not initially exist, progressive implementation requires a greater number of specialists. In this sense, the FAPA proposes providing the schools with native teachers if there are not enough trained teachers to teach this program.

In relation to the improvement proposals, the FAPA [16] proposal to provide native teachers to the schools would create a very difficult situation, since in order to access to public teaching, you must overcome a public examination and it is not specified in what way this teaching staff would access. The solution is to train teachers, encouraging them, and facilitating their training. In this sense, FETE-UGT [9] points out a series of proposals made by teachers in relation to the training of the bilingual program: (1) expand the current insufficient offer, (2) extend training to all, (3) offer varied and specific training (other areas, attention to diversity...), (4) make training compatible with work and personal life (licenses, paid leave, during school hours, during the summer or weekends, more training centers or training in the school itself), (5) training aimed at obtaining the linguistic qualification (during the course, by blocks and free), (6) to give a greater role to the Official Language Schools, (7) to promote training abroad through courses, and (8) exchanges with teachers from other countries and stays abroad.

The C.M. [17] indicates as a proposal for improvement of the Bilingual Program of the C.M. encouraging collaboration and exchanges, both for students and teachers, with other schools.

In short, the training of bilingual teachers must be a priority and there must be a continuous, varied, quality offer of courses accessible to all, because it requires ongoing training. The Administration must facilitate the completion of courses (inside and outside school hours, on weekends and holidays, greater ease to carry out seminars and work groups in the school itself with the presence of experts, more training centers...) and encourage teachers to continue training voluntarily (continue with the remuneration supplement for teachers who teach areas in English, paid study licenses and training permits, courses during school hours, courses and stays abroad courses). In relation to this last aspect of encouraging teachers, recognition of their work is essential.

Likewise, the empowerment of teachers must be facilitated through courses accessible to all teachers at no economic cost. In other words, it is not just about improving the continuous training that bilingual teachers need, the channels to obtain linguistic qualification must also be facilitated through courses, specific training, preparation for the exam...

Other proposals for improvement would be: carry out workshops to exchange experiences between different bilingual schools recognized with credits; coordination with other bilingual school centers to present different ideas, materials, experiences, and carry out joint activities; promote training abroad through courses and exchanges with teachers from other countries...

Teacher training should be integrated into their working day and, if possible, within their own school, as is the case in other countries. For example, in Singapore, only one third of their working day is direct teaching with students; during nonteaching hours, teachers can train, research, collaborate, and coordinate with other teachers and schools during their working hours. We must also highlight the prestige and value that is given to teachers in that country. Another example that could be presented is the case of Finland in relation to the reduced number of teaching hours for teachers, the rigorous selection process, and the prestige that teachers have.

It should be noted that in this section, teacher training in general has been addressed, taking into account the existence of a double aspect: linguistic and methodological. Section 2.8 will refer to the methodology, regarding the linguistic aspect, in the C.M. There are two procedures for obtaining linguistic endorsement according to Order 1275/2014: (1) posessing degrees or certificates issued by certain institutions, so that teachers are required to accredit a level equivalent to C1 or C2 of the CEFR. But such titles or certificates must have been issued by one of the
prestigious institutions included in the call and must have been obtained less than 5 years ago at the time of submission of the application for each call. (2) By passing knowledge tests to obtain linguistic qualification. These tests consist of two phases, in the first one reading comprehension, written expression, listening comprehension, grammar, and vocabulary are assessed. And in the second, an interview is conducted in the foreign language to assess communication skills.

It is important to note that the intention of the C.M. is not that the students are bilingual but that the students reach the highest level of linguistic competence in the second language that they can. Teachers, in most cases, are also not bilingual. Therefore, the objective for them must be to constantly train and develop their skills.

Similar results have been found in other autonomous communities in relation to the demand for higher quality training for teachers and the need for teacher coordination [18-20].

### 3.4 English language assistants

FETE-UGT [9] states that the majority of teachers (61\%) positively value the work of conversation assistants. Those who do not value them positively or negatively point out that it depends on their training, interest, and enthusiasm plus they express the added difficulty that they do not speak Spanish. Gerena and Ramírez-Verdugo [13] state that students consider the assistants responsible for their linguistic and cultural advancement, and that they are very helpful in practicing conversation, intonation, pronunciation, grammar, fluency, communication skills, and exam preparation. On the other hand, it is also pointed out that for some teachers, team teaching in addition to the class preparation and dynamics takes a lot of work and time. Another negative aspect that has become exposed is the lack of training and experience in teaching by the assistants.

Frigols and Marsh [21] indicate a series of requirements for the correct development of the work of the teaching staff in partnership with the conversation assistant and students: always communicate in English with the English language assistant, take advantage of the presence of the conversation assistant as a resource to improve their linguistic competence, use the English language inside and outside the classroom with the students most of the time, plan the sessions where the assistant is present so that the activities are mainly related to listening and conversation skills, coordinate with the assistant to jointly plan the sessions and avoid improvisation, and objectively evaluate the development of the program, making any improvement proposals it deems appropriate.

Frigols and Marsh [21] point out tasks that can be assigned to the English language assistant under the coordination and supervision of the bilingual project coordinator: always communicate in English in the educational environment, teach conversation classes to the teachers of the school, act as linguistic support for teachers, get involved in all the activities carried out in the sessions, attend the coordination meetings to plan together, provide adequate didactic material whenever possible, transmit traditional aspects of the culture of their country, integrate into the educational environment, attend the support and follow-up meetings called by the educational administrations, help in another class in the absence of the specialist, objectively evaluate the development of the project by making improvement proposals, and present a final report.

In relation to the improvement proposals, it should be noted that the conversation assistants are a very important resource, but they should be better utilized. For this, it is essential that the training of English language assistants is related to education and, if possible, that they have had experience and/or practices in
schools. It could be added as improvement proposals: always communicate within the educational context (both inside and outside the classroom) with teachers and students in English, coordinate teachers with the assistant to maximize their participation in classes in relation to conversation and listening activities planning their performance in writing, prepare materials together (teacher and assistant), co-evaluate together and continuously introduce the improvements they deem necessary, dedicate at least one weekly session, outside of direct teaching hours, to training everybody who is interested in English (both in the Bilingual Program and not), presentation made by the assistant in relation to their country of origin, culture, traditions...

### 3.5 Teaching staff

Laorden and Peñafiel [7] indicate that the majority of management teams recognize that a greater number of teachers is necessary, especially support teachers.

FAPA [16] points out the lack of human resources and its progressive decrease. There is another added problem, which is that of substitutions or leaves of absence, since they are not always carried out by teachers with the bilingual endorsement.

In relation to the staff, FETE-UGT [9] states that the implementation of the Bilingual Program has negatively affected the composition of the teaching staff of the schools, causing job cuts, forced displacement and causing salary and administrative differences.

The improvement proposals would be: an adequate endowment of human resources, not skimping on them and especially supporting the most disadvantaged populations, the students with a specific need for educational support and, more specifically, the SEN students. In this way, the presence of more support teachers, in general, and special needs teachers and speech and language therapists, in particular, is essential.

In reference to the teaching staffs' plans, the official teachers (defined as teachers that passed the public examination and obtained a post in a school and they want to continue working there, sometimes they have been working there many years) must be respected, and the staff must be modified without affecting them. For example, a vacant Primary position for retirement transform it into a Foreign Language with bilingual endorsement, consult the management teams about the possibilities of expanding bilingualism without affecting the official teachers, use as teachers to support those whose profile is no longer necessary, use the different specialties of the teaching staff to make a change of specialty within the school and not displace him/her...

In short, the issue of teaching staff with the consequent forced displacements and job cuts is avoidable, because there is a lack of teachers in schools in general, and in bilingual schools, it is even more necessary in order to give adequate attention to those students who show more difficulties in learning.

### 3.6 Material resources

Laorden and Peñafiel [7] point out that the management teams demand more spaces for the bilingual project (classrooms, libraries, or language laboratories). In relation to the material received and budget, they consider that it is insufficient.

FAPA [16] exposes the lack of material resources and its progressive decrease.
However, the subject of material resources is not a recurring theme in the studies, because the bilingual program of the C.M. is accompanied by an economic endowment. Nonetheless, it is true that the more resources teachers have, the greater the chances of success of the program. The Community of Madrid [6] notes that there
has been a progressive increase in relation to the resources of the bilingual program, including materials.

Regarding the spaces dedicated to the program, whenever there are available spaces, their creation should be favored in order to split groups of pupils into levels or have classrooms dedicated specifically to languages.

### 3.7 Motivation of students, teachers, and English language assistants

In relation to students, de la Rica and González de San Román [22] explain the importance of student motivation. Laorden and Peñafiel [7] indicate that very few management teams surveyed in their study state that English classes motivate SEN students and point out the difficulty these children face to follow classes in English. In reference to the motivation of teachers and assistants, Gerena and RamírezVerdugo [13] indicate that, in their study, they were very satisfied with their role in bilingual programs, that teachers considered bilingualism as very important for the future and as a way of preparing students for globalization, and that assistants considered themselves as promoters of English and perceived the motivation of students in relation to bilingualism and learning more about American customs and culture. Teachers and assistants perceived motivation on the part of the students and their interest in becoming bilingual. The students were aware of the benefits of bilingualism and felt pride and comfort when speaking in English, not showing fear of making mistakes, they also considered that their future would be better for their participation in the bilingual program. The aspects that motivated them the most were: establishing relationships with native English speakers, learning through videos, songs, the Internet, and games. On the other hand, they negatively value the extra effort that it implies in relation to a greater concentration and more study time and homework. Some students indicated that they believed they had losses in knowledge of content and vocabulary in Spanish.

FAPA [16] states that the initial illusion of teachers has been fading with the passage of time, sometimes even leaving the teaching program that they started and moving to nonbilingual schools.

Regarding the improvement proposals, different incentives have been indicated in the previous sections: economic; reduce school teaching hours; coordination with teachers, assistants and other schools inside and outside Spain; exchanges, training and stays abroad; training during school hours; etc.

In reference to this last aspect, one of the greatest incentives for teachers would be that training integrates into their working day, including times for research, collaboration and coordination with other teachers and schools.

Regarding student motivation, methodological aspects that promote student interest and motivation are described below. The improvement proposals included in the section on students with a specific need for educational support can also be considered.

### 3.8 The methodology

Halbach [14] indicates that using an active methodology constitutes a way to overcome the linguistic difficulties encountered when teaching or learning a foreign language that is decontextualized. This author also points out that the fragmentation of subjects should be avoided by intertwining them with each other, presenting the same subject from different points of view. Avoid doing the same activities in both languages but complementing them to give them meaning and to remember them. It also highlights the importance of learning through action, promoting active participation and practical experimentation. Lastly, it states that the contents and
activities must revolve around themes to provide real, motivational moments of use of the language with a clear purpose.

Gerena and Ramírez-Verdugo [13] expose a series of effective practices that are not used very often in the C.M. Bilingual Program classrooms: activation of prior knowledge before seeing the topic, use of questions and orderly reasoning activities which include advanced and critical thinking skill development, student-centered teaching, encouragement of active student participation, pair or group activities and hands-on interactive activities, and effective use of linguistic and cultural knowledge of English language learners. Besides the fact that most of the classes focus on listening, reading, and writing, they should instead focus on oral communication. In this sense, they indicate the need to promote the development of oral language.

It is important to mention Johnstone, Dobson, and Pérez Murillo [23] for the contributions they make in relation to good practices and the methodology used. However, it should be noted that their study focuses on the external evaluation of the British Hispanic integrated curriculum in public schools. That is, it is the other bilingual program of the C.M., that of the Ministry of Education and Science and the British Council. These authors expose the following strategies of good teaching practices focused on the specific focus of the language: it encourages students to focus on linguistic form, function and meaning, tries to be precise in transmitting meaning, introduces deliberate errors for the students to identify and correct, ask the students to expand their oral responses using more vocabulary, highlight the different words (nouns, verbs...) with different colors, allow a reasonable degree of use of Spanish, help students to look at keywords, develop clear definitions, describe object properties, contrast concepts, develop classifications, and use the passive voice.

Johnstone, Dobson and Pérez Murillo [23] point out the following good practice strategies focused on the language used for teaching in general: involve all students, check student results, show willingness to collaborate with peers, stay firm but pleasant, uses visual support, provides clear explanations to the students about what they have to do, reviews the results of the students with them, clearly indicates how to use the new technologies in the classroom, the teachers presence is important in the classroom and they are available, manages to keep the students' attention, avoids giving them everything solved, presents the tasks clearly, draws up a list of errors to discuss later with the students, selects appropriate web pages for the level of the students and helps students find their own solutions.

In short, in relation to the improvement proposals, the use of good practices by the teachers is essential, as well as an active, participatory, and motivating methodology with a transversal treatment of the topics in the different subjects and prioritizing oral language. In this way, teaching should be focused on the student and not on the teacher, that is, not conducting expository classes only by the teacher, but involving all students and promoting their active participation, as well as experimentation. To do this, the teacher must be willing and available to help students who need it, especially SEN students, based on the student's level of competence and selecting the appropriate resources at their level. It should help students to identify key words and make definitions, classifications, descriptions, comparisons, mind maps... It can help them by working on previous knowledge, explaining clearly and in different ways, exemplifying, repeating more difficult concepts, revising with them the mistakes they would have made in the tasks... In addition, you can keep the attention of the students using a variety of activities, examples, demonstrations, experiments, cards with pictograms or images, new technologies (videos, games, online platforms...). You can also promote cooperative learning and work in small groups and in pairs, work on projects, make flexible
groups... To do this, you must have more support teachers and have time for coordination with teachers of other subjects, assistants...

In reference to the CLIL approach, it is about combining it with other methodologies that work in the context of a specific school, with a specific group of students... It is about adapting it according to the needs that arise. Other methodologies currently being used are gamification, flipped learning... However, the CLIL approach uses methodology based on scaffolding, in which the teacher provides support to the student to gradually withdraw themselves as the student does not need them anymore. It is about the student actively building knowledge; for this, the learning must be contextualized and adapted to the student environment.

Finally, the possibility of using alternatives to the textbook should be pointed out, for example, through project work, materials prepared by teachers, the European Portfolio of Languages... Textbooks are closed material; however, these alternative materials allow adapting to the needs of the students and contextualizing in a specific environment and school. If the textbook in the English area is replaced by the portfolio and materials prepared by the teachers, the possibility of reinforcing other areas is allowed, for example, working on science in English class sessions. Obviously, this elaboration requires much more time and work, so resources, especially human resources, should be increased.

### 3.9 Loss of content and vocabulary in the mother tongue

FAPA [16] considers that the contents do not comply with the Bilingual Program and manifests the lack of preparation of students in science. On the other hand, they point out that the important thing is the acquisition of instruments and tools, not considering the knowledge as essential because it can be acquired later.

FETE-UGT [9], in relation to the acquisition of technical vocabulary in Spanish, states that $81 \%$ of the surveyed teachers who teach subjects in another language use a series of strategies, more commonly: use Spanish exceptionally, use of bilingual glossaries in the different didactic units, coordination with the teachers who teach areas in Spanish, and complementary tasks to be carried out at home. Other strategies used include rewarding students with higher vocabulary knowledge in both languages with higher scores, writing new terms in both languages, and family collaboration at home to expand knowledge in the mother tongue.

Acción Educativa [11] points out the importance of ensuring the alternation of the linguistic code in the subjects taught in English to ensure that the mother tongue and the second language complement each other. To this end, it proposes that a "curriculum development center" facilitates the work of teachers to master both languages by providing them with models and workshops, didactic units and projects, as well as bilingual curricular materials. Another proposal it makes is to repeal the third section of Order 5958/2010 to eliminate the obligation to teach bilingual subjects exclusively in English.

Genesee [24], on the contrary, affirms that bilingualism is a good investment because students study at the same time as monolinguals, with the same schedule, and do not lose skills in the first language when studying a second language.

One of the most criticized aspects of the Bilingual Program has been the loss of knowledge in relation to the content and vocabulary in the mother tongue due to the teaching of science in English. In this way, below, I present a series of improvement proposals in relation to this limitation: the same topics or contents could be worked on in different subjects taught in English and Spanish so that students can learn them in both languages (work transversally in other areas), translate into Spanish punctually at specific times (for example, when introducing a new topic of special difficulty, explaining it first in Spanish and later developing it in

English), use of bilingual glossaries, activities that students can carry out without help at home according to their level, simple tasks at home such as looking up in the dictionary the related subject vocabulary studied, using curricular material in both languages (textbooks, activities, posters...), and use of bilingual teaching resources (web pages, platforms...). In short, it would be a matter of working the vocabulary and the contents in the two languages in a transversal way, for example, using the Foreign Language English class to treat or reinforce science content and the science classes to work English through greater exposure and use of said language. The rest of the subjects (language, mathematics...) should also be used to work on the same content in Spanish. This transversal work involves many hours of coordination. For this reason, the Educational Administrations must facilitate and encourage such coordination by freeing the teachers, giving them reduced teaching hours, and providing more support staff in the schools.

### 3.10 The need for language schools or extracurricular activities in English to complete the training

FAPA [16] indicates that there is unanimity in the need for extracurricular supports in English by families. It shows that the students who are helped with extracurricular classes in academies, or at home, are those who have guarantees of progress within the program.

However, in this aspect, it is not so important to carry out extracurricular activities in English or go to academies or courses abroad, as it is to offer children a favorable and motivating environment for the English language every day at home.

Interestingly, de la Rica and González de San Román [22] make a comparison between Sweden and Spain in relation to language proficiency in English. Swedish students have a much higher level of English despite having a later exposure to English compared with Spain, and they have fewer homework hours and fewer hours of English instruction. However, exposure to the English language is much higher at home, in reference to parents' knowledge of the English language and children's exposure to media such as television. It is argued in the study that exposure to English in nonformal contexts is fundamental for improving oral comprehension and that it has a greater influence than traveling to English-speaking countries or having relationships with people who speak English.

Cummins [3] points to the promotion of reading, both at school and at home, as a way to improve the results of bilingual programs.

In short, the improvement proposals in this section are aimed at creating a favorable environment and promoting exposure at home to the English language, rather than resorting to extracurricular activities, academies, or courses abroad.

Some proposals for improvement could be: watching cartoons or movies in original version and with subtitles on television, as well as series or programs; listening to music or stories in English... In addition to the possibilities of listening to television in its original version, nowadays, through the Internet, you can access numerous free educational resources (videos and educational platforms, games...). So, it is essential to complete the most receptive and passive activities (for example, watching television in English) in addition to more interactive and active ones, such as computer games, online games, free websites, educational platforms, games, story reading or books in English... Also, whenever possible, go on holiday abroad, if possible, to an English-speaking country.

It is about children enjoying learning English, learning through playing or doing things they like, in order to associate their learning with something positive. At home, they can also have an environment suitable for learning, which includes all the resources that we currently have through new technologies and the many materials
and toys that are being created for this purpose. Likewise, the importance of learning other languages must be transmitted to them through their parents; they must be motivated, and they will learn if they enjoy learning. It is essential that parents are involved in their children's learning, encouraging and motivating them. Initially it is about getting the ear used to the noise in English, gradually they will gain confidence and security. A few years ago, the learning of foreign languages was based on the formal part of the language, on grammar, but nowadays, it focuses more on communication and the use of the language, in this way you have to start by practicing speaking and listening (oral communication and listening comprehension) and, later, study grammar. The CLIL approach is based precisely on using the second language as a learning tool of that language, instead of being the direct objective of learning.

### 3.11 Segregation

FAPA [16] states that the Bilingual Program selects students for the following reasons: (1) the demand for these types of positions causes the absence of vacancies for extraordinary schooling. (2) The students enrolled once the course begins usually request a change of school for not adapting to the program. (3) SEN students usually have trouble acquiring the skills of the program.

However, the C.M. [6] states that the percentage of students who leave the Bilingual Program to move to nonbilingual schools in secondary education is very low ( 609 students, $2.7 \%$ of the total), and in P.E., it is even lower ( 161 students, $0.5 \%$ of the total). When students pass from primary to secondary education, $2.6 \%$ ( 327 students) drop out of the program to move to nonbilingual schools.

Acción Educativa [11] exposes the topic of the segregation of the students in the secondary education institutes by marking two itineraries, section and program, as a direct consequence of the level of English reached in 6th of P.E. But this problem is not going to be discussed in the present study because we only focus on primary.

In relation to the improvement proposals, they have been previously exposed in relation to the SEN students and the rest of the students with a specific need for educational support. However, by providing more personal resources and specialized supports to the schools, a large part of this problem would be solved.

Other problems of the program that have been solved over time have been, for example, problems in relation to promotion to secondary school. Thus, FAPA [16] indicates that students have to move to centers that have the program, even if it is located in another municipality. In this sense, it sets out as an improvement proposal to ensure that there is continuity in the reference secondary schools and not in other centers or municipalities. Due to the progressive expansion of the program, more and more institutes are attached to it and, therefore, the problem has been decreasing.

In this sense, the voluntary participation in the program by the schools has also been pointed out. FAPA [16] explains that parents affirm that involvement in the program by the school and teachers is essential and that there must be a voluntary and strong enough commitment to remain over time. Genesee [24] points out that the commitment of the management team and the teaching staff is essential, as well as the adequate decision-making. The participation of the schools must be voluntary for the implementation of the program to be successful; for this, both the faculty and the school council must be in favor of it.

Finally, the fact that the program has been extended to pre-school (as well as the stages after P.E.) has been a success. Beginning the implementation of the program from pre-school facilitates the learning of the second language and normalizes and modifies denial attitudes. In this sense, Lasagabaster [25] points out the following:

> Attitudes towards the foreign language could be improved thanks to the early teaching of the foreign language from the age of four (a practice almost universalized today in the schools of the CAV), which could have a positive effect in the long run on attitudes of those students more reluctant to English. (p. 418).

It also points out that instruction in the second language must be as long as possible, both within school hours and throughout the courses of compulsory and noncompulsory schooling.

## 4. Conclusions

The Bilingual Program of the C.M. has a number of limitations. The most important would be related to the care of SEN students. In order to solve the problems derived from the deficient attention that this student population receives in the bilingual schools in relation to said program, it is indicated as a priority the training of the teaching staff, its coordination, and having the necessary personal resources. Specifically, regarding attention to SEN students in the bilingual program, training could be improved for special needs teachers and speech and language therapists. Additionally, the bilingual program could: (1) specialize certain bilingual schools in the attention to SEN students, (2) dedicate more materials and human resources, (3) adapt bilingual schools that have preferential attention for students with autism spectrum disorder, (4) use texts in both languages, (5) adapt curricular materials, (6) work the same contents in areas taught in different languages, (7) design specific support programs for SEN students, (8) equip bilingual schools with more special needs teachers and speech and language therapists. It would be very beneficial, in reference to this last aspect, that posts be created in bilingual schools for specialists in special education with the bilingual endorsement, in addition to the teaching staff of this specialty who already provides support in the core areas in Spanish. Finally in the schools in which said specialist already has the qualification, that he is allowed to give said support in the areas taught in English.

Another important conclusion is the fact that it is essential to promote and facilitate the coordination of bilingual teachers with other teachers who teach the group in the bilingual program, with conversation assistants and with other schools. To do this, the educational administrations must expand the human resources of the schools to free the teachers involved in the program teaching hours and be able to dedicate certain teaching and nonteaching hours to coordination, as well as for the preparation of materials and for research and collaboration with other teachers and schools. Furthermore, coordination is essential to work on content communally and not in isolation. In this way, the different subjects must be worked in a coordinated way, integrating the contents through different subjects.

In relation to the training of bilingual teachers, there must be a continuous, varied, free, and quality courses offered that are accessible to all, facilitating their implementation (inside and outside school hours, on weekends and holidays, seminars and working groups in the center itself with the presence of experts, more training centers...) and encouraging teachers to continue training voluntarily (paid study licenses and training permits, courses during school hours, courses and stays abroad, exchange with teachers from other countries, days of exchange of experiences between recognized bilingual schools with credits...). The most important aspect to ensure and facilitate the continuous training of all teachers would be for teacher training to be integrated into their working day and, if possible, within their own school, as is the case in other countries.

In reference to conversation assistants, the most important conclusion is that it is essential that their training is related to education and that they have had experience and/or practices in educational centers. In addition, other improvement proposals can be pointed out, such as: communicating within the educational context with teachers and students always in English, coordinating with the assistant to maximize their participation in classes in relation to conversation and listening activities, planning their performance in writing, teacher and assistant preparing materials together, co-evaluate and continuously introduce the improvements they deem necessary, dedicate at least one weekly session for the training in English of the teachers who are interested, carry out exhibitions in relation to their country of origin, culture, traditions...

A key aspect to guarantee the success of the program is related to human resources and staff (Madrid and Roa [4]). An adequate endowment of human resources should be made, not skimping on them and especially supporting SEN students. In this way, the presence of more support teachers, in general, and special needs teachers and speech and language therapists, in particular, is essential. In reference to the staff, the official teachers (defined as teachers that passed the public examination and obtained a post in a school and they want to continue working there, sometimes they have been working there many years) must be respected, and the staff must be modified without affecting them. For example, a vacant primary position for retirement could be transformed into a foreign language with bilingual qualification, consult the management teams about the possibilities of expanding bilingualism without affecting the official teachers, use bilingual qualified teachers to support those whose profile is no longer necessary, use the different specialties of the teaching staff to make a change of specialty within the school and not displace it...

Regarding the methodology, the use of good practices by teachers is essential, as well as an active, participatory, and motivating methodology with a transversal treatment of the topics in the different subjects and prioritizing oral language. Teaching should focus on the student and not on the teacher, all students should be involved, and their active participation should be encouraged, as well as experimentation. The teacher must be willing and available to help students who need it, especially SEN students, starting from the student's level of competence and selecting the appropriate resources at their level. You can help them by working on previous knowledge, explaining clearly and in different ways, exemplifying, repeating concepts of greater difficulty, reviewing with them the mistakes they would have made in the tasks... In addition, you can keep students' attention using a variety of activities, examples, demonstrations, experiments, cards with pictograms or images, new technologies (videos, games, online platforms...). You can also promote cooperative learning and work in small groups and in pairs, work on projects, make flexible groups... To do this, you must have more support teachers and have time for coordination with teachers of other subjects, assistants...

It is important to use a methodology based on scaffolding (CLIL approach), contextualizing, and adapting the learning to the students so that they actively build knowledge. However, the CLIL approach can be combined with other methodologies that work in the context of a specific school, with a specific group of students... In other words, it is about adapting according to the needs that arise. In this way, other methodologies such as gamification, flipped learning... can be used. It is interesting to point out the possibility of using alternatives to the textbook, for example, through project work, materials prepared by teachers, European Portfolio of Languages... These materials are not a closed material like textbooks and allow them to be adapted to the needs of the students and contextualized in a specific environment and school.

The fundamental conclusion in reference to the loss of knowledge in relation to the contents and vocabulary in the mother tongue due to the teaching of sciences in English is that the vocabulary and the contents in the two languages should be worked on transversally.

In relation to the need for language academies or extracurricular activities in English to complete the training, it is proposed to create a favorable environment and promote exposure at home to the English language (see cartoons, films, series or programs in original version and subtitled; listening to music or stories in English; reading stories or books in that language; accessing educational resources through the Internet or computer games), rather than resorting to extracurricular activities, academies, or courses abroad.

Finally, it is important to note that the purpose of the C.M. is not that the students are bilingual but that the students reach the highest level of linguistic competence in the second language that they can. Teachers, in most cases, are also not bilingual. Therefore, the objective for them must be to constantly train and develop their skills. To do this, teachers will have to be motivated and incentivized, in addition to facilitating their training. It is also essential to increase the teaching staff in the schools, especially supportive ones, to provide more adequate and individualized attention to those students who show more difficulties in learning. Finally, another important aspect to highlight is the prestige and value given to teachers in other countries compared to Spain. The recognition of the teaching staff is essential, and the credit for the success of the program is theirs, due to their effort and dedication.


## Author details

Esmeralda Sotoca Sienes
EAT Coslada-San Fernando, Madrid, Spain
*Address all correspondence to: esmeralda.sotocasienes@educa.madrid.org

## IntechOpen

© 2020 The Author(s). Licensee IntechOpen. This chapter is distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/ by/3.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. (cc) BY

## References

[1] Thomas WP, Collier VP. A National Study of School Effectiveness for Language Minority Students' Long Term Academic Achievement. CREDE; 2002. Available from: http://www. thomasandcollier.com/assets/2002_ thomas-and-collier_2002-final-report. pdf
[2] Lewelling VW. Academic Achievement in a Second Language. Washington DC: Eric Clearinghouse on Languages and Linguistics; 1991
[3] Cummins J. Teaching for Transfer in Bilingual Education: Promoting Language Awareness and Literacy Engagement through Identity Texts. Madrid: I Congreso Internacional sobre Bilingüismo en Centros Educativos; 2010
[4] Madrid D, Roa JM. ¿Qué variables ejercen mayor influencia en la calidad de los programas bilingües? Revista de Educación. 2018;382:81-106
[5] Ley Orgánica 2/2006, de 3 de mayo, de Educación
[6] Comunidad de Madrid. Evaluación del Programa Bilingüe de la Comunidad de Madrid; 2018. Available from: https:// es.slideshare.net/innovacion_edu/ evaluacin-del-programa-bilinge-de-la-comunidad-de-madrid
[7] Laorden C, Peñafiel E. Proyectos bilingües en los centros de la Comunidad de Madrid: Percepción de los equipos directivos. Revista de Investigación Educativa. 2010;28(2):325-344. Available from: https://digitum.um.es/jspui/ bitstream/10201/45256/1/Proyectos\%20 bilingues\%20en\%20los\%20centros\%20 de\%20la\%20Comunidad\%20de\%20 Madrid\%20Percepcion\%20de\%20 los\%20equipos\%20directivos.pdf
[8] Arigita García A. Estudio de los efectos que tienen los programas
madrileños de educación bilingüe sobre el rendimiento académico de los alumnos de primaria con necesidades específicas de apoyo educativo. Verbeia. 2016;1:39-56. Available from: https:// www.ucjc.edu/wp-content/uploads/ 2.-Amaya-Arigita-Garcia.pdf
[9] Federación de Trabajadores de la Enseñanza de FETE-UGT Madrid. Resultados de la Encuesta al profesorado sobre el Programa Bilingüe de la Comunidad de Madrid. 2014. Available from: https://www.fespugtmadrid.es/ wp-content/uploads/2017/03/informebilinguismo.pdf
[10] Lova M, Bolarín MJ, Porto M. Programas bilingües en Educación Primaria: Valoraciones de docentes. Porta Linguarum. 2013;20:253-268. Available from: http://www.ugr.es/~portalin/ articulos/PL_numero20/16\%20\%20 Maria\%20Lova.pdf
[11] Acción Educativa. El Programa Bilingüe a examen. Un análisis crítico de sus fundamentos. Asociación Acción Educativa. 2017. Available from: http:// accioneducativa-mrp.org/wp-content/ uploads/2017/10/informe-bilinguismo-2017-low.pdf
[12] Lova M, Bolarín MJ. La coordinación en programas bilingües: las voces del profesorado. Aula Abierta. 2015;43: 102-109. Available from: https://www. sciencedirect.com/science/article/pii/ S0210277315000050
[13] Gerena L, Ramírez-Verdugo MD. Analyzing bilingual teaching and learning in Madrid, Spain: A Fulbright scholar collaborative research project. GIST Education and Learning Research Journal. 2014;8:118-136. Available from: https://files.eric.ed.gov/fulltext/ EJ1062625.pdf
[14] Halbach A. Una metodología para la enseñanza bilingüe en la etapa
de Primaria. Revista de Educación. 2008;346:455-466. Available from: http://www.revistaeducacion.mec.es/ re346/re346_17.pdf
[15] Durán Martínez R. Análisis comparativo de la percepción de los docentes sobre los programas bilingües en la Educación Primaria y Secundaria. Revista Complutense de Educación. 2018;29(3):865-880
[16] Federación de la Comunidad de Madrid de APAS Francisco Giner de los Ríos. Informe sobre el Programa de Centros bilingües de la Comunidad de Madrid; 2009
[17] Consejo Escolar de la Comunidad de Madrid. Los Programas de Enseñanza Bilingüe de la Comunidad de Madrid. Un estudio comparado. 2010. Available from: http:/www.madrid.org/edupubli
[18] Lova M, Bolarín MJ, Porto, M. Programas bilingües en Educación Primaria: Valoraciones de docentes. Porta Linguarum. 2013;20:253-268. Available from: http://www.ugr.es/~portalin/ articulos/PL_numero20/16\%20\%20
Maria\%20Lova.pdf
[19] Durán R, Beltrán F. A regional assessment of bilingual programmes in primary and secondary schools: The teacher's views. Porta Linguarum. 2016;25:79-92
[20] Travé GH. Un estudio sobre las representaciones del profesorado de Educación Primaria acerca de la enseñanza bilingüe. Revista de educación. 2013;361:379-402. Available from: https://www.educacionyfp. gob.es/dctm/revista-de-educacion/ articulosre361/re36115.pdf?documentId =0901e72b8162f197
[21] Marsh D, Mehisto P, Wolff D, Frigols-Martin M. The European Framework for CLIL Teacher Education. Graz: European Centre for Modern Languages; 2010
[22] De la Rica S, González de San Román A. Determinantes del rendimiento académico en competencia inglesa en España. Claves para la mejora. Estudio europeo de competencia lingüística. Vol II. In: Análisis de expertos. Madrid: INEE; 2012. pp. 12-29. Available from: https://www.educacionyfp.gob.es/ inee/dam/jcr:f823e390-12e8-4e3a-8a717ae133768613/eeclvolumeniicap1.pdf
[23] Johnstone R, Dobson A, Pérez Murillo MD. BEP (Spain) Evaluation. Madrid: Documento elaborado por el equipo de evaluación para la presentación celebrada el 25 de marzo de 2010
[24] Genesee F. Dual language development in preschool children. In: Young English Language Learners: Current Research and Emerging Directions for Practice and Policy. 2010. pp. 59-79
[25] Lasagabaster D. La presencia de tres lenguas en el currículo: Multilingüismo en los contextos canadiense y español. Revista de Educación. 2005;337:405-426

