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Language of Instruction: Research Findings and Program and Instructional Implications

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Abstract: The question of language of instruction is at the top of the educational agenda in many countries around the world. Decisions about language of instruction (including what mother tongue languages to teach, in what grades, when to transition to the national language or international language) and efforts to develop materials and instructional strategies to support the language(s) selected are well underway. This article reviews a study of language of instruction conducted in the United States that has a rigorous study design and compelling results. Its outcomes and implications can provide helpful guidance for selecting languages of instruction and for planning programs and instruction in contexts around the world. It also raises interesting questions about the impact of context (including time, place, and participants) on implementation of programs and instruction based on research. It concludes with support for the strong design and findings of the study reviewed and, at the same time, cautions about matters of the context in which instruction takes place and language choice in instruction.

Key Words: contexts for instruction**,** language of instruction**,** mother tongue**,** national language**,** international language**,** quality of instruction

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Introduction

The question of language of instruction is at the top of the educational agenda in many countries around the world, and decisions about language of instruction and efforts to develop materials and instructional strategies to support the selected language(s) are well underway. The language of instruction may be the mother tongue of students (a language they speak at home and in their community), the official or national language of the country, an international language such as English, or a combination of these. Students may begin learning in one language and transition to one or more languages after some years. Education in students' mother tongue is often described as a language right (May, 2012; Skutnabb-Kangas & Phillipson, 1994).

A number of recent publications focused on education in developing countries argue strongly for use of the mother tongue/home language in instruction, at least in the early years of education. For example, Ball (2014), after an overview of interest in and approaches to mother tongue education in the past several decades in many countries around the world, concludes, "Children whose primary language is not the language of instruction in school are more likely to drop out of school or fail in early grades. Research has shown that children's first language is the optimal language for literacy and learning throughout primary school (UNESCO, 2008)" (p. 1). The UNESCO publication cited by Ball gives case studies of the strengths and challenges of mother tongue education in Mali, Papua New Guinea, and Peru.

Building on this article and these case studies, Zafeirakou (2015) gives a prevalent argument: "Teaching the foundational skills (early literacy and numeracy) and critical thinking in a language that the child speaks and understands is one of the most effective ways to reduce school failure and drop out in the early grades. More importantly, these foundational skills significantly increase learning later on" (p. 1), as students transfer these skills to learning in another language.

In his review of the findings of the National Literacy Panel (August & Shanahan, 2006), which focused on language of instruction (among other factors) in the teaching of reading in the United States, Goldenberg (2008) concluded, "If feasible, children should be taught reading in their primary language. Primary language reading instruction a) develops first language skills, b) promotes reading in English, and c) can be carried out as children are also learning to read, and learning other academic content, in English" (p. 12).

Advocates for bilingual/multilingual education, and for the importance of a bilingual and multilingual citizenry in a global society, agree that there are many reasons for students to maintain oral proficiency and literacy in their mother tongue/home language and for that language to be used as a medium of instruction in school, at least in the primary years. In addition to the reasons described above, students often have a stronger sense of identity and agency when their mother tongue is valued and used in school (Cummins, 2000). Schools are more welcoming for parents and communities, and teachers are more effective when they can speak the language of and with their students (Zafeirakou, 2015). Some scholars and educators argue that, when possible, it is appropriate to develop proficiency in the mother tongue/home language at high levels (beyond the elementary school grades), at the same time as students learn a national language of the country or an international language (Abbott, et al., 2014). High levels of proficiency in multiple languages can facilitate effective participation in a global

society as well as promote interaction and connection with families and communities. For many scholars and educators, there is no question about the importance of developing bilingualism or multilingualism of students. It brings value in many areas of individual lives, of communities, and of the larger society in developed as well as in developing countries.

At the same, while many international statements and the authors of the National Literacy Panel report have come to this conclusion, there has been considerable controversy for decades in the United States about the role and value of the home language of students in their reading development and general academic success. Reviews of educational outcomes of bilingual instruction have reached sharply conflicting conclusions, with studies, reviews of studies, and arguments about the methodological soundness of the studies. After years of this conversation, Hakuta, Butler, and Witt (2000) concluded that ideology has often trumped evidence on both sides of the discussion.

In light of these issues, it is worthwhile to review a seminal study of language of instruction that has a rigorous study design and interesting results, *Reading and Language Outcomes of a Five-Year Randomized Evaluation of Transitional Bilingual Education* (Slavin, Madden, & Calderón, 2010). Although the study was conducted in the United States, its findings have important implications for considerations of language of instruction in countries around the world. This article describes the design, outcomes, and possible implications of this study, considering how its outcomes provide helpful guidance for planning programs and instruction in diverse contexts around the world. After review of the study, the article argues that additional factors – quality of instruction and contexts for instruction -- also have a strong impact on students' learning and that these factors need to be considered along with decisions about language of instruction.

A Study of Language of Instruction in Learning to Read

The study reviewed here, reported in detail in Cheung and Slavin, 2012; Slavin, Madden, and Calderón (2010); and Slavin, Madden, Calderón, Chamberlain, and Hennesy (2011), compared the reading performance in English and Spanish of Spanish-dominant children in two educational approaches: Transitional Bilingual Education (TBE) and Structured English Immersion (SEI). The study is notable, and different from most studies of the impact of language of instruction carried out in the United States, because of three study design factors. It took place over five years and reported fifth-year results, involved randomized assignment of students to bilingual and English-only conditions, and involved pre- and post- assessment of students as well as continuous assessment at each grade level in which they were involved. In addition, all students in both conditions received consistent, high-quality instruction based on a curriculum with a strong research base.

The broad question guiding the study was, "How can a child who is dominant in another language learn the skills and content taught in the early grades while also learning the school language?" The more specific question was, "What are the effects on learning English and Spanish oral language and reading in Transitional Bilingual Education (TBE) and Structured English Immersion (SEI)?"

Study Design and Outcomes

School locations and student populations. The study was carried out in six schools in six different cities and states:
- Los Angeles, CA
- Denver, CO
- Rockford, IL
- St. Paul, MN
- Albuquerque, NM
- Alamo, TX

The cities ranged from small towns to large cities. Most of the schools were located in low-income neighborhoods. The student population was diverse; the demographic characteristics of the participating schools are listed in Table 1, combined across the six schools. (See details for each school in Slavin, Madden, & Calderón, 2010, Table 1.) The initial sample size was 247 students (130 in TBE and 117 in SEI), and the final sample size was 115 (60 in TBE and 55 in SEI), due to attrition.

Table 1						
*Demographic Characteristics of Students in Participating School*s						
Grades at the School	**Percent of Students on Free/Reduced Lunch**	**Student Ethnicity**				**Percent of Students Classified as English Language Learner (ELL)**
		Hispanic	**African American**	**White**	**Other**	
PreK-Grade 6 Average (Specific schools: PreK-Grade 5 or 6, K-Grade 5 or 6)	92% (Range: 76-100%)	77% (Range: 42-97%)	9% (Range: 1-35%)	7% (Range: 0-23%)	7% (Range: 0-17%)	58% (Range: 32-93%)

All of the schools had TBE and SEI programs in place before the study began.

Study design. As mentioned above, there were three critical features of the study, which had not been carried out in previous studies of language of instruction:

Multi-year duration: The study reports fifth-year findings of a longitudinal study, with three successive cohorts of kindergartners (entering school in 2004, 2005, 2006). The first cohort was followed to grade 4:

- Cohort 1 – 2004 (K), 2005 (Grade 1), 2006 (Grade 2), 2007 (Grade 3), 2008 (Grade 4)
- Cohort 2 – 2005 (K), 2006 (Grade 1), 2007 (Grade 2), 2008 (Grade 3)
- Cohort 3 – 2006 (K), 2007 (Grade 1), 2008 (Grade 2)

Within-school randomized assignment of students: Students were randomly assigned to bilingual (TBE) or English-only (SEI) conditions. To make this assignment, children entering kindergarten were assessed using the English Peabody Picture Vocabulary Test (PPVT) and its Spanish equivalent, the Test de Vocabulario en Imágenes Peabody (TVIP). If they were determined based on these assessments to be Spanish dominant, they were candidates for the study. A meeting was held each year (2004, 2005, and 2006) for the parents of entering kindergartners, the study was described in Spanish, and parents were offered $100 and promised story books for their children during kindergarten (in Spanish or English depending on the treatment they were assigned to). Parents who wanted their children to participate signed a form allowing their children to be randomly assigned to English or Spanish instruction. Parents who did not want their children to participate could choose the language of instruction for their children, but their children were not included in the study.

Continuous assessment: Students were assessed before the treatment (in the fall of kindergarten) and each spring (at the end of the school year at each grade level) in English and Spanish.

Treatment. Students in both treatments received instruction that followed the Success for All program, which has parallel versions in Spanish and English and is described in detail in Slavin, Madden, Chambers, and Haxby (2009). Both versions of Success for All – transitional bilingual education and structured English immersion -- have been found in multiple studies to improve the reading performance of English language learners, other Spanish-speaking students, and students in general (August & Shanahan, 2006; Borman, Hewes, Overman, & Brown, 2003; Borman, et al., 2007); Comprehensive School Reform Quality Center, 2006; Correnti, 2009).

Transitional bilingual education (TBE). In kindergarten, the teachers and students used *Descubre Conmigo* ("Discover With Me"). Students were taught to read entirely in Spanish, and Spanish vocabulary and comprehension skills were taught and practiced throughout the year. Instruction followed sequences of letter sounds, phonics, vocabulary, and concept development; vocabulary and background knowledge were introduced in thematic units; story activities developed concepts of print and story structure; and students often worked in pairs or small groups. Children worked with decodable mini-books, each devoted to a phoneme. Little or no English was used during reading periods. Students received English as a Second Language instruction in other parts of the day to develop oral English. In some schools, students received some instruction in English in subjects other than reading.

In grade 1, instruction was based on *Lee Conmigo* ("Read With Me"), with emphasis on phonemic awareness and phonics, continued use of phonetic mini-books, and teaching of sound blending skills in Spanish. Vocabulary, comprehension, and fluency were emphasized in a fast-paced sequence of instructional activities. In grade 2, reading comprehension strategies were developed in cooperative learning groups and built around Spanish basal readers and novels. Some students transitioned to English at the end of grade 1, and most transitioned at the end of

grade 2. This approach, an "early exit" program, was believed to be typical of TBE in the 2000s in the United States. In grades 3 and 4, all students were taught in English. Instruction continued to emphasize cooperative learning activities built around English basal readers and novels, and there was a continued focus on developing the reading skills listed above but in English. In short, students were engaged in reading activities similar to those they had done earlier in Spanish.

Structured English Immersion (SEI). Students in all grades (K-4) used the English Success for All program for all subjects, in all classes. Instructional elements and materials were the same as in TBE, but all instruction was in English except for occasional Spanish explanations. In addition, students participated in daily English as a Second Language sessions, as did those in the TBE condition, to help build their oral English. The materials used are described in detail in Slavin, Madden, Chambers, and Haxby (2009):
- Kindergarten: KinderCorner and KinderRoots
- Grade 1: Reading Roots
- Grades 2-4: Reading Wings

Assessments. The following assessments were used with all of the students in both conditions:
- *Pretests* (K): (oral language)
  - *PPVT* (English: *Peabody Picture Vocabulary Test*)
  - *TVIP* (Spanish: *Test de Vocabulario en Imágenes Peabody*)
- *Posttests* (in the spring of each year of the study):
  - PPVT/TVIP (oral language)
  - Woodcock (English and Spanish) (reading)
    - Letter-Word Identification (K-4)
    - Word Attack (K-4)
    - Passage Comprehension (1-4)

Students entering kindergarten were found to be below grade-level standards in oral Spanish (TVIP) and far below in English (PPVT) and were determined, on the basis of these tests, to be Spanish dominant. Most students did not know any English at pretest. Composite scores are shown in Table 2 (adapted from Slavin, Madden, & Calderón, 2010, Table 2).

Table 2		
Pretest Scores, Oral Language, Spanish and English		
	TVIP (Spanish)	**PPVT (English)**
Students in TBE	91.3	61.11
Students in SEI	86.75	60.27

Study Results. On the posttests in *Spanish oral language and reading*, the TBE students scored significantly higher than the SEI students at the end of kindergarten and grade 1, non-significantly better in grades 2 and 3, and there were no significant differences between the two groups in grade 4. In *Spanish reading*, the TBE students scored significantly higher on all Spanish reading measures in grades K-3. By the grade 4, there were smaller differences, and the only significant difference was on passage comprehension. (See Slavin, Madden, & Calderón, 2010, Table 4, with these results.) The authors conclude, "Fourth graders who had been taught

to read in Spanish from kindergarten to second grade scored non-significantly better than those taught only in English on measures of Spanish language and reading" (p. 10).

On the posttests in *English oral language and reading*, the students in the TBE condition scored significantly less well on all measures than the students in the SEI condition before they transitioned to English. After students transitioned to English, English reading scores were higher for those in SEI, but the difference was not statistically significant. That is, in *English reading*, TBE students made the transition and, by grade 4, were up to par with students immersed in English. In *English oral language*, both groups gained each year. By grade 4, TBE students scored almost as well on the English PPVT (88.1) as they did on the Spanish TVIP (91.0). SEI students scored slightly higher on the PPVT (90.4) than on the TVIP (86.3). Students in TBE and SEI conditions gained in oral language and reading in English and Spanish to about the same extent. That is, while both groups of students gained each year on the English PPVT, they also did not diminish in scores on the Spanish TVIP. The authors conclude, "All students were fully bilingual in English and Spanish by fourth grade, at least as indicated by PPVT and TVIP scores" (p. 10). "In both TBE and SEI conditions, fourth graders retain their Spanish language and reading skills and speak and read English and Spanish with similar facility" (p. 10). How is this possible, when the SEI students did not use or learn Spanish in school? In a conversation with one of the study authors, it was explained that even when they studied only English in school, students were immersed in Spanish at home, in the community, with parents and peers, and watching TV and reading in Spanish (Calderón, personal communication, April 24, 2015).

Study Conclusions

As a result of this study, the authors point out that the outcomes "do not unequivocally support positions on either side of the debate in the United States over bilingual education" (Slavin, Madden, & Calderón, 2010, p. 10) and that "what matters most in the education of English language learners is the quality of instruction, not the language of instruction" (p. 10; a point that is also made by August & Shanahan, 2006; Cheung & Slavin, 2005). "Schools may choose to teach English language learners in either their native language or in English for many reasons, including cultural, economic, or political. Yet the claims that this choice is crucial for ultimate learning of English or Spanish reading are not supported by the data from this experiment" (Slavin, Madden, & Calderón, p. 10). In an article synthesizing the outcomes of this and other studies of language of instruction that meet high, consistent standards of methodological rigor, Cheung and Slavin (2012) argue that "Educators and policy makers should consider all possibilities to enhance outcomes for Spanish-dominant ELL children" (p. 27).

Implications of the Study for Education Programs in International Contexts

The conclusions to this study are relevant not only to education efforts in the United States but also to international development efforts, where language of instruction is a critical concern. If *quality of instruction* is more important than *language of instruction* in promoting students' success, what are the features of high-quality instruction and of contexts in which high-quality instruction occurs? These questions are addressed in research reviews carried out by the authors of the study reviewed here (Calderón, 2011; Cheung & Slavin, 2012; Slavin, Madden, & Calderón, 2010) as well as by August and Shanahan (2006) after a meta-analysis of studies of

reading instruction in the United States. They are also the key components of Success for All, the educational approach used in the study, which has a strong research base (Slavin, Madden, Chambers, & Haxby, 2009).

High-Quality Instruction

The research reviews described above (and others cited within the points below) outline nine basic features of high-quality instruction, in the mother tongue or the national language and in elementary to secondary school:

1. The *curriculum* is based on thematic units (and specific topics within those units) that 1) take a week or so to introduce vocabulary and background knowledge, 2) build on students' interest and knowledge base and give students multiple opportunities to use vocabulary related to the themes and topics, and 3) continue to build vocabulary over consecutive lessons.

2. A *comprehensive approach to teaching reading* includes phonemic awareness, phonics (graphophonemic awareness), decoding and word recognition, vocabulary comprehension and use, and oral reading fluency, implemented at appropriate times and with appropriate intensity (the five components of reading outlined by the National Institute of Child Health and Human Development [NICHD], 2000), as well as reading comprehension and writing. As part of their development of reading skills, students have access to decodable books and other readers.

3. Special emphasis is placed on *learning and using vocabulary*. Vocabulary is taught throughout the day, in all subjects, with ample time for student interaction and explicit instruction. Activities might include total physical response (acting out words) and use of realia (concrete objects to represent words). Teachers might simplify their language and teach specific vocabulary that is likely to be unfamiliar and also demonstrate strategies for acquiring word meaning independently.

4. *Appropriate materials* (which are proficiency-based, grade-level appropriate, and appropriate to the reading levels of the students) are used for instruction, tutoring, and family literacy activities. (Students take books home regularly to read with their families.)

5. Students often work in pairs and small groups on *cooperative learning activities*, which 1) give them extensive, daily opportunities to use their developing language skills in meaningful contexts and 2) build their confidence in their ability to use the language. (See Slavin, 2014, for discussion of ways to ensure that cooperative learning, which has a strong history of positive research outcomes, can be implemented effectively.)

6. *Story activities* develop concepts of print, understanding of story structure, and use of vocabulary. These might include oral and silent reading, oral discussion, and written response to texts that are read.

7. Uses of *technology* (or other resources that give students additional activities, vocabulary, and reading texts) expand sources of language input, knowledge acquisition, and types of activities and interactions that students, teachers, and parents engage in.

8. Students receive *formal or informal support* to help them use the language of instruction and do school-related work in it. This might include help from a bilingual aide, who provides occasional translation or explanation of texts and activities; separate classes for some students focused on building their oral skills in the language until they are ready to join the larger class in which the language is used; and use of a careful progression from more simplified to more complex uses of the language as their skills grow.

9. There is a *content focus* for all language instruction, with language, reading, and writing taught in math, science, social studies, and other content areas and with language instruction aligned with the content-based classes that students are taking at the same time. (See, e.g., Calderón, 2011, for discussion of extending language-focused programs to include content-based instruction; and Honig, Diamond, & Gutlohn, 2013, for extensive discussion and examples of use of content and text types to develop reading proficiency.)

Context for Instruction

The reviews of research listed above (Calderón, 2011; Cheung & Slavin, 2012; Slavin, Madden, & Calderón, 2010) also outline eleven critical components of the context in which classroom instruction takes place:

1. *Whole-school implementation:* There is understanding that all of the teachers and administrators in the school (not only the language teachers) are engaged with and responsible for the language, literacy, and content learning of all of the students; for effective implementation of instruction; and for students' success.

2. There is *buy-in* from all stakeholders for a multi-year effort to improve instruction and student success and not only for brief periods when an internal or external evaluation is taking place.

3. *School leadership* (the principal, assistant principals, counselors, and others) send positive messages about the approach that has been agreed on and is in use, and convey enthusiasm about it.

4. *Professional development* is provided for all teachers, coaches, and administrators. Experienced coaches visit teachers and classrooms and provide feedback and support, with explicit manuals, videos, and simulations of classroom activity to guide practice in a supportive environment.

5. There is *continuous coaching for and monitoring* of implementation to help teachers implement instruction effectively. Coaches and principles who work with teachers 1) know what to look for in instruction and student learning; and 2) know how to observe, give feedback, and support continuous learning progressions.

6. Teachers participate in *teacher learning communities* at least 30 minutes per week to share strategies, analyze student progress, celebrate successes, solve problems, and motivate one another toward continuous learning.

7. *Families* are offered materials to enhance vocabulary, reading, writing, and content learning at home. Students read books of their choice for 20 minutes at home each evening.

8. *Assessment* is done regularly throughout the year and across grades, and assessment outcomes are available to teachers and parents to guide instruction and activities at home.

9. *Tutoring* is available for students who need it.

10. Outside experts regularly conduct *implementation visits* to observe how the program is set up and delivered and how instructional principles are being implemented in the classroom.

11. *Regular reports* (monthly or quarterly and year-end) are developed on program design and set up, instructional offerings, and learning progressions are shared with administrators and teachers in the program.

Features of High-Quality Instruction and Contexts for Instruction Discussed in International Contexts

Some of the features of high-quality instruction and effective contexts for instruction described above (which focus on a U. S. context) are also described by researchers who have reviewed and made recommendations concerning education in developing countries. For example, after a study of mother tongue and English literacy instruction in primary schools in Ethiopia, Smith, Stone, and Comings (2012, pp. 52-56) recommended the following "six pillars" of focus in instruction in that country:

1. Attainable goals for literacy and English language learning
2. Learning materials (including the literacy environment in schools)
3. Instruction (classroom set up and instructional activities)
4. Teacher training, supervision, and monitoring
5. Family and community support (homework support, the literacy environment in communities, community libraries)
6. National and regional support infrastructure (technical assistance, administration, management, and policy)

Zafeirakou (2015, p. 4) recommends that the following ten components be in place in the Early Literacy in National Languages (ELINL) program in Gambia:

1. Foundational reading skills are taught in the mother tongue and oral language skills in the second language.
2. Clear, implementable curricula are available for reading.
3. Each student has at least one textbook.

4. Teachers have a short, practical teacher guide with simple steps for teaching beginning reading.
5. There are clear, measurable reading objectives (to monitor progress).
6. Instructional time is dedicated daily to teaching and practicing reading.
7. There is hands-on training and continuous on-site support for teachers (a coaching model).
8. There is a teaching reading module for initial teacher training.
9. There is a program for transition from the mother tongue as a medium of instruction to a second language.
10. A pre-primary program focuses on oral language development and early reading.

Meiers (2013, p. 12), based on research carried out in Nepal, outlines a similar set of seven effective practices in multilingual education for improving learning outcomes, with a strong focus on mother tongue instruction and experiences:

1. Provide training for teachers in multilingual education
2. Conduct early education in the mother tongue (preschool and Grades 1-2)
3. Develop reading skills in the mother tongue first
4. Build competence in the second language before using it for instruction
5. Provide oral vocabulary training
6. Create a print-rich environment in the mother tongue
7. Provide textbooks and resources for students at school and at home

Each of these lists includes many, but not all, of the nine and eleven components listed above. However, they combine features of high-quality instruction (e.g., in Meiers: Provide oral vocabulary training) and contexts for instruction (e.g., Provide training for teachers in multilingual education) rather than separating them, which would provide clarity and focus. A focused review of needs and recommendations across countries regarding 1) features of high-quality mother tongue and second/third language instruction and 2) effective instructional contexts would bring clarity of focus and would allow stakeholders to clearly articulate and implement all of the components that need to be in place.

Factors Influencing Language Choice and Quality of Instruction

As we have seen in the discussion above, the study by Slavin, Madden, and Calderón (2010) was planned and carried out with methodological rigor that has seldom been in place in studies of language of instruction, and the authors' claims about language of instruction based on the outcomes are strong. Helpful lists of features of high-quality of instruction and of contexts for instruction have grown out of the study, which are only partially discussed in publications by authors focusing on ways to develop students' literacy and improve learning outcomes in developing countries.

In considering the implications of the study reviewed here, and the feasibility of implementing the recommendations in the two lists of components of effective programs, it is important to consider three issues: 1) the context in which the study (and any study that has implications for implementation) was carried out; 2) the strength of the implications of any study that is done and its application to different contexts, no matter what the level of rigor of its design and the strength of its outcomes; and 3) the scope/breadth of the study and resulting recommendations

and the need to look beyond language proficiency alone in making decisions. Each of these issues is discussed here.

Context of the Study

It is important to keep in mind that this study was carried out in the United States from 2004 to 2008. Contextual factors in this country, at this time, had an impact on the findings, which might be different in another country at another time. English was (and is) the primary and most widely spoken language in the United States, the language spoken in many contexts outside of school, and usually the language of instruction (when overall language and content learning, and not the learning of another World Language, are the focus). Students of all ages and at all grade levels cannot live in the United States without encountering English the minute they leave their homes, especially when they go to school. The relationships between languages used at home and in the community, and those used in education, are very different from those in many developing countries, in which the language of instruction is a question. The students involved in the study came from Spanish-speaking families and were often surrounded by Spanish in strong, sometimes vibrant and respected, Spanish-speaking communities. Even in the TBE treatment, all students received some ESL instruction (in this case their second language, L2). The approach used was highly developed and researched, with high-quality materials. Teacher quality was high, teachers were proficient in the language they taught, and they received ongoing support from administrators and each other. In the early 2000s, the most prevalent model for bilingual programs was early-exit TBE (transitioning to the L2 at the end of grade 2), so that was the model studied. Outcomes could be different in a late-exit or long-term dual language program, in which students read in both languages throughout their school careers (as discussed below).

This context is very different from that of many developing countries. (It is also different from current approaches in the United States, where an increasing number of programs allow students to learn in their home language and in English throughout their schooling, into and beyond high school.) A critical question that needs to be asked in every country considering language of instruction is, what is the context for language use, language proficiency, and language development in this place, and what impact does this have on possible approaches to instruction in different languages?

The last contextual factor listed above has a significant impact on the study outcomes. While the authors did not find significant differences in oral language and reading proficiency of students in the two conditions at the end of grade 4, the students were only in the TBE program until the end of grade 2. Studies of bilingual/dual language immersion programs in a number of states (in the United States) have found that students of all language backgrounds and socioeconomic groups, including those in special education programs and in poverty, have developed higher levels of English proficiency when they are in these programs than those students who were in English-only programs (Collier & Thomas, 2009; Thomas & Collier, 2012). However, these students did not exit the bilingual/dual language programs at the end of grade 2 but rather spent many years in the program. In these contexts, where the mother tongue/home language is the language of instruction over many years, it has been found that the language of instruction *does* make a difference in learning outcomes.

Application of Results of One Study to Other Contexts

We also need to be careful about applying outcomes of a rigorous study, or even a series of rigorous studies, to other educational contexts, even within the same country. After a review of the findings of the National Literacy Panel's meta-analysis of rigorous research on reading in a second language (August & Shanahan, 2006), Goldenberg (2008) lists one of the key findings that "Teaching students to read in their first language promotes higher levels of reading achievement *in English*" (p. 14). However, when he starts to look at the research and its implications more deeply, he concludes that, "Beyond the finding that primary language reading instruction promotes reading in English (and in the primary language), there are more questions than answers" (p. 12). He then provides a long list of questions that need to be raised when implementing study findings. These include: Is primary language instruction more beneficial for some students than for others? Is it more effective in some settings than in others and with certain student populations than with others? What should be the relative emphasis between promoting knowledge and skills in the primary language and developing proficiency in English (the second, third, or national language)? Van Ginkel (2014) asks similar questions about choice of the mother tongue and additional languages in instruction in non-English-speaking countries. We do not have solid answers to these questions, but they need to guide development of language programs.

The Need to Look Beyond Language Proficiency Alone

Finally, this article and the specific study that is reviewed here focus on the development of *students' proficiency* in oral language and in reading. Some researchers involved in language policy and development, and on restoration of language vitality in specific contexts, call this focus Capacity Building. They argue that Capacity Building (with its focus on the ability to use a language at specific levels) is certainly necessary, but it is not sufficient for a language to be vital in a society, to be used effectively by those who reside in the society, and for individuals living in the society to want to continue to use and learn it (Grin, 1990, 2003; Lo Bianco, 2008 a, b; Lo Bianco & Peyton, 2013). In addition to Capacity Building, it is also necessary to promote Opportunity Creation: creation of contexts in which use of the language is not only acceptable but also expected or required. Capacity Building and Opportunity Creation are both necessary but not sufficient. Desire Enhancement is also required: promotion of identification with and use of the language, because its use brings certain rewards (not only financial but also connections with family, community, and the wider world). This argument for the need to expand beyond simply developing language proficiency for sustainable language use and development is also made by Lewis (2011), in his FAMED model for development and sustainability of languages in developing countries -- *F*unctions of the language, *A*cquisition of the language, *M*otivation to use the language, *E*nvironments in which the language is used, and whether there is a *Dis*tinct niche for the language. (See also discussion of this model in Bickford, Lewis, & Simons, 2015.)

In line with this need, when thinking about language of instruction, educators and scholars will want to look beyond schooling alone, and levels of proficiency in a language that students will reach in school, and also ask questions like the following about all of the languages that are being considered for instruction:

- How is the language used in the places where students live, study, and work?
- How likely is it that they will continue to use the language throughout school and after they graduate from school and move on to other endeavors?
- What opportunities will proficiency in the language bring to them?

In addition, there are important questions to ask about the capacity of schools and regions to develop the proficiency of students in the languages that *have* been determined by educators and researchers to be important. These include:

- Which specific mother tongues will be taught in multilingual contexts, where multiple languages are spoken?
- How are these decisions made, who supports them, and what mechanisms are in place to ensure that that instruction is effective and that mother tongue instruction is balanced with instruction in the language of the country and an international language (if also taught)?
- How do parents view the use of the languages selected for instruction? Do they support learning of their children in the mother tongue as well as in the language of the country and an international language?
- What is the proficiency of teachers in the languages to be taught, and how can teachers' language proficiency be developed and supported?
- How will instructional time be allocated so that sufficient language and content learning occur?

It is exciting to see that the National Annual Literacy Conference in Uganda (3rd National Conference on Literacy, March 25-26, 2015) focused on questions of Opportunity Creation and Desire rather than simply on language of instruction. The conference flyer states: "In addition to Reading, Writing, and Numeracy, children need and must learn relevant and transferable skills such as critical thinking, problem solving, civic values, and mental and physical well-being skills, in order to compete for scarce global resources." (This could be restated to say, "in order to be productive and effective in a global society.") A continued focus on these broader issues will greatly enhance decisions about language of instruction.

Conclusion

This article describes efforts to determine language of instruction in many countries and debates about the importance of language of instruction in the United States. It then reviews the design, outcomes, conclusions, and recommendations made as a result of a seminal study of language of instruction in the United States, *Reading and Language Outcomes of a Five-Year Randomized Evaluation of Transitional Bilingual Education* and reviews of studies with similar rigor. Based on the outcomes of the study and reviews of research, the researchers focusing on this question claim that quality of instruction is more important than language of instruction, and they outline nine features of high-quality instruction and eleven features of effective contexts in which that instruction occurs. These features are critically important not only in the United States but also in language development around the world. While some work has been done in specific countries to articulate and implement some of these features, the focus is sometimes limited, the two types of features are not separated, and cross-country efforts are often missing. We also need to look beyond Capacity Building (in-school learning of the language) alone to the larger contexts in which the language is (or is not) valued and used.

In their discussion of successful implementation of their reading program, Success for All, Slavin, Madden, Chambers, and Haxby (2009) conclude with this call: "*Next September*, another *6 million children* will enter *U.S. kindergartens.* If we know how to ensure that all of them will succeed in their early schooling years, we have a moral responsibility to use this knowledge. We cannot afford to let another generation slip through our fingers" (p. 376). (italics added)

Those of us engaged in implementing effective instruction in countries around the world can consider this call to action from our own perspectives and fill in the month and year, number of children, countries or localities, and grade levels (the italicized words in the quote). The important point is that the call is relevant to and urgent for all of us, and language of instruction is one piece of the complete and complex endeavor. We cannot afford to not have a plan in place that includes high-quality instruction and effective contexts for instruction, as well as selection of the languages that students need to learn in order to be successful.

References

Abbott, M., Brecht, R. D., Davidson, D. E., Fenstermacher, H., Fischer, D., Rivers, W. P., Slater, R., Weinberg, A., & Wiley, T. (2014). *The language enterprise: Languages for all?* Final report. Retrieved from http://www.casl.umd.edu/lfafinalreport

August, D., & Shanahan, T. (Eds.). (2006). *Developing literacy in second-language learners.* Mahwah, NJ: Erlbaum.

Ball, J. (2014, February 21). *Children learn better in their mother tongue: Advancing research on mother tongue-based multilingual education.* Global Partnership for Education. Retrieved from http://www.globalpartnership.org/blog/children-learn-better-their-mother-tongue

Bickford, J. A., Lewis, M. P., & Simons, G. F. (2015). Rating the vitality of sign languages. *Journal of Multilingual and Multinational Development, 36*(5), 513-527.

Borman, G. D., Hewes, G. M., Overman, L. T., & Brown, S. (2003). Comprehensive school reform and achievement: A meta-analysis. *Review of Educational Research, 73* (2), 125-230.

Borman, G., Slavin, R. E., Cheung, A., Chamberlain, A., Madden, N. A., & Chambers, B. (2007). Final reading outcomes of the national randomized field trial of Success for All. *American Educational Research Journal, 44* (3), 701-731.

Calderón, M. (2011). *Teaching reading and comprehension to English learners, K-5.* Bloomington, IN: Solution Tree Press.

Cheung, A., & Slavin, R. E. (2005). Effective reading programs for English language learners and other language minority students. *Bilingual Research Journal, 29* (2), 241-267.

Cheung, A. C., & Slavin, R. E. (2012). Effective reading programs for Spanish-dominant English language learners (ELLs) in the elementary grades: A synthesis of research. *Review of Educational Research, 82,* 351-395. Retrieved from http://www.bestevidence.org/word/ell_read_Mar_19_2012.pdf

Collier, V. P., & Thomas, W. P. (2009). *Educating English learners for a transformed world.* Albuquerque, NM: Dual Language Education of New Mexico – Fuente Press.

Comprehensive School Reform Quality Center. (2006). *CSRQ Center report on elementary school comprehensive school reform models.* Retrieved from www.csrq.org

Correnti, R. (2009). *Examining CSR program effects on student achievement: Causal explanation through examination of implementation rates and student mobility.* Paper presented at the 2nd annual conference of the Society for Research on Educational Effectiveness, Washington, DC, March, 2009.

Cummins, J. (2000). *Language, power, and pedagogy.* Clevedon, UK: Multilingual Matters.

Goldenberg, C. (2008). Teaching English language learners: What the research does – and does not – say. *American Educator, 32*(2), 8–42. Retrieved from http://www.aft.org/sites/default/files/periodicals/goldenberg.pdf

Grin, F. (1990). The economic approach to minority languages. *Journal of Multilingual and Multicultural Development, 11*(1-2),153–173.

Grin, F. (2003). *Language policy evaluation and the European Charter for Regional or Minority Language*s. London: Palgrave Macmillan.

Hakuta, K., Butler, Y. G., & Witt, D. (2000). *How long does it take English learners to attain proficiency?* Berkeley, CA: The University of California Linguistic Minority Research Institute, Policy Report 2000-2001. Retrieved from http://web.stanford.edu/~hakuta/Publications/(2000)%20-%20HOW%20LONG%20DOES%20IT%20TAKE%20ENGLISH%20LEARNERS%20TO%20ATTAIN%20PR.pdf

Honig, B., Diamond, L., & Gutlohn, L. (2013). *Teaching reading sourcebook*. Second Edition. Berkeley, CA: Consortium on Reading Excellence in Education (CORE).

Lewis, M. P. (2011). *The sustainable use model for language development*. Presentation at the American Association for Applied Linguistics (AAAL), Chicago, IL, March 26, 2011. Retrieved from http://www-01.sil.org/~simonsg/presentation/Applying%20the%20SUM.pdf

Lo Bianco, J. (2008a). Organizing for multilingualism: Ecological and sociological perspectives. In *Keeping language diversity alive: A TESOL symposium.* Alexandria, VA: Teachers of English to Speakers of Other Languages. Retrieved from http://www.tesol.org/attend-and-learn/academies-conferences-symposia/upcoming-symposia/symposiums/a-tesol-symposium-on-keeping-language-diversity-alive

Lo Bianco, J. (2008b). Policy activity for heritage languages: Connections with representation and citizenship. In D. M. Brinton, O. Kagan, & S. Bauckus (Eds.), *Heritage language education: A new field emerging* (pp. 53-69). New York, NY: Routledge.

Lo Bianco, J., & Peyton, J. K. (Eds.) (2013). Vitality of heritage languages in the United States. Special issue of the *Heritage Language Journal, 10*(3). Retrieved from http://www.heritagelanguages.org/

May, S. (2012). *Language and minority rights: Ethnicity, nationalism, and the politics of language.* New York: Routledge.

Meiers, M. (2013). *Introduction to issues and implications for children learning to read in multilingual settings*. Canberra, Australia: AusAID Education Resource Facility. Retrieved from http://mlenetwork.org/content/introduction-issues-and-implications-children-learning-read-multilingual-settings#attachments

National Institute of Child Health and Human Development. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction: Reports of the subgroups* (Report of the National Reading Panel. NIH Publication No. 00-4754). Washington, DC: U.S. Government Printing Office.

Skutnabb-Kangas, T., & Phillipson, R. (1994). *Linguistic human rights: Overcoming linguistic discrimination.* Berlin: Mouton de Gruyter.

Slavin, R. E. (2014). Making cooperative learning powerful. *Educational Leadership, 72*(2), 22-26. Retrieved from http://www.ascd.org/publications/educational-leadership/oct14/vol72/num02/Making-Cooperative-Learning-Powerful.aspx

Slavin, R. E., & Cheung, A. (2003). *Effective reading programs for English language learners: A best-evidence brief.* Baltimore, MD: Johns Hopkins University. Retrieved from http://www.csos.jhu.edu/crespar/techReports/report66.pdf

Slavin, R. E., Madden, N., & Calderón, M. (2010). *Reading and language outcomes of a five-year randomized evaluation of Transitional Bilingual Education.* Baltimore, MD: Johns Hopkins University. Retrieved from http://www.bestevidence.org/word/bilingual_education_Apr_22_2010.pdf

Slavin, R. E., Madden, N. A., & Calderón, M., Chamberlain, A., & Hennesy, M. (2011). Reading and language outcomes of a multiyear randomized evaluation of transitional bilingual education. *Education Evaluation and Policy Analysis, 33*(1), 47-58.

Slavin, R. E., Madden, N. A., Chambers, B., & Haxby, B. (2009). *Two million children: Success for All.* Thousand Oaks, CA: Corwin.

Smith, C., Stone, R., & Comings, J. (2012). *Field study report: Literacy policy and practice in Ethiopia: Building on the TELL program and EGRA results.* Washington, DC: American Institutes for Research. http://www.air.org/files/TELL_Field_Study_-_Literacy_Policy_and_Practice_in_Ethiopia.pdf

Thomas, W. P., & Collier, V. P. (2012). *Dual language education for a transformed world.* Albuquerque, NM: Dual Language Education of New Mexico – Fuente Press. http://www.thomasandcollier.com/publications.html

UNESCO. (2008). *Mother tongue matters: Local language as a key to effective learning.* Paris: UNESCO. http://unesdoc.unesco.org/images/0016/001611/161121e.pdf

Van Ginkel, A. J. (2014, January 27). *Using an additional language as the medium of instruction: Transition in mother tongue-based multilingual education.* Webinar for MTB-MLE Network, Washington, DC. Retrieved from http://www.mlenetwork.org/sites/default/files/van%20Ginkel%20-%20Webinar%20Slides%20-%202014_0.pdf

Zafeirakou, A. (2015, February 20). *The power of mother tongue and multilingual education: Students who learn to read in their mother tongue transfer these skills to a second language.* Global Partnership for Education. Retrieved from http://www.globalpartnership.org/blog/power-mother-tongue-and-multilingual-education