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Dual language programs: lessons learned in the trenches

Abstract

This article reports on professional development experiences as teacher trainer in New York City schools, in particular with Dual Language (DL) programs. A successful dual language program appreciates and supports the cultural, linguistic, educational and socioeconomic backgrounds of the students in our schools. The curriculum must incorporate these factors to ensure English language learners have the same educational opportunities as their peers (Gathercole 2016; Genesee, Hamayan 2006). Hence, the concluding reflections of the teacher trainer posits that any professional development offered to teachers, administrators, and parents needs to include aforementioned differences to be efficient.

Keywords

Heritage language; English language learner; cultural inclusiveness; language objectives; content objectives

1. *Introduction*

We need to dispel the myth that 'sink or swim' programs, otherwise known as total immersion programs, are better for students learning English as an additional language than bilingual programs. English language immersion programs have been popular in states with large immigrant populations. The assumption is that ELLs (English language learners) educated in English only, will learn the language better, faster, and will avoid the negative consequences of instruction in a language they do not understand. However, a closer examination reveals that immersion programs are grounded in value-driven notions of language and cultural superiority, and lack research backing. Immersion programs for ELLs in schools are an inappropriate, if not a harmful, choice (Garcia, Lawton, Diniz de Figueirido 2010; Garcia, Johnson, Seltzer 2016).

An alternative to an immersion program is a bilingual education program. Unfortunately, bilingual education is held responsible for dropout rates and very low literacy levels for ELLs born in and outside of the USA, and some supporters of English immersion programs eliminated bilingual education across the USA (Lindholm-Leary, 2017). As a result, the growth of English-only school mandates caused many schools to eliminate bilingual education programs in favor of English-only classes. The 'bilingualists' understand the theory behind the cognitive process

of second language acquisition and are knowledgeable of the research supporting SLA (August, Goldenburg, Rueda 2010; Wiley, Lee, Rumberger 2009; Valdes, Menken, Castro 2015).

The preservation of the mother tongue among ELLs is an asset that needs to be celebrated. If you enter a store or walk down the street in any community in the United States, it is likely that you will hear languages other than English being spoken. This is a part of everyday life for millions of US residents, yet, many Americans support English-only laws, stand against bilingual education, and wonder why recent immigrants don't 'want' to learn English. The rationales behind these viewpoints are not always based on facts or research. For example, many argue that preserving their heritage language – the language spoken at home, L1, among English language learners (ELLs) has negative consequences for them. In particular, they claim encouraging heritage language use prevents ELLs from learning English. Debates over how to best educate these students have been raging since the 1970s. A number of approaches have been tried to help children acquire English while simultaneously learning the rest of the school curriculum. Advocates of bilingual education – teaching academic content in two languages – claim it is the most beneficial approach in helping EL students to succeed (Alfaro, Hernandez 2016, 8-11).

Opponents favor an immersion method where the objective is to promptly transition ELLs to an English-only classroom. Support for immersion approaches has been based on a variety of rationales, including claims that bilingual education causes confusion, makes it more difficult for students to focus on learning English, and makes students less likely to embrace American values. However, most research indicates that, rather than causing a deficiency that ELLs must overcome, preserving heritage language yields a great advantage to these students, individually and to our broader society (Cheung, Slavin 2012).

A substantial body of research demonstrates cognitive advantages for those who are balanced bilinguals, adept speakers of their heritage and their new language. Those opposed to preserving heritage languages through public schools are both devaluing ELLs and their families, and taking away the bilingual students' cognitive advantage (Genesee, Hamayan 2016).

2. *The rationale behind maintaining the heritage language*

Many people who are against bilingual education also believe that the academic content a child learns in language A, like the multiplication tables, does not transfer to language B, and children must then learn how to multiply again once they are proficient in English. The believers in immersion hold that bilingual education causes the brain to be confused – a zero-sum game where learning one language necessarily trades off with the capacity to learn another. Opponents of bilingual education also share the mistaken belief that the academic skills a child learns in one language will not transfer, and children must then relearn them in English. These beliefs may have been based on a crude understanding of how the brain

works (Baker 2011). Many more methodologically sound studies have shown that preserving heritage language benefits students (for further insights on benefits of heritage language retention see Filice 2010, 2006). Researchers who examined Latino students in a bilingual program with a morning curriculum in English and an afternoon curriculum in Spanish in Florida found that the relationship between bilinguals and the cognitive abilities of the students was positive (Valdes, Menken, Castro 2015; Sugarman 2012).

Rather than compromise brain power, bilingual education has been found to add to students' cognitive flexibility, allowing them to think about and apply the subtle meanings of different words in two (or more) languages (cf. Baker 2011). Furthermore, bilingual students, compared with monolingual students, have been found to develop complex skills, including readiness to see structure in patterns and a capacity to reorganize their thoughts according to feedback (cf. Beeman, Urow 2012). Researchers also found that bilingual students have an advantage in problem-solving that requires higher levels of attention and an understanding of numbers, in part due to a developed ability to create simultaneous connections among different symbols more effectively than monolingual students (Hattie 2012). Bilingual students possess an added advantage that goes beyond the sum of their parts. The complexity of the distinct structures and concepts of the two languages appears not to be additive, but, instead, multiplicative. Bilinguality multiplies the intellectual dividends that each language bestows on these students (cf. Gathercole 2016).

2.1 The bilingual debate

The debate between a pro-bilingual approach and an English-only perspective rages (Gandara, Orfield 2010; Garcia, Lawton, Diniz de Figueirido 2010; Hamayan, Genesee, Cloud 2013), but with politics and folk beliefs, not research, usually winning the debate. There is no evidence that indicates that ELL students have better test results by being in an English language immersion program.

Achievement outcomes were also compared from ELL students in Utah, Delaware and Texas (where bilingual education is offered) with those in Arizona (where it is not offered) on the NAEP. The results showed that there was a larger achievement gap between ELLs and non-ELLs in states that had an English-only policy (Rumberger, Tran 2010). Also, studies that analyzed literacy skills in their developing stages for Spanish-speaking ELLs in immersion classes showed that teachers who use the state-mandated English only approach succeeded with less than half of their student population. The remaining half needed more resources, time, and a variety of approaches (Blanchard, Atwill, Jimenez-Silva, Jimenez-Castellanos 2012). These findings challenge the appropriateness of immersion programs for ELLs. The research more convincingly supports the claim that immersion programs are NOT better than bilingual education.

What's ultimately at stake? ELLs are the fastest growing group in the public school system. But, these same students also have a higher dropout rate and a low-

er academic achievement gap than their peers (cf. National Education Association 2008). Many studies make a strong case for promoting educational approaches that preserve students' heritage languages as a way to both increase achievement and reduce dropout rates. Proponents of maintaining heritage language, while promoting students' acquisition of the English language, often call their approach 'English Plus' and argue that knowing more than one language should be viewed as an asset rather than a deficit. It is a curious thing that at many high schools, ELLs in one class will be actively encouraged to abandon their heritage language while native English speakers across the hall will struggle to learn German, French, Italian, Spanish or even Chinese and Arabic (Hamayan, Genesee, Cloud 2013).

2.2 Why is there a sudden interest in Dual Language Programs?

In an era of globalization and international competition when most countries recognize more than one official language, the goal should be to develop cognitive talents and linguistic skills in all communities. We should not foster policies that appear to stifle and discourage the participation of ELLs and poorer students in educational advancement. Because one cannot effectively separate language, culture, and learning, English language immersion programs had the unintended effect of devaluing immigrant cultures via language restrictions. These policies perpetuate assimilationist approaches in the education of ELLs. The goal of immersion programs is to foster a forceful abandonment of the native language and culture in order to be replaced by the dominant language and culture. This is known as the subtractive model when the students' language and culture are subtracted or eliminated (cf. Lindholm-Leary 2016a, 2016b, 2017). This was also done prior to Brown vs. Board of Education (Gandara, Orfield 2010; Powers 2008; U.S. Commission on Civil Rights 1972).

   Linguistic and cultural competency is a crucial factor that provides students with the tools they will need in order to take advantage of globalization opportunities (Healy 2013; National Education Association 2008). Knowing how to use another language effectively depends in large part on knowing the cultures where those languages are used. The knowledge of other languages added to the English language provides students with all the globalization benefits once they leave school, including the exposure gained through international travel and the internet. The USA, which is a nation that grew with immigration, has a very low level in languages other than English compared to Asia, Europe, and Central and South America. It is the intention of this paper, (together with Flores, Murillo 2001; García 2001b; MacGregor-Mendoza 2000) to prove that education for Latino or Hispanic students in the USA needs to do a better job at integrating cultural, linguistic and educational components into the curriculum. The goal of dual language programs is to foster bilingualism, biculturalism and biliteracy for all students in a respectful and equitable manner (Hakuta, Butler, Witt 2000; Mahoney, MacSwan, Haladyana, Garcia 2010). The revised census of 2004 indicated that by 2050, people of color would make up 50% of the population in the USA (cf. National Center

for Education Statistics, 2004). The number of dual language programs is growing rapidly in the USA (Christian 1999; MacGregor-Mendoza 2000). While the vast majority of dual language learners are in English and Spanish; other languages are offered as well, such as Arabic-English, Korean-English, French-English, and Russian-English (Crawford 1992; Flores, Murillo 2001).

2.3 The rationale for dual language education programs

Research has shown that if students have a strong foundation in their native language, these skills can then be transferred to the second language. In the USA, Spanish is viewed as a language with a low social status, and, unfortunately, this leaves ELLs with a little incentive to learn and use their native tongue. This can put ELLs at risk for difficulty in acquiring literacy and academic language skills in English in school because the native language is not supported at home or in the community. On the other hand, native speakers of English obtain a strong foundation thanks to the support from the community. Those students who speak the mainstream language and are immersed in the second language in school don't run the risk of losing the development of their native language. Instructing ELLs in their native language while in a dual language program gives them a solid foundation to acquire English as a second language (Aquino-Sterling, Rodriguez-Valls 2016, 73-81).

ELLs who learn all academic subjects in their native tongue are better equipped to comprehend material than students in English-only programs because the instruction is provided in a language they have mastered. Those ELLs who learn academic vocabulary and literacy in their native tongue in elementary school are better equipped to close the cultural, linguistic and literacy gap compared to their mainstream counterparts by transferring their skills to English later on (Lindholm-Leary 2017).

ELLs in dual language programs have very high levels of proficiency in their mother tongue and also obtain the same levels of proficiency in English, and may even surpass those ELLs that are instructed in English-only. Advanced levels of bilingualism result in enhanced academic achievement and general cognitive ability (Bialystok 2006; Hattie 2012; Lindholm, Aclan 1991).

Advanced levels of bilingualism resulting in enhanced competence gained by ELLs in Developmental Bilingual Education (DBE) programs is advantageous for reasons linked to globalization, cognitive development, and cultural understanding. If instruction in English-only were the best solution, one would not expect to find such significant gaps in the achievement of ELLs. Thus, educating ELLs in English-only is clearly insufficient to close the achievement gap. This was observed in the schools in New York City where professional development programs were conducted in the years 2017, 2018, and 2019. Three schools adapted a DL program while one decided to use a transitional bilingual education model. The NYSESLAT (New York State Exam of English) scores were much lower than in the other two schools where the DBE model was used. In addition, many long-term studies show

that when students spend longer periods of time in dual language programs, and when more instruction is provided in the native tongue, their academic outcomes improve (Block 2007; Lindholm-Leary, Howard 2008; Howard, Sugarman 2011; Thomas, Collier 2002).

2.4 Cultural inclusiveness and understanding

Many decades of research have shown that additive bilingual programs correlate with achievement in the content area and proficiency in both the second language and the mother tongue (Genesee, Lindholm-Leary, Saunders, Chritian 2006; Lindholm-Leary 2001; Lindholm-Leary, Genesee 2010; U.S. Department of Education 2012). This also helps to increase their self-esteem and attitudes towards different cultures (de Jong, Bearse 2014; Lindholm-Leary 2016b; Lindholm–Leary, Howard 2008; Potowski 2007). The loss of the mother tongue is associated with lower levels of second language acquisition, poor achievement in school, and emotional and psychological disorders (Hammer, Lawrence, Miccio 2008; Lindholm-Leary 2014; Lindholm-Leary, Borsato 2006; Montrul 2016). Therefore, the outcomes for English language learners are more positive if they are given the chance to develop the native tongue and the second language at the same time.

Those who perceive native-tongue instruction as deficient in patriotism or counterproductive to high levels of academic achievement, should consider the following: If you were to go to another country where you do not speak the language, as much as you would want the instruction to center around the new language and move you to a conversational level, would it not be nice if, at least the initial instructions, could be provided in your language, so that you could ask questions in your language and better engage the learning process? Or would you prefer to be tossed into the pool and be told –possibly in a language you don't understand – to 'sink or swim?'

Prejudices exist among students who speak different varieties of the same language, but DL classrooms provide a supportive environment in which students can learn about dialect variation and also get to know speakers of different varieties of their own language. This can help in reducing biases since at times, the language used in their homes may be inappropriate in schools and vice versa. On another note, what is appropriate in schools may be totally unfamiliar to ELLs in their homes (Greensfield, Quiroz, Raeff 2000). Many students may have difficulty fitting into the classrooms and benefiting from classroom instruction because teachers assume that they have the same funds of knowledge as mainstream students do. This makes it very difficult for many ELLs to link new learning to their prior experiences. Participation in a DL program provides them with experiences where different cultural norms and expectations are respected and practiced, and this, in turn, broadens their cultural competence.

DL learners use both their languages (L1 and L2) simultaneously to enhance their problem solving and critical thinking skills while learning new things. The multiple ways in which dual language learners use the combined resources of their

two languages for learning have been referred to in different ways: cross-cultural transfer, translanguaging (Garcia 2011), bridging (Beeman, Urow 2012). Teaching ELLs to use the native tongue enables them to participate in all classroom activities instead of being passive participants in the class (Bialystock 1991). In a related vein, teaching ELLs in the home language allows them to engage in instructional activities and not to sit on the sidelines. ELLs are often left on the sidelines when instruction is in English before they are competent in English. Engagement in classroom activities is critical for learning (Golderberg 2008).

The curriculum should value and reflect the languages and cultures that students bring to the classroom every day (Lindholm-Leary 2017). In order to accomplish this, it's important to include books that have authentic literature in both L1 and L2. This will promote bilingualism, biliteracy and biculturalism. Access to material and books in both languages is necessary in order for students to develop full linguistic and cultural proficiency in L1 and L2. Authentic materials also promote sociocultural development, which highlights comprehension. Students then see themselves as characters in the book and can compare and contrast themselves with their book counterparts (Phinney 1993). This supports an identity that is flexible both socioculturally and interculturally speaking. This development is as important as the development of language in a dual language program.

2.5 The source of bilingualism

In US schools, native English speakers and students who speak another language at home often interact. This generates bilingual students, who speak L1 at home and L2 in school. Consequently, bilingual education programs were originally based on the principle of assimilation to the US culture and adopting English as the primary language (Crawford 1992; Minaya-Rowe 1988).

Vygotsky proposed that a cognitive schema in a child to function in the world is bound by culture (Cole, Cole 2001). Children that come from culturally and linguistically diverse backgrounds will either have to accommodate the schema they bring with them or create a new one. Duquette (1991) concluded that we need to understand children and allow them to express themselves instead of transitioning them to the mainstream culture (in the same way that monolingual English dominant children do at home and in society). The teachers who are asked to respond to these challenging needs tend to see the children as limited when in fact, they are not.

2.6 The benefits of a dual language program

Bilingual dual language programs are beneficial at different levels:

Education: DL classes are for all students, whether they are L1 or L2 speakers; upper, middle or lower Socio Economic Status (SES); elementary, junior high school or high school students. High levels of proficiency can be obtained in both L1 and L2 (Fisher, Frey 2010; Beeman, Urow 2012).

*Cognition***:** Bilingual students are better abstract thinkers who can display high levels of originality and creativity while performing an academic task. They are keen users of the structure of L1 and L2, including grammar, semantics, pragmatics, morphology, syntax, phonetics and phonology. This facilitates reading development because they can now decode academic vocabulary (Crandall, Stein, Nelson 2012).

Bilingual people can comprehend and speak to others from a variety of cultural groups, and this enhances their world. They are exposed to different values, customs, and L2 speakers' ways of looking at the world and the communities they represent (Beeman, Urow 2012).

Economy: Many positions nowadays require proficiency in more than one language. Students that come from Spanish, Russian, French, German or Italian households are seen as resources that can be valuable to the economic relations between the USA and other countries (Hilliard, Hamayan 2012).

Global: Due to the global turmoil and countries declaring war towards one another, the USA can benefit from biliterate people that can aid in instilling peace in the areas where English is not spoken. If negotiations and debates were conducted in a variety of languages, then democracy could be protected while ensuring the well-being of the people around the world (Hamayan, Freeman 2012).

Added effective benefits are envisaged by supporting everybody in the school building in order to

- Improve delivery of instruction and learning,
- Decrease the number of students who drop out,
- Develop a better partnership between parents-teachers-communities while keeping the common goal of their child's education in mind,
- Use research-based best practices,
- Bring in consultants to provide ongoing workshops that show steady and positive growth,
- and improve race relations.

3. *Professional Development. The flip-flopping of languages of instruction: to separate or not?*

Teachers need to go through rigorous training where all ELL students achieve high academic expectations. They need to be role models for and show respect, diversity, languages, ethnicity, religions and SES. Delivery of instruction should be one language at a time. Code-switching should be allowed for the students but not the teacher. Translations are not an effective method for learning L2 because the students will wait for the explanation in a language they understand and dismiss the L2.

On the one hand, it has been argued (Valenzuela 1999) that the use of each language should be strictly separated when teaching specific subjects. The more students are encouraged to use the non-English language, the more likely their proficiency in that language will be enhanced. On the other hand, there is a grow-

ing recognition of some benefits using both languages as a resource for learning (e.g. Cummins, Bismilla, Chow, Cohen, Giampapa, Leoni, Sandhu, Sastri 2005; Cummins 2007; Lyster, Collins, Ballinger 2009). The way to align these seemingly conflicting points of view is to let *the languages of learning* (used by the student) rely on and feed one another; but keep *the languages of instruction* (used by the teacher) separate (cf. Hamayan 2010).

It is important that established programs revisit their language allocation plans from time to time. While the schedule should be re-examined periodically, frequent changes are to be avoided because they can compromise program outcomes and result in teacher frustration. This is exactly what happened in the 2016-2017, 2017-2018 and 2018-2019 school years in three New York City schools (one in Queens, one in Manhattan and one in the Bronx) where the author[1] worked as a dual language professional staff developer by providing hands-on coaching, professional development and also conducted a book study with Beeman and Urow's (2012) text.

3.1 The Cognitive benefits of dual language programs and lessons learned in the trenches

According to Beeman and Urow (2012), the planning, the implementation and the coordination of a dual language program using a multifaceted and integrated approach will provide a much better delivery of the lesson, an assessment protocol, and professional development. Bilingualism provides better academic and cognitive benefits (Hakuta 1986). After all, bilingual people have more experience with the interpretation and analysis of language compared to monolingual people. Developing a high level of bilingualism allows students to become "linguists" and this provides the opportunity to compare and contrast the structure of L1, grammar and vocabulary to that of L2 (Bialystok, Hakuta 1994; Lambert 1984).

Administrators should also make sure that teachers who must coordinate with one another are given the time to do so in their schedules. This should be considered regular planning time, and it should not be disrupted by class coverage and other duties; it is essential time needed by DL teachers and coordinators to ensure the success of the program. Each pair of teachers needs at least 45 minutes of sacrosanct time built into each week's schedule dedicated to this purpose.

In the New York City schools where professional staff development was provided for three consecutive years, the weaknesses in the program were investigated and specific revisions to the curriculum were made. Data was used for this intended purpose (questionnaires, on-site professional development sessions that took place after school, co-teaching strategies, lesson plans and curriculum development for classes taught in Spanish) to provide feedback to help strengthen the program and never to punish teachers or question the legitimacy of the programs.

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[1] Dr. Buttaro.

3.2 Challenges faced by urban districts: Implementation

There is a tendency to forget that many of our students live in low-income housing, come to school hungry and may come from households where there is drug, alcohol or sexual abuse; where mom and dad have long working hours or may not be present and, on top of all of this, are also culturally and linguistically diverse (Laterneau 2001). It is worth highlighting that in 1996, the Latino population represented 11% of the USA population but this number will increase to 25% by the year 2050 (cf. Osterling 1998). In fact, migration to the U.S. is expected to increase from 2020 to 2030, from a level of 1,090,000 in 2020 to 1,450,000 in 2030 (cf. US Census Bureau).

Standardized tests cannot appropriately assess what DL students know in English or in content areas if tested in English, until at least grade 4 when they have gained enough proficiency in English. Teachers in DL programs need to gather information, both quantitative and qualitative, in a uniform way to show what their students know and can do in English and in their academic subject as they move through the grades to make a strong case for their program in the face of such testing demands.

Teachers should engage in meaningful conversations with the students and develop the role of facilitator to encourage a genuine development of higher-order thinking skills instead of memorization (Cornelius-White 2007; Klingelhofer, Schleppegrell 2016; O'Day 2009; Reznitskaya 2012).

3.3 Hiring and Recruitment of Teachers

There should be a clear and concise plan for hiring, preparing and assigning teachers to subject areas and/or grade levels. The language allocation plan should clearly describe the type of teachers who are needed at each level and what language they need to be able to teach in. It is not enough to have proficiency in only social language if you are teaching and discussing abstract academic subjects. In one of the interviews for a dual language position in one of the New York City schools, the professional development teacher[2] made sure that the following characteristics and skills were evident when helping the Principal select staff for a DL program (Freeman, Freeman, Mercuri 2004):
- A full understanding of what it means to maintain fidelity and commitment to the program
- Proficiency in all four domains of listening, speaking, reading and writing in the language of instruction
- Ability to work in cross-cultural settings
- Willingness to collaborate or team teach
- Willingness to find or develop resources
- Willingness to accept co-teaching in the classroom

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[2] Dr. Buttaro.

During the professional development, it was ensured that the experienced DL teachers were prepared to act as resources for novice DL teachers. They served as coaches or mentors, modeling in the classrooms, and providing them with feedback on their teaching as they became used to working in a DL environment.

4. *Planning Lessons*

It was noticed that both in the preparation of teachers at the university level and in the K-12 classrooms, there was still some confusion regarding the objectives. Lesson plans in DL classrooms involve double planning because teachers have to plan for both language and content learning to occur in tandem. Teachers also need to plan for two groups of students: those that learn through the use of L1 and those who learn through the use of L2. Teachers learned that they had to plan for multiple kinds of learning; in addition to the two primary sets of objectives related to language and content, there are secondary objectives related to cross-linguistic transfer; cross-cultural learning, and general learning. The breakdown is illustrated in table 1 (August, Carlo, Calderón 2002; Beeman, Urow 2012).

Table 1 – *Instructional Objectives in the DL Program*

Instructional Objectives in the Dual Language Program
Objectives   *Content objectives* that are based on state, district and school standards that apply to all students in the school or district.   *Language objectives* that include both academic and transactional (social) oral language skills and literacy.
Secondary Objectives   *Cross- linguistic transfer objectives* that teach students how to make links between their two languages.   *Cross cultural learning objectives* that promote a true understanding of a culture other than one's own and being able to function in an effective way while in it.   *General learning objectives* that are linked to study skills, learning strategies, and time management.

Content objectives should be cognitively challenging, grade and age appropriate. They should also be aligned with district and state standards. It is important to not water down the content objectives when planning for instruction for students in the DL program.

4.1 Language Input

The students immersed in L2 possess language functions such as fluency and grammar that are not nativelike. This is why formal instruction in L2 is crucial at the beginning stages of L2 acquisition. Comprehensible input is obtained by incorporating the following (cf. Larsen-Freeman, Tedick 2016):

- Speech patterns that are slower
- Speech patterns that are simplified
- Speech patterns that are repetitive
- Speech patterns that are expanded
- Speech patterns that are paraphrased
- Use gestures (TPR) and language production that are highly contextualized
- Check for understanding
- Check for confirmation
- Scaffold dialogue in order to negotiate meaning
- Interpretations of role, intent and sequence should be limited where and when possible

Likewise, integrate the following sheltered techniques:
- Enhance the visual and auditory connection by including pictures, charts, graphs and realia
- Model the use of language by letting students make connections between what is being taught and their prior knowledge
- Let students become the facilitators (practice oracy/oral language development)
- Use alternative forms of assessment, besides multiple-choice formats. Portfolios are a wonderful way for students to see their progress, and teachers can check for understanding
- Bring outside sources, supplement, complement materials, that allow comprehensible speech and the opportunity to scaffold skills to negotiate meaning and make connections between course content and prior knowledge
- Allow students to act as mediators and facilitators
- Provide comprehensible speech, scaffolding, and supplemental materials

4.2 Language Objectives

There is a distinct difference between language that is content obligatory and content compatible. This distinction was first introduced by Snow, Met, Genesee (1989). 'Content obligatory language' is language that is essential for communicating about specific topics in each academic domain, such as science or mathematics. In general, content obligatory language includes the following:

1. Specific and often technical vocabulary that is integral to the content you are teaching.
2. Sentences of grammatical patterns that are commonly used to talk about specific subjects.
3. Discourse patterns and text genres that are typical of how to talk or write about topics in different academic subjects – such as expository text characterized by reading and writing about specific topics; narrative text, which is common when writing about social studies topics, and sequential or procedural texts.

'Content compatible language' is language that is not essential for talking or learning about specific academic subjects but can be used during content lessons to expand students' vocabulary, grammar and discourse skills.

4.2.1 Academic Language

Academic language has many definitions (cf. Bailey, Butler 2002; Scarcella 2003). Chamot and O'Malley (1994: 40) define it as follows: "The language that is used by teachers and students for the purposes of acquiring new knowledge and skills … imparting new information, describing abstract ideas, and developing students' conceptual understanding". Academic language varies depending on the subject. Task production requires students to show competency in a variety of language functions. Below is a list of examples:

- To argue for or against a point of view in a persuasive way
- Compare, analyze and contrast
- Offer an argument in a logical way
- Analyze differing points of view
- Synthesize and interpret/integrate information
- Evaluate alternative points of view and factual information
- Justify a prediction, as in a science experiment on the metamorphosis of a butterfly
- Hypothesize about the causal relationship between events
- Follow or give complex directions
- Justify one's point of view/debate different points of view

4.3 Circumstances that may lead to the loss of language equity in dual language programs

Calderon (2002, 121-146) indicates that there are tendencies that diminish the opportunities for equity and success. A few of these tendencies stand out:

- DL programs where there are more books in English than in Spanish
- DL programs where English is viewed as more important than Spanish
- DL programs where more time is spent on English instruction than Spanish instruction (especially during state testing time)
- Teachers do not have the academic background to teach in Spanish
- Teachers do not have enough literacy skills to teach in Spanish
- Teachers are not offered enough days of professional development
- Lack of high literacy levels in L1 and L2 for all students
- Lack of materials in Spanish which causes teachers to translate lessons at home (this is very time consuming and ineffective as well).
- The difficulty in picking up the Spanish lesson where the English lesson leaves off and vice versa.
- Time to work on the development of rubrics and graphic organizers in Spanish.

The above tendencies are directly connected to the Spanish language since most of the Professional Development sessions and materials are always in English. In addition, getting to know your students is important since, for example, there are different regional accents and varieties of the Spanish language that the students, teachers, administrators and staff speak. This affects their history of immigration as well as their cultural backgrounds from central and South America. An effective and successful DL program needs to develop oracy (oral language skills) that offers students both structured and unstructured opportunities to develop oral language proficiency (Saunders, O'Brien 2006; Schleppegrell 2013; Montrul 2016).

5. *Assessment of Dual Language Programs*

Teachers can use formative and summative assessments to evaluate student performance. The formative assessment is an evaluation that takes place during instruction so that the instructor can adjust the instruction for students as the lesson is taking place. Summative assessment occurs at the end of the marking period, semester or year to show how students are making progress that is expected. Examples of typical summative assessments include state assessments, district assessments, end of unit tests, and so on (Cummins, Bismilla, Chow, Cohen, Giampapa, Leoni, Sandhu, Sastri 2005, 38-43).

Peer and self-assessments make learners aware of their own progress and also help the students become independent learners. Performance indicators are statements of how the students express their learning; and this is determined by their proficiency level in the language of instruction.

5.1 Authenticity of assessments and portfolio contents

It takes time to reflect authenticity of assessment, and it should be based on the classroom and outside-of-class activities like field trips. This is a joint activity that both the teachers and students work on to show academic progress while learning the new language. In the portfolios, the students can select samples of their projects to show their growth and learning throughout the year. They can have access as they observe the measurable growth while developing ownership of their projects and use rubrics to assess their knowledge of the four domains of L1 and L2. The items mentioned below can be displayed in their respective portfolios (Freeman, Freeman, Mercuri 2004):

- Narratives in both their L1 and L2
- Reading logs that show proficiency levels in L1 and L2
- Pictures/images that show their proficiency levels in their comprehension.
- A videotape/or audiotape that reflects their input and output in both 1 and L2
- Dialogue journal conferences between the teachers and the students to show progress as they are acquiring L2.

- Provide samples of good-better-best work as well as unacceptable or mediocre work so that everyone involved has an idea of how their projects will be assessed and evaluated.

5.2 Assessment of ELLs' language development: What are the common denominators in errors that show up in their four domains (Listening / Speaking/ Reading/ Writing)?

A serious concern is the rapid assessment of ELLs to measure development in L/S/R/W skills. In many schools, it is done shortly after their arrival in the USA. Research clearly indicates that it may take between 7-9 years for a student to develop English Academic skills (Collier, Thomas 2001). If ELLs are tested in L2 too soon, the standardized tests will not show a true assessment, thus undermining the students' capabilities. DL programs need to show progress for the use of L1 and L2 in an equitable way. A multiple-choice test format does not truly assess higher-order thinking skills for the 21st century (cf. Urow, Beeman 2011). These tests do not measure the language capacity in a DL class, especially if the tests are translated from English into Spanish, making them culturally and linguistically biased. Many students come from countries where open-ended questions are asked in an oral and written test. They do not have the exposure to multiple-choice test taking and do not truly represent what actually happens in the classroom on a daily basis (Arter, McTighe 2001; Oller 1997).

5.3 Strategies for understanding in DL programs

The teacher's background knowledge and how he/she explains the lesson can be an impediment or clear road to the students even if the topic or subject are different. The following techniques are useful for ELL's understanding without translating the text(s).

- Speech patterns need to be slowed down.
- Sounds need to be enunciated in a clear form.
- Do not raise your voice.
- Long and complicated sentence clauses need to be broken down into short sentences with a simplified explanation of how to do something.
- Repeat, paraphrase, and clarify any new material, or the explanation of task.
- New vocabulary needs to be emphasized by providing a visual and auditory connection (saying it and writing it on the board).
- Display an idiomatic expression chart together with the word walls in L1 and L2 plus a cognate wall. This will help students' understanding, and it will enhance the explanations for those students who are at the entering or emerging stages of second language acquisition.

Many books are available for children's literature; however, many of them are extremely difficult because of the excessive use of idiomatic expressions or unrelatable topics (such as reading about Alaska). Time is of the essence here, with one day in English and one day in Spanish; there might not be enough time to explain it all.

Other texts do not allow for the rich conversations that are necessary for oral language development or might be too simple for the students.

5.4 Literacy skills identification in L1 and instruction adjustment

Research has indicated that the higher the literacy skills are in L1, the easier it is to transfer them to English (cf. August, Hakuta 1997; Cummins 1981). In all three schools, there were cases where it was better to teach the student in L1 while in other cases, the student could receive instruction in L2. If the student's literacy levels were highly developed in L1, then the student could develop L2 literacy skills faster than the student enrolled in ESL programs only. This happens because the skills that are taught in L1 can transfer to L2 and learning in L2 (cf. August, Carlo, Calderon 2002). When L1 students are mixed with L2 students, the instructor has to make sure to avoid the typical "sink or swim" method that many were exposed to in the decade of the 1960's.

5.5 The development and teaching of literacy skills

August, McCardle, Shanahan (2014) reviewed research on effective instruction and noticed that more attention was focused on reading skills, and that the latest research with ELLs shows how the strategies mentioned below have proven to be advantageous. These work well for all L2 learners, not just ELLs.

- "Phonological awareness, phonics, vocabulary, oral reading, fluency reading comprehension and writing" (August, McCardle, Shanahan 2014, 41) need to be explicit.
- Frequent use of repetition with the variety of pitch, tone, intonation and pronunciation.
- The use of TPR to act out verbs.
- The use of pictures, images or other visual aids that illustrate the meaning of words in a variety of contexts.
- The material has to match the reading level of the students and offer proper scaffolding to support understanding.
- The interaction of the book between the teacher and the students should enhance understanding.
- Teachers need to preview the material before showing it to the students and ask questions about it.
- The use of graphic organizers also enhances students' comprehension. All three schools tried it and noticed a difference.
- Since the students need to practice the language, 80% - 90% of class time should be dedicated to students' practice of the language and teachers should speak less (this is still a challenge in all three schools).
- Since students have a variety of levels in all four domains in both L1 and L2, differentiation of instruction is crucial in order to accommodate the needs of the student.

- Homophones cause confusion; therefore, teachers need to provide explicit instruction that clarifies vocabulary and concepts. All types of visual aids should be used and the use of TPR helps to build the meaning of words. As per Baker, Lesaux, Jayanthi, Dimino, Proctor, Morris, Newman-Gonchar (2014: 3), academic vocabulary words need to be taught "intensively across several days using a variety of instructional activities".
- Rather than using a decoding approach, a better impact on reading comprehension can be obtained by emphasizing meaning. This develops background knowledge where the teacher offers a teacher-made definition of key vocabulary and uses the new terms in sentences. This is accomplished by providing extra details to the stories and more questions for the students to answer throughout the reading process.
- With writing, teachers need to model how to revise a piece. By using the keyboard instead of paper and pencil, students can improve the quality of their writing (all three schools provided computer labs for the students to use during the week).
- Baker, Lesaux, Jayanthi, Dimino, Proctor, Morris, Newman-Gonchar (2014, 3) also recommend that teachers provide "regular, structured opportunities to develop written language skills".

The problem with the dual language programs in all three schools was that they were superimposed to the structure of a monolingual class (Calderon 2001a, 2001b). A whole reform is needed because they are not remedial, they are not for students that display behavior issues in a monolingual class and then transferred to a dual language one. They do not offer a subtractive bilingual model but rather an additive one; therefore, the mindset of administration, teachers, staff and parents needs to change, and this can only take place if the whole school building and set up are reformed.

In all three schools, teachers reported the following comments: "I am afraid to elicit higher- order discussions in Spanish because I don't know enough vocabulary." Or, "If it's not in the manual, I'm afraid of asking questions in Spanish". Or "We don't have enough math books in Spanish, so we can use key terms in English and I let the students explain it to the other students." Moreover, other observations emerged, such as, spelling and grammatical errors in the teachers' comments on yellow post-it notes placed on students' work and the students' work that was posted as well. Teachers confused the s, c and z; they don't always use the accents and many of them are unaware of the rules of accentuation in speech (*aguda/grave/esdrújula* and *sobre esdrújula*). There's a big difference between *papa* (potato) and *papá* (dad); *sí (*yes) and *si* (if).

6. *The effects of the two most popular DL programs*

There are two types of DL models used; the first one is 90/10 where 90% of the instruction is offered in L1 (students' mother tongue) and 10% in L2. With each year that passes, the percentages also change, the second year 80% of the instruction is given in L1 and 20% in the students' native tongue (L2), and so on and so forth. The second model is 50/50 where 50% of the time the instruction is offered in L1 and the other 50% of the time the instruction is offered in L2. This starts in Pre-K and continues until the fifth grade. The three schools have the 50/50 model where instruction is offered completely in Spanish on day one and completely in English on day two; then, on Wednesday and Thursday, Spanish and English are taught respectively. Spanish is offered on Friday, and week two starts with English and continues with Tuesday in Spanish; Wednesday in English, Thursday in Spanish and Friday in English. Since the week has five days, the schools use this rollercoaster model to provide equity (see Tab. 2).

Table 2 – *Language distribution schedule*

Monday	*Tuesday*	*Wednesday*	*Thursday*	*Friday*
Spanish	English	Spanish	English	Spanish
English	Spanish	English	Spanish	English

Lindholm-Leary (2001) noticed the following:
- Students enrolled in the 90/10 model had higher levels of proficiency in both L1 and L2 compared to the students in the 50/50 model. The professional development teacher shared this research with all three schools but they opted to remain with the 50/50 model with alternating days.
- The students enrolled in the 90/10 model also had a higher level of proficiency in Spanish than the ones enrolled in the 50/50 model.

Although this research was shared in all three New York City Schools during professional development sessions, they opted for the 50/50 model.

6.1 The DL curriculum and linguistic justice

All parts of the Language Arts (LA) block need to be authentic and true models of language that are appropriate from age, cultural and linguistic aspects in the texts. Dual language proficiency continues to evolve and expand in the six to seven years that a child is in elementary school DL programs and preferably, throughout high school as well. We learn and use our two languages interchangeably in the context of our two cultures. Sometimes we behave according to the blended norms from both cultures. If, for some reason, students feel that the non-English language is not important, this will affect their perception and performance in the classroom and at home as well. Linguistic justice needs to be evident in both languages and both

cultures. The only way to achieve this is by having a program design and an implementation process that is strong, sustainable and solid (Calderon 2001a, 2001b).

An effective curriculum is one that has a thematic unit and revolves around the students' lives. Buttaro (2004), Crawford (1992), and Hamayan and Freeman (2012) indicate that the USA has students that come to school not speaking the language of the school (in this case, English). It is essential that instruction be embedded in authentic language that is both meaningful and interesting to students. In fact, as Filice (2002, 62) affirms, "if authentic material reflects interests of students, then learning becomes meaningful, worthwhile and enjoyable".

7. *Conclusion*

Dual language programs should do justice to both languages and cultures based on a strong program design and implementation (Calderon 2001a, 2001b). The curriculum should involve thematic units that stress issues important in the students' lives. Crandall, Stein, Nelson (2012) and Crawford (1992) remind us that the United States is only one of many nations that must deal with issues of students coming to public schools not speaking the schooling language. In particular, the United Nations has spoken directly on the rights of a minority group and its language. Consequently, dual language programs are:

- NOT subtractive. These programs promote native literacy skills and balanced bilingualism.
- NOT remedial programs. These programs are quality program designs for standards-based education while promoting proficiency in two languages.
- NOT compensatory programs. These programs educate first class students who are able to achieve at the highest levels and who are bilingual. These programs need to be at the core of school and/or district efforts.
- NOT superimposed on traditional school or district structures or on an infrastructure that was set up for an existing bilingual program. The structures need to be re-orchestrated, redesigned, and integrated to make time for and do justice to the two languages.
- NOT superimposed on existing mind sets of an "enrichment" versus a "remedial" model.

Based on the previous arguments, the design of a linguistic justice and dual language curriculum program is an urgent national claim.

Beyond the individual students, maintenance of heritage language benefits all of society in important and different ways. A multilingual workforce will make the nation more competitive economically, eliminate the shortage of foreign language teachers, and it will yield significant political, national security and diplomatic benefits. As a nation, we would be well served if the question about ELLs were reframed, away from "Why don't they just learn English?" to, "How can we develop a multilingual society that lives peacefully and cooperates economically in this inter-

dependent world?" Currently, there are many that seem to understand this concept (cf. Healy 2013). In essence, "language is the bridge between the brain and society" affirms UNESCO and as such a human right (cf. Universal Declaration of Human Rights). Indeed, "ensuring linguistic rights is about giving people the freedom to use and learn their languages and to reaffirm their own identity, dignity and participation in society" (UNESCO).

Many school districts have developed dual – language schools not only in Spanish, for its large Hispanic population, but also in Russian, Arabic, and Mandarin. Bengali and Polish are underway as well. Waitlists to get into these schools are common as parents have learned the benefits of bilingualism. The teachers, most from other countries, teach the regular subjects like mathematics, reading and social studies, while speaking only the foreign language. At first, they may use TPR and pictures and videos to communicate, but within a few months the students quickly learn to understand them. The students in these DL are graded normally and have to take the same standardized tests as their peers. Schools are not suffering from any of the deficits predicted by those that claim that bilingualism harms children. While that may still be a common theory, many have declared it bankrupt.

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