Working with bilingual and plurilingual learners

A literature review
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Context

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This literature review has been written by Dr Dina Mehmedbegovic, Lecturer in Education at University College London's Institute of Education (IOE). Dr Mehmedbegovic's main area of research is sociolinguistics and the positioning of languages in education. She led the development of the new PGCE-level module – English as an Additional Language Pathway, and works at the IOE as a module leader, tutor and graduate supervisor. She is an active contributor to the IOE's London Centre for Leadership in Learning (LCLL) and the Research and Development Network (RDN).

The RDN connects colleagues across education, making a step-change in research engagement and research use. With a particular focus on equity and social justice, the network aims to create tangible, positive outcomes for member schools and their learners.

The network provides support for professional learning and development, and a rigorous space to connect with other school leaders, key thinkers and evidence in ways that allow members to innovate and evaluate new ways of working. The Centre for Inspiring Minds became a member of the RDN in 2014.

This literature review represents an important part in the action research process, used by the Centre for Inspiring Minds (cim) and its project teams. It exemplifies our commitment to working with outside specialists and researchers to develop research-informed approaches to improving teaching and learning and supporting school development. This literature review was developed in support of cim's Native Language Enrichment project, led by Jane Fox.

Jane Fox is the Native Language Enrichment Coordinator at ACS Egham International School. She initiated a research project in partnership with the Centre for Inspiring Minds in May 2013. The project aims to audit current native language enrichment provision at our four ACS International Schools campuses, to develop an evidence-informed 'best practice' framework, and to work with school leaders and colleagues to best meet the needs of our bilingual and plurilingual learners.

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Introduction

In 2005 the London-based American Community Schools (founded in 1967) were rebranded as ACS International Schools. This name change had been driven by the changing profile of pupil intake and market demand.

A decade later ACS International Schools are becoming increasingly international by their intake, but also in terms of diversification of their sites: the latest addition being Doha ACS International School, Qatar, for the first time located in a country where English is not the official language.

As a direct consequence ACS Internationa School teachers and leaders engage with bilingual and plurilingual learners and their families on a daily basis. Therefore, this literature review has been commissioned to support ACS staff in gaining an overview of research evidence and key issues relevant to providing conditions for bilingual and plurilingual learners to develop their full potential.

This literature review covers:
- key concepts: mother tongue, bilingual, multilingual, plurilingual learners,
- research evidence relevant to understanding the cognitive impacts of bilingualism,
- implications on classroom practice,
- considerations for next steps.

Key concepts

Mother tongue support in the context of ACS International School has been applicable and available to pupils who have a language or languages other than English as a part of their experience and learning in their homes, families and communities. In contemporary literature mother tongue maintenance and support are explored under the following key linguistic concepts:
- bilingualism,
- multilingualism,
- plurilingualism.

The existence of multiple definitions of these concepts in literature reflects the complexity and variety of approaches to relevant issues, amongst which the role of mother tongue and mother tongue support is one of the most prominent. In order to understand positioning of the mother tongue support and the role it plays in cognitive development and academic achievement of bilingual/multilingual students – it is essential to engage with the exploration of the above key concepts, as summarised in the following sections.

A key piece of research done around the activities of the International Network of Mother Tongue Education (IMEN) highlights the gender implications of the term 'mother tongue' and suggests 'home language' as a more suitable and

genderless option Herrlitz at al (2007). In literature home language is also referred to as first language (L1). Although, The Council of Europe (2001, 2003) uses Mother Tongue in its key language policy documents, as discussed on page 8.

Bilingualism

The definition of bilingualism encompasses huge variations across different contexts. The common feature of all definitions available in theory and in practice lies in the recognition that bilingualism at the individual and societal level refers to the existence of two languages – meaning recognition that a number of individuals and communities use two languages in their everyday lives.

In some cases, like the definition that is used in mainstream schools in England, the 'existence' of two languages is defined as 'exposure to two languages; living in two languages' (Eversley at al, 2010). This is a very inclusive definition that avoids complex and in some cases hard to measure aspects of language use: competency, proficiency, fluency and literacy.

Even though this is a widely inclusive definition it is not vulnerable to criticisms such as the one applied to Diebold's (1964) definition, which recognises everybody who has learnt a few words in another language as bilingual. Justly Diebold's definition is seen as the minimalist end of the spectrum of definitions aiming to capture the essence of bilingualism. Its main shortcoming is that it cannot be used to identify a specific group of people, i.e. bilinguals. It includes a vast number of people, because almost everybody today knows a few words in another language. The reasons for which it is essential for schools to have a broad, inclusive definition of bilingualism are explored below.

The criterion of 'living in two languages' allows for the inclusion of a variety of profiles of bilingual pupils. These different profiles can be divided into three main categories, discussed here in the context of England and mainstream education.

First are bilinguals born and educated in England. They are children from well-established immigrant communities, mainly originating from the Commonwealth countries: India, Bangladesh and Pakistan.

Second are recent immigrant bilinguals. They come from many different European, Asian, African and South American countries. They are mainly new to English and have various degrees of literacy in their first language.

The third group consists of settled immigrant bilinguals. These children were not born here, but have been immersed in an English-speaking environment for different lengths of time. They are at different stages of developing bilingualism depending on their backgrounds, support and abilities. They differ from

bilinguals born here mainly by having had some of their formal education in a language other than English. Therefore, in many cases they have higher levels of literacy and background knowledge in that other language (Mehmedbegovic, 2011).

Having a definition that enables teachers and practitioners in mainstream education to identify all these different cases as types of bilingualism is essential in order to: collect data that accurately reflect the full range of societal bilingualism; to recognise experiences and language practices which children engage with outside school; to identify a variety of needs in terms of language development and language support that these children may have and to allocate funds available for language development, either in English or in their home language.

Specific to the context of London is a growing number of international and bilingual schools, supported either by the European Union or national governments.

The International Schools England Directory: http://www.independentschools.com/england/international_schools.php lists 42 international schools in England, while LISA (The London International School Association, http://www.lisa.org.uk/) lists 14 international schools dotted around London.

Other searches also reveal a number of bilingual schools: the heavily oversubscribed and well established French Lycée in South Kensington, supported by a local network of bilingual French primary schools; the German Grammar School in Richmond; the Swedish School; the Norwegian School; a number of American Schools; the Spanish School and the more recently established Italian School.

Some of these schools have over 1000 pupils on roll and offer exposure to and learning in more than one language. Bilingualism and multilingualism in some of these schools are highly valued and strategically developed. In terms of the way the workforce in some international schools is equipped to support the language development of their pupils, requirements are very high.

According to the requirements of the European Council of International Schools (http://www.ecis.org) every teacher – regardless of the subject specialism – is required to have the International Teacher Certificate (ITC), which is developed and examined by the University of Cambridge. Its main aim is to 'equip teachers with the global mind-set necessary for successful teaching in the 21st century' (http://www.internationalteachercertificate.com/why.asp). This certificate has five standards, one of them focuses on the 'language dimension' of teaching and learning.

The intercultural aspect of education in international schools is also addressed by the standards. These schools are committed to developing 'able

communicators' through English, foreign languages and mother tongues (Mehmedbegovic et al, 2015).

Profiles of students in international schools globally have been identified as children from families of: professionals working for international organisations, diplomats and local communities who wish to benefit from international education.

The range of nationalities represented in an international school can be as few as five or as high as 90 or more (Carder, 2007). Linguistic profiles cover a variety of monolingual, bilingual and multilingual speakers, depending on their age, family circumstances (parents from different linguistic backgrounds) and trans-national mobility of their families (Carder, 2013).

Perceptions of bilingualism in and outside of education have been heavily influenced by early definitions of bilingualism such as Bloomfield's (1933), which recognises only bilinguals with 'native like control of two languages', also referred to in the literature as 'balanced bilingualism'. Fishman (1971) challenged the possibility of fully 'balanced bilingualism' by looking at the different functions of the two languages in an individual case. His conclusions are that in societies with one dominant language it is rare that individuals will develop as balanced bilinguals. This is because they will use one language in mainstream education and at work, while another language is going to be used at home and outside formal situations. Therefore, different functions of the two languages will lead to the dominance of one of the languages in a particular domain – hence, unbalanced bilingualism.

A more recent attempt to revisit these debates produced the terms: 'ambilinguals' or 'equilinguals'. These bilinguals are defined as those individuals who can function equally well in any context in either of their languages without any trace of language A when language B is being used (Baetens Beardsmore, 2003). However, this definition is followed by a caution that such individuals are non-existent and that it is more realistic to consider ambilingualism as 'roughly equivalent' mastery of both languages.

The expectation of non-interference between the two languages also conflicts with a widely accepted agreement that bilinguals will interactively use both of their languages, drawing on both sets of vocabulary and grammatical structures (Sankoff and Poplack, 1979; Romaine, 1989). However, this interaction of two languages often results in a more creative and individual use of both languages. Some bilingual writers have developed their unique expression based on the interaction of their two languages, for example Alexandar Hemon, has been praised by critics for 'showing native speakers a new way of using English'. (http://www.bookforum.com/inprint/016_02/3828).

Contemporary theorists of bilingualism such as Ludi (2003) claim that bilingualism and monolingualism are not objective concepts, but purely behavioural norms and social constructs. This is best experienced in settings

such as Switzerland where bilinguality is the norm: 'everybody speaks their own language and understands the other', which results in the 'construction of a communication culture which certainly entails a higher acceptance of 'mixed' speech than in neighbouring countries' - mixed speech meaning use of French, German and Italian in official and personal interactions (Ludi, 2003, p 186, 181). This model, also termed 'polyglot dialogue' (Posner, 1991), has been considered as one possibility for developing communication in international settings, such as the European Community. The advantage is that individuals would have the opportunity to address others in a language they feel most comfortable using. However, it assumes a high level of comprehension of several other languages, but not necessarily fluency in those languages.

Most relevant to classroom practice is the current research and theory which focuses on 'the threshold of linguistic competence in both languages' (Cummins, 1976) as central to experiencing bilingualism as a cognitive advantage. The concept of the threshold will be explored further in the section on cognitive advantages of bilingualism.

The discussion of these new approaches to bilingualism leads this section into the multilingualism versus plurilingualism debate.

The concept of multilingualism is relevant to this review because it is widely used by practitioners and policy makers within England's education system, especially London. Within the context of schools, practitioners and policy makers in England refer to 'multilingual schools', 'multilingual classrooms' and 'multilingual communities of learners'. In reality, this is in recognition of the fact that some or many students in these schools have a language other than English as a part of their lives, mainly outside their mainstream school. Carder (2007) argues that the way students with little or no English are treated by the school is 'the litmus test' of the international ethos of that school.

On the other hand European Council policies promote the vision and discourse of plurilingualism, as explored below.

Often the question is asked: what is the difference between multilingualism and plurilingualism? The main distinction is that a multilingual approach is about having many different languages coexist alongside each other, but separately, within individuals or society with the ultimate aim of achieving the idealised competency of the native speaker in each language (Council of Europe, 2001, p 4).

 A plurilingual approach, on the contrary, places the emphasis on the development of effective communication skills that draw on all of our linguistic and cultural experiences in an interactive way. This is promoted as a life-long activity, a process of learning the language of home, society, other peoples; developing communicative competencies throughout our life time; and in different situations flexibly calling upon different parts of this competence in order to achieve effective communication.

Plurilingualism recognises an all encompassing communication competence that is made up of different languages that one person has been exposed to and acknowledges the partial nature of the knowledge anyone can have of one language, be it their mother tongue or not.

Therefore plurilingualism removes the ideal of the native speaker as the ultimate achievement and replaces it with the aim of an effective pluralistic communicator who draws on his/her varied repertoire of linguistic and cultural knowledge in a flexible, creative and individual way (Council of Europe, 2001, p 4, 5, 169). The emphasis in this process is on attitude formation and language and cultural awareness as essential to one's understanding of social and physical environment and ability to function effectively in the local, national and international environment (Tosi & Leung, 1999, p 17).

Plurilingualism provides a true qualitative leap in terms of understanding, conceptualising and developing models of practice, which include mother tongue support. 'MT plus 2' is the well known formula meaning: Mother Tongue plus two other languages as a European education vision for every child. Mother Tongue is promoted as the foundation stone of developing competencies in the other two languages. In ACS schools – this formula appropriately reflects the reality of children in mother tongue support programmes, since they have all their lessons in English and they study a foreign language.

Apart from the European policy documents individual academics have also identified the concept of 'truncated multilingualism' (Blommaert, Collins and Slembrouck, 2005; Blommaert, 2005; Haviland, 2003). The definition of this concept rejects the ideal of full and balanced competence in different languages as imposed by dominant ideologies and instead emphasises competencies that are organised around topics or activities with which speakers engage. Truncated multilingualism has its parallels with the earlier outlined emphasis on the dominance of one language in a particular domain (Fishman, 1971).

However, Blommaert, Collins and Slembrouck add to their definition the notion of 'space' (environment) as 'constitutive and agentive in organising patterns of multilingualism', often 'incapacitating individuals' with highly developed multilingual skills (Blommaert, Collins and Slembrouck, 2005, p 198). Often this concept is illustrated with an example of a multilingual academic able to deliver fluently lectures in his/her own field of expertise in several languages, but feeling challenged when dealing with a plumbing emergency in a second language due to lack of exposure to an environment in which vocabulary required to deal with this emergency is used.

A plurilingual orientation outlined in the above referenced European policy documents provides a good starting point for rethinking communicative skills in education practice. It is relevant to the development of models of good practice, firstly because it offers a tool for understanding the linguistic reality in which most bilinguals operate. This reality is a continuum of interaction of the

different language one uses: a 'whirlpool of electronic, communicative turbulence' (Jacquemet, 2005).

Secondly, the concept of plurilingualism has important implications for classroom practice in terms of assessment. It implies that the linguistic or communicative competence of a bilingual cannot be reduced to a simplistic sum of linguistic competences measured in isolation in each of his/her languages. Grosjean (1984) pointed out that a bilingual person is not two monolinguals put together. Bilingual competence is not a sum of quantities, but a qualitative difference.

Thirdly, plurilingualism recognises the reality of children and adults acquiring only partial knowledge of relevant languages. This reality need not be dismissed as a shortfall, but acknowledged as an important contributor to the enrichment of an 'all encompassing communicative competence'.

This type of approach encourages language and cultural learning, appreciation and awareness in formal and informal settings for bilinguals and monolinguals alike. It places value on all of our linguistic experiences and provides a formal framework for their recognition – a Language Portfolio, as proposed by the Council of Europe (2003).

According to this proposition, every child in Europe is entitled to a Language Portfolio in which can be entered anything significant referring to their engagement with other languages and cultures. This means that even if a pupil cannot use a language in conventional ways, it is still valuable to recognise that she/he has, for example, done a project on it and has certain theoretical knowledge about it; or if a pupil has spent a certain period of time exposed to it, within the family, community or while abroad; participated in an oral discussion involving several languages; analysed a linguistic feature in one language in relation to another language and similar examples (Tosi & Leung, 1999).

Finally, it has to be acknowledged that efforts to develop plurilingual ethos in schools and society are often up against a hierarchy of languages.

Language hierarchy manifests itself in the education system as demonstrated by the findings of the Language Survey (2014) in two ways: firstly by the overwhelming dominance of French, Spanish and German as languages on offer and secondly by the status of these languages as fully recognised curriculum subjects, in contrast to all other languages being offered mainly as extra-curricular subjects.

French, German and Spanish are well established National Curriculum languages with the high-value and high-power status. They are referred to as Modern Foreign Languages.

Most other languages such as: Greek, Turkish, Bengali – although also in reality modern and foreign languages in this country, are referred to as community languages and often seen of value only with their own communities.

With the growing significance of Chinese economy, Mandarin Chinese has become more valued and more in demand as a foreign language in schools.

Considering that historical circumstances and market forces will unavoidably result in higher and lower value attitudes towards different languages, it is essential to promote a linguistic dimension which is of equal value for all languages. This dimension is the cognitive benefit of bilingualism, applicable to any combination of languages (Mehmedbegovic, 2011). Research evidence underpinning this argument is presented next.

Bilingualism and cognitive functioning

Clinical research studies carried out in the second part of the 20th century involving bilinguals and monolinguals provide a significant body of evidence which covers differences in a variety of variables:
- visual presentation and processing,
- audio processing,
- cortical activity of each hemisphere,
- levels of the right hemisphere engagement,
- levels of lateralisation,
- heterogeneity in the hemispheric organisation.

(Hammers and Blanc, 1989).

Jim Cummins in his book *Power, Language and Pedagogy* (2000) lists 160 education focus studies from different countries and contexts: all of which provide evidence that bilingual children perform better across the curriculum.

Several studies conducted with early years and school age children have found that bilingual pre-school children demonstrate better focus on task while ignoring distractions than their monolingual peers. A similar enhanced ability to concentrate, a sign of a well functioning working memory, has been found in bilingual adults, particularly those who became fluent in two languages at an early age.

Managing two languages helps the brain sharpen and retain its ability to focus while ignoring irrelevant information (Bialystok, 1999).

More recent studies with adults have provided insights into physical changes that happen in the brain. When two languages are used there are measurable changes in brain matter. Bilingual adults have denser gray matter (brain tissue packed with information processing nerve cells and fibers), especially in the brain's left hemisphere, where most language and communication skills are controlled.

The effect is strongest in people who acquired a second language before the age of five and in those who are most proficient at their second language. This finding suggests that being bilingual from an early age significantly alters the brain's structure, but that the proficiency and intensity of use result in the same benefits (Kovelman at al, 2008).

Similarly a study with of over 800 participants who were first tested as children in 1947 and retested as adults in 2008-10 found that: 'bilinguals performed significantly better than predicted from their baseline cognitive abilities, with strongest effects on general intelligence and reading. The results suggest a positive effect of bilingualism on later-life cognition, including in those who acquired their second language in adulthood' (Bak at al, 2014a).

This type of evidence is crucial in raising awareness on the importance of language learning as a life-long activity while overcoming perceptions that learning a language beyond certain age might be too late in terms of impact on certain cognitive benefits. The 'Never too late?' study (Bak at all, 2014b) provides evidence that although there might be a difference in scope between early and late bilinguals in terms of enhanced attention switching, selective attention and auditory domain, both types show significant advantage in comparisons to monolinguals.

Bilinguals also show significantly more activity in the right brain hemisphere than monolingual speakers, particularly in a frontal area identified as the source of the bilingual advantages in attention and control. This expanded neural activity is so consistent on brain scans that it has been labeled a "neurological signature" for bilingualism (Kovelman at al, 2008).

Latest evidence is even more significant in terms of one's well-being. Recent research studies conducted in Canada point to bilingualism as a hope in equipping ourselves better to engage with the threat of dementia: 'Executive brain power', developed by the use of two languages, has been identified as a key factor in prolonging quality life in later life and fighting off the onset of dementia by 3 to 5 years (Bialystok at al, 2012, Freedman at al, 2014).

Similarly, researchers from University of Edinburgh examined medical records of over 600 people in India and found that people who spoke two languages did not show any signs of three types of dementia for more than four years longer than those who were monolingual. They also established that bilingual advantage is not caused by any differences in education. Their illiterate participants with no formal education, displayed the same benefits (Mortimer at al, 2014, Freedman at al, 2014).

Based on this evidence bilingualism is increasingly appreciated as contributing to cognitive reserve, which can help delay the onset of dementia in old age. These findings suggest that bilingualism may have a stronger influence on dementia that any currently available drugs.

Bilingualism and academic achievement

Cummins (1976) has offered a theoretical explanation of the relationship between bilingualism and cognitive advantages that has yet to be fully proved by research, even though some evidence already exists. In a study focusing on the relationship between bilingualism and mathematical abilities, Li, Nuttal and Zhao (1999) compared two groups of Chinese-American students, one group which was literate in both languages and the another group not literate in Chinese. The group of students literate in Chinese achieved significantly better results on the mathematical tests for university entry.

According to Cummins (1991, p 84) the crucial elements that provide conditions for benefiting from the cognitive advantages of bilingualism specifically in terms of academic achievement are, first of all, that exposure to two languages provides broader linguistic experiences with the access to a wider range of thinking modes; secondly – switching between the two languages exercises flexibility in thinking, and thirdly, the conscious or subconscious comparison of two languages, resolving interference between languages, using the knowledge of one language to advance the other result in a high level of metalinguistic skills. This last point reflects the Vygotskyan view which says that bilingualism enables a child to see his/her language as a particular system and to approach the language in a more abstract way and in more general categories (Vygotsky, 1962, p 110).

Metalinguistic studies that focus on the relationships between thought, word and meaning, again a key factor in Vygotsky's developmental theory (1962), shed light on differences between monolingual and bilingual children. A number of linguists have used Piaget's sun-moon problem (1929) to test the ability of children to separate word from meaning and relate to words as arbitrary. This test consists in changing the names for sun and moon, getting children to decide which is up in the sky at night and finally what the sky is like at night: dark or light?

In studies conducted by Cummins (1978), Bialystock (1988), Eviatar and Ibrahim (2000) bilingual and monolingual children alike accept with ease the name change and that sun would be what we see at night, bilingual children were quicker in making the final conclusion that the sky remains dark at night. Feldman and Shen (1971), Rosenblum and Pinker (1983), Ricciardelli (1992), Ben-Zeev (1997) conducted further studies getting children to use new names or nonsense names. All of these studies provided evidence that bilingual children either demonstrate higher flexibility in use of newly agreed names or more abstract explanations for changing conventions.

The evidence of children approaching language and other academic content in a more abstract mode was recorded by two Canadian researchers, Lambert and Tucker, observing and testing a group of six-year-olds educated mainly in their second language. In this longitudinal study observed children demonstrated a high level of interest in comparing their two languages; approaching their

second language as a code; using their first language as the basis for relating and translating both academic content and linguistic input. Therefore, the researchers were proposing that the acquisition of the second language had benefited not only the competence in their first language, but also their mastery of the academic content (Lambert and Tucker, 1972, p 82).

Research evidence referred to thus far leads one to question – "Can neurophysiology further add to our understanding of what the use of two languages means in the complex and invisible world of brain functioning?" Uncovering the findings that neuropsychology has to contribute to having an insight in bilingualism certainly adds weight to the evidence provided by linguistic and sociolinguistic studies.

There are also studies that provide both types of evidence. For example, Ben-Zeev (1977) reports identifying delay in reference to vocabulary and grammatical structures, while advantages in terms of word manipulation, classification, structural analysis and non-verbal tasks in study comparing Spanish-English bilinguals and English monolinguals.

There are two questions that need to be addressed:
1. Is there a consensus amongst researchers whether the cognitive advantages of bilingualism outweigh the disadvantages, even though there are still many unanswered questions in this field?
2. What theoretical framework and model of good practice can provide the best conditions for advantages of bilingualism to flourish?

The most widely used theoretical framework which underpins identified good practice is the Interdependence Theory in conjunction with the Minimal Threshold of Linguistic Competence model of bilingualism as developed by Cummins (1976, 1979, 1981, 2000).

The Interdependence Theory based on the concept of Common Underlying Proficiency (CUP) or the integrated source of thought for both languages accommodates the process of skills and knowledge transfer between the two languages, which is closely related to many positive findings on enhanced skills and cognition. Hammers and Blanc (1989) put an interesting perspective on this theory by defining the second language as 'a function of competence in the mother tongue' (Hammers and Blanc, 1989, p 53). The concept of plurilingualism, as previously explored, employs Interdependence Theory and the concept of CUP by promoting the principle of overall communicative skills which draw on all of our linguistic experiences.

On the other hand, the Minimal Threshold of Linguistic Competence model suggests that it is necessary to obtain a certain secure level of proficiency in both languages in order to be experiencing the benefits of bilingualism. On the contrary, delays and deficits in language development and use may occur. Bialystok, whose work is focused on language and cognitive development, has contributed several studies supporting the view that the level of bilingualism

determines its effect on development; higher the thresholds more positive the effects (Bialystok, 1987, 1988, 1991, 2006).

Cummins (2000) himself has reflected on the fact that both of his hypotheses have been misinterpreted and misused by policy makers, practitioners and supporters of both pro-bilingual education and anti-bilingual education. Cummins perceives his Threshold Model to be speculative and vague, because of huge variations that will depend on the environment, individual learners, languages, teaching methods. As the aspect most relevant for practice and policy-making in this area Cummins highlights 'the well supported finding that the continued development of bilingual children's two languages during schooling is associated with positive educational and linguistic consequences' (Cummins, 2000, p 175).

This is also confirmed by Collier and Thomas (2007), whose study provided evidence that the most reliable predictor of academic success in English is formal tuition in the students' mother tongue.

Cummins' message to policy makers leads into answering the second question: "Is there a consensus amongst researchers regarding advantages of bilingualism?" The following quote from Bialystok captures what can be seen as the consensus in this area of research:

> "…bilingualism never confers a disadvantage on children who are otherwise equally matched to monolinguals and the benefits and potential benefits weigh in to make bilingualism a rare positive experience for children."
>
> (Bialystock, 2006, p 598)

This concludes the section on the relevant research evidence. In regards to the models of good practice the research has not found anything different to what is currently offered in ACS International Schools: enrichment classes outside of the curriculum, mostly paid for by the parents or communities is the most common provision offered. The only very different model is the Dutch integrated model (Wagenaar, 2012). However, this is only of interest if there is a big group of learners with the same mother tongue. In schools with diverse linguistic profiles, such as ACS, this would not be practical.

At this point the following questions need to be addressed in order to make the next steps towards developing an appropriate model of good practice:
- What implication do these findings have on priorities for bilingualism in the context of ACS International Schools as an 'international school?'
- How can ACS International Schools develop a model of practice to develop the linguistic and cognitive potential of every student (multilingual, bilingual and monolingual) supported by the existing evidence?
- How can we 'translate' the research findings and theoretical frameworks presented here into practical guidelines?

Principles of good practice

1. Recognise bilingualism as an integral part of teaching and learning throughout the curriculum.

For bilingual children (and adults) home language is an integral part of their cognitive functioning and all thinking processes, either at a conscious or subconscious level. It is also the most relevant prior knowledge they have in terms of learning English and all other languages. Home languages need to be seen as resources bilingual children bring into the classroom. Bilingualism provides an additional dimension to linguistic and cognitive functioning that the use of two languages creates, but currently these resources are largely underutilised across different types of schooling (Mehmedbegovic, 2008).

Obviously the crucial question is: "How can international schools that have a range of languages spoken by their learners implement this principle?"

Bilingual children and their parents need to be given clear, affirmative and consistent messages by the school and their teachers in terms of benefits of bilingualism and home language support. Students (and parents) should be given advice on what they can do themselves in order to support their own bilingual development. These messages should include raising awareness on cognitive advantages of bilingualism, which are applicable to all languages.

Teachers need to be provided with examples of good practice, guidance and training to develop skills essential for integrating home languages across the curriculum. This shift in practice should be led by the awareness that: where home languages are a part of teaching and learning throughout schooling, starting with early years, with the aim of supporting bilingual children in developing their full potential and positive attitudes towards this specific intellectual potential that they have, the impact of it will be evident in improved results across the curriculum as a whole.

2. Encourage literacy in two (biliteracy) or more languages.

Many bilingual children currently in schooling have not developed and are not developing literacy in their home languages, for a variety of reasons. A very common one being that they are often exposed to spoken language but there are no attempts to develop literacy. In most cases children will only develop full literacy skills in their home language if they have structured home language support.

Biliteracy can be also supported throughout the curriculum by giving children opportunities to produce their written work bilingually. Charmian Kenner has documented a number of successful ways of developing biliteracy in London schools (Kenner, 2000, Kenner, 2004, Kenner, Gregory and Ruby, 2007).

Strategies promoted by Kenner are based on giving bilingual children and parents the lead and the expert role in the classroom, while teachers join in as learners.

These strategies also impact on developing the ethos of collaborative learning, where children experience the shift in power and authority from teachers to pupils or parents. According to Cummins encouraging biliteracy enables bilingual children to benefit in the following ways: " …*1) the application of the same cognitive and linguistic abilities and skills to literacy development in both languages; 2) transfer of general concepts and knowledge of the world across languages …; and 3) to the extent that the languages are related, transfer of specific linguistic features and skills across languages.*" (Cummins, 2000, p 191)

Children will neither fully benefit from these advantages, nor from higher utilisation of the overall potential that bilingualism offers, if they do not develop biliteracy. However, biliteracy will not develop just by being immersed in a particular language community. It cannot be assumed that these types of transfer described above will occur automatically.

Cummins advocates *'giving this process a helping hand'* by providing opportunities for children to read and write and to acquire academic registers in both languages. Also, explicit teaching focused on contrasting and comparing the two languages gives children the tools to become conscious users of their two languages, which leads to a greater metalinguistic awareness. It is important to emphasise that teachers can facilitate this process without being speakers of particular languages.

Currently ACS International Schools Native Language Enrichment is delivered in a wide variety of ways. Some native language support at some campuses uses a structured format delivered by qualified teachers of relevant languages, providing this crucial support for the development of biliteracy. However, bilingual children should be encouraged to produce written work in two languages at every opportunity across the curriculum (e.g. homework and classroom displays).

To encourage biliteracy, schools committed to the needs of bilingual and plurilingual learners should consider:
- Developing initiatives, spaces and projects focused on providing structured opportunities to develop biliteracy across the curriculum.
- Auditing the physical environment of the school focused on looking for opportunities to promote biliteracy: school newsletter, notices, reference books in classrooms and library, displays.
- Investing effort in making the physical environment throughout the school reflect the cultural and linguistic diversity of the school population.

3. Address plurilingualism in our school philosophy and policies and in our approaches to teaching and learning (across the curriculum).

The development of thinking that demonstrates emergence of a plurilingual approach, as previously outlined, can be identified in several initiatives in England. A very prominent one is the *Policy on Bilingualism* as developed by the Inner London Education Authority, 1982, which stated that: '*all children should have the opportunity to learn how other languages work and be encouraged to take an interest in and be informed about the languages spoken by their peers and neighbours*' (ILEA, 1982).

More recently, The National Secondary Strategy was promoting the engagement with other language systems on the premise that one has a greater understanding of the functioning of his/her own language system and meta-language when there is a point of comparison (National Secondary Strategy, 2002).

Vygotsky and Goethe are often quoted as thinkers who had promoted the idea that we can only truly gain metalinguistic knowledge if we learn another system, another language: 'Those who know nothing of foreign languages know nothing of their own.' - is a famous Goethe quote.

Today nobody is truly monolingual. We are all exposed to different languages in education; on holidays; through film, media, music; we use computer languages; we are exposed to signs and print in different languages on an everyday basis etc. Any 'monolingual' pupil in London schools would find many experiences and elements s/he could write in her/his Language Portfolio. Furthermore, the research on bilingualism and dementia which also extends to learning of other languages to a high level of competency makes life-long engagement with languages an important aspect of our well-being.

Currently ACS International Schools Native Language Enrichment provision is structured in a 'multilingual format' as previously contrasted with the plurilingual approach: as a provision that exists alongside teaching and learning in English, in fact 'after' the learning and teaching in English: in the afternoon and in competition with many very attractive extra-curricular activities.

Although logistically this is the most practical solution and it has its value as one aspect of bilingual development, on its own it institutionalises practices which keep languages in 'separate boxes' and does not fully support the optimal development of bilingual potential and skills. Therefore, developing a whole school policy and an approach to the development of plurilingual skills of all pupils throughout the curriculum and school activities in consultation with all stakeholders is identified as a priority.

This recommendations is further supported by the research carried out in international schools in Australia, Canada, USA and England and the recommendation for 'the central positioning of ESL-and-mother-tongue

departments as one entity in international school structures and curriculum planning, in order to capitalize on the knowledge and expertise of teachers in these departments and provide equity in the curriculum for ESL students' (Carder, 2007).

As an example of a possible outcome it is recommended to look at:
- Vienna International School ESL and MT department Mission Statement and model: http://school.vis.ac.at/esl/main.html
- Multilingualism in education: Bilingual and Plurilingual Learners http://www.urbanlanguages.eu/images/stories/docs/toolkits/14_0252%20LUC_Toolkit_Plurilingual_V3_HR_Online.pdf

Evaluation and reflection

As a way of evaluating this process and its outcomes it is recommended to employ the principle of 'affirmative mirror' after Cummins (2000), which consists in reflecting on our practice along the following lines:
- Does our physical environment (school lobby, classroom and corridor displays, library collections, etc.) reflect the community of learners we teach? What evidence is there?
- Does our curriculum content communicate affirmative messages in regards to the cultural capital of our learners? What evidence is there?
- Do our teaching approaches provide opportunities for all our bilingual and plurilingual learners to develop their full potential? Does that include bilingual potential in case of bilingual students? What evidence is there?

References

Baetens Beardsmore, H (2003). *Who is afraid of bilingualism?* in Dewaele, JM, Housen, A and Wei, L (ed) (2003) Bilingualism Beyond Basic Principles, Multilingual Matters, Clevedon.

Bak, T H, Nissan, JJ, Allerhand, MM, & Deary, IJ (2014a). *Does Bilingualism Influence Cognitive Aging? Annals of Neurology*, *75*(6), 959-963.10.1002/ana.24158.

Bak, TH, Vega-Mendoza, M, & Sorace, A (2014b). *Never too late?: An advantage on tests of auditory attention extends to late bilinguals. Frontiers in Psychology*, *5*. 10.3389/fpsyg.2014.00485.

Ben-Zeev, S (1977). *The Influence of Bilingualism on Cognitive Strategy and Cognitive Development, Child Development.* 48, 1009-1018.

Bialystock, E (1987). *Words as Things: Development of Word Concept by Bilingual Children, Studies in Second Language Learning.* 9, 133-140.

Bialystock, E (1988). *Levels of Bilingualism and Levels of Linguistic Awareness.* Developmental Psychology, 24, 560- 567.

Bialystock, E (1991). Metalinguistic Dimensions of Language Proficiency, in Bialystock, E (ed) Language Processing in Bilingual Children, (p 113-140), Cambridge University Press, Cambridge.

Bialystok, E. (1999). Cognitive complexity and attentional control in the bilingual mind. Child Development, *70, 636-644.*

Bialystock, E (2006). *The Impact of Bilingualism on Language and Literacy Development in Bhatia.* TK & Ritchie, WC (ed) The Handbook of Bilingualism, Blackwell, Oxford.

Bialystok, E, Craik, FIM and Luk, G. (2012). *Bilingualism: Consequences for mind and brain. Trends in Cognitive Sciences*, *16*, 240-250.

Blommaert, J (2005). *Discourse: A Critical Introduction*. Cambridge University Press, Cambridge.

Blommaert, J, Collins, J and Slembrouck, S (2005). *Spaces of Multilingualism*. Language and Communication, 25.

Bloomfield, L (1933). *Language*. Holt, Rinehart and Winston, New York.

Carder, M (2007). *Bilingualism in International Schools: A Model for Enriching Language Education*. Clevedon: Multilingual Matters.

Carder, M (2013). *International School Students: Developing their Bilingual Potential*. In Abello-Contesse, C, Chandler, P M, López-Jiménez, M D andChacón-Beltrán, R (eds.) (2013) *Bilingual and multilingual education.* New initiatives anchored in experience. Bristol: Multilingual Matters.

Collier, VP and Thomas, WP (2007). *Predicting second language academic success in English using the Prism Model*. In Cummins, J and Davison, C (Eds.), International handbook of English language teaching, Part 1 (pp. 333-348). New York: Springer.

Council of Europe (2001). *Common European Framework of Reference for Languages: Learning, Teaching, Assessment*, Cambridge University Press, Cambridge.

Council of Europe (2003). *Action Plan for Language Learning and Language Diversity.* Council of Europe Policy Documents, Brussels.

Cummins, J (1976). *The Influence of Bilingualism on Cognitive Growth: A Synthesis of Research Findings and Explanatory Hypotheses.* Working Papers on Bilingualism, 9, 1-43.

Cummins, J (1978). *Bilingualism and the Development of Metalinguistic Awareness.* Journal of Crosscultural Psychology, 9, 131-149.

Cummins, J (1979). *Cognitive/Academic Language Proficiency, Linguistic Interdependence, the Optimum Age question and Some Other Matters*, Working Papers on Bilingualism, No. 19, 121-129.

Cummins, J (1981). Bilingualism and Minority Language Children. Ontario Institute for Studies in Education, Ontario.

Cummins, J (1991). *Interdependence of First and Second Language Proficiency in Bilingual Children in Bialystok.* E (ed) Language processing in Bilingual Children, (p 70-89), Cambridge University Press, Cambridge.

Cummins, J (2000). *Language, Power and Pedagogy.* Multilingual Matters, Clevedon.

Diebold, A.R. (1964). *Incipient Bilingualism.* in Hymes, D. (ed) (1964) Language in Culture and Society, Harper and Row, New York.

Eviatar, Z. and Ibrahim, R. (2000). *Bilingual is as bilingual does: Metalinguistic abilities of Arabic-speaking children.* Applied Psycholinguistics, 21, pp 451-471.

Eversley, J, Mehmedbegovic, D, Sanderson, A, Tinsley, T and Wiggins, D. R. (2010). *Language Capital: Mapping the Languages of London's school children.* IOE &CILT, London.

Feldman, C and Shen, M (1971). *Some Language Related Cognitive Advantages of Five-year-olds.* The Journal of Genetic Psychology, 118, 235-244.

Fishman, J (1971). *Socio-Linguistics: A Brief Introduction.* Newbury Publishers, USA.

Freedman, M, Alladi, S and Chertkow, H (2014). *Delaying Onset of Dementia: Are Two Languages Enough*? Behavioural Neurology, vol. 2014, Article ID 808137, 2014. doi:10.1155/2014/808137.

Grosejean, F (1984). *Life with Two Languages.* Harvard University Press, Cambridge.

Hammers, J & Blanc, M (1989). *Bilinguality and Bilingualism.* Cambridge University Press, Cambridge.

Haviland, J (2003). *Ideologies of Language: Reflections on Language and US Law.* American Anthropologist 105, 764-774.

Herrlitz, W, Ongstad, S and Van de Ven, PH (2007). *Research on Mother Tongue Education in a Comparative International, Editions Rodopi.* Amsterdam-New York.

Inner London Education Authority (ILEA) (1982). *Bilingual Learners.*

Jacquemet, M (2005). *Transidiomatic Practices: Language and Power in the Age of Globalisation, Language and Communication.* 25, 257-277.

Kenner, C (2000). *Home Pages: Literacy Links for Bilingual Children.* Trentham Books, Stoke-on-Trent.

Kenner, C (2004). *Becoming Biliterate: Young Children Learning Different Writing Systems.* Trentham Books, Stoke-on-Trent.

Kenner, C, Gregory, E & Ruby, M (2007). *Developing Bilingual Learning Strategies in Mainstream and Community Contexts.* in the London Digest: Multilingual Learners in London, London Education Research Unit, Institute of Education, London.

Kovelman, I, Baker, S and Petitto, L A (2008). *Bilingual and monolingual brains compared using fMRI: Is there a neurological signature of bilingualism?* Journal of Cognitive Neuroscience, 20(1), 1-17.

Lambert, WE and Tucker, GR (1972). *Bilingual Education of Children: The St. Lambert's Experiment.* Newbury House Publishers, USA.

Language Survey (2014). British Council, London.

Li, C, Nuttall, R L & Zhao, S (1999). *The Effects of Writing Chinese Characters on Success on the Water-level Tasks, Journal of Cross-cultural Psychology.* (30) 1, 91-105.

Ludi, G (2003). *Code-switching and Unbalanced Bilingualism.* in Dewaele, JM, Housen, A and Wei, L (ed) (2003) Bilingualism Beyond Basic Principles, Multilingual Matters, Clevedon.

Mehmedbegovic, D (2008). *Leading increasingly linguistically diverse schools, Educate.* Special Issue, October 2008 Vol 8, No 2, The Journal of Doctoral Research in Education, IOE, London.

Mehmedbegovic, D (2011). *A study in attitudes to languages in England and Wales.* Lambert Academic Publishing, Germany.

Mehmedbegovic, D, Skradies, P, Byrne, N. and Harding-Esch, P. (2015). *Multilingualism in London.* LSE, London.

Mortimer, J, Alladi, A S, Bak, T H, Russ, T S, Shailaja, M and Duggirala, V (2014). *Bilingualism delays age at onset of dementia, independent of education and immigration status.* Neurology, 82 (21) 1936-1936.

National Secondary Strategy (2002). DfES, London.

Piaget, J (1929). *The Child's Conception of the World.* Harcourt, New York.

Posner, R (1991). Der Polyglotte Dialog, Der Sprachreport, 3/91, 6-10
Ricciardelli, L A (1992), *Creativity and Bilingualism. The Journal of Creative Behavior.* 26: 242–254.

Romaine, S (1989). *Bilingualism.* Blackwell, Oxford.

Rosenblum, T and Pinker, SA (1983). *Word Magic Revisited: Monolingual and Bilingual Children's Understanding of the Word-Object Relationship.* Child Development, 54, 773-780.

Sankoff, D and Poplack, S (1979). *A Formal Grammar for Code-switching.* Papers in Linguistics, 14: 3-46.

Tossi, A and Leung, C (1999). *Rethinking Language Education: From a Monolingual to a Multilingual Perspective.* CILT, London.

Vygotsky, L (1962). *Thought and Language.* MA: MIT Press, Cambridge.

Wagenaar, C (2012). *Integrated mother tongue education: Three Dutch examples from the shop floor.* International Schools Journal Vol XXXII No.1 November 2012.

Websites:
http://www.bookforum.com/inprint/016_02/3828
http://www.independentschools.com/england/internationalschools.php
http://www.lisa.org.uk/
http://www.ecis.org
http://www.internationalteachercertificate.com/why.asp