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## MESSAGE

 FROM THE EDITOR

## Welcome to the CABE 2020 conference edition of

 Multilingual Educator! As CABE celebrates its $45^{\text {th }}$ anniversary, the theme, A Perfect Vision for Multiculturalism and Multiliteracy, could not be more timely or appropriate. The cultural and linguistic diversity of California and the nation is becoming more kaleidoscope-like each year, a multi-hued pattern of complex fractals with all cultures and languages contributing to the aweinspiring beauty and intricacy of the whole, while maintaining the authenticity and autonomy of their own unique shapes and shades of color.As the socio-political climate grows more contentious, the issues more confusing, and the rhetoric more divisive, we must remain focused on our CABE Vision of "Biliteracy, Multicultural Competency \& Educational Equity for All." We cannot afford to allow our vision to soften, become muddled, or succumb to nearsightedness or astigmatism. Now is the time to be actively vigilant in our advocacy, shining an even brighter spotlight on the issues and causes that will either move our mission forward or threaten to stall its progress. As we bring our collective goals into sharper focus, it behooves us to remember the words of Joel A. Barker: "Vision without action is merely a dream. Action without vision just passes the time. Vision with action can change the world." Preserving 20-20 vision is imperative to realizing our dreams, but it is worthless if we fail to take the audacious steps required to compel that vision into action.

In this issue, you will find articles about parents, educators, and other members of the CABE community, who not only dare to dream of educational equity through multiculturalism and multiliteracy, but who also harness the passion and momentum of those dreams into actions that transport their vision into reality. These articles address a broad range of subjects from multilingualism, dual language programs, and English learners to language acceptance, translanguaging, and parent leader voices. Many address topics embedded in dual language contexts, such as Math, Science, Urban Ecology, and Special Education, as well as teacher education and professional learning.

We hope this issue leaves you inspired, energized, and informed-with a clear, laser-like focus on the action steps needed to make multiculturalism and multiliteracy a ubiquitous reality for our students and their families.

## Laurie Nesrala-Miles, Editor

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All articles (including any footnotes, references, charts, and images not included in this print version due to space constraints) are available on CABE's website: http://www.gocabe.org/index.php/communications/multilingual-educator/


# Why Dual Language Works for Everyone, PK-12 

## California bilingual educators, your time has come!

With Proposition 58 in place, California is waking up to the possibilities that Dual Language education provides for all students! We are thrilled to watch this school initiative now spreading into many states. Bilingualism is becoming popular as more and more parents demand bilingual schooling for their children. English monolingualism, encouraged in the U.S. during the 20th century and stimulated by the English-only movement of the 1980s and 1990s, is diminishing as the internet connects all humans around the planet. At the state level, governors and state boards of education are dramatically expanding the number of Dual Language schools along with financial resources for this expansion. They can justify the expenditure because graduating more proficient bilingual/biliterate students boosts state economies in the long run.

In California, when Proposition 227 attempted to eliminate transitional bilingual classes for a period of two decades, over 400 schools continued to offer bilingual classes by drawing on the support from English-speaking parents to apply for waivers to offer "two-way" bilingual classes that included native English speakers. This determination on the part of English-speaking parents illustrates the popularity of these types of schools. Now the challenge for California educators is to make sure that all English Learners are enrolled in Dual Language, and that other underserved groups, such as Latinos proficient in English,


By
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African American students, and students of low socioeconomic background, be given the opportunity to attend Dual Language classes. In this article we'll show you why.

Program names. What are we talking about when we use the term "Dual Language" and how does it differ from transitional bilingual classes? In California, names for this program vary, so to clarify, when we talk about "Dual Language education," California educators may call this type of schooling through two languages "Dual Immersion," "bilingual immersion," or "two-way bilingual immersion." In this article we're using a shorter name, "Dual Language (DL)," to refer to all of these models of bilingual schooling, and we're contrasting DL with the older program for English Learners called "Transitional Bilingual Education (TBE)" that existed in California prior to Proposition 227.

DL compared to TBE. Dual Language education was initially started in a few U.S. schools in the 1960s but over the last half-century it has evolved dramatically. TBE was a remedial program. DL is a mainstream enrichment program-the standard grade-level curriculum is taught through two languages. TBE was only for English Learners. DL is for everyone, including English Learners. TBE was provided for only a few years. DL starts in preschool or transitional kindergarten and grows grade-bygrade each year, until it is implemented in all grades PK-12. The ultimate goal for students attending TBE classes was English
proficiency, resulting in loss of first language. DL graduates are proficient bilinguals, prepared to use their biliteracy in their professions. Longitudinal research on TBE found that English Learners only closed half of the achievement gap in English. Longitudinal research findings on DL show that by the middleschool years all DL student groups reach grade level and above in two languages (English Learners, native English Speakers, students from poverty, all ethnic groups) (Collier \& Thomas, 2017).

Benefits for DL students. DL is not a separate, segregated program only for English Learners. All students work together, teaching each other, benefiting from cooperative learning activities in pairs, small groups, and learning centers. DL students are happier, more engaged with instruction, more confident, attend school more regularly, and their high school graduation rates are dramatically higher than for students not attending DL classes (Collier \& Thomas, 2018; Lindholm-Leary, 2001; Thomas \& Collier, 2012, 2014). DL is exciting, stimulating, and fun!

DL teachers rule! What kind of teaching innovations have emerged in DL classrooms? DL is so powerful that it is changing teaching practices for all teachers, because research shows it works for all students, including at-risk groups. DL teachers must teach very heterogeneous groups of students-of different socioeconomic backgrounds, ethnicities, and varying proficiency levels in the language of instruction, as well as varying amounts of prior schooling. To manage all these diverse student needs, DL teachers must use many varied strategies based on cooperative learning, with teachers modeling routines and procedures in the process of guiding new curricular experiences, and providing clues to meaning through mime, gestures, pictures, word charts, chants, music, movement, graphic organizers, and much more. As the lesson moves on, peer teaching among students in pairs and small groups then stimulates cognitive development through collaborative problem-solving and critical thinking across the curriculum (Collier \& Thomas, 2009, 2012).

Many DL classes are team taught, with each teacher providing instruction in one language, and the two teachers exchanging their two classes. Team teaching requires coordination and planning, but two heads are better than one for developing innovative teaching strategies and problemsolving regarding individual student needs. Some DL classes are self-contained with one deeply proficient bilingual teacher providing instruction in the two languages, but not translating or code switching, unless that is the specific object of a lesson. For elementary schools, amount of instructional time in each language is designated by the program model chosen by the DL
school (90:10, 80:20, 50:50), and these variations can influence the choice of either sequential or simultaneous biliteracy development. Secondary DL classes are planned by offering core curricular courses and electives taught in the non-English (partner) language, along with ELD content courses for the newly arriving immigrants.

In our North Carolina research, we conducted interviews with principals that confirmed our surprising data-analytic findings regarding DL teaching practices. These types of second language teaching strategies developed by DL teachers are powerful, not only for the English Learners, but also for other students who in the past had not done well in school. Professional development opportunities in DL schools now help monolingual English teachers to master more varied teaching strategies based on DL teaching innovations, to serve all learners' diverse needs (Thomas \& Collier, 2014, 2017).

DL administrative reforms. Since DL is the mainstream curriculum, teaching all subjects through both languages over each two-year period (e.g., if math is taught in English this year, next year math should be taught in the partner language), this reform pushes all central office curricular heads into collaboration and shared financing. Textbooks in each subject area must be chosen thoughtfully, so that the curricular materials in the partner language are cross-culturally appropriate, authentic, and match the curricular goals of the grade for the subject being taught. Also financial and logistical support should be provided by all departments-to hire highquality, certified bilingual staff, to secure library resources in the partner language, and to provide DL professional development for teachers and administrators. Uniting all administrative divisions also requires collaboration across elementary, middle, and high schools, because all K-12 educators contribute to DL students' long-term success. This can occur only when the superintendent, chief academic officer, school board members, and principals fully understand and support the DL program.

Extending DL to secondary. DL courses need to continue into the feeder middle and high schools for many reasons. Our longitudinal research shows that it takes groups an average of six years to reach grade-level achievement in their second language (Collier \& Thomas, 2009). Some students get there in a shorter amount of time and others take longer. Extending the DL program into middle school gives all students the opportunity to catch up to grade level in their second language and to excel in their first language. Proficient bilinguals usually outscore monolinguals on any test you give them in either language, so once the DL students reach grade-level achievement, they
typically outscore native speakers by as much as one or two grades. Principals of DL middle and high schools watch their scores go up as increasing numbers of students who attended the DL elementary program reach secondary school. This success should help to address concerns about accountability. DL is clearly a win-win for students, teachers, and administrators.

Most important, though, is that the DL secondary courses are where newly arriving immigrants belong when the DL partner language is their native language. Courses taught in the partner language allow the new arrivals to catch up and keep up with schoolwork while they are acquiring English through the ELD content courses, taught by ELD faculty who are part of the DL program. We have some astonishing stories of student success for young people arriving in the U.S. at secondary level in our book on secondary DL (Collier \& Thomas, 2018). Since bilingually schooled students are high achievers, DL students should be offered many core courses for AP credit in the partner language, as well as popular electives. DL high school programs lead to high graduation rates, big reductions in dropouts and misbehavior, and no more Long-Term English Learners.

The Biliteracy Seal. Congratulations, California bilingual educators! You started this in 2011! Since then, state by state, the Biliteracy Seal has become so popular that as of August 2019, 37 states have approved a Biliteracy Seal and 12 more states are working on developing the Seal. This credential added to a student's high school diploma helps DL students gain admission and scholarships to four-year universities, professional credibility, and higher salaries in their professional lives.

Languages of DL programs. Since Spanish is the primary language of 77 percent of English Learners in the U.S., SpanishEnglish programs are quite popular. Spanish is the second largest language of the world after Mandarin as defined by number of native speakers. The U.S. now has the second largest number of Spanish speakers in the world, after Mexico. There are also DL programs in the U.S. taught in English and Arabic, Armenian, Bengali, Cantonese, Filipino, French, German, Greek, Haitian-Creole, Hebrew, Hmong, Italian, Japanese, Khmer, Korean, Mandarin Chinese, Polish, Portuguese, Russian, Ukrainian, Urdu, and Vietnamese, and the list is growing every year. In addition, DL programs are provided in the following indigenous languages of the U.S.: Arapahoe, Cherokee, Crow, Diné (Navajo), Hoopa, Inupiaq, Keres, Lakota, Nahuatl, Ojibwe, Passamaquoddy, Shoshone, Ute, and Yurok (U.S. Department of Education, 2015; Center for Applied Linguistics, 2017).

DL works for everyone! You can see that DL is popular, and it's expanding throughout the U.S. On the website www.duallanguageschools.org, as of this writing, 2208 DL schools have registered in 43 states, and there are many more developing every year. In our research in North Carolina and Texas, we have found that African American students benefit dramatically from attending DL classes, scoring as much as two grades above grade level by the middle-school years (Thomas \& Collier, 2002, 2014). In our North Carolina research, DL students with learning disabilities, autism, and other categories of special need scored significantly higher than their peers with special needs not in DL. It does not harm these students to study through two languages-they benefit! Native English Speakers, new immigrants, English Learners, Latinos, Asians, indigenous groups, students of low socioeconomic status-all students thrive in DL enrichment classes. $\boldsymbol{\propto}$

References to consider: We suggest that your superintendent, school board members, and central administrative staff check out our short book, Why Dual Language Schooling (Thomas \& Collier, 2017; 2019 edition in Spanish). This is also a good book for convincing bilingual families to enroll their children in DL classes. Educators should ensure that newly arriving immigrants who are speakers of the DL partner language understand the importance of the program so that their children can continue to keep up or catch up to grade level in their native language while they also acquire English. The research shows that in DL classes their children will develop deeper proficiency in English than in a monolingual English program.

For details on well-implemented DL programs, see Thomas \& Collier (2017), as well as our series of five books on DL, three of which have editions in Spanish. Collier \& Thomas (2014) is written by and for DL principals, and Collier \& Thomas (2018) provides the passionate voices of 19 contributing authors who are experienced secondary DL educators.

References are available in the online version: https://www.gocabe.org/index.php/communications/multilingual-educator/

Editor's note: We invite you to check out CABE's Dual Language Immersion Planning Guide at https://di.gocabe.org.

## "ICAN SHOW YOU THATIAM SOMETHING"

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The title of this article comes from a presentation made by ninth-grade student Kanta Khalid in October 2005 at the Ontario Teachers of English as a Second Language (TESL) conference in Toronto, Canada. Kanta discussed the Dual Language story, entitled The New Country, that she and her friends, Sulmana, and Madiha, had written and published online two years previously under the guidance of their teacher, Lisa Leoni. In many presentations during the past 15 years, I have quoted the insights of Kanta and her classmates because they speak directly to the essence of effective teaching of multilingual students. In a nutshell, effective teaching of multilingual students requires more than simply instructional support for learning English. This instructional support is obviously important. There is a large degree of consensus that teachers should be familiar with instructional strategies for scaffolding students' access to curriculum content and should be committed to reinforcing academic language across the curriculum. However, effective teaching of multilingual students also requires a sustained and simultaneous focus on:

- enabling students to engage actively with literacy from their earliest experiences of schooling;
- affirming students' identities by enabling them to use their multilingual language and literacy skills to carry out powerful intellectual and creative academic work.

These claims are based on the fact that most multilingual students in the United States experience opportunity gaps associated both with low socioeconomic status (SES) and the effects of societal discrimination and/or racism directed at their communities. Thus, effective instruction requires that teachers implement evidence-based strategies to "push back" the effects of poverty and racism, in addition to supporting the learning of English language and literacy skills.

The academic benefits of encouraging students to engage actively with literacy and use their entire multilingual repertoire can be illustrated in the 20-page English-Urdu story, The New Country, written by Kanta, Sulmana, and Madiha (See Figure 1 in online version or go to http://multiliteracies.ca/index.php/folio/ viewProject/8.)

## Affirming Identity through Multilingual Literacy Engagement: A Concrete Example

Both Kanta and Sulmana had arrived in Toronto in fourth grade and were reasonably fluent in English, but Madiha was in the very early stages of acquisition. In a typical English-Only classroom, Madiha's ability to participate in a seventh-grade social studies unit on the theme of immigration would have been severely limited by her minimal knowledge of English. She certainly would not have been in a position to write extensively in English about her experiences, ideas, and insights. However, when the social structure of the classroom was changed in very simple ways that permitted her to collaborate with her friends and draw on her first language L 1 knowledge and literacy, Madiha was enabled to express herself in ways that few English Learners experience. Her L1, in which all her experience prior to immigration was encoded, became once again a tool for learning. She contributed her ideas and experiences to the story, participated in discussions about how to translate vocabulary and expressions from Urdu to English and from English to Urdu, and shared in the affirmation that all three students experienced with the publication of their story, both as a printed book and online. This affirmation was powerfully expressed by Kanta in her presentation to educators at the TESL conference:

When I came here in Grade 4 the teachers didn't know what I was capable of. I was given a pack of crayons and a coloring book and told to get on coloring with it. And after, I felt so bad about that-I'm capable of doing much more than just that. I have my own inner skills to show the world than just coloring and I felt that those skills of mine are important also. So, when we started writing the book [The New Country], I could actually show the world that I am something instead of just coloring. And that's how it helped me, and it made me so proud of myself that I am actually capable of doing something, and here today lat the Ontario TESL conferencel I am actually doing something. I'm not just a coloring person-I can show you that I am something.
(Leoni et al., 2011, 50)

Kanta's account illustrates the major themes of this paper. Multilingual students' academic performance will be enhanced when teachers enable students to use their entire multilingual repertoire to engage actively and creatively with literacy in ways that affirm their personal and academic identities. The more formal theoretical framework that embodies this claim is outlined in the next section.

## Implementing Evidence-Based Multilingual Instruction

A first step in thinking about educational policies and pedagogical practices that might be effective in reversing patterns of underachievement among minoritized multilingual students is to examine the research evidence regarding causes of underachievement. (See Table 1 in online version of article). Three sources of potential educational disadvantage can be identified (excluding special education needs):

- Home-school language switch requiring students to learn academic content through a new language;
- Low socioeconomic status (SES) associated with low family income and/or low levels of parental education;
- Marginalized group status deriving from discrimination and/or racism in the wider society.
Some communities in the United States are characterized by all three risk factors (e.g., many Latinx students). In other cases, only one risk factor may be operating (e.g., middle-class African American students, high-SES white European-background students learning English as an additional language). These three risk factors become realized as actual educational disadvantage only when the school fails to respond appropriately or reinforces the negative impact of the broader social factors.

Home-School Language Switch. The following approaches respond to the potential disadvantage of having to learn at school in a language different than the one spoken at home and can reverse patterns of underachievement.

Scaffold meaning. The term "scaffolding" refers to the ways in which teachers provide additional supports to help multilingual students understand instruction and engage actively in learning. Scaffolding strategies include the following:

- Graphic organizers such as Venn diagrams, flow charts, etc.
- Visuals in texts such as photographs, drawings, diagrams, video clips, etc.
- Demonstrations such as modeling for students how to make sense of a text while reading.
- Hands-on experiences such as science experiments.
- Collaborative group work such as completing a graphic organizer.
- Encouraging L1 use, for example, writing initially in L1 as a means of transferring knowledge and skills from L1 to L2.
- Learning strategies such as planning tasks, visualization, grouping/classifying, note-taking/summarizing, questioning for clarification, etc.
- Language clarification through teacher explanations, providing examples, dictionary use, etc.

Reinforce academic language across the curriculum. The language of textbooks and classroom instruction is very different than the language we use in everyday conversation. Academic language includes far more low-frequency words (e.g., photosynthesis, hypothesis, prediction, etc.) as well as grammatical constructions (e.g., the passive voice) that we almost never use in casual everyday interactions. Research carried out in several countries, including Canada, Israel, and the United States, shows that although multilingual students may acquire reasonable fluency in using the school language for everyday conversational interactions within about two years of exposure, it typically requires at least five years (and frequently longer) for students to catch up academically. A major reason for this is that they are catching up to a moving target-students who are native speakers of the school language are increasing their literacy and general academic skills every year and thus multilingual students must "run faster" in order to bridge the gap. Students' progress will be accelerated when all teachers systematically draw students' attention to language and take every opportunity to deepen their knowledge of the school language across curriculum subjects.

Engage students' multilingual repertoires. Extensive research has demonstrated both the positive outcomes of bilingual programs for minoritized students and strong relationships between students' L1 conceptual development and their level of attainment in the school language (e.g., Cummins, 2001; National Academies of Sciences, Engineering, and Medicine, 2017). In recent years, a wide variety of collaborative projects involving educators and researchers have also demonstrated that multilingual students' L1 can play a significant positive role in promoting achievement even in contexts where many languages are represented in the classroom and the teacher does not speak these languages (Cummins \& Early, 2011; García \& Kleyn, 2016).

Low Socioeconomic Status. Some of the sources of potential educational disadvantage associated with SES are beyond the capacity of individual schools to address (e.g., housing segregation and overcrowding) but the potential negative effects of other factors can be partially reversed by school policies and instructional practices. In this regard, extensive research suggests that the role of literacy engagement is crucial. Students from economically disadvantaged backgrounds experience significantly less access to print and opportunities to engage with literacy in their homes, schools, and neighborhoods than students from more advantaged backgrounds (Duke, 2000). An obvious reason for limited print access in children's homes is that parents who are experiencing economic difficulties don't have the money to buy books and other cultural resources (e.g., smartphones, tablet computers) and some may not have had opportunities to become literate in their own languages. Research from around the world has demonstrated a causal relationship between literacy engagement and literacy achievement (Krashen, 2004). In fact, the extensive research of the Organisation for Economic Co-operation and Development (OECD, 2010) suggests that schools could "push back" about one-third of the negative effects of social disadvantage by ensuring that students from low socioeconomic backgrounds become actively engaged with reading and other literacy activities from an early age.

Teachers can promote a culture of literacy engagement in their schools by implementing the following strategies:

- Ensure that schools serving multilingual students from socially disadvantaged backgrounds have well-stocked libraries, ideally including books in relevant community languages that students can take home to read with their parents and/or siblings;
- In the preschool and early grades of elementary school, read and dramatize engaging stories to students on a daily basis;
- Create a community of readers within the classroom where students discuss fictional and non-fictional books, connect the ideas to their own lives and interests, and explore the deeper meanings of what they are reading;
- Encourage students to write in a variety of genres and display examples of students' writing in English and their L1 prominently throughout the school.

Marginalized Group Status. Research carried out since the 1960s has documented the chronic underachievement of groups that have experienced systematic long-term discrimination in the wider society (e.g., indigenous communities around the world). The effects of constant devaluation of the culture and identities of marginalized social groups is illustrated in the well-documented phenomenon of stereotype threat (Steele, 1997). Stereotype threat refers to the deterioration of people's ability to carry out cognitive tasks in contexts where negative stereotypes about their social group are communicated to them.

How can schools counteract the negative effects of societal power relations that devalue the identities of students from marginalized social groups? Gloria Ladson-Billings (1994) expressed the essence
of an effective instructional response: "When students are treated as competent they are likely to demonstrate competence" $(1994,123)$. In other words, educators, both individually and collectively, must challenge the devaluation of students' language, culture, and identity in the wider society by implementing instructional strategies that enable students to develop "identities of competence" (Manyak, 2004) in the school context. These "culturally sustaining pedagogies" (Paris \& Alim, 2017) will communicate high expectations to students regarding their ability to succeed academically and support them in meeting these academic demands by affirming their identities and connecting curriculum to their lives.

## Conclusion

The sources of minoritized multilingual students' underachievement go far beyond the challenge of learning English language and literacy skills. Teachers, individually and collectively, must also respond to the constriction of students' opportunities to learn brought about by economic exclusion and societal discrimination. For me, the most significant message to emerge from the extensive body of recent research carried out by teachers and university researchers working collaboratively is that teachers can challenge identity devaluation and at least some of the effects of socioeconomic disadvantage. This research (e.g., Cummins \& Early, 2011; García \& Kleyn, 2016; Isola \& Cummins, 2019; Paris \& Alim, 2017) has documented powerful and inspirational instructional approaches that promote identities of competence and confidence among multilingual students. ©

Table 1, Figure 1 and References are available at the end of this online version of the magazine: https://www.gocabe. org/index.php/ communications/multilingual-educator/


> Transforming Sanchez School

Shared Leadership, Equity, and Evidence


RAYMONII K. ISOLA - JHM CUMMINS

## It takes a village ...

Transforming Sanchez School is a story of school leadershipshared among the principal, teachers, paraprofessionals, students, parents, and community members. The evidencebased innovations implemented at Sanchez over a 13-year period increased student, parent, teacher, and community engagement, and dramatically improved test scores.

Raymond Isola (the principal) and Jim Cummins (a researcher) illustrate how collaborative teams at Sanchez use a results-oriented cycle of inquiry to guide their work.

> This book will be a useful resource and a helpful guide to educators who genuinely seek to make a difference.

-Pedro A. Noguera, Center for the Transformation of Schools

## Don't miss the authors at CABE 2020

Jim Cummins as a Keynote Speaker and Raymond Isola as a Featured Speaker with a book signing to follow.

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At high school graduation ceremonies across California, families and educators recognize and congratulate students for their years of academic achievements. In recent years, young people's accomplishments in the area of language and literacy have been newly celebrated. In California, 418,205 students earned high school diplomas in 2017-18, and 47,248 of those students graduated with a State Seal of Biliteracy, a distinction that recognizes proficiency in English and one or more other languages.

## The State Seal of Biliteracy

In 2008, Californians Together spearheaded a campaign aimed at statewide adoption of a Seal of Biliteracy. Four years later in 2012, the State of California officially adopted its State Seal of Biliteracy. Thus far, 321 school districts have adopted the State Seal of Biliteracy and encourage students to become proficient in two or more languages.

"I come from Guatemala and learning a different language is very hard. The Seal of Biliteracy means I knocked down those barriers. I have achieved something that I actually never thought possible. It is such a privilege to be able to speak both languages."

- Tanya Lopez, Azusa Unified 2019 graduate with acceptance to the Torrey Honors Institute at Biola University

California's adoption of the State Seal of Biliteracy was a remarkable triumph considering the previous 18 years in which English Only instruction was legislated. That triumph was made possible by changing public and political attitudes toward multilingual education. The passage of Proposition 58 in 2016, which repealed restrictions on bilingual education, demonstrated the evolution in attitudes and the demand for access to multilingual programs in California. Proposition 58 paved the way for the development and adoption of a new statewide English Learner policy, The English Learner Roadmap. The EL Roadmap, adopted in 2017, is a policy that supports and guides districts and schools to offer comprehensive assets-based programs, including those leading to biliteracy.

## State Seal of Biliteracy Recipients

## English Only (EO) and Heritage Language (HL) Students

In 2017-18, 37\% of all Seal of Biliteracy recipients spoke only English upon school entry. They were initially English Only (EO) students who became bilingual. The remaining $63 \%$ had a language background other than English at the start of their education. They were Heritage Language (HL) students and became fluent in English and another language.


## Heritage Language Students as Seal of Biliteracy Recipients

When considering just the Heritage Language graduates, $48 \%$ of all the Seal of Biliteracy recipients were once English Learners (ELs) who were reclassified as Fluent English Proficient (RFEP), 14\% were Initial Fluent English Proficient (IFEP) students who were bilingual when entering school, and 1\% were English Learners on the cusp of reclassification. Mastering fluency in one of the 41 different languages these students spoke including American Sign Language, is a tremendous accomplishment for any student, whether English Only or Heritage Language. We celebrate all students who achieve proficiency in two or more languages, especially students who walked into their classrooms not knowing one word of English.

## Potential Seal of Biliteracy Recipients

There is a need to support and encourage many more students to qualify for the State Seal of Biliteracy. The table below shows the numbers of 2017-18 12th grade students in each language proficiency category, the numbers who earned the State Seal of Biliteracy, and their percentage of the 12 th grade class.

Students who come to school in California with a language background other than English have the basis for proficiency in English and their heritage language. The table above shows that there is great potential for large increases in the percentages of HL students to become bilingual and receive Seals-EO students as well. The simple math is that with access to multilingual programs, many more RFEPs, IFEPs, and EOs could become bilingual each year.

| Praficiency Category | Total Twelfth Grade Enroltment [1] | \% of Twelfth Grade Enrollment | Seal of Biliteracy Recipients (2) | Seal of Biliteracy Reciplents \% of 12 th grade Enrollment |
| :---: | :---: | :---: | :---: | :---: |
| RFEP | 14,0,875 | 28.8\% | 22,964 | 16.3\% |
| IFEP | 34.934 | 7.1\% | 6.557 | 18.8\% |
| English Learners | 49.869 | 10.2\% | 508 | 1.01\% |
| English Only Students | 263.319 | 53.8\% | 17.317 | 6.6\% |
| TOTAL | 489,221 | 99.9\% | 47.248 | 9.66\% |

[^0]
## Number of School Districts Offering the State Seal of Biliteracy

Out of the 420 school districts in California eligible to offer the Seal of Biliteracy, 321 districts are participating. It is hoped that the remaining 99 districts will adopt the Seal of Biliteracy and provide access for all students across the entire State of California.

California is rewriting our state's language history by supporting all students to reach multi-language proficiency, and Heritage Language students to maintain and enhance literacy in their native language.


I am the first generation in my family to receive a high school diploma and go to college. Like most immigrant families, none of my family members are fluent in English. This is why I embrace the value of maintaining proficiency in my home language: to interact with my family members and have a closer connection with my home culture. Because I'm able to communicate with my family, I have learned more about my roots and heritage. Knowing well about my culture, I'm able to raise cultural awareness in my community and able to build selfconfidence. I'm proud of and embrace my heritage, where I come from, our unique culture, and most importantly, my identity."


- Thao Vy Le, Magnolia High School 2019 graduate and merit scholarship recipient


## Global California 2030: A State Initiative

In May 2018, the California Department of Education launched Global California 2030. The initiative's purpose is to equip students with world language skills that will enable them to more fully engage with and better appreciate the rich and diverse mixture of cultures, heritages, and languages in California. This initiative calls for more than tripling the number of students earning the Seal of Biliteracy, to 150,000 graduates by 2030.

## Benefits of Bilingualism

Speaking two or more languages has proven cognitive, social, and economic benefits. Bilingual students have the ability to retain and manipulate varying pieces of information, do better academically in English and their home language, have better college-going and completion rates, are preferred by employers, and for Heritage Language students, maintain strong connections to their family members, language, and culture. These students are our future bilingual teachers, doctors, government employees, and artists.

##  47,248 in 2018 <br> in 2030

## Conclusion

California is moving toward multilingualism for all students. The rapid increase in the number of local educational agencies adopting the Seal of Biliteracy and the number of students qualifying for that designation is heartening. The state adoption of the EL Roadmap and Global California 2030 provides the framework for further work in elevating programs for English Only and Heritage Language speakers and supports the vision of a multilingual state which benefits both students and the state as a whole.

## Recommendations for a Seal of Biliteracy Campaign:

- Encourage 100\% of California's school districts to adopt the State Seal of Biliteracy.
- Have up-to-date lists of county offices, districts, and charter schools that have adopted the Seal of Biliteracy.
- Track and report the demographics of students who receive Seals of Biliteracy.
- Expand resources for districts, schools, and classrooms to fully implement the English Learner Roadmap including multilingual programs leading to eligibility for the Seal of Biliteracy.
- Keep the focus on Global California 2030's goals by reporting widely on the status of goal attainment annually.
- Publish and distribute informational materials for students in the lower grades to motivate them to develop proficiency in English and another language leading to recognition with the State Seal of Biliteracy.
- Develop a multilingual communications campaign to encourage parents of English Learners to learn about the State Seal of Biliteracy and the importance and benefits of enrolling their children in multilingual programs to eventually qualify for this recognition. ©
"I aspire to become a pediatrician. Being bilingual will allow me to diminish the language barrier that often exists between patients and physicians. I hope to administer the best possible care for patients that do not speak English and better connect with them and their families by being proficient in a language they are comfortable with."
- Karina Moreno, Anaheim High School and former K-12 Dual Language Learner program student

For more information on implementation of the State Seal of Biliteracy, go to the California Department of Education (https://www.cde.ca.gov/sp/el/er/sealofbiliteracy.asp) and our Seal of Biliteracy website (www.sealofbiliteracy.org), or visit us at:

# FOR EDUCATORS IN CALIFORNIA THE "MAIN THING" IS ENGLISH LEARNERS 

## "THE MAIN THING IS TO KEEP THE MAIN THING THE MAIN THING."

- Stephen Covey, The Seven Habits of Highly Effective People

English Learners (ELs) represent a growing part of the U.S. student body, and California, with its large concentration of ELs, is beginning to make ELs the "main thing." In recent years, the state's political and educational landscape has been shifting rapidly with an everincreasing drumbeat calling educators to focus intently on all language learners, especially ELs. With the 2014 release of the English Language Arts/English Language Development (ELA/ELD) Framework, the California Department of Education (CDE) placed a stake in the ground: no longer will ELs be an afterthought. The Framework paints a clear picture of culturally responsive schooling based on sound research, in which all students thrive. The ELA/ELD Framework goes far beyond describing instruction and endeavors to illuminate all facets of the education system that must shift to ensure that "all California learners benefit optimally and achieve their highest potential" (CDE 2014, 2). Furthermore, the Framework boldly lays claim to the research supporting the value of biliteracy, both for individual students and the state as a whole. Just two years after the release of the Framework, California voters


By
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Anya Hurwitz, Ed.D. Martha I. Martínez, Ph.D. SEAL (Sobrato Early Academic Language)
followed suit, overwhelmingly passing Proposition 58. The new law not only rescinds the ban on bilingual education that had been in place for almost 20 years; it also encourages districts to create Dual Language Immersion programs for both native and non-native English Speakers, and it provides parents with additional leverage to insist that districts establish these programs for their children in schools where they don't currently exist.

With this clear mandate from voters, the ELA/ELD Framework, and the growing research on effective literacy practices for ELs, the State Board of Education adopted the California English Learner Roadmap into policy in 2017. The EL Roadmap articulates a vision for EL education focused on four principles: (1) assets-oriented and needs-responsive schools; (2) intellectual quality of instruction and meaningful access; (3) system conditions that support effectiveness; and (4) alignment and articulation within and across systems. These new policies have created a clear sense of urgency around ELs and a heavy lift for California. For many years, SEAL (Sobrato Early Academic Language) has been advocating for a new vision and service-delivery model for ELs and demonstrating that, through a focused systems-approach to professional learning, achieving this vision is possible!

SEAL is a comprehensive educational model that prioritizes the needs of Dual Language Learners (DLLs) and ELs, working
to create aligned, culturally-responsive, and effective schooling for these students from preschool through the elementary grades. The model (which currently operates in over 130 preschools, 100 elementary schools, and 20 school districts throughout California) focuses on language development in and through all content areas, within bilingual and English-Only contexts. SEAL is committed to the beliefs that all children are linguistic geniuses, and that enacting assets-based teaching and learning for ELs is an issue of equity. The SEAL approach focuses on sustained, job-embedded, system-wide professional development which includes coaching and reflection, and involves not only teachers, but principals and district leaders as well. Now that we are a few years into this work, three themes have emerged that run in and through all of the policy, politics, and research related to EL education. These central tenets not only make ELs the "main thing," but also do the right thing by ELs.

## THREE CENTRAL TENETS

## 1. Language and culture have relevance.

The research is clear: language and culture have relevance to the education of ELs. The ELA/ELD Framework repeatedly emphasizes the need for an asset-based approach, highlights the research behind this, and describes a context for learning that is respectful and reflective of students' identities and languages. By building on background knowledge and experiences gained in the home and community,

teachers can foster the development of academic English, and simultaneously promote positive self-image and respect for different cultures and languages (Au 2009; Hollins 2012; Hooks 1994; Irvine and Armento 2001, as cited in CDE 2014). The critical nature of culturally responsive pedagogy is echoed in Principle \#1 of the EL Roadmap: Assets-Oriented and NeedsResponsive Schools.

Teachers of DLLs and ELs must understand that a student's primary language is an asset and a powerful tool to be leveraged to deepen their English proficiency. These students should be encouraged to tap into what they know by comparing and contrasting their home language to English to learn how English works. In addition, all children, including DLLs and ELs, need to see themselves reflected in the classroom-in the books they read, on the walls, and in the curriculum. An intentional approach to reflecting their cultures and languages gives children the opportunity to continuously expand their understanding of the world around them.

## In the words of a SEAL preschool administrator:

SEAL has brought to light something that we had possibly pushed back a few years ago, or even until recent history-to value the culture of the student and their families. We want to make sure that our students value not only their culture, but find value in other cultures. So, we're tapping into that social justice portion of our students.

- Maribel Zuniga, preschool program coordinator, Los Angeles USD

Regardless of the content area, as teachers plan instruction it is of the utmost importance that they design lessons and units with the students' identities and experiences at the forefront. This is why we emphasize "relevance"—a now ubiquitous term in education often overshadowed by "rigor." To effectively engage students with the content we must consider what it means for them in their lived experiences, and search for opportunities to connect their learning to their primary languages, in order to optimize learning the content while simultaneously strengthening their English language skills.

## 2. Language develops in and through content.

For English Learners, a traditionally marginalized population, access to the full curriculum is a civil rights issue. For far too long, students who aren't proficient in English have been denied grade-level science, social sciences, and mathematics content, based on the unsubstantiated claim that English proficiency was required before students could learn these content areas, by inadequate preparation regarding how to effectively teach ELs, and by California's bilingual education ban. As a result, generations of students have entered middle school and high school unprepared, often leading them to drop out prior to graduation (Callahan 2013).

The Common Core Standards make clear that language develops in and throughout all content areas. The adoption of these standards, California's corresponding ELD Standards, as well as a new set of Next Generation Science Standards, highlights the tightly
interconnected nature of developing disciplinary content understandings, analytical practices, and academic uses of language for all students. The educational system must move away from remediation of students' English language skills to simultaneous development of their language and literacy skills while engaging in the full range of academic content learning. Thus, teachers no longer teach just science or math or language arts; rather, they are teaching the complex academic language structures required to engage in the various disciplines.

En las palabras de una maestra de SEAL [English translation below]: SEAL construye sueños porque nuestros estudiantes están siendo expuestos a mucha información la cual es académicamente bastante alta para su edad, pero ellos están absorbiendo todo ese conocimiento y [están] motivados a seguir aprendiendo. Quieren más. Ya son pequeños científicos, pequeños historiadores, y si continúan por ese camino, lo serán.

## In the words of a SEAL teacher:

SEAL builds dreams because our students are being exposed to a lot of information that for their age is academically quite high, but they are absorbing all that knowledge and are motivated to continue learning. They want more. They are already little scientists, little historians, and if they continue down this path, they will become that.

- Nuria Godcharles, first grade teacher, Redwood City School District


Instead of memorizing lists of vocabulary or discrete grammar rules, children learn language in the context of the content, thereby deepening their proficiency in both language and content. Teachers anticipate the needs of their DLLs/ELs and scaffold them into lessons by preloading language structures. During instruction, they remain vigilant, looking for opportunities to deepen their students' use of language, providing just-in-time ELD instruction or follow-up support to solidify learning. Teaching in this way-an assetsbased approach that leverages the primary language while deepening language proficiency in and through content areas-is sophisticated and complex. Teachers typically do not receive the kind of professional training that prepares them to meet these demands. Moreover, teachers are part of a larger school system that also needs to evolve in order to create learning environments for DLLs and ELs that are culturally and linguistically responsive, as well as academically rigorous.

## 3. Real change happens at the systems <br> level.

Research clearly identifies the need for systems-level change in order to seed, implement, and sustain comprehensive educational reform (Datnow, Borman, Stringfield, Overman, \& Castellano 2003; Rowan \& Miller 2007). What has become clear through SEAL's mission to improve educational learning conditions and outcomes for English Learners is that change must occur at the systems level. This is not a school issue, teacher issue, student issue, or family issue. It is a systems issue wherein all the parts need to move in the same direction with clear purpose and intentional outcomes designed to centralize language learners within the system.

Indeed, teachers must engage in high-quality professional learning. And, so too, must those who support teachersthe site and district administrators. While teachers require development in researchbased strategies and best practices, administrators must understand how to support teachers in this endeavor. This includes reducing competing initiatives, providing resources and time for teacher collaboration and curriculum development, and creating articulation and alignment across grade levels and school sites. Teachers also need coaching and mentoring, and administrators must provide the requisite resources for the kind of deep, authentic learning that comes from this critical practice. Coaching provides the opportunity for active learning and application. Instructional coaches provide coherence and ensure teachers are able to make meaning from their professional learning experiences.

Teachers, administrators, and coaches must also work to align their practices by engaging in peer observation for the sake of learning, not evaluation. These peer observations can take the form of instructional rounds or Learning Walks (Education World, n.d.), which provide opportunities for the kind of collective participation necessary to hone systems and craft. SEAL recognizes the power of peer observations. SEAL teachers, coaches, administrators, and trainers regularly participate in classroom observations over multiple years. Observers examine instruction and environment through multiple research-based lenses. Visits conclude with deep dialogue, using rubrics and tools that address all areas of the system, such as curriculum, siteand district-level leadership, primary
language support, environment, and family engagement. This focused examination promotes the most clearly articulated and aligned vision of high-quality instruction for ELs.

In the words of a SEAL school principal:
As a principal on the ground, I know that SEAL is working when I walk into the classrooms and kids are joyfully engaged in learning. They're happy, and they're using language that I haven't heard them use before that's high and it's complex and it's rigorous, and they understand the language that they're using.

- Jennifer McNeil, elementary school principal, Davis Joint USD


## TOWARD A MULTILINGUAL, MULTICULTURAL CALIFORNIA

To create and sustain asset-based learning environments that centralize the needs of DLLs/ELs requires that educators at all levels possess a deep understanding of and steadfast commitment to enacting the three central tenets identified above. If we succeed in serving DLLs/ELs in this manner, California will be well on its way to creating the multilingual, multicultural state envisioned in Global California 2030 (CDE 2018). However, this can only be done through dedication and focus on the part of all educators who understand that "The main thing is to keep the main thing the main thing." $\mathrm{c}_{\mathbf{s}}$

References are available in the online version: https://www.gocabe.org/index.php/ communications/multilingual-educator/

## Floreciendo a través de las experiencias: Los padres de familia abren sus corazones para compartir su ampendizaje sobre algunos arogramas ie GnBE.

CABE tiene el honor de trabajar con padres, familias y miembros de la comunidad en todo el estado a través de nuestros diversos programas de participación de padres y familias, como Project 2INSPIRE, Apoyo para Estudiantes Inmigrantes y Refugiados (SIRS), Plaza Comunitaria, Community Engagement Initiative (CEI), y nuestras conferencias regionales y anuales. La sabiduría, las ideas y las perspectivas que provienen de nuestros padres nos llenan de admiración, esperanza e inspiración. Les invitamos a abrir sus corazones y mentes a las palabras y experiencias de los siguientes padres líderes:

CABE has the honor of working with parents, families and community members across the state through our various Parent and Family Engagement programs, such as Project 2INSPIRE (P2I), Support for Immigrant and Refugee Students (SIRS), Plaza Comunitaria, Community Engagement Initiative (CEI), and our regional and annual conferences. The wisdom, insights, and perspectives that come from our parents fill us with admiration, hope and inspiration. We invite you to open your hearts and minds to the words and experiences of the following parent leaders:

Soy fotógrafa. Mi diploma de primaria significa para míel empezar algo y seguir avanzando. También me demuestra quesí, se puede hacer mucho más. Me gustaría tomar clases de inglés.
-Abelina Gallegos, Plaza Comunitaria

Para mí, recibir mi certificado de primaria es mejorar mi vida y tener más conocimientos muy buenos. Mi meta es seguir estudiando en la secundaria y seguir mejorando. Así puedo ser un ejemplo para mis hijos y para las demás personas.

- Ramona Lora, Plaza Comunitaria

Les doy gracias a CABE, al distrito, y al consulado por otorgarme una beca, la cual me motiva grandemente a seguir adelante con mis estudios. Gracias por traer este tipo de programa que es muy valioso y de gran ayuda para todos nosotros que estamos estudiando y luchando para superarnos.
-Alejandra Villalpando,
Plaza Comunitaria

La beca que me dieron me apoya mucho porque paga las materias de cada semestre en plaza comunitaria. A mí en lo personal me ha hecho crecer académicamente. Me ha abierto las puertas en varios lugares por lo que he aprendido y me he preparado. Estoy infinitamente agradecida a todo uds. - Marcela salas, Plaza comunitaria

> Estoy orgulloso de graduarme de la primaria
y secundaria, y también y secundaria, y también muy motivado con la beca que me dieron. Les doy gracias al personal que hicieron este hermoso trabajo porque si no fueran por ellos, esto no sería posible. Gracias por toda la ayuda. - Hector Carbajal, Plaza Comunitaria

> El nombre, Project 2INSPIRE, a mi criterio, es un nombre muy acertado ya que nos inspira a estar en constante búsqueday a no darnos por vencidos a pesar de las adversidades que se nos presentan, no sólo en el ámbito educativo, sino en nuestro diario vivir. No sólo aprendimos temas educativos, sino que también nos hizo reconocer nuestra parte humana. - Georgina Monjaraza, Proyecto 2INSPIRE -

> Después de las primeras clases me di cuenta lo importante que son los estudios de mi hijo. Project 2INSPIRE es una buena guía que nos enseña a preparar los hijos para que tengan una carrera. Cuando comparto información, yo sé que estoy dando fruto. Acuérdense que la vida de nuestros hijos está en nuestras manos.
> -Roberto Rangel, Proyecto 2INSPIRE

Hay muchas cosas positivas que han sucedido a raíz de haber comenzado mi capacitación del Project 2INSPIRE. Ahora estoy más consciente del rol tan importante y decisivo que tenemos los padres dentro de la educación de nuestros hijos. El curso de Project 2INSPIRE no sólo me permitió tener una visión más amplia de cómo navegar en el sistema educativo, también me dio las herramientas para formarme como líder positivo y proactivo. Poder servir, formar, e informar padre a padre me brinda una enorme satisfacción y me recuerda el compromiso que he adquirido al ser un "Padre Líder."
-Luz León, Proyecto 2INSPIRE

Para más información sobre los programas de CABE para padres de familia, visite https://www.gocabe.org/index.php/parents-3/ o comuníquese con la directora, María Villa: mvilla@gocabe.org

For more information about CABE Parent Programs, visit
https://www.gocabe.org/index.php/parents-3/ or contact the director, María Villa: mvilla@gocabe.org

## Taking a Multilingual Stence: Not Just for Bilingual Educerors



By
Ester de Jong, Ed.D. University of Florida

## Introduction

Recently, an ELD teacher asked for advice on how to approach her mainstream teacher colleague who told her English Learners (ELs) they could not use their home language in the classroom. In another forum the question was posed if it was okay for an elementary mainstream teacher candidate to use her EL's home language since the child did not speak any English and was clearly uncomfortable in the classroom. The fact that we still hear these questions as professionals working with bilingual learners can indeed be discouraging. It also suggests the extent of the work that needs to be done with general (mainstream, grade level) educators. In this article I argue that it is not enough for bi/multilingual perspectives to be enacted by bilingual educators in bilingual programs-they must become integral to the preparation of all teachers.

## Taking a Multilingual Stance: Bi/Multilingualism as a Resource

From the earliest bilingual programs to the current two-way immersion programs where both fluent English speakers and fluent partner language speakers become proficient in two languages and learn content through two languages (Arias \& Fee 2018), bilingual educators have approached their students' linguistic and cultural differences as assets for teaching and learning (Dubetz \& de Jong 2011; Flores \& García 2017; Goldenberg \& Wagner 2014). Bilingual educators take what might be called "a multilingual stance," i.e., they embrace the fact that "bilingualism is a resource at all times to learn, think, imagine, and develop commanding performances in two or more languages" (García \& Kleyn 2016, 21). Such a multilingual stance is not only ever-present but also all-encompassing-it directly affects programming, curriculum, and pedagogy, as well as decisions about language, discourse, and language use (e.g., Beeman \& Urow 2013; García, Ibarra Johnson, \& Seltzer 2017; García \& Kleyn 2016; Palmer, Martínez, Mateus, \& Henderson 2014).

Research has shown that policies and practices that align with a multilingual stance support the language, academic, and cultural outcomes for bilingual learners (de Jong 2011; Goldenberg \& Wagner 2014). In order for schools to provide equal access to high-quality instruction for bi/multilingual learners, teachers thus need to construct learning environments that allow students to use and build on their entire linguistic repertoire within and across languages. This mandate holds true regardless of whether the student is in a bilingual, ELD, or mainstream classroom (de Jong 2011).

## A Multilingual Stance for Mainstream Teachers

Within the context of a formal bilingual education program, a bilingualism-as-a-resource orientation is the norm, although certainly not without negotiation and contestation (de Jong, Yilmaz, \& Marichal 2018; Martínez, Hikida, \& Durán 2015; Sánchez, García, \& Solorza 2017). However, only a small percentage of Emergent Bilingual students are enrolled in bilingual education programs. Many Emergent Bilinguals find themselves in mainstream classrooms, due to budget constraints, shortage of specialist teachers, and/or a district's purposeful programming (Coady, Harper, \& de Jong 2016). In these classrooms, English dominates, is formally legitimized as the language of instruction, and teachers are likely not fluent in languages other than English.

In addition to these realities, there is an enduring myth that monolingual language teachers cannot foster, encourage the use of, learn, or assess languages other than English (Schwarzer, Haywood, \& Lorenz 2003). Mainstream teachers' willingness and ability to engage in multilingual practices can be further limited due to the lack of teacher education programs that prepare mainstream teachers to work with Emergent Bilinguals (Education Commission of States 2014) and the lack of assessments that specifically address teachers' knowledge and skills related to Emergent Bilinguals (Sampson \& Collins 2012). Where such preparation is included, the primary focus
tends to be on second language development, the use of strategies to make input in English more comprehensible, and scaffolding academic English (Education Commission of States 2014). Given these trends, the emphasis on English and scaffolding instruction in and through English appears quite natural and is certainly relevant. It also reinforces a monolingual bias in mainstream teacher preparation for bilingual learners (de Jong 2013) and thus significantly undermines the capacity of schools to adequately and effectively support Emergent Bilinguals.

## Multilingualism and Mainstream Teacher Education Programs

There is a scarcity of studies that consider how mainstream teacher candidates understand and enact multilingual practices as they go through their teacher preparation program (Villegas, SaizdeLaMora, Martin, \& Mills 2018). A study on graduates from one teacher education program indicated that, although students felt well prepared to work with bilingual learners and displayed positive attitudes toward students' home languages, they also noted that they felt less prepared to actually leverage home language and literacies in their classrooms (Coady, Harper, \& de Jong 2011).

The possibility of reframing mainstream classrooms as multilingual spaces exists, however. In a recent review, de Jong and Gao (2018) note a growing set of studies that document monolingual teachers' bilingual practices in mainstream classrooms. These practices appear to vary in their impact on positioning multilingualism as the norm for all students in the classroom and place reported practices along a multilingual stance continuum. On one end of the continuum are multilingual practices that reflect tolerance for students' use of their home languages (e.g., outside of the classroom, with a buddy for translation, or during small group work for clarification). On the other end of the continuum are practices that position multilingualism as the norm for all students (e.g., using bilingual books for literacy instruction, creating bilingual texts, and language mapping activities). In between these two ends of the continuum are transitional practices where teachers use students' home languages for instructional purposes but only for Emergent Bilinguals at lower proficiency levels (e.g., using supplemental materials and providing access to bilingual books).

The question then becomes how mainstream teacher education programs can provide monolingual teacher candidates with the knowledge and opportunity to build a sense of efficacy in enacting classroom practices that are no longer grounded in monolingual assumptions (de Jong, Pacheco, \& Vetere 2019). In a small pilot study on teacher candidates' multilingual stance development, we began to explore this question. In this study, we asked ten teacher candidates to sort common sheltered English strategies (e.g., comprehensible input, graphic organizers, and use of visuals) and bilingual strategies along the multilingual stance continuum (e.g., allowing students to
use $L_{1}$ in small groups, having bilingual books, and creating bilingual texts) by how comfortable they would be to use them. We then asked them to explain why they put the strategy in that category. Our preliminary analysis shows that teacher candidates' categorization appears to be mediated by direct exposure to bilingual strategies. Teacher candidates frequently moved a strategy into the "not comfortable" category because they had never seen the strategy-it was simply unfamiliar. This finding points to the importance of the nature of field experiences and the extent to which candidates encounter bilingual practices. It also suggests the importance of a critical examination of monolingual discourse and practices when encountered in field practica and of their impact on Emergent Bilinguals.

The lack of proficiency in a language other than English (and especially Spanish) was another reason for not being comfortable implementing bilingual strategies. Even if they had some experience learning other languages in high school, they did not see how this could function as a resource for teaching Emergent Bilinguals. Teacher preparation programs can help teacher candidates acknowledge their own linguistic repertoires (e.g., through language mapping, D'warte 2014) and diverse linguistic histories (e.g., through family and community language-use trees, Schwarzer \& Acosta 2014). They can encourage reflection on how teachers can use these activities when working with Emergent Bilingual students. Catalano and Hamann (2018) note that teacher educators can also enhance their teacher candidates' metalinguistic and multilingual awareness as well as linguistic skills. Asking students to spend some time learning another language as part of their educational coursework or study abroad experiences is one way to do so.

While the small sample size and the pilot status of the study limit our conclusions, these emerging insights have intriguing potential implications for how teacher educators can cultivate a stance supportive of multilingualism among mainstream teacher candidates. More research and examples from practice are clearly needed.

## Conclusion

Taking a multilingual stance goes beyond respecting students' home languages to proactively affirming their linguistic repertoires in the classroom. Strategic collaboration between bilingual teacher educators and general teacher educators can support this goal. When bi/multilingual understandings, rather than monolingual or even second language understandings, underpin whole-school approaches to working with Emergent Bilinguals, more equitable learning opportunities can be created by all teachers for all students. ©

References are available in the online version:
https://www.gocabe.org/index.php/communications/multilingualeducator/

# Institutional Acceptance of Unaccepted Languages Equals Academic Success 



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Interestingly, artificial intelligence is now being used to curb hate speech on Twitter and other social media outlets. The algorithms are meant to identify abusive language, particularly toward marginalized populations. More interestingly, according to a Cornell University study (2019), the same systems designed to detect targeted groups are discriminating against the populations that they are designed to protect. Specifically, tweets believed to have been written by African Americans are more likely to be noted as sexist, hateful, harassing, or abusive. The artificial intelligence bias was so stark that in some cases the algorithm flagged what it thought was black speech more than twice as often. For the typical social media user, African American Language (AAL), more commonly known as African American Vernacular English (AAVE), is associated with hate and harmful language rather than being considered the legitimate linguistic entity it is. On social media, as in society at large, AAL remains a misunderstood and unaccepted language.

Despite the 1996 Ebonics controversy that on the one hand shined a necessary light on the abundance of ignorance about AAL and at the same time cemented long-held prejudices, some institutional progress has been made towards acknowledging AAL and other so-called nonstandard languages as accepted languages. Historically, institutional acceptance of AAL and other
so-called non-standard languages, not only has shifted policy, but demonstrated a conduit to changes in instructional practices, leading to academic gains for students who have traditionally been underserved. This article highlights what happens when a historically unaccepted language is institutionalized, and that acknowledgment leads to academic gains. First, a brief history of AAL as an institutionally unaccepted language will be provided. Next, the background and description of a Standard English Learner policy is given as an example. Lastly, early indications of academic gains based around the policy for Standard English Learners will be shown.

## Historical Denial of Unaccepted Languages

The call for the validation and affirmation of nonstandard languages or unaccepted languages remains controversial and provocative (Hollie 2015). The debate about their legitimacy persists and is still coupled with ignorance, misinformation, and entrenched negative beliefs about nonstandard or unaccepted languages. Like the general public, educators often exhibit the greatest ignorance about the historical and present-day context of these linguistic entities that linguists have studied for decades. Twenty years ago, Corson (1998) revealed that formal educational policies for the treatment of nonstandard languages in schools are conspicuous by their absence in most educational systems.


This research aptly pointed out, however, that these varieties are brought, one way or another, into the work of the school regardless, and more so today. Educators must recognize that students coming from differing linguistic backgrounds often possess two or more languages that they use in the home. But because of the lack of a formal policy, students are often penalized for having a language variety that is different from the linguistic capital that has high status in the school (Corson 1998).

Most people view nonstandard languages as dialects or, even worse, as slang. The research on these languages, which has been a source of vigorous academic debate for decades, strongly refutes that limited, deficit perspective. The ethnolinguistic perspective, which is the most affirming research for unaccepted languages, holds that the derivation of the unaccepted languages is rooted in the social, historical, and linguistic development of the people and that any understanding of an unaccepted language must be inclusive of these aspects. Going back over 50 years, numerous studies acknowledge that African American students, as well as other research-identified populations such as Chicano/a, Hawaiian, and Native American students, come to school speaking a language that is different from, but no less valuable than, the language of instruction-Standard English or Academic Language.

Linguist Ernie Smith (1992) views African American Language as a linguistic continuation of the West and Niger-Congo regions of Africa, where multiple African languages are spoken-Fula, Mandinka, Ewe, and Umbundu, to name a few. Robert L. Williams (1972), affectionately known as the Father of Ebonics, defined Ebonics as the linguistic and paralinguistic features that on a concentric continuum represent the communicative competence of West African, Caribbean, and United States slave descendants of African origin. Ebonics does include the various idioms, patois, argots, idiolects, and social dialects of black people, especially those who have been forced to adapt to colonial circumstances. In other words, wherever the enslaved Africans were taken throughout the world, some form of Ebonics exists today, meaning African American Language has validity as a linguistic entity, but despite this research, as well as the work of others (Dillard 1972; Labov 1972; Rickford 2000), AAL remains unacknowledged and unaccepted institutionally for the most part.

## Policies for Standard English Learners in California

The California State Department of Education (CDE) and the Los Angeles Unified School District (LAUSD) stand out for their acknowledging and affirming policies regarding Standard English Learners. A Standard English Learner (SEL) is a student who speaks a language that is varied from the structure of "school language," and is considered competent communication within the context of the home culture (LeMoine 1998). CDE and LAUSD have enacted education policies that:1) acknowledge African American Language as a legitimate rule-governed language, and 2) identify Standard English Learners as language learners who benefit from targeted language support as they add academic English to their linguistic repertoires. The education policy supports the use of cultural and linguistic responsiveness (CLR) to improve academic outcomes (Hollie 2018). "Simply immersing students in Standard English (SE) and ignoring differences between SE and the varieties of English that Standard English Learners (SELs) use...is ineffective and not conducive to a positive and productive learning environment" (CA ELA/ELD Framework, chapter 9). Most linguists agree that the correctness of grammar or English usage is relative and that the appropriateness of the language used in a communication exchange depends on the audience, context, and purpose.

The Los Angeles Board of Education recognized that unequal opportunities to access the curriculum and to learn in the school context can contribute to the overrepresentation of SELs in special education, suspensions, drop-out rates, and overall low academic performance. To intensify support for SELs, the Board passed Resolution 097-13/14, Strengthen Support for Standard English Learners (2014). As a result of this resolution, the Academic English Mastery Program (AEMP) was given the responsibility to implement a comprehensive plan for SELs. AEMP addresses the language and literacy needs of African American, Mexican American, Hawaiian American, and American Indian/Alaska Native students for whom Standard English is not native. The program assures that students whose language does not match the language of instruction have equal access to the Common Core Standards. Six action steps were identified to reach this goal:

1. Utilize an appropriate tool to assess the academic language and literacy needs of SELs,
2. Provide research and evidence-based professional development highlighting teacher efficacy and practices to improve student outcomes,
3. Identify targeted resources to ensure a quality program for SELS,
4. Strengthen the Parent-School connection,
5. Build emerging models of excellence starting with elementary schools, and
6. Provide an annual count of Probable SELs in the District.

According to data taken in 2018, there are 189,228 Probable Standard English Learners (PSELs) enrolled in the LAUSD-38,912 of which were African American PSELs. Probable Standard English Learners are the pool of students from which Standard English Learners are identified. African American PSELs are students whose language classifications are English Only (EO) or Initial Fluent English Proficient (IFEP). Not all African American EO and IFEP PSELs are Standard English Learners. Multiple academic and language data points are used to identify Standard English Learners. Scores that are below proficient on standardized tests and nonpassing grades on report cards are academic indicators that are used to identify SELs who may benefit from the inclusion of CLR instructional strategies to help them achieve higher levels of academic and socioemotional success. A second indicator is the presence of African American Language identified in oral or written form using AEMP's linguistic screener that identifies SELs. SELs are not identified for program placement, like English Learners, rather they are identified for targeted language support. Targeted language support includes the use of culturally and linguistically responsive pedagogy to support increased academic gains for Standard English Learners (Hollie 2018).

## Acknowledgment and Acceptance Equal Academic Gains

The primary goal of AEMP is to increase Standard English Learners' access to core standards-based curricula in order to increase academic achievement. The program incorporates into the curriculum instructional strategies that facilitate the acquisition of standard and academic English in classroom environments that simultaneously validate, affirm, and build upon the language and culture of the students (Hollie 2015). The mission of the program is to assure that students will have equal access to a standardsbased content curriculum and post-secondary career opportunities.

Through AEMP, educators receive direct professional learning in Mainstream English Language Development (MELD) and Academic Language Development (ALD) to strengthen students' listening, speaking, reading, and writing skills in school and academic language. Operating under the premise that literacy is the power tool for equity,

AEMP strives to counteract the opportunity, achievement, and rigor gaps that have contributed to a vicious cycle of underperformance for SELs throughout the district. Results have been positive.

During the 2015-16 and 2016-17 academic years, the Smarter Balanced ELA Scale showed that growth in all grades was two points higher for African American and Latino/a PSELs in AEMP schools than for African American and Latino PSELs in non-AEMP schools throughout the district. In 2016, the AEMP partnered with UCLA Center X to conduct a three-year longitudinal study exploring the ways AEMP schools are responding to the instructional needs of their Standard English Learners. The purpose of this study was to identify strategies that AEMP schools utilize to support SELs. Findings suggest that the application of instructional strategies incorporating the home languages and cultures of SELs create a collaborative learning environment and make the core content meaningful and accessible to students. This approach looks at language diversity as an asset, not as a deficit. African American students have experienced academic growth in ELA and Math at AEMP schools. Eighty-seven AEMP schools have shown an increase toward SELs meeting the standards in English Language Arts over a two-year period (2016-2017 and 2017-2018). Seventy percent of these schools demonstrated significant progress for SELs in English Language Arts. African American SELs have shown an increase of 6.8 points, Latino SELs showed an increase of 9.6 points, and Pacific Islander SELs showed an increase of 11.8 points. Although there has been progress through the support of AEMP, LAUSD recognizes there is much more work to be done to ensure access and equity for historically underserved student groups.

## NextSteps

The next steps are obvious. More state education departments and school districts, as well as organizations and community groups, need to formally accept so-called non-standard languages. As a general practice in all schools, SELs need to be validated and affirmed. Subsequently, funding is needed to support the policies so that they are not just symbolic. Based on the work in California and in Los Angeles in particular, the evidence strongly suggests that when actual policies are adopted and implementation is supported financially, instructional practices become more culturally and linguistically responsive and improved student outcomes can occur. The example that the Academic English Mastery Program in LAUSD has set is infinitesimal in comparison to the changes needed in the overall system institutionally. Only one question remains: if we do not undertake this change now, when will we? ๙ை

References are available in the online version:
https://www.gocabe.org/index.php/communications/ multilingual-educator/

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## individualized education Plans (ImPs) in a Dual language bilingual education context



By
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Bourdieu (1997) asserts that language is not only an instrument of communication, but an instrument of power and to a large extent a catalyst for expressing the self as it relates to the world. Due to the many and varied challenges of English Learners (ELs) with special needs, Individualized Education Plans (IEP) are vital components of their education. These documents are charged with educational implications. Herein, the aim is to develop a blueprint that positions language broadly as the driver of equitable IEPs for ELs with special needs by reviewing current IEP guidelines and deepening our understanding of the IEP process-from the Who? and What? of the development phase to the Where? and How? of the implementation phase.

## Guidance from the Law

The Individuals with Disabilities Education Act (IDEA, Public Law 94-142), stipulates that teams follow specific requirements when developing, reviewing, and revising each IEP document. In accordance with the law, it is mandatory that the PEPs of ELs with special needs include the consideration of specific factors. Among the factors that the IEP team must consider are the strengths of the child (language being a strength (Title.1.B.614.d.3)) and in the case of a child with limited English proficiency, the language needs of the child. The California Commission on Teacher Credentialing (CTC) requires that educators "encourage respect for individual diversity through planned lessons that are a direct reflection of individual goals and objectives as stated on students' IEPs/IFSPs/ITPs" (CTC 1996, 99). The law is clear-IEPs must incorporate linguistic and cultural considerations. The law is also vague—leaving its flexibility and agency to fail when faced with lack of directionality. In practice, cultural and linguistic
diversity is often undermined in the development and implementation of IEPs through imbalances of language status, objectives in the spirit of assimilation, Present Levels of Performance (PLPs) that are not inclusive of student funds of knowledge, and overall practices that are unresponsive to differences. Whether IEPs do take linguistic and cultural considerations into account often depends on the team's knowledge of second language development and instruction and their ability to thoroughly examine core goals free from discrimination or bias based on socioeconomic status, culture, ability, or language.

## Unique Opportunities for IEPs in Dual Language Bilingual Education

Dual Language Bilingual Education (DLBE) has a great opportunity to leverage language status for students of diverse profiles (Baca \& Cervantes 2004) by equalizing status characteristics among students and across languages and abilities. Under this premise, DLBE represents transformative programming in that it serves as a platform for providing enriched educational opportunities by overcoming linguistic dominance (Cummings 2000). Given this, native language support and instruction in the IEP process have a greater role in DLBE than in English Only programs where instructional approaches often serve to disrupt child-family communication (Cartledge \& Kourea 2008). At a minimum DLBE ensures language access as required under the Civil Rights Act and the Equal Educational Opportunities Act, but at a maximum they purport authentic interpretations of equity and access wherein students' languages are viewed as strengths throughout the IEP process.

## The Study

The learnings discussed in the sections that follow emerged from teacher interviews and classroom observations conducted at eleven DLBE programs across California (varying models of Spanish/English). It is important to note that all of the schools embraced inclusion as part of their mission statements. Four themes emerged from the qualitative analysis that reveal the need for a deeper understanding of the special education role in DLBE: who and what to include in the IEP, where and how to implement the IEP. The research revealed that these components were repeatedly missing in the IEP process for ELs with special needs in DBLE.

## Who to Include in the IEP

The concept of shared responsibility is not new. From the literature and practice it is known that an IEP team should consist of all individuals with a stake in that student's education. Those attending the IEP meeting range from the resource specialist program teacher to the psychologist to the speech or behavioral therapist to... the list can go on and on depending on the child's needs and services. The development of IEPs is usually handled by the education specialist, rarely by the general education teacher(s), and even more rarely by the parent.

The majority of educators would agree that parents should be part of the IEP team. Parents can contribute unique information about their child's learning in nonformal education environments; from prior education to native language abilities-all of which should be considered important by IEP teams, but especially DLBE IEP teams, in the development of Present Levels of Performance and subsequent goals. The law recognizes the essential role of parental participation (IDEA Public Law 94-142). In the IEP process, IDEA states that parents are full and equal members of the IEP team and have a right to participate ( $\$ 300.322(a)(1)(2))$. What is often ignored is that full participation of parents should start before the IEP meeting. Simply informing parents of the meeting is a passive and incomplete approach to parental engagement-IEPs are meant to be collective, not directive. Effective DLBE programs cultivate inclusive learning environments where parents, teachers, and students work closely together in the interests of the child. Parents have the right to ask questions, dispute points, and request modifications to the plan-this means that they also have the right to inform the PLPs and co-develop goals.

DLBE general education teachers, who know gradelevel curriculum and are prepared to understand and see language as a function of access, also have key roles to play in informing and making decisions about what types of supports and services the student may need to be successful in the inclusive DLBE setting. It is for this reason that IDEA requests that general education teachers assist in determining which "appropriate behavioral interventions and supports, and other strategies, [as well as] supplementary aids and services, program modifications, and support for support personnel" are necessary (IDEA, 2004, §300.324(a)(3)(i)). Far too often, general education teachers sign off on IEPs without ever reading them. "We don't have any part in the IEP goals" was a typical response given by one of the teachers interviewed. DLBE teachers cannot realistically expect students to achieve in contexts where there exists such a disconnect between themselves and their students. To be effective, the IEP team should be exactly that-a team in which each member has specific rights and responsibilities.

## What to Include in the IEP

Regulations caution that IEP goals that do not align with the student's language needs are not considered to meet the linguistic requirement (Butterfield 2010). In an examination of IEP goals, Kurth and Mastergeorge (2010) found that students in inclusive settings had few IEP goals and that those goals focused predominantly on skills development. If IEP goal development is supposed to be "meaningful and of value for the student" (Kurth \& Mastergeorge 2010, 157), then language needs, broadly, should encompass both the need to learn mainstream American English as well as academic native language.

Language, complex as it may be, must be part of the special education evaluation process. PLPs and goals must be derived from an evaluation process that is authentic. During one of the observations, a teacher asked ¿Qué libro lee Hans Christian Andersen en la escultura que se le dedicó en Central Park? Then the teacher whispered a response: "The Ugly Duckling." Imagine this question on a content knowledge test-the whispered answer would be incorrect because it is in the wrong language. Therein lies the issueideologies of language purism, not just in classrooms, but in the way IEPs are written. Rigid language practices in the classroom are a reflection of rigid language IEPs. Beyond the English PLPs and goals, DLBE teachers for ELs with special needs have an obligation to establish PLPs and create goals inclusive of the native language.

For instance, a Spanish DLBE program should have PLPs of what the student can do in Spanish that inform Spanish language goals (e.g., addressing the phonology, morphology, syntax, semantics, pragmatics, and spelling specific to that language, not a translated version of an English language goal), and should be written in Spanish.

When we deny students their language rights, we subsequently deny them the opportunity to understand the world from different perspectives and the ability to fully communicate with their families. Honoring this right for ELs with special needs in DLBE starts with IEPs that discuss student performance in languages of instruction, have goals specific to the languages of instruction, and are written in the languages of instruction.

## Where to Implement the IEP

One of the pillars of IEP goal implementation is instruction that creates opportunities to demonstrate mastery and settings that are inclusive and not just integrated. Inclusive education purports access to the core curricula and opportunities to interact with typicallydeveloping English Only counterparts. Alfaro and Hernandez (2016) further recognize that truly inclusive environments encourage students' excitement about learning and pride in their accomplishments.

Inclusive environments are increasingly becoming the Least Restrictive Environment (LRE) of many students with special needs ( $94.8 \%$ of students with special needs participate in the general education classroom (U.S. Department of Education, National Center for Education Statistics 2017)). During indirect conversations leading up to the data collection, it was impossible to ignore the difficulty in finding ELs with special needs in DLBE. Soon it became clear that these students are a minority in these settings. Just like IDEA's Child Find mandate or the obligation to identify ELs given to us by the Lau Remedies, it should also be a priority of DLBE to recruit and service these students with special needs. If decades of research have positioned DLBE as a contributor to a multitude of benefits, then these benefits should also be extended to ELs with special needs in ways that go beyond the traditional push-in and pull-out models.

## How to Implement the IEP

Recommendations on how IEPs should be implemented are limited. IEP implementation typically addresses issues of fidelity (Ruble \& McGrew 2013), which while significant
on its own merits, leaves one to wonder if goals are loyally implemented in spite of biases, segregation, and inequity. In a review of IEP goals and implementation, Catone and Brady (2005) come to a critical conclusion: there is incongruence between the IEP goal and instructional practice. Even though IEPs call for individualized instruction, instruction continues to be more a reflection of the preferred pedagogies. Moreover, Ruffin (2009) argues that language instruction, specifically reading comprehension, has long been challenged by the insistence on selecting the right strategy which is to some extent superfluous when contrasted to the ability to differentiate (Delpit 1995). In discussing some of the challenges of implementing IEP goals, one teacher explained, "In previous years, I had one [1:1 assistant] that was there all the time. Most of the time the IEP goals require one-on-one time [and] the special education teacher is the one working with that." Another teacher shared that the use of the IEP depended on the student's goals-the more aligned the goals were to the academic content of the standards, the more they were readily addressed "because I focus on what the whole class is working on and then just include him. So, not necessarily his IEP goals but what the rest of the students are learning."

For the DLBE-inclusive setting, a model for designing spaces conducive to IEP implementation starts with the daily routine schedule. The schedule outlines blocks of time for each activity. Within each activity, the goals are included. This design has a few advantages: it is more natural and representative of typical learning environments, is conducive to meeting multiple goals for linguistically and ability-diverse students, and is easier to use with larger groups because it does not necessitate designing separate activities to meet individual goals.

## Learnings

In short, "There is a great difference between policy development and policy implementation. Good policy ideas, such as the IEP, frequently come to grief when put into the context of a specific set of circumstances at the local level" (Gallagher \& Desimone 1995, 372). Addressing the multiplicity of factors that handicap students entails reconfiguring, "redistributing, and focusing resources on groups of students who are entangled in a complex web of social and educational disadvantages" (Liasilou 2012, 177). @

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# Addressing DLBE Goals through Science Education： through Science Education： Anchoring Phenomena 



## By

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According to Howard et al．（2018），the goals of Dual Language Bilingual Education（DLBE）programs are for students to：

1）become bilingual／biliterate，
2）reach high levels of academic achievement，and 3）develop sociocultural competence．

These are lofty goals are challenging to accomplish－ even for veteran DLBE educators．Most research on bilingual programs focuses on achievement of the second goal：academic achievement．There is less information available regarding the other goals：developing bilingualism／biliteracy and sociocultural competence． Anecdotal evidence suggests that little to no attention is paid to the third goal．Perhaps because of this，Palmer et al．（2019）propose a fourth goal for DLBE education：critical consciousness for all．Noting that DLBE programs have not lived up to their promise of providing equitable outcomes for language minoritized students as compared to their English－dominant peers，Palmer et al．argue that adding this fourth goal will help stakeholders＂better maintain a focus on equity and fulfill their potential to support a more integrated and socially－just society＂$(2019,5)$ ．

Two of the authors of this article，Cathy Amanti and Rachel Fiore，prepare students at Georgia State University to teach in DLBE classrooms．As a DLBE educator and science educator respectively，we have struggled to find
ways to help our students integrate all of the above goals in their teaching．We have noted that in many instances，what happens in DLBE classrooms is business as usual：students in DLBE programs encounter a monocultural，standardized curriculum－the only difference being that it is taught through the medium of two languages rather than one．

For the past two years，we have co－taught Content－ Based Curricula，Instruction，and Assessment for Dual Immersion Classrooms，a course on teaching and assessing science and social studies in DLBE classrooms to current and future DLBE educators．One of the major assignments is for students to develop an integrated unit that foregrounds science．In addition to developing the unit around elementary Science Standards，students must integrate standards from other areas of the curriculum，as well as language acquisition and sociocultural goals．Science is foregrounded in the planning process because，in our local context，the preferred model is to teach science in the program＇s partner language－i．e．，the language other than English．However，assigning students to develop a science unit that includes language acquisition and sociocultural components is no guarantee that educators will move beyond superficially addressing these components in their teaching，much less develop a critical consciousness in their students．It is too easy to fall back on the＂food，fun， and fiestas＂approach to multilingual and multicultural education．



This is where anchoring phenomena have an important role to play. Although we previously established a requirement that our students incorporate an anchoring phenomenon related to the Science Standards in their units, this year we expanded the requirement: students must select an anchoring phenomenon from a country where the DLBE program's partner language is spoken. In addition, students were strongly encouraged to select an anchoring phenomenon from a non-European country. This would afford them the opportunity to develop a critical consciousness in their students by meaningfully exploring topics such as colonialism, racism, and linguicism, since the languages of most DLBE programs are colonial languages. Adding this requirement to the assignment has proven key for students to seamlessly integrate meaningful content, language, and sociocultural goals with an anti-bias and equity focus in their thematic units.

In what follows, we first describe the concept of anchoring phenomena in the context of science education. We then provide an example of an anchoring phenomenon we shared with our students. Next, we bring in Stephanie Mata, a DLBE educator, to describe and reflect on the unit she developed for the class assignment. We conclude with a discussion of the importance of ensuring that Dual Language Learners, especially students labeled as English Learners (ELs), have equitable access to the science curriculum.

## Anchoring Phenomena in Science Education

Anchoring phenomena are part of the Next Generation Science Standards (NGSS). We will describe anchoring phenomena in brief, but we also provide references from the California Department of Education that include the other terms in NGSS, as well as more extensive descriptions of anchoring phenomena.

An anchoring phenomenon (AP) is a science experience that interests students and cannot be easily explained. One common misunderstanding about how to incorporate an AP is that it is introduced as a question. But the goal of an AP is to have students themselves generate the questions. So, an anchoring phenomenon is an observable, intriguing event. The students can observe the phenomenon through direct experience or through a video. Introducing the AP should be quick, easy, and inexpensive. We have found the National Science Foundation's STEM Teaching Tool \#28 beneficial for helping educators understand anchoring phenomena. Another excellent resource is the Executive

Summary of the California Science Framework, which highlights grade-appropriate phenomena (Feb. 2018, pages 9-35).

Once we guided our students to understand and apply anchoring phenomena in science instruction, a leap toward reaching the goals of DLBE instruction occurred, particularly when we required educators to start their unit with an anchoring phenomenon from a country where their program's partner language is spoken. This facilitated a disruption in our students' approach to curriculum planning, prompting our students to rethink instruction instead of repackaging old lessons.

Anchoring Phenomenon in DLBE Contexts
In our work preparing students to teach in DLBE classrooms, we have offered Lake Titicaca as an example of an anchoring phenomenon. Characteristics of Lake Titicaca that make it a viable anchoring phenomenon for a science-focused unit include the fact that it is the highest navigable lake in the world. It is also home to a unique and endangered species of frogs. The border between Peru and Bolivia runs through the middle of the lake, which could be an anchoring phenomenon in itself. Recently, Peru and Bolivia have joined forces to reduce pollution in the lake, a development which affords students an opportunity to explore the sociocultural and social justice components of DLBE.

It has been important to us to ensure that our students understand the interrelationship between the physical environment and sociocultural practices. People think and behave in certain ways that are tied to their histories and the spaces they inhabit. The indigenous people living around Lake Titicaca build reed boats because that material is readily available in their environment and because it is a good material for boat-building. One group of people, the Uros, use locally available reeds to build and live on floating islands on the lake. The islands were originally built for defense, but the Uros people continue to build and live on these islands today. The islands are what Stewart describes as "an extraordinary feat of engineering" (2017, para. 6). Student questions that this phenomenon might generate include, How do homes made out of plant material stay afloat? and, Why do the Uros people continue to live on floating islands? The first question relates to the DLBE goal of high academic achievement; the second to the development of sociocultural consciousness.

 in a country where the partner language of a DLBE program is spoken, particularly those that are former colonies of a European country, is key to achieving anti-bias and antiracist goals. Exposing students to the idea that French is spoken not only in France, but also in countries such as Haiti, Madagascar, and the Ivory Coast, and that Tagalog and Spanish overlap due to over 300 years of Spanish colonial rule of the Philippines (Ocampo 2016), can counter linguistic bias and Eurocentrism. In addition, it gives educators the opportunity to help students become aware of cultural variations in lexicons and steer them toward the realization that no one variety has more value than any other. It also addresses the problem of finding curriculum material in languages other than English.

Many scholars have written about the importance of making learning relevant to students' lives. There is much to be said for grounding curriculum in the lived experience of students and in focusing on local knowledge, culture, and linguistic practices. We do not disagree with this view. However, we see benefit in leveraging multilingual pedagogical spaces to deepen students' understandings of, and to raise critical consciousness about, the manner in which culture shapes the way that people interact with each other and their environments across the globe. Integrating anchoring phenomenon into the science curriculum is one promising way to achieve this goal.

## Anchoring Phenomenon in DLBE Contexts: Stephanie's Example

When I began the process of creating the list of possible anchoring phenomenon for my class assignment, I started by doing a search for natural phenomena around the world. As I looked at the results, I began to focus only on Spanishspeaking countries because Spanish is the language in which I would be teaching. Five potential phenomena I considered were the flowering Atacama Desert in Chile, the rainforest in Central America, the monarch butterfly migration in Mexico, the Río Caño Cristales in Colombia, and the Rain of Fishes in Honduras. From this group, I began to choose options that I thought might connect to the fifth-grade Life Science Standard I had chosen for the unit. In order to make my final selection for the anchoring phenomenon, I looked at what I felt could most easily be connected to other content areas as well.

The unit plan that I wrote uses the path that monarch butterflies follow during their migration as the anchoring phenomenon. The unit starts with a one-minute YouTube video from the Monarch Butterfly Biosphere Reserve in Mexico to help students generate questions. As students look at the butterflies' path through Mexico and the United

States, they will identify plants and animals that live in these areas and then classify these plants and animals into groups defined in the standard.

Using the anchoring phenomenon made the lesson planning process more streamlined. Everything related back to one topic or theme across content areas. In the beginning, it felt like I was forcing everything to connect, but once I started working, everything fit together neatly on its own. One example is a math lesson I incorporated on coordinate grids. I have seen that many students do not truly understand how to use the coordinate plane. In this lesson, students work in small groups to identify plants found along the migration path and mark the points on a coordinate grid. I think that the connection to the coordinate grid helps students understand how the coordinate plane can be used to provide locations and how it can be used in real life situations.

## Science Education and English Learners

Reflecting on Stephanie's unit, we see multiple opportunities to address language, content, sociocultural, and critical consciousness-raising goals. An additional lesson she included has students read an article in Spanish on the impact of the proposed border wall between Mexico and the United States on a butterfly reserve in Texas. Highlighting the relationship between humans and the natural world was something we hoped would be facilitated by using anchoring phenomena and we saw this in Stephanie's unit, as well as in the other students' units.

In conclusion, centering science education on anchoring phenomena in countries where the partner language of DLBE programs is spoken affords DLBE educators the opportunity to address all four program goals. In addition, we believe this pedagogical strategy will help to address the gap in science achievement between English Learners and English Speakers. There is ample evidence that ELs do not achieve at the same level in science as their English-dominant peers. According to the National Center for Education Statistics, on average, ELs scored at the basic level on the science portion of the National Assessment of Educational Progress in 2015, the same as they did in 2009 and 2011. The statistics also indicate that the gap between the science achievement of EL.s and English-dominant speakers has remained steady. This undoubtedly contributes to the underrepresentation of Latinos in STEM fields. DLBE educators must ensure that their students receive high-quality science instruction. Engaging students' through the use of intriguing, real-world anchoring phenomena is one way to accomplish that. ca

References are available in the online version: https://www. gocabe.org/index.php/communications/multilingual-educator/

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# RIGOROUS AND MEANINGFUL SCIENCE FOR ENGLISH LEARNERS: URBAN ECOLOGY AND TRANSDISCIPLINARY INSTRUCTION 



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T
he implementation of the Next Generation Science Standards (NGSS) continues to present opportunities and challenges to "create a rich languagelearning and practice-oriented science classroom environment, provided teachers ensure that English Learners (ELs) are supported to participate" (Quinn, Lee, and Valdés 2012). The recent NASEM report, English Learners in STEM Subjects (2018), issues a call to action to create contexts for systems- and classroom-level supports that recognize the assets ELs contribute to classroom learning and to increase rigorous science instruction by providing ELs access to adequate program models, curriculum, and instruction. Paramount among the recommendations proposed are high-quality curricular materials coupled with equipping teachers with the preparation and tools needed for effective instruction for ELs.

Attending to these recommendations is critical if we are to reverse trends in National Assessment of Educational Progress (NAEP) data that show only $19 \%$ of eighth-grade ELs scored at or above the basic level in science, as compared to nearly four times that number ( $71 \%$ ) of English Only students (US DOE 2015). To address these challenges and call to action, two centers at Loyola Marymount Universitythe Center for Equity for English Learners (CEEL) and the Center for Urban Resilience (CURes) collaborated with five districts to implement the Urban Ecology for English Learners Projects with funding from U.S. Department of Education National Professional Development (NPD) and National Science Foundation (NSF) grants.

Over the course of seven years (2012-2019), this effort resulted in the creation of curricular resources, professional learning models, and tools to increase the quantity and quality of science instruction for ELs in fourth to eighth grades who were Long-Term English Learners (LTELs), or at risk of becoming LTELs. The projects' primary goals were to (1) increase teachers' knowledge and skills in delivering STEM education for ELs; (2) increase ELs' science achievement and engagement in Urban Ecology; and (3) bolster ELs' scientific disciplinary academic language skills and access to inquiry-based science.

This article presents project highlights, professional learning approaches, elements of the interdisciplinary, standards-based Urban Ecology curricular modules, and project evaluation results about ELs' outcomes and teachers' knowledge and skills in delivering high-quality STEM education for this population.

## TRANSDISCIPLINARY INSTRUCTION: INTEGRATING SCIENCE, LITERACY, AND LANGUAGE DEVELOPMENT FOR TEACHERS OF ENGLISH LEARNERS

Effective science instruction for ELs provides access to content and simultaneously builds literacy skills (reading, writing, speaking, listening, viewing, and representing). Thus, our projects engaged cross-disciplinary teams of fourth- to eighth-grade teachers of ELs. We utilized a transdisciplinary approach (Kaufman, Moss, \& Osborn 2003) using Urban Ecology (UE) as a branch of environmental science that focuses on the
sustainability and interdependence of cities and nature (Bravo et al., 2007). The use of Urban Ecology through a transdisciplinary approach was developed by creating multiply-aligned cross-disciplinary relationships among the Next Generation Science Standards (2012), the Common Core State Standards-English Language Arts (2010), and the California English Language Development Standards (2012) to respond to the increased demands for effective teaching of ELs envisioned in the curricular reforms of these standards. These demands require that teachers integrate science, language, and literacy seamlessly, and that ELs should... "[engage] in ... practices [that] require classroom science discourse, which demands both receptive and productive language skills...[to] present their ideas and engage in reasoned argumentation with others to refine them and reach shared conclusions" (Quinn, Lee, \& Valdés 2012).

Framing the professional development (PD) model was Guskey's Professional Development Design Theory (2005) consisting of five levels: (1) Reactions; (2) Learning; (3) Organizational Supports and Changes; (4) Use of Knowledge and Skills; and (5) Student Learning Outcomes. PD was designed to be responsive to the needs of teachers of ELs seeking to improve and increase access to quality science instruction.

Professional learning sessions included annual three-day summer institutes coupled with a series of three-hour follow-up sessions throughout the year. Collaborative learning agendas included delivery of simultaneous science, language,

literacy, and inquiry-based content focused on research-based practices for teaching, learning, and assessment for ELs. Lead teachers and on-site coaches provided support and feedback based on classroom observational data. Ongoing PD sessions allowed for cross-disciplinary collaboration and discussion of approaches to assist teachers in maximizing opportunities to increase instructional time in science and to support students' scientific research.

## WHY AN URBAN ECOLOGY CURRICULUM FOR ENGLISH LEARNERS?

The science of Urban Ecology (UE) provides an emerging set of tools to enhance the sustainability and resilience of urban communities. This affords an opportunity to re-envision social challenges (Lord, Strauss, \& Toffler 2003) by integrating natural and social sciences to understand urban communities as systems and to manage human effects on ecosystems (Alberti \& Marzluff 2004, DeStefano \& DeGraaf 2003, Pickett, Cadenasso, Grove, Nilon, Pouyat, Zipperer, \& Costanza 2001). As Tate (2010) concludes, science education for diverse urban students is the new civil rights agenda.

Our projects were designed to explicitly engage students in experiences where they are learning science content through investigations of their local schoolyards and neighborhoods. Student interest in science is stimulated and retained using these curricula since the majority of ELs' families live in urban-centric areas (DeBay et al., 2012, Barnett et al., 2011, McNeill et al., 2011). Subsequently, motivation and engagement are increased for minority students and

ELs when science is "connected to realworld problems in the school community" (Bouillon and Gomez 2001).

Three upper-elementary/middleschool Urban Ecology for English Learners curriculum modules were designed to bolster English language and literacy learning by providing access to standardsbased, rigorous STEM content. Project teachers and site-level coordinators were an integral part of developing these transdisciplinary curriculum modules, providing feedback on their content, sequence, and standards alignment. The curriculum emphasizes locally relevant field studies and is multiply-aligned with science, literacy, and language standards. Each module (See Figure 1 at the end of this online version.) includes six instructional units with over 22 lessons that develop inquiry-based integrated English language and science emphasizing expository / informational writing and oral language development. Academic writing in science for ELs (Quinn, Lee, \& Valdés 2012; Minicucci 1996) is particularly essential given the focus of the National Common Core Standards. The modules culminate with an action-oriented project consisting of an interrelated science and literacy product. Pre- and post-module assessments are used to measure acquisition of scientific concepts, vocabulary, and informational text-writing skills.

## IMPLEMENTATION STRATEGY AND PROJECT EVALUATION METHODOLOGY

The strategy for implementing the Urban Ecology for ELs projects consisted of several components: (1) system and sitelevel leadership technical assistance and collaboration; (2) identification and
development of teacher leaders across designated school sites to support implementation; (3) sustained, recurring professional development focused on integrated science and language teaching; and (4) classroom observation and peer coaching.

Two research questions guided project evaluation inquiry: 1) How does a transdisciplinary model for professional development in Urban Ecology for ELs support teacher learning of both content and pedagogy?; and 2) What are the effects on student outcomes as measured by a pre- and post-student writing assessment and state-level language and academic assessments?

## Participants

Our projects engaged 126 educators, including district and site-level leaders in 5 school districts and 13 school sites in an urban area of Southern California over the course of 7 years. During the project's second phase, a subset $(n=14)$ of the 126 teachers from one of our partner districts engaged in continued collaboration. Students enrolled in project teachers' classrooms received instruction in the project curriculum for at least one year.

## Data Collection and Analysis

Mixed methods analyses of multiple data sources were conducted on teacher data collected. Matched data were examined for 29 teacher participants who remained in the project for two or more years. Quantitative (Likert scale) and qualitative data were collected through PD evaluations, classroom observations, a teacher survey, and pedagogic artifacts such as a Project Journey Showcase.

The second phase of the project allowed us to better examine the effect of the professional development at Guskey's fifth level of implementation, Student Learning Outcomes, by collecting pre- and post-measures of language and academic growth for the California English Language Development Test (CELDT), the Smarter Balanced Assessment Consortium ELA Test, and the Urban Ecology for ELs Writing Assessment. Based on available student data, reclassification rates and growth in English-language proficiency were examined across three years for student participants. Matched pre- and post-writing scores based on the Urban Ecology for ELs Writing Rubric were analyzed to determine if there were statistically significant differences between the pre- and post-assessment of each subgroup for each domain.

## RESULTS

Research question 1: How does a transdisciplinary model for professional development in Urban Ecology for ELs support teacher learning of both content and pedagogy?

## Professional learning support for EL science teaching and learning

Project teachers found the Urban Ecology for ELs modules' content and resources to be useful, pertinent, and exemplary of interdisciplinary instruction. Results from the Teacher Survey, Journey Showcase artifacts, and teacher reflections also indicated growth in teacher practices in using Urban Ecology Scientific Inquiry processes in tandem with EL researchbased practices through a transdisciplinary framework. Overall, this project affirmed the efficacy of an integrated PD model focused on STEM literacies for LTELs. The following representative quotes capture teachers' perceptions:

> "I Ioved seeing how excited and proud my English Learner students felt as they were able to study Urban Ecology and understand challenging science content and vocabulary." $$
\quad \text { - Middle school teacher }
$$ "This program has a positive impact on my students because l'm using many of the strategies while teaching the Urban Ecology for English Learners curriculum and also in other content areas."

- Fourth/fifth-grade teacher

By the end of the project, teachers' overall mean rating was 4.1 on a 5 -point scale ("High") on knowledge, skills, and practices in developing science content, language, and literacy learning for ELs. Teacher survey results showed evidence of confidence and implementation of the interdisciplinary practices and most project strategies. See Figures 2 and 3 (located in the online version of this article) for examples of teacher documentation of application and use of research-based strategies.

Research question 2: What are the effects on student outcomes as measured by a preand post-assessment of student writing and state-level language and academic assessments?

## EFFECTS ON STUDENT LEARNING OUTCOMES

Reclassification. Of the EL students for whom data were available ( $n=103$ ), end-of-project results indicated that 73\% ( $\mathrm{n}=75$ ) were reclassified as Reclassified Fluent English Proficient (RFEP); 27\% ( $\mathrm{n}=28$ ) remained ELs, with $46 \%$ ( $n=13$ ) of these receiving special education services.

CELDT. Of the ELs for whom there were CELDT scores for pre- and postproject data ( $\mathrm{n}=37$ ), the number in the Early Intermediate proficiency level decreased by $48 \%$. Conversely, the numbers at the Intermediate and Early Advanced/ Advanced increased by $13 \%$ and $35 \%$ respectively.

Academic Achievement. EL students' progress on ELA state-level academic achievement assessments indicates that from pre- to post-project, the number of students in the EL/RFEP group who scored at the "Standard Not Met" Performance Level decreased by $25 \%$. Those who scored at the "Standard Nearly Met" level increased by $21 \%$ and those who scored at the "Standard Met/Exceeded" Performance Levels increased by $4 \%$.

Writing Assessment. Project writing assessments showed statistically significant differences in scores ( $\mathrm{p} \leq 0.05$ ) related to development of informational text structure, academic discourse, spelling/grammar, and metacognition/ metalinguistic awareness.

## CONCLUSIONS

Overall, project findings are consistent with PD research that suggests the need for more ongoing teacher support to translate research to practice. Results also corroborate the importance of providing teachers with detailed, responsive, and structured PD focused on an interdisciplinary framework and researchbased practices for ELs. This approach increases content knowledge pedagogy and accelerates content knowledge among students. Additionally, teachers' exposure to interdisciplinary science during PD sessions translated into increased student exposure to scientific concepts and science as a way of knowing.

The positive results achieved by participating ELs indicate that the teacher PD enhanced instructional skills to deliver Urban Ecology scientific content knowledge effectively and utilize effective practices for ELs to develop the academic language of the discipline. Several implications serve to advance scholarship and practice:

- Increasing teachers' implementation of research-based practices requires a framework for and flexibility in PD delivery.
- Transdisciplinary approaches to PD involving the integration of science content and pedagogy are effectively modeled when university collaborators demonstrate it themselves through curricular innovation that incorporates learning outcomes for oral and written language and literacy of ELs.
- The PD model influences depth of teacher learning and confidence, with additional implications for guided feedback to support transdisciplinary pedagogic shifts.

Projects such as this also contribute to systemic efforts to model, influence, and study how members of transdisciplinary communities engage in and benefit from the development and implementation of resources, models, and tools that have the potential to positively affect educational outcomes for English Learners. ©

## References are available in the online version:

https://www.gocabe.org/index.php/
communications/multilingual-educator/


# Growing-Our-Own Dual Language Teachers: Partnerships between Local Districts and Universities 



By<br>Jorge Arvizu, Loma Vista Immersion Academy<br>Helen Rocca, Pueblo Vista Elementary Magnet School Rhianna Casesa, Ph.D., Sonoma State University

Despite the current nativist rhetoric and policies discouraging immigration, the United States has the most diverse student population in history (Dilworth \& Coleman 2014). In California this fact is even more dramatic as Latinx children comprise the majority of students in our TK-12 public schools. However, despite recent demographic shifts, the teacher workforce is actually less ethnically diverse than it has been before, with the majority of classroom teachers being white, middle-class women (Albert Shanker Institute 2015).

Compelling evidence suggests that employing diverse teachers, particularly bilingual teachers and teachers of color, has the potential to reduce the achievement gap (Gay et al., 2003). Diversification of the teacher workforce may be even more crucial here in California, where currently 76\% of children enrolled in public schools are students of color. Of these students, over one million are English Learners (ELs)/Emergent Bilinguals (EBs) and 84\% of the ELs/EBs in

California are native Spanish speakers. These factors, along with the 2016 approval of California's Proposition 58, provide evidence supporting an urgent need to recruit and retain more teachers of color into bilingual authorization programs throughout the state.

To meet this need, Sonoma State University has partnered with two local Dual Language elementary schools, Pueblo Vista in Napa and Loma Vista in Petaluma, to develop an innovative model of student teaching with the long-term goal of recruiting (and retaining) bilingual Latinx teachers into the workforce. Teacher candidates (i.e., student teachers) are supported academically, linguistically, and socioculturally throughout their student teaching experience by both Sonoma State University and their field placement site. We call this collaborative model our CORE (Collaboration for the Renewal of Education) Model of student teaching.

The CORE Model goes beyond traditional models of student teaching by empowering university and elementary school faculties to work together on behalf of the mutual and ongoing improvement of each program in the service of all the students we teach-the elementary students and teacher candidates. Grounded in the vision of John Goodlad (1994), we intentionally provide rich experiences for both the teacher candidates and the mentor teachers. Providing a collaborative experience supports all stakeholders: teacher candidates, elementary students, mentor teachers, other site faculty, administrators, families, and university faculty.

We approach our collaboration from a "grow-your-own" philosophy of Dual Language teacher development. By giving teacher candidates meaningful learning opportunities grounded within local, growing DL schools, we hope to inspire them to teach where they trained and to continue to support the community. Sonoma State's program has indeed met this goal-our DL teacher candidates are often hired at the sites where they began their student teaching or go on to teacher-leader or mentor positions at our local DL schools.

At its core, one of the factors that makes these partnerships unique is that the partner schools (Pueblo Vista and Loma Vista) agree to host a critical mass of student teachers for an entire academic year. This allows the student teachers to develop a sense of connection with the community and to be seen as valuable assets to the school.

The year-long field placement at one school, coupled with a critical mass of six to ten student teachers per school, provides a variety of experiences: peer coaching and mentorship, clinical observation, co-teaching, collaborative models of mentor development, and on-site student teaching seminars. These experiences would be challenging in a more typical student teaching model where a candidate is placed at multiple sites throughout their practicum and may be the only student teacher at that site.

## Peer-Coaching and Mentorship

Teacher candidates are permitted to begin their student teaching field placements in either fall semester (August) or spring semester (January). Wherever possible, firstsemester (1S) student teachers and second-semester (2S) student teachers are placed with the same mentor. These partnered student teachers form a reciprocally supportive relationship: the $2 S$ student teacher is able to model what more experienced student teaching looks like and offer some coursework support based upon his or her first semester of classes. Furthermore, as the $2 S$ student teacher is in the
classroom more frequently than the $1 \mathrm{~S}, \mathrm{~s} / \mathrm{he}$ is able to fill in some of the planning gaps that the other might have missed. This near-peer mentorship gives the $2 S$ the opportunity to share his/her developing classroom expertise with the 1 S ; not only does this support the 2 S 's ability to articulate planning, teaching, and assessment to someone with less experience, but it takes some pressure off of the mentor. Beyond the academic development and support fostered by this partnered student teaching relationship, socioculturally this experience supports student teachers' development as novice teachers and builds community. Often, mentor teachers make teaching look really easy-having a peer in the classroom helps teacher candidates as they struggle together and come to understand together that learning to teach is not easy. It offers the 1S a more realistic model for what more experienced student teaching looks like as opposed to only offering an often intimidating (or even unattainable) model of teaching demonstrated by our veteran mentor teachers.

## Clinical Observation

Student teachers observing other student teachers is a fundamental component of the partnership. Over the course of the year-long student teaching experience, candidates are required to clinically observe other student teachers a minimum of six times. When possible, site supervisors facilitate a field trip between placement sites: student teachers from Pueblo Vista come to Loma Vista for a day, and the student teachers from Loma Vista go to Pueblo Vista for a day.

When a site supervisor schedules a clinical observation for a candidate, all other student teachers and their mentors are informed and invited. Therefore, during a formal student teaching observation, the teacher candidate will be observed by his/her mentor teacher, the university supervisor, and other student teachers. All observers take detailed notes using a formal observation protocol based upon the Teaching Performance Expectations (TPEs). These notes then inform the clinical debrief-an opportunity for all observers to discuss the lesson, determining strengths and next steps for the student teacher, determining if and how instructional objectives were met, etc. This clinical observation has multiple purposes: it supports the observed teacher candidate by offering him/her multiple lenses or perspectives about the lesson, and it strengthens the observational skills of the non-observed teacher candidate. Importantly, the debrief or "teaching conversation" lends itself to refining skills of articulation of and about practices related to teaching for all observers-student teachers, mentors, and even the university supervisor.

## Co-Teaching

In most clinical placements in teacher credentialing programs throughout California, student teachers co-teach with their mentor teachers. Like these other programs, our partnership facilitates the co-teaching between a mentor and the student teacher(s). However, our partnership also focuses upon co-teaching between the student teachers. Mentor teachers, the site supervisor, and the school administrator work together to teach on-site seminars to student teachers. During these seminars, we model, discuss, and practice six types of co-teaching (one teach/ one observe; one teach/one assist; station teaching; parallel teaching; supplemental teaching; alternative or differentiated teaching). Then, the mentors, supervisor, and/or administrator support and expect the student teachers to plan, teach, assess, and reflect upon their co-taught lessons together.

While we value the role of co-teaching between the candidate and the mentor, we have noticed that in many cases when a candidate co-teaches a lesson with a mentor, the mentor often does most of the idea-generating and planning. By requiring student teachers to co-plan and coteach lessons together, we notice a greater buy-in from the student teachers regarding co-teaching. We also notice a greater diversity in content and idea-generation related to lesson planning, teaching, and assessing. We notice our student teachers often take more risks when working with other student teachers than they take when co-planning and co-teaching with a mentor.

## Collaborative Mentor Development

Having multiple student teachers at each of our sites means having multiple mentors at each site. This provides a meaningful opportunity for mentors to meet together as a team of expert teachers. During bi-monthly mentor meetings, we discuss pertinent issues related to supporting the development of our student teachers as a group of teacher educators (mentors, supervisors, and administrators working with the teacher candidates). For instance, a mentor might notice that a candidate is struggling with academic language in Spanish for mathematics instruction. Our mentor meetings provide a safe space to discuss these issues and crowdsource ideas to support struggling student teachers and consider what resources are available. Each site's mentor meetings also serve as an opportunity to struggle through new ideas, requirements, or protocols together as teacher educators before working with student teachers.

## On-site Student Teaching Seminar

Both Pueblo Vista and Loma Vista support on-site student teaching seminars that are relevant to and based upon each school. These on-site seminars are valuable opportunities for a small group of teacher candidates to debrief the student teaching experience-to discuss classroom management, the successes and challenges of learning to teach, the mentor-student teacher relationship, school politics, etc.-at their own site. As a credit-bearing course, the seminar does follow a syllabus; however, the syllabus and course calendar are often modified based upon student teachers' needs and school events. For instance, when parent-teacher conferences are scheduled, we hold a seminar specific to communicating with parents focused upon the cultural, academic, and linguistic diversity of the parents at each site. Furthermore, we capitalize upon the mentors' strengths: administrators encourage each of our mentors to be a "guest lecturer" for a seminar session. The mentor guestlecturer spends 30-45 minutes working with the student teachers on a topic of their expertise. Some of our most successful seminars are those facilitated by mentors: positive classroom management; special education in DL contexts; communicating with parents in a language that is not your first; and top ten strategies to use in DL classrooms. We have had the school garden educator discuss incorporating the school garden into content lessons, and each principal always facilitates a seminar focused upon job hunting, resume building, and successful interviewing techniques. Hosting seminars at each school where the mentors teach makes their participation easier and more authentic. Perhaps most importantly for our candidates, hosting seminars at each student teaching site allows for a deep and rich discussion about teaching in a small and intimate space, developing collaboration, communication, and community among the student teachers.

As partners supporting the development of Dual Language teachers, we all strive to provide the teacher candidates-all future DL teachers-with the knowledge, skills, and abilities that can positively impact the schooling experiences of the children they will be teaching. We hope to create teachers who are thoughtful and innovative, and who have professional integrity based upon who they are and who they teach. We want teachers who are committed to their communities and their languages-and, ideally, teachers who become advocates for linguistic diversity and social justice. Strong, authentic, and collaborative partnerships between local schools and credentialing institutions are one way to develop critically-minded teachers who do just that. œ

# "PRESEIT YOUR STRRT". MRTHEINRTIES DISㄹU55IDIS TO BEREFIT RLL STUDEMTS 



While research shows that English Learners (ELs) or Emergent Bilinguals (EBs) [Editor's note: these two terms are used interchangeably in this article], can engage productively in mathematics discussion in English (Moschkovich 2007; Takeuchi 2015), some question whether the language demands of whole group discussion in English limit EBs'learning (Turner, Dominguez, Maldonado, \& Empson 2013). In this article, we address this question by summarizing the results of a study of the relationship between effective mathematics discussion and performance on a written assessment by students in 20 thirdand fourth-grade classrooms in a low-income district where nearly half of the students are EBs (Banes et al., 2018, in press). Results showed all students benefited from quality discussions. We outline the features of classroom discussion that proved beneficial to all students, including EBs. The following questions guided our study:

1. Do mathematics discussions affect all students in a similar manner, regardless of their status as EBs?
2. How do discussions affect EBs?

## THE 5TUD

Theoretical framework. We focus on benefits of discussion that can be associated with improved performance on achievement measures for EBs. We share the view of many in mathematics education that students construct their understanding of mathematics by working on problems and then discussing their attempts under the guidance of a teacher who orchestrates discussion by eliciting student contributions and encouraging students to make sense of one another's ideas (Huffered-Ackles, Fuson, \& Sherin 2004; Kazemi \& Stipek 2001). Following Forman, McCormick, and Donato (1998), we define classroom discussion in mathematics as an activity in which students listen, speak, and think about mathematical ideas. Classroom research has shown that quantity of talk is

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not enough to produce an effective math discussion. Quality of talk is equally important (Smith \& Stein 2011). Based on the literature, we identified five key features of effective math discussion: 1) variety of approaches; 2) opportunities to speak; 3) equitable participation; 4) explanations; 5) connections between ideas. Table 1 summarizes these key features. (See Table 1 at the end of this online version of this magazine.)

Methods and data sources. We conducted the study during the 2013-14 school year in a small northern California urban district where $92 \%$ of the students received free or reduced-price lunch. In 2013-14, 37\% of the students were Hispanic, 16\% white, and 15\% African American, while 45\% were classified as ELs. Although student mobility is high (21\%), teacher mobility is low (only 5\%). Fourteen of the 20 teachers in the study participated in voluntary professional development (PD) provided by the authors, with participation ranging from 22 to 131 hours over three years. PD emphasized discussion, anticipating students'responses, and furthering teachers'own mathematical understanding. The district also emphasized discussion and problem-solving, key features of the adopted curriculum, EnVision Math.

Our study examines the differences between discussion and math performance for students classified as EBs and students who were not. We also explore effects of discussion on the performance of EBs. Participants included 410 students from 20 classrooms, including 217 EBs who spoke 17 different home languages. Table 2 (next page) shows the number of classes by grade, percentage of ELs/EBs, and mean scores of ELs/EBs on the California English Language DevelopmentTest (CELDT).
(Students in the EL/EB category were still in the process of acquiring the language of instruction. Students identified as non-ELs include native speakers of English as well as students who were previously identified as ELs but were re-designated fluent English proficient.)

Table 2. ELs by Grade

| Grade | \# of classes | \% ELLs | Mean EL CELDT level (1-5) |
| :---: | :---: | :---: | :---: |
| 3 | 11 | 55 | 2.94 |
| 4 | 8 | 47.5 | 3.12 |
| $3 / 4$ | 1 | 48 | 4.08 |

We measured mathematics performance by creating a Linguistically Modified Math Assessment (LMMA) based on problems from past Trends in International Mathematics and Science Study (TIMSS) and National Assessment of Educational Progress (NAEP) assessments. We modified the language of items to remove unnecessary linguistic complexity while keeping the mathematics and content-related vocabulary the same. Figure 1 below shows an example of an original and linguistically modified item.

Figure 1. Original and linguistically modified item

## Original text:

Together, Sara and Brendan have 20 pencils. Sara says 1/4 of the pencils are hers. Brendan says 15 of the pencils belong to him. Explain how both could be right. Use words or drawings.

## Modified text:

There is a box with 20 pencils.
Sara says $1 / 4$ of the pencils are hers. Brendan says 15 of the pencils are his.
Why are they both correct?
Use words or drawings to explain.

We administered the LMMA in spring 2013. The test includes multiple-choice, open-response, and explanation items as well as multistep word problems. The third-grade test has eleven items; the fourth-grade test includes six additional items.

To measure mathematics discussion, two raters, unfamiliar with the teachers, attended one lesson for each classroom and, using a rubric developed by our research team (Appendix A), rated discussions according to the five features in Table 1. (See Appendix A and Table 1 at the end of this online version of the magazine.) The rubric has a four-point scale for each feature.

After the lesson, raters independently generated discussion scores, then met to debrief and resolve any differences. Scores within $10 \%$ of each other were considered consistent. Inter-rater agreement was $75 \%$. When raters' initial scores diverged, they returned to the classroom for another observation. The following vignette illustrates the use of the rubric to evaluate a high-scoring discussion:

> Students in a third-grade class were working on the following problem:
> Lou is painting a shelf. She paints $2 / 8$ purple. Then she paints $4 / 8$ more of the shelf gray. How much of the shelf has she painted in all?

After reading the problem aloud clause-by-clause, the teacher gave students five minutes to "get a start, but don't solve it yet." He then selected students to present their "starts" to the class. The following excerpt shows Aria, an outgoing EB, presenting her "start" at the front of the room with her paper projected. The teacher acted as facilitator, reminding presenters to "check your audience," and asking students to revoice key ideas.

Aria: [presenting] I colored it two purples because she said it was 2/8 purple and 4/8 gray.
Teacher: Can you show us that in your drawing?
[Aria points to two sections shaded with pencil in her drawing of a fraction bar divided into eight sections.]
Teacher: What made you decide to color that in?
Aria: I colored it in because it's going to show how much she colored in all.
[Several students signal agreement using hand signals, unprompted by teacher]
Teacher: Any questions for Aria?
Joey: Why did she add the 2/8 and the 4/8? [looking at teacher]
Teacher: Are you asking Aria?
Joey: How come you added the 4/8 and 2/8? [now looking at student presenter]
Aria: Because it's going to tell how much she colored altogether. [pause] I didn't color it with pencil because it would be mixed up together.

As in other discussions with a top score of four in variety of approaches, this teacher presented an open-ended problem and let students decide how they would solve it. By selecting several students who solved the problem in different ways to share their strategies, the teacher ensured all students had access to multiple solution methods.

Over half the students, including EBs, contributed to the discussion, resulting in a four in equitable participation. This lesson received a three in the category opportunities to speak because students were given short opportunities to speak with partners, and several were given time to produce extended responses in whole class discussion. During the discussion, the teacher pressed students to explain how they decided on a strategy. Several students in this discussion produced meaningful, partial explanations, thus earning a three for explanations.

Students showed a genuine interest in making sense of their classmates' thinking. When Joey asked Aria why she added the fractions, he pressed for a justification that led her to connect back to the situation described in the word problem. Later in the lesson, students had opportunities to compare and connect multiple ways of solving, helping the discussion reach


This vignette illustrates how the teacher supported student-student interaction by directing questions back to students, positioning them as mathematics doers and thinkers. He alerted students who would be presenting beforehand, enabling EBs to better articulate their thinking. Encouraging students to refer to visuals while they presented also supported communication of mathematical ideas.

The Results. Below we summarize the results on the Linguistically Modified Mathematics Assessment and show how different aspects of discussion affected performance.

LMMA performance. The average LMMA score for third graders was $47.2 \%$, while the fourth-grade average was $51.78 \%$. There was very little difference between the average scores of ELs, who averaged 48\%, and non-ELs, who averaged $51 \%$.

Features of discussion in the lessons. Variety of approaches, opportunities to speak, and equitable participation were the highest scoring categories, indicating students in most classrooms were solving problems more than one way and publicly sharing their thinking. Conceptual explanations and connections between ideas were less frequent. These features require teachers to respond in real time to students' contributions and connect them to other mathematics, which may be more difficult than eliciting student talk.

Table 3. Discussion Scores Across Classrooms

| Discussion <br> Feature | Mean <br> Score | Standard <br> Deviation | Range |
| :--- | :---: | :---: | :---: |
| Variety of approaches | 3.60 | .64 | $\mathbf{2 - 4}$ |
| Equitable participation | 3.55 | .56 | $2-4$ |
| Opportunities to speak | 3.05 | .77 | $1-4$ |
| Connection between ideas | 2.55 | .84 | $1-4$ |
| Explanations | 2.30 | .86 | $1-4$ |
| Total Score | $\mathbf{1 5 . 1 0}$ | $\mathbf{2 . 6 9}$ | $\mathbf{1 0 - 2 0}$ |

Effects of discussion on LMMA scores. We found a statistically significant relationship between class discussion scores and students' performance on LMMA, controlling for prior math achievement. Overall discussion scores account for 6\% of the variance in LMMA scores, a small, yet promising effect. As individual features, variety of approaches and equitable participation significantly affected students' performance. Importantly, we found that the relationship between discussion scores and LMMA performance is the same for ELs and non-ELs. Higher discussion scores appear to benefit both groups equally.


## By

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In this article, we present a professional development model for assessing and teaching mathematics to bilingual students. Our focus on mathematics achievement is guided by our commitment to equitable instructional practices for students developing bilingualism and biliteracy in California's schools. We co-developed an iterative formative assessment process to assist educators in understanding and addressing the relationship between mathematics teaching and learning, as well as culturally and linguistically responsive pedagogy. We recognize that the relationship between bilingual students' academic achievement and professional development for teachers requires ideological clarity on the social and political dangers of interventionist deficit approaches that promote English monolingualism and cultural assimilation (Alfaro \& Hernández 2016; Flores, Strikwerda, \& Ordaz 2019). Student achievement measures, such as standardized test scores, cannot be disassociated from the sociopolitical stances of privilege and exclusion that influence practices and policies for bilingual students (Gutiérrez 2013). As teacher educators, we consider equity in mathematics education research a professional responsibility (Aguirre, Herbel-Eisenmann, Celedón-Patichis, Civil, Wilkerson, Stephan, Pape, \& Clements 2017). The present
study illustrates the use of a formative assessment process to help support teachers, schools, districts, and communities in bolstering the mathematics achievement of bilingual students.

Mathematical Proficiency. California's standards for mathematical practice are based on the five interdependent strands of mathematical proficiency: (a) conceptual understanding-comprehension of mathematical concepts, operation, and relations, (b) procedural fluency-skill in carrying out procedures accurately, flexibly, and efficiently, (c) strategic competence-ability to formulate, represent, and solve mathematical problems, (d) adaptive reasoning-capacity for logical thought, reflection, explanation, and justification, and (e) productive disposition-habitual inclination to see mathematics as sensible, worthwhile, and coupled with a belief in diligence and one's own efficacy (National Research Council 2001).

The Mathematical Register. The register associated with mathematics includes discipline-specific words, expressions, and meanings (Halliday 1978). We contend that explicit instructional attention to the mathematical register is required
for Emergent Bilinguals (also referred to as English Learners) to develop academic language fluency and biliteracy in California's schools (Martiniello 2009). We utilize the phrase Emergent Bilinguals to affirm students' "potential in developing their bilingualism" (Garcia 2009, 322). Students developing their bilingualism may require scaffolding to understand academic vocabulary and grammatical patterns necessary for accessing the mathematical register (Schleppegrell 2007) and promoting mathematical discourse, which relates to the interplay of language, symbols, and visual representations (O'Hallaran 2005). When teachers use and reinforce the importance of mathematics-specific vocabulary in classroom discussions, Emergent Bilinguals developing English fluency and literacy achieve higher results on assessments than students in a comparison group (Snow, Lawrence, \& White 2009). Moreover, the importance of assessing and teaching bilingual students in multiple languages allows educators to disaggregate evidence of language acquisition fluency from the mathematical register. Furthermore, the mathematical register includes notation conventions that are distinctive across languages, such as the representations of fractions in a decimal with a comma (e.g., one fifth can be represented in decimal form as 0,20 ) and ordinal numbers with a superscript of 0 being mistaken as a representation of degrees (e.g., the ordinal fourth in Spanish is represented as $4^{0}$ which a reader may interpret as four degrees) (Solano-Flores 2011).

Formative Assessment and Professional Development. The purpose of formative assessment is to provide teachers with meaningful student information to guide instruction (RuizPrimo, Furtak, Ayala, Yin, \& Shavelson 2010). The relationship between assessment, instructional practices, and bilingualism provides opportunities for educators to examine the extent of bilingual students' mathematical understanding and analyze how the process of developing bilingualism and biliteracy influences their mathematics learning (Duran 2008; Téllez \& Mosqueda 2015). Understanding that mathematical knowledge and skills of bilingual students is distributed across languages, Avalos and Secada (2019) developed a professional development program to improve urban bilingual students' mathematical understanding and develop their mathematical register across languages via collaborative problem-solving discussions that focused on language, symbols, and visual representations. We believe professional development regarding the relationship between formative assessment and instructional practices is an antecedent access point to bilingual students' mathematics achievement.

Guided by the literature on mathematical proficiency, the mathematical register, and formative assessment, we designed, implemented and analyzed a professional development model for mathematics teachers of Emergent Bilingual students informed by student assessment results. Considering that most research attention on mathematical proficiency has prioritized oral language functions and neglected written texts (Ryve 2011), our professional development model was attentive to both the importance of structuring accountable talk during mathematics instruction (Chapin, O’Connor, \& Anderson 2009), as well as the potential for meaningful information from openended formative assessment writing prompts in mathematics. For example, students were asked, "In the box above, represent the following information in equation form-Divide a number by 5 and add 4 to the result. The answer is 9 . Solve the equation. In the space below, explain to someone the steps you took to solve the equation." Throughout all stages of professional development, we referenced the strands of mathematical proficiency as guiding principles (National Research Council 2001).

## Equity-Based Action: Professional Development Informed by Student Assessment Results

We developed and implemented a professional development process informed by student assessment results where teachers learned about assessment and used assessment to examine student learning and inform their practice. This work was done with eight middle school mathematics teachers at an urban charter school in California’s Bay Area. (We use United States Office of Management and Budget metropolitan statistical area classifications to qualify schools as urban.) The school served high percentages of students eligible for participation in the National School Lunch program (95\%) and designated as English Learners (96\%). Mathematics teachers' experience ranged between 5 and 25 years and three teachers self-reported as bilinguals. Our professional development approach consisted of: (a) three workshops to support mathematics teachers in the integration of language, literacy, and mathematics, (b) the cocreation of formative assessment tools (e.g., writing prompts and scoring rubrics), and (c) individualized coaching that included co-designing lessons, classroom observations, and post-instruction reflective conversations.
(See Figure 1 on pg. 38.)

The content of all three workshops included recent research findings, collective viewing and discussion of video examples of mathematics instruction that integrated

Figure 1

language development practices, and co-developing and refining formative assessment writing prompts, rubrics, and administration guidelines (e.g., reading aloud the prompt to students). All workshops included opportunities for teachers to score formative assessment samples, discuss patterns in student responses, and share instructional suggestions for promoting students' concurrent development in mathematical proficiency and disciplinary biliteracy. We encouraged teachers to promote student responses in the language they felt could best express their thinking.

After the first workshop, teachers administered a mathematical writing prompt about a savings account line graph with the $y$-axis representing dollar quantity and the x -axis representing number of months. We collected and scored all assessments using rubrics in both English and Spanish and provided each teacher with aggregated results for all students ( $\mathrm{n}=99$ ). We also met individually with each teacher and used aggregated assessment results and bilingual rubrics to co-design a future lesson, which we observed and discussed post-implementation. We used information from both the aggregated assessment results as well as our notes from the nine individualized coaching experiences to design the content of the second workshop.

During the second workshop, teachers collaborated on refining the formative assessment as a wireless phone plan line graph with the $y$-axis representing dollar quantity and
the x -axis representing the length of calls in minutes (Figure 2). We asked teachers to implement the revised formative assessment after the second workshop. Additionally, we once again collected and scored all assessments ( $\mathrm{n}=118$ ) and provided teachers with aggregated results for all students and met individually with each teacher to co-plan, observe, and discuss a lesson post-implementation. We reviewed both aggregated results of the second assessment and notes from our individualized coaching experiences to design the content of our third workshop.

During the third workshop, teachers collaborated on creating a formative assessment about representing, solving, and justifying an equation and we asked teachers for suggested modifications to the rubrics. After the third workshop, teachers implemented the formative assessment they created and we asked teachers to score their students' responses. Finally, we met with each teacher for a third individualized coaching experience that included pre-observation planning, recording teacher statements and actions during instruction, and postobservation dialogue.

The rubric we created to measure students' mathematical proficiency, disciplinary literacy, and English-language fluency simultaneously was in English. Cognizant of power differentials of language in schools, the assessment administration guidelines directed students to respond in Spanish or English. Most students composed their responses in English, but some
students responded exclusively in Spanish, and we created a Spanish-language version of the rubric.

## The bilingual rubric assesses students across four domains:

(a) conceptual understanding-entendimiento conceptual
(b) procedural fluency-fluidez de procedimientos
(c) mathematics vocabulary-vocabulario matemático
(d) writing conventions-convenciones de escritura

## We scored all assessment dimensions on the following scale:

(a) above grade-level
(b) at grade-level
(c) below grade-level
(d) does not address grade-level expectations

The conceptual understanding domain measured the logic and organization students used to solve the mathematics problem as well as their understanding of the mathematical concept. The procedural fluency domain measured students' ability to carry out mathematical procedures. The mathematics vocabulary domain measured students' use and quantity of disciplinary-specific and process-oriented vocabulary. The writing conventions domain measured students' use of punctuation, spelling, grammar, and transitional words. (See Table 3 at the end of this online version of the magazine.)

## Concurrent Measures of Mathematics, Biliteracy, and Bilingualism

Aggregated formative assessment results revealed mean score gains from first to third assessment on conceptual understanding and writing conventions. Mean score gains from first to third assessment on procedural fluency and mathematics vocabulary were not evident. On average, two trends existed: (a) students exhibited grade-level results on conceptual understanding, but demonstrated below gradelevel results on writing conventions and (b) students exhibited grade-level results on writing conventions, but demonstrated below grade-level results on conceptual understanding. Rubrics provided a tool for teachers to analyze the interrelated, but distinctive, domains of learning mathematics, as well as developing biliteracy and bilingualism. Informed by assessment results, we provided teachers individualized instructional suggestions, as well as customized professional development workshops.

Moreover, we shared research findings about community cultural wealth and a repository of readings about Latinx mathematicians and scientists with teachers who reported students' motivation in mathematics as an area of interest. For teachers that were interested in developing their students' mathematical vocabulary and reasoning, we provided a workshop with research findings on academic literacy and a repository of daily journal exercises that would promote explanations of students' sense-making in mathematics. Teachers reported the opportunity to disaggregate students' mathematical learning by conceptual understanding and procedural fluency as useful for planning instruction. Finally, we provided a workshop with suggested daily language acquisition exercises and mathematical discourse routines to develop students' oral and compositional language throughout mathematics instruction. For example, we presented teachers a framework for teaching mathematical problem-solving and identifying language convention errors concurrently. (See Figure 4 at the end of this online version of the magazine.)

## Conclusions and Recommendations: Bilingualism and Biliteracy in Mathematics

Our aim in this article was to contribute insights regarding how to leverage assessment and professional development to prioritize equity in the mathematics learning of Emergent Bilinguals. Specifically, we suggest professional development collaborations to include continuous opportunities for teachers to be purposefully included in the development of formative assessment processes. Second, we recommend that bilingual education / Dual Language teachers use multiple assessment measures that prioritize $21^{\text {st }}$ century indicators of learning: communication, collaboration, critical thinking, and creativity/problem-solving (Binkley, Erstad, Herman, Raizen, Ripley, Miller-Ricci, \& Rumble 2012; Maldonado, Georges, Puglisi, \& Hernandez 2018). Third, we encourage educators to create intentional opportunities for Emergent Bilinguals to demonstrate their learning across languages. By expanding formative assessment and instructional practices of mathematical proficiency in multiple languages, teachers invite bilingual students to maximize their linguistic and mathematical repertoire (Garcia 2009), support transfer between languages (Briceño \& Maniates 2016), and structure pedagogical conditions that support equitable California policies, such as the State Seal of Biliteracy and the English Learner Roadmap. ↔

Table 3, Figures 2-4, and References are available in the online
version: https://www.gocabe.org/index.php/communications/ multilingual-educator/

# PRACTICAL FINDINGS FOR IMPLEMENTING A DUAL LANGUAGE IMMERSION PROGRAM: Where does My DISTRICT START? 



By
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Dual Language Immersion Programs (DLIPs) are growing in number in response to the needs of both English Learners and native English Speakers to mutually acquire a second language while learning academic content areas. While the growth of Dual Language Immersion Programs seems to be a movement happening across the nation (Harris 2015), there is little qualitative data on what the development and implementation of these programs actually look like for a K - 12 district. With so much at stake during the implementation of any new program in terms of student achievement and lifelong learning outcomes, it is critical for school districts to have a clear starting point and understanding of the implementation road ahead. As Lindholm-Leary states, "...it is important to examine some of the successes, as well as challenges, identified in the research on Dual Language education programs, along with some of the implementation issues that are associated with high quality programs and can impact student outcomes" $(2012,257)$. This article highlights three practical findings from a case study that examined one K - 12 school district's process in planning for and ultimately implementing a Spanish and Mandarin Dual Language Immersion Program. The objective is to provide a starting point for districts looking to implement a DLIP.

## RESEARCH METHODS

The case study captured voices of district personnel, including the superintendent who led implementation, as well as principals, teachers, and parents in order to understand the process and decision points behind implementing a DLIP. Ten interviews were conducted, each ranging in time from 55 minutes to just over 2 hours, for a total of 13 hours of recorded interviews. Findings for this
original qualitative case study are the result of analysis of the recorded interviews, which were then transcribed and coded using multiple rounds of a priori coding and open coding (Maxwell 2013). Among other findings from the larger study, this paper focuses on three particular "golden nugget" findings for districts to consider as they grapple with how to provide a DLIP for their students and communities.

## GOLDEN NUGGETS

## The Founding Teacher

While the literature described nine factors that promote the planning and implementation of a DLIP, including: assessment and accountability, curriculum, instructional practices, staff quality, professional development, program structure and model, family and community involvement, support, and established goals, in several studies (Christian 1996; Gomez, Freeman, \& Freeman 2005; Lindholm-Leary 2005; Linton 2004; Montecel \& Cortez 2002; Pena 2002), the participants stated that the Founding Teacher was critical to the success of the implementation year of the Spanish and Mandarin DLIPs. Participants used the term Founding Teacher to describe the first DLIP kindergarten teachers in the Spanish and Mandarin strands. As the kindergarten cohort moved to first grade, a first-grade Founding Teacher needed to be found and hired, and then a second-grade Founding Teacher, and so on. The Founding Teachers in the case study were experienced DLIP teachers who were hired for their passion, experience, and political savvy. Although the literature discussed the necessity of properly credentialed staffing, the significance, depth, and reverence the participants placed on the Founding

Teacher is not emphasized in the literature in the emphatic way it emerged in this study. The Founding Teachers were teachers the district and site principals knew would be able to field concerned parent questions as well as help build a multilingual culture at their school sites. The Assistant Superintendent of Instructional Services also shared her belief in the critical role of the Founding Teacher:

The founding teacher, to us, was very, very important... [For] any program, really, the reputation of the program lives and dies by the founding teacher. No matter how many logistics you put in place, and how many resources you throw at a program, if the founding teacher does not have the passion for the program, the passion for the kids, the passion for instruction, then the program begins to have a reputation of mediocrity...versus [when] having an exemplary founding teacher, your program just starts on this high note. (Interview, January 6, 2017)

The district began informally searching for these teachers by word of mouth one year prior to the implementation year. The Assistant Superintendent of HR strategically informed local university BCLAD programs that the district would be hiring Spanish and Mandarin BCLAD teachers for the next several years until all grade levels had designated BCLAD personnel at the ready. Additionally, HR put the word out "on the street" to nearby districts with BCLAD programs. Finding the right Founding Teacher was prioritized.

## Teachers in Waiting

These case study participants also introduced the term Teachers in Waiting to describe the strategy of hiring only BCLAD teachers to replace retirees or other teachers who had left the district. The Teacher in Waiting would be placed in a monolingual third grade classroom, for example, waiting for the DLIP cohort to move up into third grade. Teachers in Waiting would be teaching monolingual assignments while also collaborating with the other gradelevel DLIP teachers to create materials, as well as attend DLIP trainings. DLIP teachers were afforded additional paid time during the summer and during the school year to produce unique multilingual materials for their programs. The Assistant Superintendent of Instructional Services shared,

> A teacher who has experience in dual immersion, who knows what to expect from students, who knows how to support the parents and their challenges...in the case of Mandarin, who knows how to work with a partner teacher-they are gems. It's very, very important to
nurture those gems, because you want to keep them for a long time. (Interview, January 6, 2017)

This strategy allowed the district to nurture and prepare DLIP teachers while subtly shifting school cultures to anchor support for the DLIP strands within the larger school. District administrators were not just seeking a BCLAD teacher. They were also building capacity, while shaping school cultures: new Founding Teachers and Teachers in Waiting. Participants understood that the Founding Teacher would be the face of the DLIP and placed a strong significance on the role of the Founding Teachers and Teachers in Waiting.

## A Vision for Negotiating, Hiring, and Recruiting Students

In order for the Assistant Superintendent of Human Resources to be able to hire solely BCLAD Spanish and Mandarin teachers for the next few years until all gradelevel DLIP spots were filled, strategic conversations needed to be had. With the support of the Board of Education, cabinet, and the community, who had vocally and formally supported the district's DLIP implementation, the Assistant Superintendent of HR came to school sites during staff meetings to explain DLIP goals, the model, and the need for hiring the necessary credentialed personnel. Certificated staff were informed that no jobs would be lost and BCLAD personnel would be hired as natural personnel attrition occurred through retirements. Teachers learned about the possibility of kindergarten students attending schools outside their neighborhood should the family select or win a lottery spot for the DLIP. By informing the entire teaching staff a year in advance of how hiring would look, how students would be selected and placed, and sharing the goals of the DLIP, the district was able to ease anxiety and build support for their Spanish and Mandarin DLIPs.

With a long-term plan in place for hiring administrators, as well as principals, realized the need to plan for student classroom makeup. Ideally, DLIPs have 50\% speakers of the target language and 50\% native English Speakers. The native English-speaking population was the largest as this district had only a 7\% English Learner population. Administrators knew the challenge would be to recruit and enroll Spanish Speakers as well as Mandarin Speakers from within the district to adequately populate the kindergarten DLIP strand each year. Essentially, the district needed to enroll 10 native Spanish Speakers and 10 native Mandarin Speakers every year in order for the DLIP to survive. The principals actively recruited from private preschools and even visited local churches.

After intentional communications efforts, parent meeting nights about student target language assessments, and the district DLIP lottery for native English Speakers, the Spanish implementation year started with one DLIP strand consisting of a third native Spanish Speakers, a third Heritage Spanish Speakers, and a third native English Speakers. The decision was made to create a Heritage Spanish Speaker category, defined as students who had a strong working knowledge of Spanish but did not test proficient on the Spanish kindergarten assessment. This decision was a result of not being able to recruit enough native Spanish Speakers. The lottery, mentioned earlier, was necessary to determine which native English Speakers would win the 10 spots for the Spanish DLIP and the 20 spots for the Mandarin DLIP. There were over 100 students on the native English pre-enrollment list for kindergarten. The following year, at a different site, two kindergarten strands were formed with $50 \%$ native Mandarin Speakers and 50\% native English Speakers. The district's larger native Mandarin population and their desire for a DLIP was confirmed by Mandarin assessments and subsequent enrollment.

While the district considered the first two years of implementation successful ones, administrators shared their concern for how future years would look as each kindergarten year would require constant new targetlanguage enrollments:

That's my challenge. I just can't imagine that many families to keep constantly feeding the program...because every year, you got to have more Spanish Speakers...new fresh batch. I can't picture us having that many. Now, once the program gets really going and if it's promoted, you may get more. Our hardest part is recruiting the Spanish families, not the English families. We got lots of people that are speaking English that want to be in the DLIP program. It's the native Spanish Speakers that we're having a harder time recruiting. The Mandarin, it's not a problem. (Interview, Assistant Superintendent of Human Resources, January 5, 2017)

With rising housing costs and little mobility within the district, administrators alluded to looking to their neighboring districts for native speaker student recruitment. Administrators shared concerns about the political impact this might have on their own community
and school district. While the literature discussed the importance of planning for hiring and understanding student demographics, it did not speak in detail as the case study participants did about student lotteries and the possibility of admitting kindergarten students from out of district to fill the need for continuous target-languagespeaking kindergarteners.

## Planning Period

Participants shared their belief that time spent analyzing planning phase elements paved the way for their first two successful implementation years. While the literature argues that the implementation team should establish goals, program design, and instructional practices, the study participants also added that districts seeking to implement DLIPs should keep longer end goals in mind. For example, will the DLIP continue into middle school or solely be an elementary program? The process of recruiting and hiring for personnel sparked discussion from the participants about the significance of the Founding Teacher, Teachers in Waiting, and intentional hiring strategies to recruit and retain BCLAD Spanish and Mandarin teachers. While the literature discussed studying demographics and identifying student needs, the participants revealed the importance of looking critically at the feasibility of DLIP implementation, forecasting potential challenges, and deciding upon student selection criteria—particularly the lottery process. Participants shared their desire to provide foreign language options for students who were not able to register for the DLIP due to limited space and staffing. Their solution, a work in progress, may be to offer summer language camps supported by their schools' foundation partner. Finally, participants' reflection on planning revealed their satisfaction in allotting additional planning time for DLIP teachers outside the school day, as well as during the summer. Administrators described this investment as invaluable in supporting DLIP teachers and preparing for a "stellar" program.

## IMPLICATIONS

While districts look at the feasibility of Dual Language Immersion Program implementation for their particular school district setting, they must keep in mind a variety of planning elements. Lessons and nuances can be learned from other districts that have had experiences planning for and implementing DLIPs. ©


# Classroom Translanguaging: Building Identity and Agency 



By<br>Danielle Patenaude, San José State University

I had heard a lot about Leo before working with him. He didn't speak in class. He would copy sentences from the board, but wouldn't write anything of his own. He was considered a "nonreader" when he first came into my intervention classroom. But the opportunities provided by working with small groups allowed me to see a different Leo. He would quietly fix his partner's English spelling on shared assignments and I would find Korean characters erased from pictures and replaced with English vocabulary. He was the "lowest" English speaker and reader in my second-grade group, yet I found him on the bench after school comfortably reading his fourth-grade sister's Korean books. Leo had literacy skills far beyond what I was introducing to my groups in class. He made me wonder: what was I missing about my students and their understanding of the world around them by only allowing them to show what they know in English?

As a pull-out ELD and reading intervention teacher, I work with students who are often tasked with changing the language and behaviors of their learning to match the ones used during instruction in our monolingual school setting. My goal as an educator is to provide a learning space where students are not marginalized for taking linguistic risks. To that end, I explore the use of intentional translanguaging in my instruction and in students' workspaces so they can engage all their linguistic skills and work toward developing more agency in their unique learning experiences.

## SHIFTING THE DEFICIT LENS

In California schools, students are given the label of "English Language Learner" (ELL) if they speak a language other than English at home. However, García, Ibarra Johnson, \& Seltzer assert the use
of the term Emergent Bilingual (EB) for students who are learning more than one language, because using the label ELL "renders the Languages Other Than English (LOTE) in the emergent bilinguals' developing linguistic repertoires invisible" $(2017,2)$. Rather than positioning students as lacking proficiency in the acquisition of English language, Emergent Bilingual refers to students as learners who are developing linguistic abilities, in more than one language, in addition to their cultural knowledge (Alvarez 2014; Michener, Sengupta-Irving, Proctor, \& Silverman 2012). Terms such as "L1" and "L2" for referring to students' first or second languages can also be problematic, as they oversimplify the language repertoires of students (Sayer 2012). EBs have diverse language backgrounds, in which their literacy and communicative experiences have contributed to their growing linguistic repertoires in more substantial and varied ways than simply as a language they learned first or second. Often times, children are experiencing more than one language at home simultaneously, and therefore do not have a distinct "L1", but rather a complex multilinguistic repertoire (Sayer 2012).

Assessments of EBs continue to perpetuate the deficit view of their abilities. EBs are often required to use only one language to answer questions on many assessments and may encounter test passages that are culturally unfamiliar to them, therefore placing EBs at a disadvantage compared to their English proficient peers (Ascenzi-Moreno 2018; Aukerman, Schuldt, Aiello, \& Martin 2017; Rodriguez-Mojica 2018). Deficit perspectives and decontextualized language on these tests disproportionately affect nondominant language communities, devaluing students' heritage languages and communicating a lack of recognition of their power (Paris \& Alim 2017).


The narrow focus of formal assessments provides teachers with an incomplete view of what Emergent Bilinguals can do with the English language and with the content knowledge being tested. For example, language brokering, or the process by which youths translate or interpret oral and written text during adult-to-adult conversations (Alvarez 2014), is a common expression and practice of emergent bilingualism. In fact, language brokering is often expected or even demanded of students by schools in order to communicate with families, however these skills are not assessed or valued in monolingual schools (Alvarez 2014). Despite the complexity of EBs' cultural and linguistic understandings, only a "partial portrait" of these students' abilities is being formed (Martínez-Alvarez \& Ghiso 2017). The risk of failing to build upon EBs' existing or emerging abilities then grows, as teachers potentially underestimate the skill sets of students based on these assessments. Broadening the accepted forms of responses to assessment questions could give students "the freedom to engage with academic content without the hypervigilance of their English language use" (Rodriguez-Mojica 2018, 59).

The results of these problematic assessments often lead to EBs spending more time in remedial class settings with direct instruction models and basic skills practice, and less opportunity for dialoguing about texts (Aukerman et al., 2017; Martinez-Alvarez \& Ghiso 2017; Rodriguez-Mojica 2018). These studies and data make clear that we are not adequately meeting the needs of EB students in our schools, and that continuing to base instructional placements on problematic assessments will not work to produce more independent and confident learners.

## TRANSLANGUAGING

García states that translanguaging is "a strategy that bilinguals use to make meaning, shape their experiences, gain understanding and knowledge, and make sense of their bilingual worlds through the everyday use of two languages" $(2009,307)$. Bilingualism is often traditionally viewed as the addition of a language, with students seen as two monolinguals in one (Grosjean 1989). However, in the translanguaging framework, students' bilingualism is seen as dynamic, with language features and experiences "that together form one intricate communicative repertoire that bilinguals learn to adapt to monolingual contexts whenever they occur" (García et al., 2017, 19). This model of a linguistic repertoire allows students to combine social and academic spaces with language codes that are usually practiced separately. It also opens avenues for teachers to begin using students' entire linguistic repertoires as resources for learning.

A translanguaging stance for teachers means believing that the many different language practices of students work together, not in interference with each other and not with the development of one language being at the expense of another (García et al., 2017). Many students enter school with the gift of speaking two or more languages. But one of the objectives of formal education is often to learn how to use English "correctly" (Sayer 2012), and so natural translanguaging practices of bilingual students (such as code-switching) are often rejected as acceptable forms of communication and knowledge-
building in the classroom. Even in bilingual or Dual Language school settings, the use of each language is often separated by time of day or subject matter instruction. Consequently, even while students may be developing academically in both languages, their potential is still hindered by the fact that using the entirety of the linguistic resources they possess at any given time is discouraged (Creese \& Blackledge 2010; Durán \& Palmer 2014, Velasco \& García 2014).

## STUDENT IDENTITY

Regardless of the classroom setting or the context of an academic task, EB students will complete their learning bilingually (Bauer, Presiado, \& Colomer 2016). Many immigrant children's lived experiences do not align with just one nationality or language, and therefore their linguistic repertoires reveal a "bordercrossing hybridity" that matches more accurately with the natural communication practices of bilingual students (Martínez-Alvarez \& Ghiso 2017). Hybrid language and cultural practices lead Emergent Bilingual students to form identities that may differ from a previous generation in their family. Translanguaging can give students an outlet for expressing this identity and to engage in the fluidity of moving between what Gutiérrez (2008) calls "repertoires of practice," which are both formal learning environments and the range of language practice spaces outside of school. Her work expands the concept of a zone of proximal development (ZPD; Vygotsky 1978) to include a Third Space where teacher and student language scripts intersect, and where the idea of what counts as knowledge shifts. Classrooms have multiple, sometimes conflicting, activity systems, and EBs can learn to move efficiently in and out of these spaces, as well as to participate in a Third Space, a hybrid language space, which can be intentionally created by teachers through practices such as bilingual partner pairing (Gutiérrez 2008).

The incorporation of translanguaging practices led to long-term educational gains in many studies, such as strengthened reading and writing quality, as well as an increased development of metalinguistic awareness, acquisition of new vocabulary, and students' development as strategic language users (Bauer et al., 2016; Henderson \& Ingram 2018; Pacheco \& Miller 2015). Translanguaging can position bilingual students as leaders and help them identify as intelligent experts in language with special skills for communicating with a wide range of other people (Alvarez 2014; Durán \& Palmer 2014). This requires intentional classroom discourse that goes beyond tolerance of students' languages and cultures, to normalizing translanguaging and encouraging the use of multiple languages in teaching and learning. Figure 1 (on the next page) shows five ways to incorporate translanguaging in classroom settings.

Creating translanguaging spaces in classrooms also led to teachers valuing students' personal histories and identities, which helped in building stronger and more inclusive classroom communities in which learners are encouraged to consider multiple perspectives (Henderson \& Ingram 2018; Martin-Beltrán 2014; Pacheco \& Miller 2015). These spaces proved integral in building important home-school connections, which honor students'


There are a number of easy things teachers can do to enable students to use their full linguistic repertoire when learning and showing what they know:

- Have dynamic cognate charts on the wall that students can add to. Discussions about cognates can foster a word-conscious classroom.
- Allow students to use multiple languages when drafting a writing piece to help them communicate their thoughts. They can translate to English later, if needed.
- Incorporate mentor texts from authors that use translanguaging as a craft. Discussion about word and language choice can help solidify for students when particular registers or languages might be appropriate for the audience and genre. Examples of books that include languages other than English are in Figure 2.
- Allow students to use heritage languages when talking about books, especially on reading assessments, where the purpose is to identify what they understood about the text, rather than what they're able to communicate in English (Ascenzi-Moreno, 2018). In some cases, this may require another student or adult to translate.

Figure 1.
multilingual identities by incorporating their backgrounds and lived experiences. A translanguaging lens provides educators with a way to rethink what meaningful parent participation looks like, from homework support to involvement in school or classroom contexts (Alvarez 2014). These connections can also contribute to a student's sense of belonging at school, which is associated with on-time high school graduation (Gándara 2015).

## AGENCY

Vaughn (2014) describes student agency as the act of making choices, decisions, or even critiques of the classroom learning situation. It involves students taking initiative and being in charge of their own learning. Languaging is an area that is ripe for students to exercise their agency. Students make decisions all day long about the language that they use in any given situation. These "choices about language reflect not only who they are, but also who they wish to be" (Durán \& Palmer 2014, 369).

Multilingual discourse, such as language brokering and codeswitching, and the meaningful decision-making behind it, could be brought into the classroom, opening a space for communicative agency for students (Alvarez 2014; Gutiérrez 2008; Martin-Beltrán 2014; Martinez, Hikida, \& Durán 2015). Teachers who arrange learning environments to include both social and cognitive activity within a hybrid language space can help expand students' repertoires of practice and encourage them to exercise their agency as they use peers as resources for comprehending the world around them (Aukerman et al., 2017; Gutiérrez 2008; Martin-Beltrán 2014;

## MULTILINGUAL LITERATURE

Picture Books<br>Doña Flor by Pat Mora<br>In My Family/En mi familia by Carmen Lomas Garza<br>Marisol McDonald Doesn't Match/Marisol McDonald no combina<br>by Monica Brown<br>The Cazuela That the Farm Maiden Stirred by Samantha R. Vamos<br>Los Gatos Black on Halloween by Yuyi Morales<br>Books for Grades 4-8<br>The House on Mango Street by Sandra Cisneros<br>Esperanza Rising by Pam Muñoz Ryan<br>Any Small Goodness: A Novel of the Barrio by Tony Johnston<br>Poetry<br>Laughing Tomatoes and Other Spring Poems/Jitomates Risueños y otros poemas de primavera by Francisco X. Alarcón<br>Gathering the Sun: An Alphabet in Spanish and English by Alma Flor Ada

Figure 2.
Martinez-Alvarez 2017). Treating translanguaging as a valued practice in class can help EBs build cooperative group skills and engage in a more meaningful dialogue with peers around content and texts (Alvarez 2014; Rodriguez-Mojica 2018).

## CONCLUSION

I won't pretend that Leo went on to ace all his tests after working with me. He will continue in my class in third grade, working on his English development. But he grew in ways that we know as educators are never really measured by test scores. He now writes funny stories in which he teaches his classmates Korean vocabulary, and he stops peers from taking over his turn when they attempt to fill in his English language for him. He takes responsibility for his learning time.

Non-stigmatized classroom translanguaging practices send the message to students that their complete knowledge, language, and experiences are valued and essential in their development, and that linguistic power does not need to reside solely in the hands of native English Speakers (Ascenzi-Moreno 2018; Bauer et al., 2016). As Creese \& Blackledge deftly state, "Bilingualism in the classroom is not so much about which languages, but which voices are engaged in identity performance" $(2010,110)$. The voices of Emergent Bilinguals often remain unheard in the classroom. The intentional inclusion of translanguaging practices is one way we can engage all our students' voices and foster all our students' growth. ©s

References are available in the online version: https://www.gocabe. org/index.php/communications/multilingual-educator/


## Introducción

Durante las dos décadas que llevamos enseñando en Estados Unidos hemos escuchado demasiadas veces frases como: tu español se oye "mejor", "más bonito"; "me gusta tu acento"; "tu español es el de verdad". Al principio reaccionábamos con extrañeza ya que nunca se nos había pasado por la cabeza que nuestra manera de hablar acarrease un estatus. Al haber crecido en un entorno con un mayor nivel de aparente homogeneidad, recién salidos de una dictadura centralista con un fuerte discurso de nación-estado, la reflexión sobre el uso del idioma y sus implicaciones sociopolíticas era escasa en la esfera pública española. Si, yo Ferrán/Fernando, ahondo más en esta epistemología diría que mi uso del español se contraponía a la que considero mi "mother tongue", el catalán. En esta lengua si era consciente del tipo de idiolecto catalán más correcto. Siendo lo que en Cataluña se llama un charnego ${ }^{1}$, mi madre es catalana y mi padre gallego, mi catalán había surgido de un discurso transglósico (García, 2014) en el que el catalán y el castellano y algún deje gallego se interrelacionaban para crear mi repertorio lingüístico. Para muchos mi catalán no tenía el nivel estándar que un hablante con altos niveles de competencia lingüística debe mostrar en todas las funciones del lenguaje: hablar, escribir, leer, escuchar y comprender. Por decirlo de algún modo era una persona bilingüe pero definitivamente no biliterate.

Por otra parte, si yo, Eduardo, desmantelo esa cortina de "homogeneidad" lingüística del español "peninsular" y exploro las implicaciones de mi dialecto, generalmente definido como andaluz, surgen nuevos y controvertidos matices. Suena a vocales amplias, y a muchas eses. El estereotipo que se ve es el del sureño holgazán, demasiado flojo para pronunciar consonantes finales o intervocálicas, y, por consiguiente, iletrado; apasionado y, por tanto, no dado al frío cálculo racional o académico; eso sí, hábil en los chistes, audaz en la comedia de la vida. La contraposición de imágenes, estereotipos y arquetipos, resulta sospechosamente familiar en el contexto racial y clasista de los Estados Unidos. Aquí Ferrán/Fernando y yo fuimos homogeneizados como peninsulares, pero la realidad lingüística española en el plano ideológico y de segregación raciolingüista (Flores y Rosa, 2015) se asemeja más a una estructura de muñecas rusas, donde la discriminación y privilegio se redistribuyen sucesivamente a cada nivel. Peninsular contra no peninsular y, dentro, peninsular norte contra peninsular sur y, a su vez dentro, población urbana frente a rural, y así sucesivamente: es lo que Irvine y Gal (2000) vinieron a llamar "recursividad fractal".

Es cierto y no vamos a negar los privilegios que nuestro español nos ha dado a través de los años.

[^1]Tenemos que reconocer que nuestra manera de hablar español y nuestra apariencia nos han abierto puertas, aunque también sabemos que nos han cerrado otras. Somos conscientes de la inequidad existente y cómo las personas asocian raza y lengua para crear falacias y estereotipos. Como explica Jonathan Rosa (2019) "languages are perceived as racially embodied and race is perceived as linguistically intelligible, which results in the overdetermination of racial and communicative practice..." (p. 2).

## La auto-historia como práctica intelectual y docente

Elegimos la auto-etnografía como herramienta de investigación por "su carácter cultural, como descripción del otro que forma de un entramado social y cultural determinado" (Guerrero Muñoz, 2014, pág. 238). Somos conscientes de que, para dar relevancia a nuestras auto-historias necesitábamos traspasar el mero relato y ahondar en la crítica personal para así hacer reflexionar al lector sobre su propia auto-historia y cómo esta es un trampolín para convertirse en un educadxr culturally and linguistically proficient.

Escribir nuestras auto-historias nos han hecho, reescribiendo las palabras de Boragnio (2016), poder sopesar nuestras emociones e ideas durante todo el periodo que dedicamos a la indagación e introspección de las prácticas educativas que creíamos se debían utilizar en los salones de clase a los cuales estábamos asignados. Somos conscientes que la autoetnografía por naturaleza tiende, según "los énfasis que cada autor le da a su texto" (Blanco, 2012, p. 57), a ser una narración personal o quizás una ventana para evaluar con lentes científicas aspectos claves de nuestro devenir como educadores.

En las siguientes secciones explicamos nuestras auto-historias
y analizamos con respeto y con mucha autocrítica errores que cometimos antes de aprender a escuchar y entender las necesidades sociolingüísticas de nuestrxs estudiantes. Y también cómo abrazamos el poder lingǘstico de nuestros contextos. El lector podría encontrar experiencias compartidas y esperamos que de una manera colectiva podamos seguir indagando en la pregunta inicial: ¿Qué español debemos enseñar? con la esperanza que este proceso constante prevenga futuras colonizaciones y apropiaciones lingǘsticas

## Qué poco cuesta escuchar cuando se quiere aprender

Aprender y enseñar han sido y son los dos motores que guían mi carrera como educador. Siempre o casi siempre, en nuestro trabajo no existen los absolutos, he tenido la audacia de romper los convencionalismos que a veces previenen a la educación ir más allá de la mera instrucción (Palmer, 2007). Dije "casi siempre" porque mis dos primeros años en California tendí más a instruir que a educar. No voy a utilizar ninguna excusa pero es obvio que antes de convertirme en el educador que soy hoy navegué en prácticas de cultural incompetence and cultural blindness (Quezada, Rodríguez-Valls y Lindsey, 2016). Sin darme cuenta no puse atención lo que Cuomo e Imola (2008) consideran imprescindible: "...la identidad, la singularidad, la autenticidad, la originalidad, las distintas necesidades comunicativas, relacionales y afectivas de cada alumno" (pág. 53), a la hora de crear differentiated teaching para poder abarcar las necesidades de todxs lxs estudiantes.

Si nos remitimos a los resultados académicos, mis estudiantes aprendieron mucho y fueron capaces de obtener buenos resultados en los exámenes estatales. Pero como todos sabemos la educación va más allá
de los resultados académicos aun siendo estos muy importantes. Educar, como nos recuerda Freire (2014), no es transmitir conocimiento por el simple hecho de que alguien tiene una credencial a otra persona llamada alumno. Educar es una práctica liberatoria en la que lxs maestrxs y alumnxs crean conocimiento juntos. El conocimiento nace de una práctica heteroglósica que incluye potencia y valora todas las voces del salón de clase (Ghosh y Galczynski, 2014).

Aun sabiendo esto, en el inicio de mi carrera en California, mi docencia se refugió en una monoglosia que por momentos apagaba las voces de mis estudiantes (Terrel y Lindsey, 2008). No fue hasta que empecé a oír atentamente a mis estudiantes y a sus familias que mi manera de aprender y enseñar se transformó para ser inclusiva en lugar de ser exclusiva, equitativa en lugar de igualitaria, and just instead of fair. Fueron mis estudiantes y sus familias los que me ayudaron a expandir y enriquecer mi repertorio lingüístico. A mi catalán, inglés, francés, se le añadió un español más fresco lleno de recursos y riqueza gramatical, sintáctica y semántica.

Si echo la vista atrás y pienso en la pregunta que encabeza nuestro artículo, he de decir que el español que debemos enseñar tiene que ser un español vivo, móvil que se transforma, se adapta y morfa dependiendo del contexto, la audiencia y el mensaje (Nero y Ahmad, 2014). No nos podemos parapetar en la corrección y en lo unívoco. Tanto mis estudiantes del sur de Los Ángeles como los teacher candidates con los que trabajo y aprendo ahora han mejorado mi repertorio lingüístico, incluyendo el español de una manera que nunca imaginé sería posible. Sus voces, sus expresiones, su riqueza lingǘstica y cultural revitalizan y previenen que me estanque, que me convierta en adalid de falacias sustain by a fake sense and entitlement of correctness.

En pocas palabras no se puede educar si no escuchas primero, si no vas analizando tu manera de aprender y de enseñar y si no estás dispuesto a reescribir tu auto-historia.

## California languaging

Fastforward al tiempo presente, mi historia es muy contemporánea. Como Fernando, hay tantas cosas que aprendí tras mi llegada como maestro visitante en 2005, y para lo cual me fue muy necesario pasar por un unschooling personal que implicaba una profunda resocialización lingüística. Pero, hoy en día, también como Fernando a cargo de formar a maestrxs bilingües, muchos de los cuales son considerados "de herencia" (Rodriguez-Mojica et al. 2019), los conflictos y dilemas son de otra índole. Tras casi quince años de vida social y profesional en California, muchos usos y formas fluidas y translingüísticas se han acomodado en mi repertorio, y siento que potencian mi capacidad expresiva, profesional e interpersonal. No es sólo que la mayor parte de mi socialización profesional ha transcurrido en los Estados Unidos (con la consiguiente acumulación de terminología y formas de discurso anglosajonas), sino que el uso del translenguaje en mi experiencia cotidiana ha adquirido valores significativos y pragmáticos que están muy lejos de ser capturados por gramáticos o lexicólogos que habitan en las capitales de las naciones-estado definidas como hispanoparlantes. Aún más, desde la conciencia autocrítica de mi privilegio europeo inherente, creo en el acto político y transformador del translenguaje como una reclamación
de identidad (García y Leiva, 2014), both simultenously fluid and gelling, sin necesidad de language policing. Con orgullo y sin impostura, eso es algo que me lo han enseñado aquí.

En mi práctica diaria, siento una especial emoción y empatía con los maestrxs bilingües de herencia que osan desafiar las expectativas del mito nativista, y aspiran recibir su autorización bilingüe como Lifelong (Trans)language Learners. Y quien no sea Language Learner, que tire la primera piedra. Aun hoy, se sigue debatiendo hasta dónde llevar la separación de lenguas en los programas de inmersión dual y cuál es el carácter práctico del translenguaje como práctica pedagógica. Sin embargo, lo innegable es que el translenguaje, simplemente, ES. El translenguaje está entre nosotros y permite la consecución de metas lingüísticas, la transmisión de ideas sofisticadas y, por encima de utilitarismos, la creación de vínculos afectivos e identitarios entre los miembros de la comunidad de San José State a la que pertenezco. Ahora bien, no es un translenguaje que niegue la necesidad de tener una conciencia de que existan named lenguages (Wei, 2017) y de que se adquieran habilidades en situaciones que requieran esa performance (ej. entrevistas de trabajo). Frente a ideologías que defiendan a ultranza el español puro o estándar (sea lo que sea que eso quiera decir), el embrace del translenguaje refuerza la adecuación docente de nuevas generaciones de maestrxs bilingües en la zona del sur de la Bahía de San Francisco, ya que estos maestrxs conectan no sólo con sus estudiantes, sino consigo mismos.

## Auto-historias, un trabajo clave en la preparación de maestrxs bilingües

A modo de conclusión, queremos brindar lo que hubiera de aplicable o transferible a las experiencias de tantos profesionales dedicados en cuerpo, alma y lengua a lo largo y ancho de California. La experiencia autoetnográfica en que ambos autores nos hemos embarcado surge de una necesidad que, por personal, no es menos relevante para muchos otros educators of educators que forman parte de nuestro network. Todos hemos sentido la necesidad de reflexionar sobre las tensiones entre nuestra identidad individual y las presiones estructurales, la necesidad de mantener afilada nuestra Critical Language Awareness (Fairclough, 1999), y limpiar constantemente los lentes que median con nuestra propia ideological clarity (Alfaro y Bartolomé, 2017). Animamos pues, armados con libreta y lápiz, a todos los educadores a acometer un proceso de reflexión sistemática que les permita (re)posicionarse. De un modo para nada desdeñable, la experiencia autoetnográfica es un proceso de reflexión, distanciamiento y acercamiento simultáneo, con respecto a las experiencias del bilingüismo en los Estados Unidos, tan unidas a las tensiones interseccionales (de clase, de raza, de género, y prosigue la lista de ismos) de esta sociedad. Es un modo de "digerir y asimilar" los sinsabores y contrariedades de nuestro trabajo que, a menudo, lleva aparejado el estrés y la necesidad de luchar por el reconocimiento institucional del bilingüismo. Porque la Proposición 58 abrió las puertas, pero aún queda tanto, tanto por hacer. ©

## SEAL



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## Why Dual Language Works for Everyone, PK-12

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Table 1 Reversing Underachievement


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For Educators in California, the "Main Thing" is English Learners
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## Taking a Multilingual Stance: Not Just for Bilingual Educators

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# Addressing DLBE Goals Through Science Education: The Instructional Potential of Anchoring Phenomena 

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## Notes

${ }^{1}$ http://stemteachingtools.org/assets/landscapes/STEM-Teaching-Tool-28-Qualities-of-AnchorPhenomena.pdf
${ }^{1}$ https://www.scoe.net/castandards/Documents/summary_science_framework.pdf
${ }^{1}$ https://nces.ed.gov/programs/digest/d17/tables/dt17 223.10.asp
${ }^{1}$ https://www.pewsocialtrends.org/2018/01/09/diversity-in-the-stem-workforce-varies-widely-acrossjobs/

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## Rigorous and Meaningful Science for English Learners: <br> Urban Ecology and Transdisciplinary Instruction

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Figure 1. Urban Ecology for English Learners Curriculum Modules Overview

| URBAN ECOLOGY <br> FOR ENGLISH <br> LEARNERS <br> MODULES | BIG IDEA | ACTION-ORIENTED PROJECTS |
| :--- | :--- | :--- |
| Module 1: <br> Introduction to <br> Urban Ecology | Cities are urban <br> ecosystems. | Science Product: Animal habitat <br> investigation <br> Literacy Product: Communicate in a <br> Public Service Announcement |
| Module 2: Patterns <br> of Urban Land Use | Humans create and <br> transform <br> neighborhoods that <br> can be studies as a <br> system. | Science Product: 3D Neighborhood Land <br> Use Map at present or over time and with or <br> without the use of technology <br> Literacy Product: Proposal for land use <br> development in school or home community |
| Module 3: <br> Biodiversity | Healthy urban <br> communities have <br> diverse natural <br> systems. | Science Product: Field Data Collection to <br> determine levels of biodiversity in <br> community habitats |

Figure 2. Interdisciplinary Teaching Strategy Use Interdisciplinary Teaching Strategies I've Refined and Learned (5th Grade Teacher)

- Using focus pictures \& videos to promote engagement in scientific inquiry
- Use of cognates with words students might already know in primary language
- Modeling with "think-alouds" (step by step) with field-study processes
- Focus on repetition to support science content vocabulary development with chants
- Use of graphic organizers to scaffold content learning
- Use of an interactive notebook for science teaching and learning
- Use of sentence frames for oral and written output
- Having students think about an answer and then share with a partner, rather than calling on individual students for answers allows all students to be held accountable for thinking and an opportunity to share
- Incorporate close reading strategies such as Ear-to-Ear reading allowing all students to have an opportunity to read and to retell while actively engaging with informational text

Figure 3. Professional Learning Reflection My STELLAR Journey by Rafael Ramos (Middle School Teacher)

When I first taught science three years ago I was like a Ratite
A bird that has wings, but cannot fly
My puny wings could not lift my heavy body I struggled mightily to leave my nest With limited resources I could not thrive.

I joined Project STELLAR my second year

I was given the tools to commence my journey Hesitantly I went to the edge of a branch I flapped my wings mightily and took a dive But before I plunged into the ground My mother bird stopped my free-fall.

She fed me confidence and resiliency So that my wings would flap incessantly I became like a hummingbird That could fly in any direction I returned to my nest of young To give my birds my mother's tools!



Transdisciplinary Learning: Professional Development Session

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Growing-Our-Own Dual Language Teachers: Partnerships between Local Districts and Universities
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Helen Rocca, Principal, Pueblo Vista Elementary Magnet School
Rhianna Casesa, Ph.D., Assistant Professor, Sonoma State University


Image 1:
Student teachers from Loma Vista Immersion
Academy


Image 2:
Student teachers and site supervisor at Pueblo Vista Magnet School


Image 3:
Student Teachers at Loma Vista
Immersion Academy


Image 4:
Student teacher and students at Loma Vista Immersion Academy
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## "Present Your Start": Mathematics Discussions to Benefit All Students

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Table 1. Key Features of Effective Mathematics Discussion

| Variety of Approaches/ Resources | Explanations | Opportunities to Speak | Equitable Participation | Connection between Ideas |
| :---: | :---: | :---: | :---: | :---: |
| Number of student generated approaches using a variety of tools | Meaningful and thorough explanations produced by or available to each student | Amount of time students talk about problem, in pairs or groups, whole class, and to teachers | Number of students engaged in whole group interaction (verbally or nonverbally) | Emphasis on connections between mathematical "big ideas" rather than procedures |

Table 2. ELs by Grade

| Grade | Number of classes | \% ELLs | Mean EL CELDT level (1-5) |
| :--- | :---: | :---: | :---: |
| 3 | 11 | 55 | 2.94 |
| 4 | 8 | 47.5 | 3.12 |
| $3 / 4$ | 1 | 48 | 4.08 |

Figure 1. Original and linguistically modified item.


## Original text:

Together, Sara and Brendan have 20 pencils. Sara says $1 / 4$ of the pencils are hers. Brendan says 15 of the pencils belong to him. Explain how both could be right. Use words or drawings.

Modified text:

There is a box with 20 pencils.
Sara says 1 /4 of the pencils are hers. Brendan says 15 of the pencils are his.
Why are they both correct?
Use words or drawings to explain.

Table 3. Discussion Scores Across Classrooms

| Discussion Feature | Mean <br> Score | Standard <br> Deviation | Range |
| :--- | :---: | :---: | :---: |
| Variety of approaches | 3.60 | .64 | $2-4$ |
| Equitable participation | 3.55 | .56 | $2-4$ |
| Opportunities to speak | 3.05 | .77 | $1-4$ |
| Connection between <br> ideas | 2.55 | .84 | $1-4$ |
| Explanations |  |  |  |
| Total Score | 2.30 | .86 | $1-4$ |

## Appendix A. Classroom Discussion Observation Instrument

|  | 0 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Variety of approaches and resources | Emphasis on symbol manipulation | Emphasis on symbol manipulation | Multiple resources used for one approach throughout lesson | Multiple approaches for part of lesson | More than 3 approaches on part of lesson and/or 2-3 throughout |
| Explanations | No explanation at all | Procedural narration or noninteractive video explanation | Partial <br> explanations OR <br> interactive <br> video <br> OR <br> Meaningful and thorough explanations available only to some students | One meaningful and thorough explanation (excluding video) available to all students | Two or more meaningful and thorough explanations available to all students (excluding video) in whole group discussion |
| Opportunitie s to speak | Teacher is the only speaker | Students speak infrequently and only briefly in response to teacher prompts | Students speak infrequently but at length OR <br> Students speak frequently but briefly | Students speak frequently and occasionally at length | Students speak frequently and consistently at length |
| Equitable participation in whole group interaction | No whole group discussion takes place | 1-3 students participate in discussion | 4-6 students dominate the discussion; most students do not speak or visibly engage | More than 6 students participate (speak or visibly engage) in discussion | Most students, including ELLs, participate (speak or visibly engage) in discussion. Independent thinking is publicly shared. |
| Connections between ideas | No whole group discussion takes place | Focus is on sharing of procedures | Teacher probes strategies OR Little connection made between ideas | Teacher makes substantial connections OR <br> Students comment on conceptual aspects of others' ideas | Students make substantial connections between central ideas |

Resources - tools used to complete task: manipulatives, drawings, symbols, number line, graphs, etc.
Approaches - strategies: procedures/steps to complete the problem
Interactive Visual Learning Bridge -teacher stops digital animation (that accompanies curriculum) to have children respond to questions posed by the narrator

Thorough explanation - needs to include justification. Relate to concept not just procedure. Include appropriate mathematics terminology, emphasis on meaning, and should not be missing an essential component

Partial explanation - must have some conceptual aspect, not just a procedural narration. Might be missing some terminology or an essential component

Connections - might involve comparing and contrasting two or more ideas/strategies/concepts/representations

## Notes


#### Abstract

${ }^{1}$ Students in the EL category were still in the process of acquiring the language of instruction. Students identified as non-ELs include native speakers of English as well as students who were previously identified as ELs but were re-designated fluent English proficient. ${ }^{\text {ii }}$ For a full account of the modification and the full assessment, see: https://www.researchgate.net/publication/317238876_Linguistically_Modified_Mathematics_Assessm ent. iii We used the statistical procedure known as hierarchical linear modeling to analyze the effect of the various aspects of discussion on student performance. For details, see Banes et al. (2018).


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Assessing and Teaching Students' Biliteracy in Mathematics: A Professional Development Mode
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Figure 2. Savings Account Line Graph Formative Assessment Prompt

The graph below shows the cost that two phone companies charge for calls of various lengths (in minutes).


Directions. Write at least a paragraph that explains the graph to someone that is unfamiliar with the graph. Explain what mathematical operations could be used to interpret the graph in order to determine how much money would be saved by using one company over the other. Provide your reasoning as to why you would recommend one company over the other. Graph the savings on the graph above as well. Make sure you use complete sentences and correct punctuation. Use mathematics vocabulary in your response and also explain the mathematical procedures involved in interpreting the graph.

Figure 3. Rúbrica de Escritura en Las Matemáticas

| Dimensión | Entendimiento Conceptual | Fluidez De Procedimientos | Vocabulario Matemático | Convenciones De Escritura |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{ll} 0 & 0 \\ 0 & 0 \\ 0 & 3 \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \\ x & 0 \\ \text { Hi } \end{array}$ | El razonamiento muestra una lógica clara y bien organizada para explicar y justificar la solución. <br> El razonamiento muestra la comprensión de los conceptos matemáticos, operaciones y relaciones con teoremas, fórmulas o postulados. | Los procedimientos matemáticos (suma, resta, multiplicación y división) se realizan de manera precisa y eficiente. <br> Las estrategias de resolución de problemas usan conceptos y procedimientos apropiadamente. | Utiliza varias palabras de nivel 3 (por ejemplo, vértices, propiedad asociativa) y nivel 2 (por ejemplo, dígito, cociente, variable) con precisión y precisión para describir el razonamiento $y$ el cálculo. | Puntuación y sangría apropiadas utilizadas en toda la respuesta <br> - No hay problemas de ortografía - gramática en respuesta. <br> - Las palabras de transición como primero, a continuación, como resultado de, etc, se usan cuando sea apropiado para organizar la respuesta y hace que las ideas sean claras y fáciles de entender. |
|  | - El razonamiento muestra lógica para explicar y justificar la solución. <br> - El razonamiento muestra la comprensión de los conceptos matemáticos y las operaciones para resolver problemas. | - Los procedimientos matemáticos (suma, resta, multiplicación y división) se llevan a cabo con precisión. <br> * Las estrategias de resolución de problemas utilizan conceptos y procedimientos de manera apropiada. | * Utiliza una palabra de nivel 3 (por ejemplo, vértices, propiedad asociativa) y de nivel 2 (por ejemplo, digito, cociente, variable) con precisión y precisión para describir el razonamiento $y$ el cálculo. | - Minimo (1-2) problemas de puntuación o sangría que no impidan la comprensión. <br> - Minimo (1-2) problemas de ortografía o gramática que no impidan la comprensión. <br> - Las palabras de transición se utilizan para organizar ideas, pero más palabras de transición mejorarán la claridad. |
|  <br> (d) 0 | El razonamiento muestra parcialmente cierta lógica para explicar o justificar la solución. U <br> - El razonamiento muestra la comprensión de conceptos matemáticos u operaciones para resolver problemas. | - Los procedimientos matemáticos pueden ser inexactos. <br> - Las estrategias de resolución de problemas utilizan conceptos y procedimientos que no son apropiados. | - Utiliza palabras de nivel 3 (por ejemplo, vértices, propiedad asociativa) o de nivel 2 (por ejemplo, dígito, cociente, variable) para describir el razonamiento y el cálculo. <br> - Puede usar palabras incorrectamente. | - Algunos (3-5) problemas de puntuación y/o sangría que pueden impedir la comprensión. <br> - Algunos (3-5) problemas de ortografia y / o gramática que pueden impedir la comprensión. <br> - Utiliza 1 palabra de transición cuando se pueden utilizar palabras de transición adicionales. |
|  | - Ningún razonamiento incluido no explica la solución. <br> - El razonamiento no muestra <br> - comprensión de los conceptos matemáticos u operaciones para resolver problemas. | No se incluye ningún cálculo, O , en su mayoria, se incluye un cálculo irrelevante. | Usa vocabulario cotidiano en lugar de vocabulario matemático. | * Muchos ( $6+$ ) problemas de puntuación y / o sangría que impiden la comprension. <br> - Muchos (6+) problemas de ortografia y / o gramática que impiden la comprensión. |

Figure 4. Teaching Mathematical Problem-solving and Language Conventions Concurrently

## Daily Oral Language

Daily Oral Language is an instructional routine that provides the teacher with context to address issues of spelling, grammar and punctuation. The activity takes approximately 10 minutes. It is important to keep in mind to sequence writing conventions and promote conversations with students about the purpose of the conventions. We suggest teachers use Daily Word Problems that contain spelling,
grammar and punctuation problems. Students spend time making corrections to the word problem and then work to solve the problem.

Throughout this activity, the teacher:

1. Provides a sentence that contains spelling, grammar and/or punctuation errors.
2. Students work (independently or collaboratively) to make corrections to the sentence.
3. After a short time of students attempting to make corrections, either the teacher or student volunteers correct the sentence(s) on the board for all to see.
4. Teacher calls attention to common errors students make with one element (either spelling, grammar or conventions)

Sentences are sequenced to focus on particular areas of need for students and progressively add more challenging writing conventions issues. To provide additional scaffolding at the onset, teachers can tell students how many spelling, grammar and/or punctuation errors there might be in a given sentence.

Teachers should remind students to pay attention to these writing conventions as students compose for mathematics and other subjects as well.

Remind students to follow a procedure for solving the mathematics problem:

1. Read problem carefully
2. List facts given
3. Figure out what the problem is asking for
4. Eliminate unimportant information (vocabulary \& numbers)
5. Draw a diagram
6. Find and apply appropriate formula
7. Demonstrate mathematical problem-solving
8. Check your answer

## Daily Oral Mathematics Language

Directions. The word problem below has several spelling, grammar and punctuation errors. Correct the errors and then solve the problem. Be sure to follow the procedure to solve the problem.
Facebook is out of service. A group of engineers are called to fix the problem. Maria says she can fix the problem in 30 min , Israel can do it in 40 minutes and Karla can do it in one hour. How long would it take them if they worked together?

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## Practical Findings for Implementing a Dual Language Immersion Program: <br> Where does my district start?

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## Classroom Translanguaging: Building Identity and Agency

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¿Qué español debo enseñar en mi clase? Permanezcamos en silencio, escuchemos, apreciemos y aprendamos.

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[^0]:    [1] Includes 418,205 graduates and 71,016 twelfth graders who did not graduate (2) Data Source: CALPADS

[^1]:    ${ }^{1}$ Según la Real Academia Española charnego es: adj. despect. Cat. Inmigrante en Cataluña procedente de una región española de habla no catalana: https://dle.rae.es/?id=8d3XHaZ

