"Madrid, a Bilingual Community": a view from the classroom

A report for EMI Oxford

Robert Woore, 12th March 2015

1 Introduction

A recent report (Dearden, 2014), published jointly by EMI Oxford[1] and the British Council, identifies English-Medium Instruction (EMI) as a rapidly growing global phenomenon in all phases of education. For the purposes of the report, EMI is defined as "[t]he use of the English language to teach academic subjects in countries or jurisdictions where the first language (L1) of the majority of the population is not English" (ibid: p.4).

The report provides a snapshot of "the size, shape and future trends of EMI worldwide" (p. 2), based on data gathered via a questionnaire completed by British Council staff in fifty-five countries. These respondents acted as 'informed representatives' of the countries in which they were resident. However, it is clear that, within a given country, there may be a great deal of variation at numerous levels: between its constituent regions or localities; within a given region, between individual schools; and within a given school, between individual teachers or between established practices for different groups of students (e.g. according to age or perceived 'ability'). Thus, whilst the report provides an initial mapping of the EMI terrain, it was not able to look in detail at what is happening at the level of individual classrooms, where a number of interesting questions arise: for example, what is the nature of the oral interaction between teachers and learners? How is students' understanding of technical concepts associated with particular subject areas mediated in the second language (L2)?

In order to begin to explore such issues at the classroom level, I recently spent a few days observing lessons conducted through the medium of English in Madrid[2]. My visit did not involve systematic data collection and did not address specific research questions. Rather, it was intended as an initial information-gathering exercise, which might in turn form the basis for subsequent, more formal research projects.

In this brief report, I begin by providing a brief overview of the educational context within which the schools I visited were operating, followed by an outline of the nature of my visit. I then describe some of the key things that struck me in the lessons that I observed and in my conversations with teachers, head teachers, English language assistants and regional ministry officials. The report focuses mainly on the nature of students' learning, both of English as an L2 and within other academic subject areas; the pedagogical approaches taken; and some of the successes and challenges of teaching through English as experienced at the school level. Finally, I suggest some

[1] The 'Centre for Research and Development on English Medium Instruction' based at Oxford University Department of Education.

[2] I am grateful to EMI Oxford for inviting me to visit Madrid on their behalf, and to my colleague Dr Marina Arcos (Lecturer in Applied Linguistics in the Faculty of Education, Universidad Complutense de Madrid; Visiting Research Fellow at Oxford University Department of Education) for all the work she put into organizing my visit.

avenues that future research projects might seek to explore, in order to gain a deeper understanding of some of the key issues involved as I perceived them.

2 The context: bilingual education in Madrid

A number of primary and secondary schools in the *Comunidad Autónoma* ('autonomous community' or administrative region) of Madrid offer a bilingual education programme, whereby students complete a large proportion of their studies through the medium of English. Details of the programme and its implementation can be found in the bilingual report 'Madrid, Comunidad Bilingüe / Madrid, a Bilingual Community', published annually by the regional government (Comunidad de Madrid, 2015). The brief synopsis below is based on the information in this document.

The bilingual programme was first implemented in the 2004-5 academic year, beginning with Year 1 pupils in 26 state primary schools. The programme then rolled upwards, so that this first cohort of students are now in their eleventh and final year of compulsory education. Over the same period, the bilingual programme has grown steadily and now incorporates 336 state primary schools and 98 state secondary schools (as well as 163 other *centros concertados*, a type of state-subsidized private school). The trajectory appears to be continuing upwards.

Schools can apply to become part of the bilingual education project in response to an annual call from the *Consejería de Educación* (Regional Ministry of Education), which specifies the number of schools which will be accepted onto the programme in any one year. Schools must demonstrate that they are able to meet certain requirements in order to guarantee the quality of the programme, and must gain majority support from both the teaching staff and the governing body. Subject teachers must be certificated to teach their subject through English, and this requires English competence at C1 ("Advanced") level or above in the Common European Framework of Reference (CEFR), roughly equivalent to IELTS level 7-8.

Schools which join the programme then receive support from the *Consejería*, including the provision of native-speaking *auxiliares de conversación* (English Language Assistants) and the funding of professional development courses for teachers. These are residential courses based in the US, Canada or England, focussing on the development of both English language proficiency and pedagogy. Assistants are initially appointed for a one year period, extendable for a second year if both they and the school so wish. There is approximately one assistant for every 100 students in the bilingual programme. Thus, in one of the primary schools I visited, there were around 800 students and 8 Assistants.

The subjects that are taught through the medium of English in a given school depends on staff availability. However, regional legislation permits any subject to be taught in English except for Spanish and maths. It is interesting that maths is excluded, given that the recent report by EMI Oxford found that, globally, "there is no subject which is clearly designated as a subject that can only be appropriately taught in the majority students' home language" (Dearden, 2014:25); indeed, maths was the subject most often reported to be taught through English in the global survey.

The English proficiency of students in the bilingual programme is evaluated externally by means of tests completed when they are in Years 2, 4 and 6 of primary education and Years 2 and 4 of secondary education (equivalent to years 8 and 10 in England). These tests, which assess all four language skills, are administered by "internationally renowned testing institutions" (Comunidad de Madrid, 2015:29) such as Cambridge University English Language Assessment. They are compulsory

for pupils in bilingual state primary schools who wish to continue into a bilingual state secondary school; the results determine which of two pathways the pupil will enter: either the 'sección bilingüe' ('bilingual section'), in which students receive five hours per week of advanced English instruction and are taught most of the rest of their curriculum through the medium of English; or the 'programa bilingüe' ('bilingual programme'). The *programa* involves less English-medium instruction; however, even students following this pathway receive five hours of advanced English instruction per week and are taught in English for at least one of the following subjects: Arts and Crafts, Education for Citizenship, Music, Physical Education or Technology.

In terms of content learning, it would be interesting to see the results obtained by students in national subject examinations at the end of their compulsory education. The first cohort to complete their compulsory education entirely within the bilingual programme (those who began in Year 1 in 2004-5) did so in 2014; however, there is no mention of the results in the latest annual report on the bilingual programme (Comunidad de Madrid, 2015). Interestingly, these examinations, which are set nationally rather than regionally, are sat in Spanish, even for students who have been taught the relevant subjects in English.

3 The nature of my visit

I spent four days in Madrid and visited two state primary schools and two state secondary schools. One school in each phase was in the city itself, the other in the wider *Comunidad Autónoma*. All four schools were well established in the bilingual programme, having been part of it since its inception in 2004-5. I observed lessons (twelve in total) in a range of subject areas, including English (at both primary and secondary levels); Natural Sciences and *Conocimiento del Medio* (roughly 'social studies') at primary level; and Music, Art, Drama and Biology at secondary level. I also met with Head Teachers and Bilingual Programme Coordinators.

Finally, I was able to discuss the bilingual programme from an 'official' perspective with the *Subdirectora General de Programas de Innovación* ('Deputy Director for Innovative Programmes') at the Regional Ministry of Education.

4 Learning in bilingual classrooms: some impressions and observations

In the course of my work in Initial Teacher Education over the last eight years, I have frequently observed foreign language lessons. I drew on this experience to inform and guide my lesson observations in Madrid. As usual, I made brief notes where possible, including some verbatim transcriptions of what students or teachers actually said and of the texts they were reading. However, as noted earlier, I did not attempt to gather systematic data and I do not claim to have produced 'scientific' findings. Rather, what I present in this section are essentially my impressions: some of the things that struck me as I watched, listened and interacted with the students. I hope that these (inevitably subjective) observations may nonetheless help to identify areas that might merit more systematic investigation in the future.

I have structured my observations using three broad areas: first, students' linguistic proficiency in their L2 (English); second, their content learning; and third, the pedagogical approaches taken by their teachers. Within the last category, I was particularly interested in the ways in which language was used in the classroom to support students' learning. For example, to what extent was the 'English-medium' instruction actually conducted in English? Was Spanish also used? What was the nature of the interaction between students and teachers? In subject lessons, to what extent was

there a pedagogical focus on the target language as well as on the content? I try to offer some answers to these questions below.

4.1 Students' language proficiency

I begin with a consideration of students' linguistic proficiency in English, their L2[3]. I do so because this was one of the most immediately striking things in all the classrooms that I visited.

Oral production

Students' oral language production – both when answering teachers' questions, and when asking questions of their own – demonstrated an impressive facility with communication and command of the language, in terms of both syntax and lexis. I was seldom aware of students really struggling to get their intended meanings across in English, even though their contributions were generally spontaneous and unscripted. The following exchanges, which I noted down verbatim, exemplify this.

In a Year 1 Primary Natural Science lesson, as a warm-up task, students have been invited to say anything they like about our solar system. They take it in turns to do so, referring to a series of images and words displayed on the whiteboard.

> Student 1: The Moon has different faces.
> Student 2: Jupiter is a ball of gas.
> Student 3: The earth is the only planet with water.
> Student 4: But Mars has water!
> Teacher: They are investigating. We are not for sure.

In an Art lesson with a Year 1 Secondary class (equivalent to English Year 7), an English Language Assistant is describing the effects of different line forms on the viewer, supported by a Powerpoint presentation.

> Assistant: Parallel lines create a sense of excitement (…) Who can define what a parallel line is?
> Student 1: When you lengthen the lines, they will never meet.
> Assistant: Yes (…)
> Student 2: When you see the lines, they are all in the same direction.
> (…)
> Student 3: I have a question. We have said that parallel lines create a sense of excitement. Is this for all the people or just for one person and it is different for another person?
> (…)
> Student 4: We are studying lines but we didn't study perpendicular lines. Perpendiculars can also be important

True, some of the statements in the first example (produced by the Year 1 children) may have been memorized as pre-formed chunks of language; nonetheless, all of their contributions are both

[3] I was aware of very few students who did not speak Spanish as their first language (i.e. the equivalent of students with 'English as an Additional Language' or EAL in the UK). In most classes, I did not notice any such students; in others, there appeared to be perhaps one or two. This was equally true of the schools outside the city and those within it.

relevant and linguistically accurate. In the second group, more of the language produced is likely to have been formulated by the students themselves, given that they are clearly responding to things that the teacher is saying.

In classes of older students, who had now been taught through the medium of English for several years, this sense of facility in using English to communicate was still more striking. This is reflected in students' test results: the Biology teacher of one Year 4 secondary class I observed (equivalent to English Year 10) reported that most of the 22 students in the class had been assessed at B2 level, with two having achieved C1. Indeed, one of the regional government representatives I spoke to, as well as several teachers, pointed out that some students in the final years of compulsory education now have higher English proficiency than their subject teachers.

Furthermore, the high levels of English proficiency which I observed did not appear to be restricted to a small number of high-attaining students in each class; rather, it appeared to be widespread, as demonstrated by students' oral responses when they were nominated to speak by the teacher rather than volunteering to do so (e.g. by putting their hands up). For example, I noticed that there was a rather reticent girl in the Art lesson described above who never volunteered to answer. Nonetheless, when she was put on the spot by the Assistant and asked to describe the features of the lines in an image displayed on the board, she noted, correctly, that "some are thicker than others".

The contrast with students' L2 proficiency in the context with which I am familiar – Modern Foreign Language (MFL) classrooms in England – is marked. There, students generally struggle to formulate language spontaneously and indeed get little opportunity to do so (Ofsted, 2011). This also reflects the conclusions of a paper written over fifteen years ago by Milton and Meara (1998), who asked "Are the British really bad at learning foreign languages?" They found that L2 learners in Britain did indeed exhibit low levels of language performance compared to their counterparts in Greece and Germany. However, they concluded that the most likely cause of this problem was the comparatively little amount of time spent learning languages in the British curriculum – a problem which remains today. In other words, in Britain, we simply do not devote enough time to L2 learning in order for our students to make any real progress in it.

We can apply the same argument in reverse to the students in Madrid. In the primary schools I visited, every year group spent ten hours per week learning English, or learning through the medium of English, as part of their curriculum. This compares to 30-40 minutes per week on average for students in Years 3-6 in England (Cable et al., 2010). In the secondary schools I visited, students were exposed to English for twenty hours per week in Years 1-5 (equivalent to English Years 7-11), compared to around 2-3 hours per week of MFL lessons in England (with this being statutory only up to Year 9). Further, I was told that the Year 1 primary children in the example above had additionally learnt English at pre-school. In light of the major differences between the instructional practices and language learning outcomes in these two contexts, one might propose the following as an underlying principle of L2 teaching and learning: 'You get out what you put in!'

Pronunciation

Despite the strengths in students' ability to express themselves spontaneously in the L2, I did note that their spoken English was often heavily accented. In many cases, the teachers also spoke English with a strong Spanish accent, which presumably will have influenced their students' pronunciation. Of course, as Munro and Derwing (1995) pointed out, having a foreign accent does not necessarily impinge upon intelligibility, defined as the extent to which a native speaker can understand the intended message. Nonetheless, from my own perspective as a native speaker of British English, I

would say that I often had to concentrate fairly hard in order to understand what students were saying; and occasionally, I did find some parts of their utterances unintelligible due to the strong Spanish influence on their pronunciation. It is likely, however, that with more practice I would 'tune in' to this accent and find it easier to understand.

One of the secondary school teachers I spoke to acknowledged that she spoke English with a Spanish accent, and that this might well influence her students' pronunciation; however, she also noted that the students were additionally exposed to a number of other accents in English, namely those of the native-speaking Assistants who came from various different Anglophone areas. For example, in recent years, the schools I visited had hosted assistants from Southern England, Scotland, Ireland, Australia, Canada and various parts of the United States.

The same teacher also said that she would be interested to find out more about the effects on students of hearing this variety of different accents. To what extent are they aware of the different accents of different teachers and Assistants? Are there particular accents that they are aiming (or at least would like) to sound like? To what extent are they aware of their own accent when speaking English and to what extent are they satisfied with this? These are interesting issues that future research studies might explore, linked to the question of 'which English' is appropriate for use in EMI contexts.

Literacy

I had limited opportunities to consider students' written work. When I did so, this was mainly at primary level (because the layout of the classrooms and organization of the lessons made it easier to circulate and look at students' exercise books in this context). My impression was that there was more in the way of vocabulary lists and sentence-level work, guided by writing frames, than longer pieces of free writing. A more systematic examination of students' written output at both primary and secondary levels, and the ways in which this is used to support both content and language learning in English-medium lessons, might be a fruitful avenue to pursue.

In terms of reading, there was more of this to observe. In several of the secondary subject lessons that I saw, much of the work was textbook-based (see also below). Students were often asked to read out questions and other excerpts, for example, when going through and correcting their homework. Based once again on my impressions rather than on any systematic analysis, the language in these textbooks did not appear to have been modified or simplified to take account of the fact that the students were learning through the medium of a foreign language. For example, one passage read out by a Year 4 secondary student (equivalent to Year 10) in a Biology lesson was the following definition of a 'karyotype':

> The chromosomes of a cell, usually displayed as a systematized arrangement of chromosome pairs in descending order of size.

In the primary schools classes, more use was made of worksheets and other non-textbook texts, including some which appeared to have been purpose-written by the teacher (or Assistants) themselves. I was again impressed by the linguistic level of the texts which students were reading. For example, a class of Year 4 primary students were working with a text entitled "Europe and the European Union", which began as follows:

> Europe is the second smallest continent by surface area: 2% if the earth's surface.
> In Europe, there are approximately fifty countries. Russia is the largest and the

> Vatican the smallest. Europe is the third most populous continent after Asia and Africa…

Students appeared to comprehend what they were reading fully; or at least, I did not notice any visible signs or explicit statements of difficulty. Perhaps this is to be expected given the volume of English texts that students must have been reading in the course of their curriculum as a whole.

Given that students were often asked to read texts aloud in class (in a plenary context), I had numerous opportunities to gauge their print-to-sound decoding proficiency: that is, the extent to which they were able to read aloud the written texts accurately and fluently. In contrast to the situation in English MFL classrooms (see Woore, 2009), even students at primary school level were generally able to decode accurately – if sometimes a little hesitantly and requiring help with words having irregular pronunciations (such as 'populous' in the Year 4 passage cited above). This is despite the fact that English is an extremely 'deep' orthography (Katz and Frost, 1992) with complex and inconsistent symbol-sound correspondences. At secondary level, when I heard students read aloud, their decoding (in terms of symbol-sound mappings) was again generally accurate – although, as noted above, English phonemes were often pronounced with a heavy, L1-influenced accent. This sometimes made it hard for me to understand what they were reading, particularly in light of the lexical and syntactic complexity of some of the passages involved.

Again, it may be presumed that the students' development of high levels of decoding proficiency has been facilitated by the extensive practice that they must have had in reading aloud. Decoding challenging L2 texts (containing complex syntax and low frequency words) is a matter of daily routine for these learners, in contrast to the limited opportunities that English MFL students often have to interact with written texts of this nature (Woore, 2011).

According to the teacher of the Year 4 primary class who were studying Europe (using the text quoted above), primary school students, at least in this school, also receive some explicit instruction in decoding the English writing system, although this is not something that I witnessed during my visit (except in the form of corrective feedback when students read words aloud incorrectly). The same teacher also reported that this explicit focus on English decoding begins only around Year 2 (even though students do encounter written English in Year 1), because of a concern that starting any earlier might interfere with their learning to decode in Spanish, their L1. The acquisition of foundation level reading skills in L1 Spanish is a comparatively rapid process which most children complete by the end of Year 1, due to the 'shallow' nature of Spanish orthography, that is, its transparent and consistent symbol-sound mappings (Seymour et al., 2003). Thus, children in this school are expected to establish secure decoding skills in L1 Spanish before receiving explicit instruction in the English writing system. How widespread this practice is amongst other primary schools in the bilingual programme, and the extent to which it is supported by empirical evidence, would make interesting issues to investigate further. However, the students I observed in later year groups in this school certainly seemed to have successfully mastered English symbol-sound correspondences under this approach.

It is nonetheless interesting to compare this approach to the recent evidence presented by Murphy et al. (2014), whereby English children in Years 3-4 showed gains in L1 (English) reading accuracy as a result of learning an L2 (French or Italian) in school. There appeared to be particular advantages to learning Italian, which has a shallow orthography, compared to French with its more opaque system of symbol-sound correspondences (though the authors acknowledge that the precise reasons for this remain to be identified). This issue of the interactions between languages in the early stages of literacy acquisition – for different language combinations and in different instructional contexts – would seem to offer fertile grounds for further research.

4.2 Students' content learning

A crucial question for Madrid's bilingual education programme is the extent to which students' attainment in the various subject areas (e.g. Chemistry, History) remains at least as high when taught through the medium of English (the L2) as when taught in Spanish (the L1). To some extent, this question may be answered through an analysis of national examination results, by comparing the attainment of students in Spanish-medium versus English-medium classes.

However, I was told by various people that, anecdotally, there is high demand for places at bilingual schools amongst families of higher socio-economic status, whose children may be more likely (other things being equal) to attain highly. Therefore, it may be difficult to obtain a valid comparison between the attainment of students in bilingual and non-bilingual schools. Similarly, within individual secondary schools, it tends to be higher-attaining students (those with sufficiently high English scores at the end of primary school) who enter the *sección bilingüe* and lower attainers who follow the largely Spanish-medium *programa bilingüe*. Again, therefore, this would undermine a valid comparison of the final attainment of students in the two groups.

In terms of my classroom observations, not being a specialist in the subject areas in which I observed lessons (Natural Science, Art, Biology, Music and so forth), it was difficult for me to gauge students' attainment in terms of their content learning. However, I certainly did not get any impression that the curriculum was being 'dumbed down' in order to allow for the fact that it was being learned through the medium of a foreign language. I saw several examples where students appeared to be developing new conceptual understandings appropriate to their age. For example, the Year 1 students mentioned above had been exploring ideas such as the rotation of the earth and its orbit around the sun as an explanation for day and night and the seasons (using a model of the earth and moon together with a torch to simulate the sun).

Higher up the age range, at secondary level, I watched a Biology lesson in which Year 4 students (equivalent to Year 10) were learning about the principles of genetic inheritance. I noted down all the technical terms that came up during this lesson and list these below, in order to give some indication of the level of conceptual understanding that students were expected to develop:

haploid	phenotype	homologous	trait
diploid	genotype	chromosome	locus
meiosis	gamete	nucleus	gene
spermatozoa	allele	chromatid	carrier
recessive	Mendel's law	daltonism	karyotype
dominant	mitosis	haemophilia	cell

Nonetheless, I did sometimes wonder about the depth of students' engagement with some of the subject matter being taught. As noted previously, there were certainly numerous examples of students asking spontaneous questions in order to explore the boundaries of the teachers' statements. A good example of this is provided by the Year 1 secondary (Year 7) student's question, quoted earlier and repeated below, in which he seems to be grappling with the idea of subjectivity in responding to art – in contrast to the Assistant's apparent statements that particular kinds of lines always have particular effects on viewers:

> I have a question. We have said that parallel lines create a sense of excitement. Is this for all the people or just for one person and it is different for another person?

Nonetheless, I sometimes found myself wondering why more students did not seem to be asking what I would describe as really 'searching' questions, those reflecting a profound engagement with and insight into the topics at hand; and whether there would have been more such questions if the lessons had been conducted in students' L1. In the Biology lesson described above, for example, very few questions seemed to be asked by students at all, and those that were asked related to the factual content of the material being presented. This is of course purely an impressionistic observation and in any case, the nature of students' questions might be affected not only by the language in which they are operating (L1 or L2), but also by the pedagogical approach taken by the teacher (on which more below). These two factors may also be interrelated: for example, the language of instruction may influence the teaching approaches used (see, for example, Lo and Macaro, 2012). Given the central importance that interaction between teacher and students has been argued to play in academic subject learning (e.g. Edwards and Mercer, 1987; Mercer et al. 2004; Rojas-Drummond and Mercer 2003), the possible impact of the medium of instruction (L1 or L2) on the kinds of questions that students ask in the classroom may be a valuable avenue for further research.

Another question that arose for me during my observations of subject lessons concerned students' knowledge of technical terms in Spanish (their L1). The learning of concepts such as 'meiosis' and 'recessive genes' goes hand-in-hand with the learning of the terminology used to express them; thus, if this learning is done in English, to what extent are students able to use the associated terms in Spanish as well? By what channels are they expected to learn these Spanish terms? These questions have important implications for students' ability to use their specialist subject knowledge in future, Spanish-medium situations – not least in their forthcoming national examinations.

At least in the case of Spanish, which has close etymological links with English, technical terms often resemble the L2 forms that students encounter in class; indeed, in some cases they are identical in written form. This is the case, for example, with many of the biological terms in the list above (e.g. chromosome – cromosoma; recessive gene – gen recesivo; mitosis – mitosis). Developing students' knowledge of L1 technical terms may therefore be less serious in this context than in other EMI settings, in which the L1 is less closely related to English. Even in Spanish, however, not all technical terms are predictable from the English forms. For instance, one teacher gave the example of students producing an incorrect L1 form (**insulador*), having learnt the English version (*insulator*) when studying electricity. The correct form in Spanish is in fact *aislador*. This is an interesting case of 'reverse transfer' (the L2 influencing the L1), specifically in the domain of technical language. This too may be an area worthy of further investigation in EMI settings more broadly.

Teachers I spoke to were aware of the potential problems associated with students not knowing the appropriate technical terms in Spanish. In some schools, measures were therefore being taken to address this issue: for example, in one primary school, the material covered in Spanish lessons (conducted in Spanish) was adapted so that it reflected what was being taught in the English-medium subject lessons. For example, if the students were learning about plants and how they grow in Natural Sciences (taught in English), their Spanish teacher might set them a text to read on the same subject and discuss it with them. The intention of this integrated approach is to ensure that students learn the relevant technical terminology in both languages. Clearly, however, it relies upon effective collaboration and coordination of teaching at the individual school level and one wonders to what extent this is replicated more widely – particularly since the school in question has a long-established bilingual programme and so has had plenty of time to adapt its systems. It is also worth noting here that the approach taken in this school provides an example of how the introduction of English-medium teaching in some areas (e.g. Natural Sciences) has impacted upon the nature and content of the teaching in another, apparently unrelated curriculum area (Spanish).

4.3 Pedagogical approaches

General observations

The pedagogical approaches in the secondary school lessons that I observed were, in general, much more 'traditional' than those that I saw in the primary classrooms. Several teachers and head teachers confirmed that there tended to be a reliance on traditional methods in secondary subject lessons – in some cases, to their evident exasperation. For example, there tended to be a heavy reliance on the textbook to structure the teaching. In several lessons, a considerable portion of time at the start was taken up by students reading out questions from the textbook, followed by their answers which they had completed for homework. In other phases of the lessons, presentation and explanation of content by the teacher tended to predominate, with interaction with students occurring mainly at the whole class level (e.g. Teacher: Do you know what X is? Students call out: Yes!). In several cases, the whole class teaching was conducted by the Assistant rather than the teacher him- or herself.

In the primary classrooms I visited, the pedagogy tended to be much more varied and interactive. I saw students working in a range of groupings (individuals, pairs, small groups, whole class), moving around the room, coming up to the front, engaging in individual interaction with the teacher and with peers, completing problem-solving tasks and using worksheets created by the teacher. The layout and wall displays in some classrooms were also reminiscent of English primary schools. Indeed, one teacher said that he had been heavily influenced by the classrooms that he had seen during a professional development course (organized and funded as part of the bilingual programme) which he had completed in England. He said that this applied not only to the physical appearance of his classroom, but also to the kinds of tasks he used in his lessons. In this case, then, the bilingual programme had led to wider changes in pedagogical approach beyond those associated simply with the language of instruction.

The language of the classroom

In the English-medium classrooms I visited, the language of instruction was indeed English – indeed almost exclusively so. In terms of written language, the textbooks, the teachers' notes on the board and the students' work in their exercise books were all in English (with the exception that I did see some paired associate lists in English and Spanish in one primary classroom). In all the lessons I observed, the oral interaction between the teachers and students took place almost entirely in English. Further, when students were working collaboratively on a task (this was observed only at primary level), they interacted mainly in English. Only their social or non-task-related interaction took place predominantly in L1, although here too there was some use of English, even in the Year 4 primary classes that I saw.

This approach reflects the principle – emphasized by several of the teachers, head teachers and government officials I spoke to – of 'one face, one language': in other words, the intention is that a subject teacher in the bilingual section of a school will only ever speak English to a given class of students; they will never hear him or her speak Spanish at all. Only occasionally were exceptions to this principle mentioned: for example, where staffing constraints meant that a teacher had to deliver some of the Spanish-medium curriculum to the same students whom they also taught in English. However, in the schools that I visited at least, the 'one face, one language' principle appeared to be fairly strictly observed. This is interesting given that, in Second Language Acquisition research, there has been increasing recognition of the role of the L1 in supporting the learning of a foreign language

and a questioning of the 'monolingual assumption' as a basis for classroom pedagogy (e.g. Hall and Cook, 2012).

I was interested that students were so willing to communicate in English with their teachers, even though the teachers shared the students' L1 – in sharp contrast to the situation in many English MFL classrooms (e.g. Ofsted, 2011). When I asked about this, several teachers and head teachers suggested that the students (especially at primary level) may not actually realize that their teacher speaks Spanish, if the 'one face one language' principle is strictly implemented. However, I doubted this was the case. For example, in one of the Year 1 primary lessons I observed, a student who had listened to the teacher's explanation of the earth rotating on its axis and orbiting the sun then summarized the information in Spanish, to which the teacher replied (in English), "Exactly" – thus acknowledging that she had understood the Spanish summary.

Second Language Acquisition research has also begun to investigate the effects of principled code switching from L2 to L1 on various aspects of L2 learning. For example, Tian and Macaro's (2012) study of Chinese university-level students of English offers some initial evidence that providing learners with L1 equivalents of new L2 words may be more effective in supporting their vocabulary learning than giving explanations of the new words in L2 only. Notwithstanding such evidence, in most of the lessons I observed, teachers did not use any code switching, but rather spoke exclusively in L2 (again consistent with the one face, one language principle). I saw only two instances of teacher code switching overall: one in a Year 2 secondary (Year 8) Science lesson, when 'acero' was used to help students understand the meaning of 'steel'; the other in the Year 4 secondary (Year 10) lesson on genetic inheritance, when 'portadores' was used to translate the term 'carriers' (in the sense of people who carry a particular genetic trait, such as haemophilia, but do not display it). It is interesting that in both these cases, the L1 and L2 forms are non-cognates: perhaps, therefore, the teacher chose to code switch in anticipation that students would not be able to work out the L1 form on the basis of the L2 form. Both terms (steel; carrier) are also in common, everyday usage – in contrast to terms such as 'mitosis', where a translation into L1 may not have been particularly helpful. It would be interesting to know more about teachers' practices and beliefs in relation to classroom code switching within the Madrid bilingual programme. The teachers in these examples appear to have made highly limited but principled use of code switching, possibly linked to a particular category of words.

Focus on language

As part of the bilingual programme, the *Consejería de Educación* in Madrid runs a virtual platform for teachers to share digital resources called 'AICOLE' (*Aprendizaje Integrado de Contenidos y Lenguas Extranjeras*), the Spanish equivalent of the English acronym CLIL ('Content and Language Integrated Learning'). I was therefore interested in the extent to which content teachers focussed on the language itself as well as on the subject matter.

In the subject lessons I observed, as noted above, various subject-specific, technical vocabulary items were taught; however, I did not see any explicit teaching of grammatical structures or other aspects of the target language. My impression was that, at secondary level, the teachers' overriding focus was on content learning (perhaps because of the students' already high level of English proficiency, or perhaps because they saw themselves primarily as subject teachers rather than foreign language teachers). At primary level, there was perhaps more of a sense of teachers working on students' linguistic knowledge as well as on their subject knowledge.

Nonetheless, at both levels, I did see various examples of 'negotiation of meaning' (Long, 1996) during students' communicative interaction. The following typical examples illustrate this. In the

first example, the students show 'uptake' by reformulating their initial utterances, whereas in the second the student simply moves on without any acknowledgment of the correction.

Year 1 primary Natural Science lesson

> Student 1: Jupiter is fifteen moons
> Teacher: Jupiter…?
> Student 1: Jupiter has fifteen moons
> (…)
> Student 2: This is a Mars
> Teacher: This is Mars
> Student 2: This is Mars. Mars is coloured red
> Teacher: Is red
> Student 2: OK Mars is red.

Year 1 secondary Art lesson

> Student 1: [This image] is made up of horizontal lines so they could evoke us
> Assistant: evoke in us
> Student 1: a calm feeling.

Less frequently, I also observed negotiation of meaning between students, as in the following example from the Year 4 secondary (Year 10) Biology lesson. A boy with colour blindness has been invited to tell the rest of the class how he perceives a series of colours displayed on the white board.

> Student 1: The two colours at the (.) below
> Student 2: bottom
> Student 1: yes bottom, when I watch them they are the same

It is interesting that there was no attempt here (on the part of the students or the teacher) to correct the verb 'watch' here.

5 Other views on the programme

In this final section, I briefly report on some additional views on the bilingual programme (those that have not already been mentioned above), as expressed by the various teachers, head teachers and government officials with whom I spoke.

My overwhelming impression in almost all these conversations was one of immense positivity: there was a sense of vibrancy and indeed of pride, particularly in respect of the linguistic levels achieved by the students. Several people also noted that there had been a strong positive effect on teachers operating within the bilingual system, in terms of their engagement with their professional roles and their commitment to their on-going professional development. There seems to be a sense of pedagogical renewal associated with the bilingual programme, as seen in the example above of the Year 4 teacher who had remodelled his classroom and teaching approach as a result of his professional development course in England. On the other hand, it was acknowledged that teachers not able to teach through the medium of English sometimes saw the programme more negatively, perceiving it as a threat to their own professional prospects and status.

The recent report by EMI Oxford (Dearden, 2014) notes that, in various countries included in their global survey, English-medium education was seen as something for the 'elite' rather than being accessible to all. Several people I spoke to in Madrid, by contrast, were at pains to point out that the bilingual programme was open to everyone. For example, the head teacher at the rural primary school I visited had a strong commitment to fairness and equality of opportunity, and was proud to serve all of the students in his catchment area. There is no academic selection onto the programme at primary level. One of the ministry officials noted that, through their well-resourced and manifestly successful bilingual programme, there was a sense in which the local state schools had 'stolen a march' on their private (fee-paying) counterparts and were now seen almost as a more desirable option for affluent families.

I asked whether, in the longer term, there might arise a situation in which more affluent families would move house in order to be near a bilingual state school, thus pushing up house prices in the area and making such schools inaccessible to less well-off children. I was told that there was no evidence of this happening at present (although it should be noted that I did not ask anyone external to the programme for their views on this). The number of bilingual schools is also continuing to rise, making them accessible to a wider sector of the population. Nonetheless, it was striking to learn that the rural primary school mentioned above had expanded from having around 300 children in 2004-5 (when the programme started) to over 800 now.

At secondary level, as noted above, students do need to achieve a minimum level of English proficiency in their Year 6 primary tests in order to be able to enter the *sección bilingüe*. This is to ensure that they have the necessary level to access the rest of the curriculum in English. This does seem to raise some equity issues: for example, students who do not reach the threshold level of English proficiency by the end of Year 6, but who might do so given a little more time, are unable to access English-medium instruction, setting up a kind of 'Matthew effect' (whereby those who are already strong in English get even stronger and those who are less strong do not have the same opportunities to improve). However, as noted above, those who do not reach the required level in English in Year 6 and who therefore enter the *programa bilingüe* still receive around ten hours of instruction in English per week.

As a result of the selection by English level on entry to secondary school, several teachers noted that students in the *sección bilingüe* generally tended to be high attaining and well motivated. By contrast, there seemed to be less enthusiasm for teaching students in the *programa*. For example, in one secondary school, I was told that one Biology teacher was unhappy because – not having sufficient English proficiency himself to join the bilingual programme – he could only teach *programa* groups, which he perceived to be academically weaker, less engaged and therefore more challenging. I also wondered about the possibility of negative effects on students' motivation as a result of failing to make it into the *sección*, even though the teachers and head teachers I asked denied this was the case.

Another potential challenge for the bilingual education model, noted by various people I spoke to, lies in the fact that the subject examinations sat by students at the end of their compulsory education remain in Spanish – even though all of their learning in these subject areas has been in English. As suggested above, an analysis of examination results should be able to shed further light on the extent and nature of students' ability to demonstrate their content knowledge in L1. This issue of a mismatch between the use of English for content instruction and the use of L1 for examinations is seen as one of the recurring challenges facing EMI worldwide (Dearden, 2014:26).

6 Conclusions and questions

I do not know to what extent the schools I visited and the teaching I observed were typical of the bilingual programme more widely. All were well-established in the programme, having been part of it since its inception in 2004-5. Nonetheless, it was impossible not to be impressed by what I saw: first, in terms of the students' ability to communicate spontaneously in English; and second, by the sense of vibrancy and enthusiasm surrounding the bilingual programme as a whole. From the perspective of English MFL classrooms, it was an inspiring experience, showing what can be achieved with the right kind of vision, enthusiasm and collective investment.

As a result of my observations, I also felt that there were some questions for the programme: for example, concerning the traditional nature of the pedagogical practices in secondary subject classes and how these might be made more interactive and responsive; the extent to which some principled use of L1 might be helpful for students' learning, both in English and in other subject areas; and the extent to which students are able to develop their knowledge of technical terms in L1 as well as in English. In the first two cases, there may be opportunities for EMI Oxford to contribute through courses of professional development for teachers within the programme, alongside those that are already being run for them and funded by the regional government.

From a research perspective, I have also identified, in the course of this report, a number of questions that might warrant further investigation within the broad area of English-medium instruction. This is of course a personal selection, based on the issues that struck me as I observed lessons and spoke to teachers and other stakeholders. These questions are summarized below.

- To what extent are the kinds of questions asked by students in subject lessons influenced by the medium of instruction? Do they ask different questions in English-medium versus L1-medium settings?
- What are students' perceptions of the different varieties of English – both native and non-native –to which they are exposed via their teachers and Assistants, particularly with regards to phonology and accent? Who would they like to sound like and why? What are their perceptions of their own accent in English and to what extent are they satisfied with this?
- What is the nature of the interaction between languages and writing systems in early literacy development? At what point should the written L2 be introduced and at what point should it be taught explicitly?
- To what extent and in what circumstances is code switching helpful for learners, both in terms of their content learning and their language learning? Are there particular categories of words where code switching is beneficial?
- Is the bilingual programme associated with different subject pedagogy compared to Spanish-medium programmes?
- What are the effects of the presence of Assistants (who are not qualified teachers) on the pedagogical approaches taken in the classroom, in terms of both content and language learning?
- Conversely, to what extent do these Assistants' conceptualizations of teaching change over the course of their year abroad? If such changes occur, what are the factors that influence them? What are the sources of their learning about teaching?
- To what extent is the bilingual programme accessible to all learners? Does it disproportionately benefit children from more affluent backgrounds?
- What are the effects of the secondary bilingual programme on those who are not able to enter it (because of insufficient English scores at the end of Primary school), in terms of their motivation and learning?

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