



The National Dual Language Immersion Research Alliance:

Where Practitioners and Researchers Align



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We are at a tipping point of a truly significant innovation in preK-12 education that holds great promise to level the academic playing field for hundreds of thousands of students across the United States.

Dual language immersion (DLI) programs are rapidly emerging and becoming prominent in school districts and states, both rural and urban, across the country. As the linguistic diversity of U.S. schools continues to expand, dual language immersion opens exciting new opportunities for students to use their linguistic abilities as key assets in expanding multilingual instruction with native English-speaking students. Dual language programs provide both native English speakers and English learners (ELs) with academic instruction in two languages from as early as pre-Kindergarten onward.

These programs have been found to significantly raise student achievement in core subjects for both ELs and native English speakers. With a rapidly expanding national population of non-native speakers of English, dual language immersion programs provide a compelling approach that offers all students an opportunity to excel in all academic subjects.

The emphasis on equity and equal access to quality education demands the inclusion of dual language programs as an integral component of the algorithm. Dual language education opens a necessary window for educational equity by increasing the achievement of all students while also reducing achievement gaps between different groups of students and eliminating predictable trends about which students are the highest and lowest achieving in a school system.

Our Alliance And Mission

The National Dual Language Immersion Research Alliance (Alliance) is a new network of K-12 practitioners and education researchers. The mission of the Alliance is to advance quality and build capacity in additive dual language learning programs by identifying core features and variables for quality implementation to prepare students to be bilingual, biliterate, bicultural, and career and college-ready. The Alliance is positioned to address the research and policy relevant issues that can insure long-term success for this important intervention strategy.

Our Objectives

We seek to develop and carry out a rigorous research agenda on topics that matter to all schools involved in, or planning to be involved in, dual language learning. The Alliance will advance equity and excellence in education by providing credible, nonpartisan research and evidence about policies and practices that promote student success.

Specifically, we will:

- Conduct rigorous applied research in collaboration with policymakers, educators, and other stakeholders;
- Develop and maintain an archive of available longitudinal data on dual language immersion programs and communities to support ongoing research; and
- Disseminate research findings to multiple audiences around the nation.

Critical Research Areas

Educational innovation must not occur in a vacuum. Practitioners currently engaged in developing and implementing dual language immersion programs across varied settings need systematic and comprehensive guidance and answers to questions and issues that impact the quality, cost, and sustainability of their efforts.

During its startup, the Alliance has begun to identify the pressing curricular and policy questions that are consistently raised by practitioners. We highlight some of the key areas below, which directly inform our current research agenda.

- How do student academic, linguistic, cultural, cognitive, non-cognitive, and socio-emotional outcomes in DLI programs compare to non-DLI programs— including English-immersion and traditional bilingual approaches?
- How do different program models impact results? What are the best models to adopt?
- Do ELs do better academically in DLI programs when compared to non-DLI programs?
- How does the effect of DLI programs on student outcomes vary by student characteristics, teacher profiles, DLI program types, and instructional environments?
- How can programs accommodate students who enter after grades K-1?
- What are the best approaches to identifying schools for DLI programs, what is the potential impact of DLI programs on local neighborhoods, and how do we achieve equity for all students, including African-Americans?
- What types of assessments should school district officials use to monitor and evaluate the outcomes of students participating in DLI programs?
- What are the best approaches to teacher credentialing and professional development and how do teacher practices in DLI impact student performance?

- How can elementary-level teacher prep programs incorporate the needs of DLI teachers?

About The Researcher-Practitioner Alliance

Representing an initial network of more than 450 dual language programs with approximately 70,000 students enrolled from elementary through high school, our alliance of K-12 practitioners and researchers is formed around a shared need for better evidence about problems, issues, and practices associated with developing and implementing dual language immersion programs in secondary schools across the U.S.

Given the significant role that dual language learning can play in addressing longstanding equity issues in U.S. preK-12 education, it is essential that practitioners have access to the best policy-oriented research available.

The Alliance will follow the lead of best practices in researcher-practitioner partnerships by creating a fully collaborative environment in which practitioners bring their questions to researchers so that the two communities may jointly explore broader lessons for the field. To enable educators and policymakers to deliver programs best suited to fulfill the potential of this promising intervention, we believe that researchers and practitioners must work together to bring evidence to decisions about practice and bring the realities of practice to inform research.

Our Alliance structure creates an environment in which researchers can study the core problems facing districts and states and then work with practitioners to build the capacity to improve practice.

Our Guiding Principles

Our researcher-practitioner partnership is distinguished by a number of guiding principles and related organizational capacities. We have borrowed heavily from the experience of other successful educational alliances, most specifically the Research Alliance for New York City Schools, to inform our process. These adopted principles include:

- Genuine engagement with education stakeholders;
- High standards of scientific rigor;
- Establishment of a longitudinal data archive to support research;
- Clear communication of findings to a range of audiences; and
- Multiple funding sources to help ensure independence.

Our Team

The Alliance is administratively housed at the American Councils Research Center (ARC) at American Councils for International Education. ARC brings years of experience in education research, second language learning pedagogy and assessment, and education policy. ARC's parent organization, American Councils (a nonprofit organization), brings 40 years of experience in developing and administering programs in international education, academic exchange, language acquisition and assessment and research. Our model is simple and straightforward. It is designed to facilitate and encourage collaboration among researchers and collaborators and to ensure that everything we learn is effectively disseminated throughout the education community.

The Alliance is led by ARC's Co-Director Dr. Robert Slater, a highly experienced researcher and project director who recently co-directed a major Institute of Education Sciences-funded grant project on dual language and academic performance in Portland, Oregon Public Schools.

Under Dr. Slater's direction, ARC will work closely with the Alliance's researchers and participating practitioners to identify teams to address specific research questions and issues. Each team will be unique in its composition of researchers and practitioners.

To ensure that the Alliance addresses a wide spectrum of research and policy questions that reflect the needs and concerns of school districts, we have identified a Steering Committee that works toward setting the agenda and future of the partnership.

Steering Group Members

- Mr. Michael Bacon, Assistant Director, Department of Dual Language, Portland (OR) Public Schools
- Dr. Donna Christian, Senior Fellow and President Emeritus, Center for Applied Linguistics, Washington, D.C.
- Ms. Helga Fasciano, Dept of Public Instruction, North Carolina State Board of Education
- Ms. Lynn Fulton-Archer, Education Specialist, Delaware State Office of Education
- Dr. Jennifer Li, Management Scientist and Senior Linguist, RAND
- Dr. Margaret Malone, Director of Assessment, Research and Development, American Council on the Teaching of Foreign Languages (ACTFL)
- Ms. Rosa Molina, President, Association of Two-Way and Dual Language Education (ATDLE)
- Mr. Gregg Roberts, World Languages Specialist, Utah State Board of Education
- Ms. Sylvia Romero-Johnson, Executive Director, Office of Multilingual and Global Education, Madison (WI) Public Schools
- Dr. Robert Slater, Co-Director, American Councils Research Center (ARC)

- Dr. Johanna Watzinger-Tharp, Associate Professor, Department of Linguistics, University of Utah
- Dr. Jon Valentine, Director, Foreign Language Programs, Gwinnett County (GA) Public Schools

Our Practitioner Partners

We are joined in this effort by a strong group of founding practitioner partners. These partners already represent more than 450 dual language programs, approaching and likely to soon surpass 70,000 students enrolled in these programs. An overview of each of these school systems is provided within this document.

- Cave Creek Unified School District, Scottsdale, AZ
- Delaware Department of Education, World Languages and International Education
- District of Columbia Public Schools
- Gwinnett County (GA) Public Schools
- Los Angeles Unified School District
- Madison (WI) Metropolitan School District, Office of Multilingual and Global Education
- North Carolina Department of Public Instruction
- Portland (OR) Public Schools, Department of Dual Language
- Utah State Board of Education, World Languages

Our Researcher Partners

The Alliance is built to facilitate collaboration among our nation's best researchers and practitioners. More importantly, the Alliance is designed to insure an effective laboratory for communications between researchers and practitioners, particularly a milieu where practitioners bring problems to the Alliance. We have gained commitments from established researchers and will continue to expand this list as we progress and as projects require. Our researchers encompass a diverse range of disciplines and professions including education policy, second language learning, assessment, econometrics, and linguistics. See our section on Researcher Partners for biographies of the organizations that are already committed to the Alliance.

Dr. Beatriz Arias, Vice President, Center for Applied Linguistics. Dr. Arias, formerly Associate Professor at Arizona State University, is CAL's Chief Development Officer and director of professional development and online education activities. Her research deals with educational policy, teacher preparation, and programs for English learners. She has provided expertise in school desegregation cases across the nation, focusing on programs that promote equity for English learners, including bilingual/dual language programs.

Dr. Richard Brecht, Co-Director, American Councils Research Center, American Councils for International Education. Dr. Brecht is an internationally recognized expert on second language learning. He brings five decades

of leadership in language research and policy on behalf of education, government, heritage communities, private business and NGOs. He has been a founder and leader of more than a dozen national language organizations and projects, including the National Foreign Language Center and the Center for the Advancement of Language at the University of Maryland.

Dr. Donna Christian, Senior Fellow, Center for Applied Linguistics (CAL). Dr. Christian held the position of President of CAL from 1994-2010. For over 20 years, she has been involved in research, professional development, and technical assistance related to two-way bilingual immersion, including a study for the National Center for Research on Education, Diversity & Excellence (CREDE), funded by the U.S. Department of Education.

Dr. Dylan Conger, Associate Professor, Trachtenberg School of Public Policy, George Washington University. Dr. Conger's research concerns disadvantaged, immigrant, and minority youth with a focus on education policies and urban areas. Current projects include examining the effects of public policies and programs on the educational outcomes of undocumented immigrant and English Language Learners from early schooling through post-secondary; estimating the effect of Advanced Placement and other advanced high school courses on educational outcomes; and identifying the sources of gender disparities in secondary and post-secondary educational outcomes.

Dr. Dan Davidson, President, American Councils for International Education. Dr. Davidson has focused much of his professional life on the development, oversight, and support of international initiatives in educational development, training, and research, primarily through the work of American Councils and its partner organizations in the U.S., Eurasia, Africa, the Middle East, and Asia. Dr. Davidson also holds the rank of Professor at Bryn Mawr College.

Dr. Patricia Gandara, Research Professor & Co-Director, The Civil Rights Project, UCLA. Dr. Gándara is Professor of Education at UCLA. Her professional interests in graduate teaching include education policy/education reform, social context of learning, learning and assessment, and educational equity/bilingual and multicultural education. She has published extensively on issues related to the education of Latino students, particularly English learners, and the benefits of bilingualism and biliteracy

Dr. Kathryn Lindholm-Leary, Private Consultant. Dr. Lindholm-Leary is currently Professor Emerita of Child and Adolescent Development at San Jose State University. Her research interests focus on understanding the factors that influence student achievement, with a particular emphasis on culturally and linguistically diverse students. Dr. Lindholm-Leary has one of the most comprehensive longitudinal data sets on bilingual students, particularly students in two-way programs, in the country.

Dr. Jennifer Li, Management Scientist, The Rand Corporation. Dr. Li conducts research on language education, language policy, organization development, training, and workforce issues. Dr. Li led the qualitative component of the study of dual language education in Portland, Oregon and conducted the analysis of implementation practices across the district. Other past projects have addressed school leadership, charter schools, language assessment, and the retention of heritage languages among children of immigrants.

Dr. Margaret Malone, Director, Center for Assessment, Research and Development, ACTFL. Dr. Malone served as Associate Vice-President of World Languages and International Programs at the Center for Applied Linguistics (CAL). The author of numerous publications on assessment, she brings extensive experience in language test development, data collection, survey research, and program evaluation. She is also Co-Director of the Assessment and Evaluation Language Resource Center (AELRC) at Georgetown University.

Ms. Myriam Met, Private Consultant. Ms. Met works K-12 with language programs and teacher professional development in K-12 education. She was Acting Director of the National Foreign Language Center and a senior research associate at NFLC prior to her retirement. She was also a supervisor of foreign language instruction for major urban and suburban school districts for over 25 years. In that capacity, and as a consultant to educational agencies, she planned, implemented, and evaluated K-12 language programs including elementary and secondary programs.

Dr. Trey Miller, Economist, The Rand Corporation. Dr. Miller is an economist at RAND whose research focuses on education policy. He has lead quantitative and mixed methods research projects with multi-disciplinary research teams and a combined budget of over \$10M for clients including the Institute of Education Sciences, the Lumina Foundation, the Bill and Melinda Gates Foundation, the Houston Endowment, the Spencer Foundation, and the U.S. Department of Defense.

Dr. Robert Slater is Co-Director of the American Councils Research Center. Most recently he co-directed a U.S. government funded study examining the impact of dual language immersion programs on K-12 academic performance. Dr. Slater served as Director of the National Security Education Program (NSEP) where he established the highly successful Boren Scholarship and Fellowship programs, the Language Flagship program and the National Language Service Corps. He is an accomplished political scientist and methodologist and has published in major scholarly journals.

Dr. Jennifer Steele, Associate Professor, School of Education, Teaching and Health, American University. Dr. Steele was the Co-Principal Investigator on the recently completed Department of Education (Institute of Educational Science) study of the impact of Dual Language Immersion on Academic Performance in Portland (OR) Public

Schools. Her research, which emphasizes quantitative methods that support causal inference, focuses on urban education policy at the K-12 and postsecondary levels.

Dr. Johanna Watzinger-Tharp, Associate Professor of Linguistics, College of Humanities, University of Utah. Dr. Watzinger-Tharp's research focuses on language pedagogy, sociolinguistics, dual language immersion, and teacher education and has been published in a variety of scholarly journals. As co-chair of Utah's World Language Council, she was involved in the creation of Utah's language roadmap and dual language immersion. Since then, she has worked with public and higher education to advance dual immersion in Utah and the U.S., and was instrumental in passing legislation to establish Utah's DLI bridge program for high school students.

Dr. Gema Zamorro Rodriguez, Endowed Chair in Teacher Quality, College of Education and Health Professionals, University of Arkansas. Dr. Zamorro has performed research on applied econometrics in the areas of education, health, and labor. She has completed studies on heterogeneity in returns to education, on the relationship between teacher quality and student performance, and on the effect of school closing policies on student outcomes. In addition, she is researching the properties of value-added methods for estimating teacher quality.

Dr. Conor Williams, Senior Researcher, Education Policy, New America. Dr. Williams is the founding director of the Dual Language Learners National Work Group at New America. He is also a senior researcher in New America's Education Policy program. His work addresses policies and practices related to educational equity, dual language learners, immigration, and school choice.

Our Organization Partners

The Alliance is also structured to build on the considerable foundation of organizations already established in critical areas of education policy and dual language learning in the U.S. Collaboration with each of these organizations is a cornerstone to the Alliance's efforts to ensure that our work reflects the best knowledge and expertise available. Among those organizations committed to participating with the Alliance are:

American Council on the Teaching of Foreign Languages (ACTFL)

The American Council on the Teaching of Foreign Languages (ACTFL) is dedicated to the improvement and expansion of the teaching and learning of all languages at all levels of instruction. ACTFL is an individual membership organization of more than 12,500 language educators and administrators from elementary through graduate education, as well as government and industry.

Association of Two-Way and Dual Language Education (ATDLE)

The Association of Two-Way & Dual Language Education (ATDLE) was formed into a national organization in 2013. As the leading organization in Two-Way Bilingual Immersion Education, ATDLE works closely with other organizations and agencies that share a common vision and mission for this work.

Center for Applied Linguistics (CAL)

The Center for Applied Linguistics (CAL) is a private, nonprofit organization founded in 1959. CAL has earned an international reputation for its contributions to the fields of bilingual and dual language education, English as a second language, world languages education, language policy, assessment and the education of linguistically and culturally diverse adults and children. CAL's mission is to promote language learning and cultural understanding by serving as a trusted source for research, resources, and policy analysis.

New America

New America is a think tank and civic enterprise committed to renewing American politics, prosperity, and purpose in the Digital Age. As a civic enterprise, *New America* is committed to the solution of public problems. New America provides a platform that enables individuals and groups working on these solutions to drive different stages of change, from inspiration to implementation.

The RAND Corporation

The RAND Corporation is a nonprofit institution that helps improve policy and decision-making through research and analysis. RAND promotes rigorous, fact-based research and analysis to help individuals, families, and communities throughout the world be safer and more secure, healthier and more prosperous. RAND led the major research effort that explored the relationship between dual language immersion and academic performance in Portland Public Schools.

The University of Utah

The University of Utah's Second Language Teaching and Research Center (L2TReC) focuses its primary activities in three areas: research, pedagogy, and outreach. It profiles the University of Utah's unique strengths in language education and provides a focal point for research in Second Language Acquisition. The Center plays a prominent role in supporting the state-wide, legislatively-funded dual immersion project in Utah, by promoting immersion research, educating pre- and in-service teachers, and assisting with immersion curriculum developments.



Overview of Our Practitioner Partners

Our Practitioner Partners

The Alliance, in its early stages, includes as founding partners a highly diverse set of independent school districts and schools within state education systems. Each partner has agreed, in principle, to work within the Alliance to:

- Raise important issues and questions critical to the success of dual language;
- Participate in specific research efforts by providing expertise and student level data; and
- Provide access to teachers, administrators, and parents.

The partners represent the diversity of school systems across the U.S. Our practitioner partners include:

- Three statewide systems (Delaware, North Carolina, and Utah);
- Three major, but very different, urban school districts (Gwinnett, GA, Los Angeles, CA, and Portland, OR);
and
- Two smaller school districts (Madison, WI and Cave Creek, AZ).

Across these states and districts, the Alliance gains unprecedented access to almost **70,000** students and over **450** distinct dual language programs. Over time, the numbers of students, programs, and teachers across these states and districts will increase and provide an even richer pool of data. The diversity, breadth, and sheer numbers of the schools, programs, teachers, administrators, and students represented in the Alliance provide access to data that have heretofore been entirely unavailable to researchers.

Cave Creek Unified School District 93 (CCUSD)

Arizona Public School District

Overview of CCUSD

Cave Creek Unified School District (CCUSD) covers a suburban and rural area in the north Phoenix valley. There are a total of seven schools in the district (five K-6 campuses, one 7/8 middle school, and one high school). The student body at CCUSD is predominantly white (86 percent), with nine percent Hispanic, three percent Asian, and one percent African American enrollment.

Dual Language Immersion in CCUSD

The CCUSD World Language Immersion program currently includes four schools (three elementary schools and one middle school). Desert Willow's Spanish Immersion program started in 2003 and has seen students go through the middle school immersion and the high school continuation pathway (at high school, it's no longer an official immersion model, due to only one Spanish class daily). The Mandarin Chinese (grades 1-2) and French Immersion (K-1) programs are younger, but will move to later grades as the cohorts progress.

Enrollment

As of December 2016, there were 528 enrolled language immersion students and 21 language immersion teachers. Current 2016-17 dual language enrollment is distributed across schools as follows:

Desert Willow Elementary School (one-way, Spanish, two-teacher model):	327
Horseshoe Trails Elementary School (one-way, Mandarin, two-teacher model):	88
Desert Sun Academy (one-way, French, self-contained model):	44
Sonoran Trails Middle School (one-way, Spanish, two-teacher model):	69

Future Steps for 2017-2018

- French immersion will roll up to one 2nd grade classroom (one self-contained teacher added)
- Chinese immersion will roll up to one 3rd grade classroom (an English and Chinese teacher team will be added)
- Spanish immersion rollup is complete K-8 with a high school continuation pathway of one class daily.

Delaware Public Schools

Overview of Delaware Public Schools

The Delaware Department of Education supports the instruction for more than 137,000 students in 201 public schools and 25 public charter schools in 19 school districts. Delaware's statewide student population is 46 percent white, 30 percent African American, 16 percent Latino, and 8 percent other.

Delaware World Language Immersion Programs

Delaware World Language Immersion Programs are part of the larger *Governor's World Language Expansion Initiative* created by Governor Jack Markell in 2011. This state-level initiative proposes an aggressive world language education plan that prepares Delaware students with the language skills to compete in an ever-changing global economy at home and around the world.

The initiative began with the establishment of four immersion programs in 2012 and has grown to 18 programs in 2016. Immersion programs have been established in 80 percent of eligible school districts across the state. There are four one-way Chinese immersion programs, eight one-way Spanish programs, and six two-way Spanish programs. There are also two two-way Spanish immersion programs established in public charter schools. While these programs are not affiliated with the state-level initiative, they are included in the program overview and enrollment data.

The Delaware World Language Immersion Programs follow a 50/50 model in grades K-5 and begin in Kindergarten. Immersion in the state-level initiative encompasses grades K-4 and continues to grow by one grade level each year in each school. One charter program has articulated K-6 and the other K-3 immersion.

Enrollment

As of December 2016, there were 3,780 students enrolled in immersion programs K-5. This represents 6 percent of the entire elementary school population across the state. There are currently 80 English language teachers, 70 Spanish language teachers, and 16 Chinese language teachers serving students in these programs. Enrollment is distributed across programs as follows:

Language	Enrollment Model	Total
Chinese	One-Way	698
Spanish	One-Way	892
Spanish	Two-Way	1197
Spanish	Two-Way Charter	993
TOTAL		3780

Future Growth

Program growth is exceeding the original targets, and it is expected that one out of every six kindergarten students in Delaware—more than 16 percent of total students— will be enrolled in a language immersion program during the 2017-18 school year. The 2017-18 school year will see the establishment of a total of nine new state-affiliated immersion programs—two Chinese and seven Spanish—and one charter school Greek immersion program. Immersion will expand into middle school for the first time during 2017-18 and total enrollment is expected to exceed 5,200 students.

District Of Columbia Public Schools (DCPS)

Overview of District of Columbia Public Schools (DCPS)

DCPS is an urban school district in the nation's capital with over 48,000 students enrolled PreK–12. DCPS serves more than 6,000 students classified as English Learners (ELs). DCPS EL students come from 140 different countries and speak over 147 different languages, including dialects. Nearly 75 percent of DCPS EL population comes from a background where Spanish is spoken at home. Following Spanish, Amharic, French, Chinese, and Vietnamese are the four most commonly spoken languages of EL students.

Dual Language Education Programs in DCPS

In the last 13 years, dual language programming in DCPS has grown from one program with 500 students to 11 programs with over 3,000 students. All programs are Spanish/English 50/50 programs (with model variability in early childhood). Some programs are two-way, linguistically balanced programs and others are one-way programs predominantly enrolling students from English-speaking homes. All programs have the same four goals: bilingualism, biliteracy, academic achievement, and cultural competency.

Enrollment

Approximately 3,000 students are enrolled in dual language programs, with over 250 teachers supporting program students. For a list of dual language programs in DCPS, please visit <https://dcps.dc.gov/DL>.

Moving Forward

DCPS is exploring expansion options, looking into adding additional middle and high school programs, elementary programs in underserved areas, and the possibility of additional partner languages. Engaged families and the school community will determine how best to meet the demand for additional programs.

Gwinnett County Public Schools (Gcps)

Overview of GCPS

Gwinnett County Public Schools is the largest school system in Georgia with 139 schools and an estimated enrollment of 178,000 students (2016-17). GCPS is estimated to be the 14th largest school district in the U.S. Approximately 31 percent of the students enrolled are African American, 29 percent are Hispanic, and 26 percent are white.

Dual Language Immersion in GCPS

The GCPS Dual Language Immersion program currently includes six schools. Three of these schools were part of the initial rollout in the 2013-14 school year and encompass grades K-2, but will move to later grades as the cohorts progress. All schools host Spanish immersion programs, with the exception of one French program. The Spanish programs are both one-way and two-way and the French program is one-way.

Enrollment

As of November 2016, there were 765 enrolled students and 30 teachers. Current 2016-17 dual language enrollment distributed across schools:

Annistown Elementary School (Spanish): **150**
Approximate percent Spanish speakers: 5%

Bethesda Elementary School (Spanish): **305**
Approximate percent Spanish speakers: 65%

Trip Elementary School (French): **148**
Approximate percent French speakers: 2%

Baldwin Elementary School (Spanish): **54**
Approximate percent Spanish speakers: 90%

Camp Creek Elementary School (Spanish): **54**
Approximate percent Spanish speakers: 5%

Ivy Creek Elementary School (Spanish): **54**
Approximate percent Spanish speakers: 5%

Future Steps

For the 2017-18 school year, GCPS is planning expansion to the third grade in their first three programs and adding first grade to the programs that began in 2016-17. Each new grade level increases the number of students by 400 per year and teachers by 14 per year. Planning is also focused on:

- Scaling existing professional development offerings to include an increased number of teachers;
- Identifying and purchasing instructional materials;
- Planning for middle and high school.

Los Angeles Unified School District (LAUSD)

Overview of LAUSD

LAUSD is the second largest school district in the nation, with over 520,000 students enrolled in PreK-12. In all, 94 languages other than English are spoken in the L.A. Unified School District. The district has approximately 130,000 English Learners, whose primary languages are Spanish (92.5% of English learners), Armenian (1.1%) and Korean (1%) with Arabic, Cantonese, Russian, Tagalog, and Vietnamese each accounting for less than one percent of the total.

Dual Language Education Programs in LAUSD

There are 77 total dual language education programs in the district's K-12 schools. The programs encompass dual language two-way programs, maintenance bilingual programs, as well as foreign language immersion programs. The programs are in Spanish, Korean, and Mandarin; French was added last year; and programs in Armenian and Arabic were added this year. Guiding Principles for Dual Language Education, a resource from the Center for Applied Linguistics, was used as a guiding document for working with schools, administrators, teachers, and parents on dual language education programs.

Enrollment

Approximately 13,000 students are enrolled in dual language education programs, with over 580 teachers supporting program students. For a list of participating schools in LA Unified, please visit the website.

Future Steps

L.A. Unified has been working to build PreK-12 pathways for its immersion programs, and will continue this work to move the programs into middle school and high school and into early childhood education.

There has been a growth trend over the last five years for dual language education programs. The projected growth is by 15-20 new dual language education programs for school year 2017-18. With the passage of Proposition 58, CA Multilingual Education Act of 2016, the trend is anticipated to continue as more parents request programs that lead to bilingualism and biliteracy.

Madison Metropolitan School District (MMSD)

Overview of MMSD

The Madison Metropolitan School District (MMSD) is the second largest school district in Wisconsin serving over 27,000 students in 49 schools. Approximately 44 percent of the students enrolled in MMSD are white, 20 percent are Hispanic, and 18 percent African American. Of the student population, 27 percent of MMSD students are classified as English Language Learners.

Dual Language Immersion in MMSD

The MMSD Dual Language Immersion program currently includes 16 schools. Dual language began in Madison in 2004 with the establishment of the first program at Nuestro Mundo Elementary. Three of these schools were part of the initial rollout in the 2013-14 school year. These three schools now encompass grades K-2, but will move to later grades as the cohorts progress. All schools host Spanish immersion programs with the exception of one French program. The Spanish programs are both one-way and two-way and the French program is one-way.

Enrollment

As of November 2016, there were 2,205 enrolled students in DLI programs, 340 in developmental bilingual education programs (DBE), and 133 teachers. Current 2016-17 dual language enrollment distributed by school:

Frank Allis Elementary	27 Students (Spanish Speakers: 18%)
Cesar Chavez Elementary	119 Students (Spanish Speakers: 14%)
Glendale Elementary	215 Students (Spanish Speakers: 29%)
Leopold Elementary	387 Students (Spanish Speakers: 35%)
Lincoln Elementary	237 Students (Spanish Speakers: 30%)
Midvale Elementary	243 Students (Spanish Speakers: 28%)
Nuestro Mundo Elementary	310 Students (Spanish Speakers: 57%)
Sandburg Elementary	219 Students (Spanish Speakers: 34%)
Schenk Elementary	37 Students (Spanish Speakers: 19%)
Cherokee Middle	123 Students (Spanish Speakers: 28%)
Sennett Middle	171 Students (Spanish Speakers: 30%)
Sherman Middle	34 Students (Spanish Speakers: 24%)

Additional Students in Developmental Bilingual Education Programs: 340

North Carolina Public Schools

Overview of North Carolina Public Schools

The North Carolina Department of Public Instruction is charged with implementing the state’s public school laws and the State Board of Education’s policies and procedures. The system is composed of 115 local public school districts and more than 2,500 traditional public schools, 150 charter schools, and three residential schools for students with hearing and visual impairments. In September 2011, the Board of Education formed a Task Force on Global Education to assess the state’s efforts to produce “globally competitive” graduates. The Task Force Final Report outlines 10 action items to support the efforts and one of those is the expansion of dual language/immersion programs statewide and vertical articulation K-12. The State Board interest in program expansion was the result of parental and district interest in the program but also the academic achievement of students in the program as reported in the longitudinal research study by Drs. Wayne Thomas and Virginia Collier.

Dual Language Programs

North Carolina has been on the leading edge of a national trend toward dual language immersion, driven by strong parental demand and the needs of a rapidly expanding Spanish-speaking population. The first dual language immersion program was launched in the 1990-91 school year; there are now 130 programs featuring seven languages in 33 school districts across the state; 70 of these programs are in Spanish, but a growing number (11) are in Chinese.

North Carolina applies four different models of dual language/immersion programs defined primarily by the population of students being served. These models include development bilingual, full immersion, partial immersion, and two-way; and 38 of the 130 programs currently use the two-way model.

Enrollment

North Carolina is still in the process of developing a system to capture dual language enrollments across the state. Over 20,000 students are currently enrolled in dual language programs. A complete list of programs across the state is available on the North Carolina dual language website.

Portland Public Schools (Pps)

Portland, OR

Overview of Portland Public Schools (PPS)

Portland Public Schools is the largest school district in Portland with 78 schools and an estimated enrollment of 49,000 students (2016-17). PPS is one of the largest school districts in the Pacific Northwest. Approximately 56 percent of the students enrolled in PPS are white, 16 percent are Hispanic, 10 percent African American, nine percent multi-racial, and seven percent Asian.

Dual Language Immersion in PPS

PPS opened the first dual language immersion (DLI) program in 1986 and has continued to expand to 15 programs across 27 K-12 schools in five languages (Chinese, Japanese, Russian, Spanish, and Vietnamese); 13 of the 15 programs currently operate as two-way immersion programs (all Spanish, Russian, Vietnamese, and one of the Chinese), with the other two operating as one way programs. However, in alignment with the district's equity policy and goal to close the achievement gap for historically underserved children, all of PPS DLI programs prioritize lottery slots for native speakers. PPS also offers PreK DLI in Spanish at three sites and also prioritizes students from a community-based Head Start program teaching 3- and 4-year-olds Mandarin for entry into Chinese dual language programs.

Enrollment

As of October 2016, there were 5,347 enrolled K-12 students and 165 teachers. Current 2016-17 dual language enrollment by school:

Language and Model	Elementary/K-8	Middle/K-8	High School
Spanish Two-Way 90:10	Ainsworth ES: 316	West Sylvan: 145	Lincoln: 179
Spanish Two-Way 90:10	Atkinson ES: 164	Mt. Tabor: 94	Franklin*: 105
Spanish Two-Way 90:10	Beach ES: 281	Ockley Green: 167	Roosevelt**: 84
Spanish Two-Way 90:10	Bridger K-8: 231	Bridger K-8: 60	Franklin*
Spanish Two-Way 90:10	Cesar Chavez K-8: 220	Cesar Chavez K-8: 88	Roosevelt**
Spanish Two-Way 90:10	James John ES: 71	(George) NA	(Roosevelt) NA
Spanish Two-Way 90:10	Lent K-8: 140	Lent K-8: 63	Franklin*
Spanish Two-Way 90:10	Rigler ES: 352	Beaumont: 87	Madison: 47
Spanish Two-Way 90:10	Scott K-8: 215	(Scott K-8) NA	(Madison) NA

Spanish Two-Way 90:10	Sitton: 109	(George) NA	(Roosevelt) NA
Russian Two-Way 90:10	Kelly ES: 260	Lane: 38	Franklin: 15
Chinese Two-Way 50:50	Woodstock ES: 331	Hosford: 167	Cleveland: 97
Chinese One-Way 50:50	MLK Jr. ES: 118	(Tubman) NA	(Jefferson) NA
Japanese One-Way 50:50	Richmond ES: 641	Mt. Tabor: 252	Grant: 147
Vietnamese Two-Way 50:50	Roseway Heights K-8: 73	(TBD) NA	(Madison) NA
TOTAL	3,522	1,161	674

Serving Emerging Bilinguals (English Language Learners)

In 2015-2016, 42 percent of all emerging bilinguals kindergartners in PPS were enrolled in DLI. This enrollment is significantly higher than 26 percent in 2013-2014 and 36 percent in 2014-2015—and is expected to be higher for 2016-2017.

Future of DLI in PPS

PPS is again considering expanding DLI programs in Spanish, Chinese, and Arabic to better serve students and the community with the goal of enrolling as many emerging bilinguals with matching L1 in DLI as possible. For the 2017-18 school year, PPS is proposing to add a third Chinese DLI program.

Utah Public Schools

Overview of the Utah Public School System

The Utah Public School System (K-12) operates within Local Education Agencies (LEAs) governed by locally elected school boards and superintendents. In 2015, Utah had 633,896 students enrolled in a total of 1,085 schools in 148 LEAs (41 school districts and 108 charter schools). The student body is approximately 66 percent white, 16.8 percent Hispanic, and 6.2 percent ELs.

Dual Language Immersion in Utah

Dual language immersion in Utah is a statewide initiative. In 2008, the Utah Senate passed the International Initiatives Bill, creating funding to Utah public schools to begin dual language immersion in Chinese, French, and Spanish. Additional languages have since been added: Portuguese in 2012; German in 2014; and Russian in 2017. The Dual Language Immersion Program uses a 50:50, two-teacher model in which students spend half of their day in the target language and the other half in English.

Enrollment

As of the 2016-17 school year, the Utah statewide system is composed of a total of 161 dual language schools: Spanish (88 schools) Chinese (45), French (20), Portuguese (6), and German (2). These schools include elementary, middle and high school.

Overview of Program Growth

2009-10 Approximately 1,400 students and 25 schools
2010-11 Approximately 5,500 students and 40 schools
2011-12 Approximately 9,400 students and 53 schools
2012-13 Approximately 14,000 students and 75 schools
2013-14 Approximately 20,000 students and 96 schools
2014-15 Approximately 25,000 students and 115 schools
2015-16 Approximately 29,000 students and 136 schools
2016-17 Approximately 32,000 students and 161 schools

Future Steps

For the 2017-18 school year, one new language (Russian), 28 new schools and approximately 6,000 students will be added to the program.



Our Research Agenda

Our Research Agenda

Our goal is to outline a comprehensive agenda that addresses issues of importance to dual language practitioners, researchers, and policymakers moving forward. This agenda will evolve as new problems and issues are identified. From this research agenda, the Alliance has developed a set of projects outlined in a companion document.

I. Mapping Dual Language in the U.S.

Within the last decade, the number of DLI programs in the U.S. has grown at a rapid pace. In just a few years, the number of programs operated under the DLI rubric nationwide has likely reached at least 2,000, as California, Delaware, Georgia, Louisiana, Minnesota, Ohio, Oregon, Texas, and Utah have implemented programs.

There is currently no reliable macro-level data that maps and describes dual language immersion in the U.S. We do not know how many programs exist, which program models they represent, or how many students the programs impact. There is an imperative to initiate a large-scale national effort to identify the number of dual language programs and their major characteristics.

National Census of Dual Language Programs (or estimation through sampling)

- Number of Dual Language Programs by State and District
- Dual Language Programs by Language
- Classification of Dual Language Programs by Program Type and Modes of Delivery
 - One-Way
 - Two-Way
 - 50:50 Model
 - Other Models (80:20; 90:10)

Our DLI National Alliance includes a highly representative sample of dual language programs in the U.S. With the collaboration and cooperation of these partners we will be able to dig deeper into the characteristics of dual language programs.

Alliance Partner Demographics: Detailed Statistics

- Dual Language Enrollment by Ethnicity and Race
- Dual Language Enrollment by Student's Native Language
- Dual Language Enrollment by SES
- Retention and Dropout Rates by Grade
- Attrition from Primary to Secondary

II. Causal Outcomes: The Impact of Dual Language on Academic Performance

We have limited data and research on the short- and long-term impact of enrollment in dual language immersion programs on academic performance, particularly in core subjects like language arts, math, and science. There is even less research that is based on adequate sample sizes, uses rigorous sampling methodologies, and controls for selection bias. And most research is based on studies of single school systems. The Alliance’s approach is to develop and implement a research agenda that draws on a large population of students across multiple programs; offering researchers an opportunity for the first time to undertake comparative research based on large numbers of programs and students. Three primary areas will represent the focus of the research:

Dual Language Immersion and Academic Achievement

In: Core Subjects (Language Arts, Math, Science)

By:

Gender	Socio-Economic Status (SES)
Grade	Learning Disability
Ethnicity	Class Size
Race	Teacher Experience
Native Language	Program Type
EL Status	Parent Education

Dual Language Immersion and Academic Attainment:

Demonstrated by:

- High School Retention
- High School Achievement
- College Attainment
- Employment
- Earnings

By:

Gender	EL Status
Ethnicity	SES
Race	Learning Disability
Native Language	Parent Education

Dual Language Immersion and Language Proficiency

In:

- L1 and L2
- Grades 5/6, 8/9, and 12
- Skill Modes (Receptive, Presentational, Interactive)

By:

Gender	SES
Ethnicity	Learning Disability
Race	Teacher Experience
Native Language	Program Type
EL Status	Parent Education

III. The Impact of Dual Language Immersion on Non-Cognitive Skills

Much like in the focus on academic skills, we need to develop a better understanding of the impact of enrollment in dual language programs on what are generally labeled “non-cognitive” skills, such as social skills, persistence, creativity, and self-control. Many of these factors and skills are a product of instruction and social interaction that takes place in the school environment. Our efforts will focus on measures of self-control and tolerance as well as information on grades, absences, and disciplinary actions that are usually available in academic records.

IV. The Impact of Dual Language Immersion on Creating a Bilingual Population

A major goal of dual language immersion is to graduate students with proven skills in at least two languages. We have only limited research to date on the process of second language learning, proficiency outcomes, and reliable testing.

Measuring the impact of dual language immersion on language learning

By:

- Matriculation
 - o Number of years of DLI
 - o Number of hours of classroom instruction
- L2 usage
 - o In class
 - o Extramural

Language Learning: DLI vs. other immersion and language learning environments

In:

- Achievement
- Usage

By:

- DLI
- Overseas immersion
- Heritage learners
- ELs
- Native English speakers

Traditional classroom modes:

In:

- DLI
- Foreign Language in the Elementary Schools (FLES)
- High school

V. Researching the Quality of Dual Language Instruction

As a relatively new approach to education, dual language models are varied and subject to large variations in quality based on policy environments; curricular models; and teacher recruitment, training, and retention. This segment of research will examine external and internal differences across programs and look toward developing standards along with proposing models for improving teaching and performance.

- Fidelity to dual language program models
- Strategies in the dual language classroom
- Models for teacher recruitment, training, retention

VI. Researching Cognition and Bilingualism

We face a significant issue in measuring bilingualism because there is no nationally accepted standard test of overall proficiency for children and youth on a par with the ACTFL/ILR scale and tests, which are broadly applied for university age students and adults. At the moment, programs use different instruments like AAPPL and STAMP. However, we need to have a general standard and scoring method for children and youth graduating from DLI programs across the nation.

In addition, we have established correlations between bilingualism and enhanced cognition (more specifically, working memory), as well as between bilingualism and educational achievement. While we have established a

correlation between DLI and educational achievement, we have not documented the cognitive basis for this phenomenon. There are cognitive tests in existence used by cognitive researchers, and we need to employ them across DLI contexts in order to document the cognitive advantages of the bilingualism associated with DLI. There is also a growing body of research on the relationship between bilingualism and intercultural development, of the emergence of both cognitive and socio-emotional skills sets essential for social integration, and successful participation in international teams and the global context.

Accordingly, for DLI we need to document:

- language proficiency attainment in both languages;
- the relationship between bilingual proficiency and cognitive enhancements as displayed in critical and creative thinking skills;
- the relationship between these two and educational achievement and attainment; and
- the relationship between language proficiency, intercultural development, and critical thinking.

The background features a repeating pattern of concentric hexagons and stars in a lighter shade of orange, set against a darker orange gradient background. The text is centered horizontally and vertically.

Alliance Research Projects

Alliance Research Projects

The Alliance has formulated an ambitious agenda of research projects designed to inform the field of education during the next five to ten years. These projects represent a set of important priorities that promise both a strong empirical and policy-oriented direction for dual language immersion and an opportunity to inject critical new evidence regarding the role these programs play in providing equal access to quality education.

Brief overviews of each of these projects follow; we identify the lead collaborating organization for each project. Practitioner partners will depend on the specific project and the Alliance plans to identify additional practitioner partners for future projects.

1. Mapping Dual Language Programs in the U.S. (ATDLE, CAL, American Councils)
2. Guiding Principles for Dual Language Programs, Revised (CAL)
3. Dual Language and Academic Outcomes Across DL Programs (Dylan Conger, George Washington University)
4. Teacher Competencies, Preparation and Effectiveness in Dual Language Programs (CAL)
5. Dual Language Immersion Teacher Supply (New America)
6. High School Achievement and College Attainment for DL Participants (American Councils, RAND)
7. Instructional Practices for Quality DL Programs (University of Utah, RAND, American Councils)
8. Comparing the Effects of Dual Language Programs on English Language Learners' Academic Achievement (CAL)
9. The Impact of Second Language Proficiency on Academic Performance (University of Utah)
10. Dual Language School Placement, Equality and Integration in Public School Systems (UCLA)
11. Dual Language Immersion, Student Character Skills and Behavioral Outcomes (University of Arkansas)
12. New Pathways from K-12 to Higher Education for Dual Language Students

Mapping Dual Language Programs Across the U.S.

Within the last decade, the number of DLI programs in the U.S. has grown at a rapid pace. In just a few years, the number of programs operating under the DLI rubric nationwide has reached at least 2,000, as California, Delaware, Georgia, Louisiana, Minnesota, Ohio, Oregon, Texas, and Utah have implemented programs.

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- Dual Language Enrollment by SES
- Retention and Dropout Rates by Grade
- Attrition from Primary to Secondary

Only limited and imprecise estimates are currently available that suggest the numbers and types of dual language programs across the U.S. Without more precise information about these numbers and the basic demographics of dual language programs, we cannot begin to assess the potential for a significant national movement.

For the national census we will use a mixed method survey approach. A survey instrument will be developed to elicit information on the various aspects of dual language instruction in U.S. schools: such as program type (e.g., 50/50, 80/10, one-way, two-way); numbers and profile of students; and numbers of teachers. The questionnaire will be designed so that it could be administered either through an Internet-based option or a telephone survey.

The project will be a collaborative effort of American Councils, ACTFL, ATDLE and CAL.

Guiding Principles for Dual Language Education

As dual language expands throughout the country, it is of paramount importance that we support practitioners with common tools for their programs. The *Guiding Principles for Dual Language Education* has been a foundational resource for programs across the country and has been used as a tool for program planning, evaluation, and growth. Published in 2007 (L. Howard, J. Sugarman, D. Christian, K. Lindholm-Leary and D. Rogers), the guide has been primarily used in developmental bilingual programs, where all students are speakers of the partner language or in two-way immersion program, where approximately half of the students are native speakers of the partner language and approximately half of the students are native speakers of English.

While foreign language immersion programs are a type of dual language education, the *Guiding Principles* resource was not developed in consultation with foreign language immersion educators and researchers. Consequently, the *Guiding Principles* document is not specifically applicable to foreign language immersion programs.

The Alliance will develop *Guiding Principles for Dual Language Education in Immersion Programs* based on the framework of the original *Guiding Principles*, but adapted for use by foreign language immersion educators. The *Guiding Principles for Dual Language Education in Immersion Programs* would include the following programmatic strands:

- Assessment and Accountability
- Curriculum
- Instruction
- Staff Quality and Professional Development
- Program Structure
- Family and Community
- Support and Resources

Each of the strands is composed of a number of guiding principles, which include one or more key points associated with them. Each of the guiding principles are grounded in evidence from research and best practices within the context of Dual Language Immersion. *The Guiding Principles for Dual Language Education in Immersion Programs* will identify the research affiliated with each strand in an introductory literature review for the volume. Additionally, in order to make the document useful for planning and reflection, each key point within the principles includes progress indicators—descriptions of three to four possible levels of alignment with that key point: minimal alignment, partial alignment, full alignment, and possibly exemplary practice.

We will identify a team of Alliance educators and researchers experienced with immersion education to work in close concert with our practitioner partners. Potential team members include: Donna Christian (Senior Fellow at the Center for Applied Linguistics), Ester de Jong (Professor of English as a Second Language/Bilingual Education at the University of Florida), Fred Genesee (Professor Emeritus at McGill University in Montreal), Kathryn Lindholm-Leary (Professor Emerita of Child and Adolescent Development at San Jose State University), and Diane Tedick (Professor of Second Language and Culture Education at the University of Minnesota).

Principal Researcher:

Dr. Donna Christian, Center for Applied Linguistics

Evaluating Dual Language Immersion Program Impact on Academic Achievement And Educational Attainment

A handful of recent high-quality impact evaluations suggest that DLI programs improve English language arts and mathematics test score performance for English Learner (EL) students. However, many questions remain under-explored. DLI programs have the potential to improve the achievement of both EL and fully English proficient students, yet the outcomes of the latter group have not been studied. The effect of DLI programming on academic achievement in other areas, such as scientific literacy, as well as attainment outcomes (high school graduation, college enrollment and completion), have also received little research attention.

Our research will rely on rigorous methodologies to estimate effects of DLI programs on academic outcomes in our partner districts. Specifically, we will work with our partners to implement research designs that allow for a high degree of causal integrity by reducing selection biases and maximizing generalizability. Our previous work in Portland, Oregon relied on a randomized controlled trial methodology, where students gained entry into DLI programs based on a lottery system. This research design controls for differences between students and their families that could both influence their choice of DLI education and their academic outcomes.

Several non-experimental approaches can often provide similar levels of confidence in causal estimates, such as difference models, matching, instrumental variables, regression discontinuity, and student- or family-level fixed effects. With each site, we will identify the appropriate high-quality research design and rely on similar outcome measures across the sites to maximize the generalizability of our findings. We will also explore variation in impact estimates across different types of students (e.g., by the language spoken at home) and programs (e.g., by the percent of time that each language is used in the classroom). Research questions include:

1. How does the effect of DLI programs on students' academic achievement and educational attainment compare to the effects of other programs, including English-immersion and traditional bilingual approaches?
2. How does the effect of DLI programs on student outcomes vary by:
 - a. The characteristics and skills of the students, such as the age they began learning the second language, their home language, and their baseline proficiency in each language?
 - b. The program models, such as how much time is spent during the day in each language?
 - c. The characteristics and skills of the teachers, such as whether they have bilingual or ESL certification/degrees?

- d. The characteristics of the instructional environment, such as small versus group learning or the involvement of parents and guardians?

Principal Researcher:

Dr. Dylan Conger, George Washington University

Teacher Competencies and Preparation and Effectiveness in Dual Language

Classrooms

Teacher effectiveness is a topic of interest and concern in education research, but little attention is paid to the role that teacher preparation plays in equipping teachers with the specific skills they need to be successful in the classroom (Greenberg, McKee, & Walsh, 2013). For dual language (DL) teachers serving in the rising number of immersion programs across the country, the issue of adequate preparation is even more pronounced, given that there is no systematized approach to preparing teachers to serve in DL settings. A handful of states have adopted educational policy that requires the identification of bilingual teacher competencies, establishment of bilingual teacher preparation standards, and defined pathways to bilingual teacher certification. Still, the vast majority of states provide guidelines solely for the preparation and certification of teachers serving in English-only classrooms. Equally important, all of our Alliance practitioner partners have highlighted the importance of this issue to the success of their dual language programs.

In DL classrooms, teaching students academic content in two languages is a daunting task that requires a specialized educator skill set (Achugar & Pessoa, 2009; Diaz Soto, 1991; Guerrero & Guerrero, 2009; Menken & Antunez, 2001). Findings indicate that successful DL teachers need to possess high academic language proficiency in Spanish (Guerrero & Guerrero, 2009) or another minority language; a deep understanding of linguistics and second language acquisition theory (Menken & Antunez, 2001); knowledge of Hispanic (or other minority) culture (Walton & Carlson, 1995); diversity awareness and skills in culturally responsive teaching (Walton & Carlson, 1995; Gay, 2010); a non-deficit attitude toward bilinguals and bilingualism (Achugar & Pessoa, 2009; Diaz Soto, 1991); effective multicultural parent communication and education strategies (Diaz Soto, 1991); and the ability to shelter content instruction delivered in English (Echevarría et al., 2010).

Our research will focus on exploring teacher perspectives on essential skills needed to serve effectively in DL classrooms. We will use electronic surveys that include both open- and close-ended responses to be completed by practicing DL teachers in order to gather their perceptions with regard to their preparation and continuing professional development for effective teaching in dual language classrooms. Teacher demographic data will also be collected. Surveys will be sent out to DL teachers serving in schools in Alliance-affiliated school systems. Additional practitioner partners may be added to the Alliance and included in this study to round out the research. DL teachers serving in states with certification requirements (e.g., California, Illinois, New York, Texas) as well as those serving in states with no such requirements (e.g., Ohio, Pennsylvania, Virginia, Washington D.C.,) will be included for comparison purposes. We will address the following research questions:

- What do DL teachers identify as essential skills for serving DL students effectively?
- To what degree do DL teachers perceive that they possess the necessary knowledge and teaching skills required to achieve DL program goals and promote DL student success?
- How do DL teachers acquire essential skills that they perceive they are lacking?
- What do DL teacher perceptions about their preparedness to teach effectively in DL classrooms tell us in terms of needed changes in education policy?

Principal Researcher:

Barbara Kennedy, Center for Applied Linguistics

Joining Equity and Enrichment: Expanding the United States' Supply of Bilingual Teachers

Public and policymaker interest in two-way dual immersion programs has grown significantly in the past several years. Educators and policymakers are responding to shifting public interest—there is considerable English-dominant family demand for opportunities to help their children learn another language at school.

New studies also suggest that quality dual language immersion programs are the best instructional models for meeting the needs of students who speak a non-English language at home. Since these dual language learners (DLLs) usually begin their formal education in U.S. schools while developing proficiency in their native tongues, immersion programs help them to use those languages as a foundation for acquiring English. When DLLs build strong abilities in their first language, they also develop a deeper understanding of the general workings of language. These “meta-linguistic” skills appear to be powerful tools for improving the pace and breadth of their English language development. Communities across the country are opening significant numbers of new dual immersion programs and states are amending English-only policies to allow immersion programs to expand.

Dual immersion programs are popular both on enrichment and equity grounds. Fortunately, the most effective immersion education programs combine these goals and foster integration by enrolling roughly equal numbers of native speakers of English and native speakers of the target language. Unfortunately, the scarcity of effective multilingual teachers can make it difficult for policymakers to design such balanced immersion programs. While nearly one in four U.S. children speaks a non-English language at home, just one in eight U.S. teachers possess that qualification. As a result, these teachers are in high demand. In 2016, 32 states and the District of Columbia reported shortages in ESL, bilingual, and dual immersion teachers.

Should policymakers use their limited supply of multilingual teachers to satisfy the preferences of English-dominant families? Or should they dedicate these teachers to supporting better outcomes for DLLs? Without enough talented multilingual teachers to go around, expansions of dual language immersion programs inevitably struggle to balance this tension and interested, deserving families lose out.

In response to this fundamental challenge to dual language immersion program expansion, New America's Dual Language Learners National Work Group will develop a policy toolkit for local, state, and federal policymakers interested in developing and hiring more multilingual teachers. The project will catalogue and assess all available options for increasing the supply of this critical element of the labor force. Guiding questions will include:

- How can states adjust licensure requirements to expand their pool of multilingual teachers—without sacrificing instructional quality?
- Which core competencies and teacher practices appear to be critical to effective dual language immersion instruction?
- How can local (and state) policymakers build successful “Grow Your Own” models for mentoring and training new multilingual teachers themselves?
- How can alternative training and certification programs be designed to reach new pools of potential multilingual educators, such as paraprofessionals, teachers assistants, non-instructional district staff, and high school or college students?
- How can traditional teacher preparation programs better attract and train multilingual candidates for teacher licensure?
- How might federal policymakers adjust visa rules to increase the supply and longer-term retention of foreign-born multilingual teachers?
- How can districts work with teachers unions to devise collective bargaining agreements that allow immersion programs to expand and support recruitment and retention of multilingual instructors?

To answer these questions, DLL National Work Group researchers will analyze the limits and opportunities of various policy strategies for expanding the multilingual teacher force in American schools. Whenever possible, the analysis will be illustrated with examples of current policy reform efforts. For instance, analysis of the viability of new “Grow Your Own” models will explore the genesis, design, and implementation of Portland Public Schools’ current alternative certification program.

Principal Researcher:

Dr. Conor P. Williams, New America

Dual Language Immersion, Student Character Skills, and Behavioral Outcomes

Recent systematic and rigorous evaluations of the impact of dual language immersion have focused only on studying effects of these programs on student achievement. However, character skills such as grit, self-control, and a growth mindset, have been found to play a prominent role in shaping academic and long-term outcomes, beyond the role of IQ and cognitive ability (Almlund et al., 2011), and could also be affected by dual language immersion.

Research on child development has found a positive link between bilingualism and the development of important executive functioning skills (e.g. Carlson and Metzoff, 2008; Bialystok, 2015; Thomas-Sunesson, Hakuta and Bialystok, 2016). At the same time, executive functioning, which includes cognitive flexibility, working memory, and inhibitory control, has been found to facilitate behaviors such as persistence, being able to focus on several things at once, and reflective learning. These are behaviors that are more commonly observed among individuals that present high levels of conscientiousness, effortful control, and self-discipline (Zelazo, Blair and Willoughby, 2017). Therefore, dual language education could have a positive role on the development of character skills related to self-control, conscientiousness, and grit through its effect on executive functioning.

A big challenge in the study of character skills is to find reliable measures of such skills. To date, three approaches have been proposed for obtaining measures of character skills: 1) Measures based on self-reports or observer reports of certain skills; 2) Measures based on academic outcomes such as student grades, absences, credits earned, disciplinary infractions, etc.; and 3) Measures derived from performance tasks.

Despite the various approaches and sources of information available to measure character skills, none have proven fully reliable (Duckworth and Yeager, 2015). Therefore, for this project we propose to use an array of measures whenever possible, including student grades, other academic behaviors, and student and teacher reports.

Our research efforts will focus on information from lottery applicants to dual language immersion programs. We would compare grades and other academic behaviors of those lottery winners with those students that were not placed in a dual language program and attended regular public schools. Additionally, whenever possible we will complement administrative data with student survey information where middle school students will be asked to report on their character skills. Similarly, teachers will also be asked on reporting on the level of skills of their students for a subgroup of lottery applicants. With this data, we will aim to address the following research questions:

- What is the effect of dual language immersion on student character skills related to conscientiousness and grit, measured through student grades and reports from teachers and students?
- What is the effect of dual language immersion on student absences and disciplinary infractions?

Principal Researcher:

Dr. Gema Zamarro, University of Arkansas and University of Southern California

Dual Language and School Integration

There are many potential benefits to multilingualism—social, psychological, cognitive, and economic, to name a few. However, there are non-linguistic benefits to two-way dual language programs that can be just as powerful. Most students who are not native English speakers are segregated in schools that provide fewer learning opportunities than those of non-minority native English speaking students. And there is an unfortunate correlation between being an English learner and being low-income, albeit with significant linguistic and cultural assets.

Similarly, majority native English speakers are often denied the opportunity to learn in more diverse settings (like those they will ultimately need to live and work in) as they are more segregated than any other group, albeit in better resourced schools and with considerably more social and economic capital. The ideal two-way dual language program enrolls approximately 50 percent of each type of student and can provide an enriched learning environment for both English speakers and English learners. Research has also shown that in this type of environment, students become more open to other cultures and better equipped to thrive in a diverse society.

Given the multiple legal, practical, and social impediments that schools face in desegregating their student bodies, these two-way programs represent a unique opportunity to promote increased integration of students who would not otherwise have the opportunity to learn in an integrated environment. The potential effects of these programs can be viewed as occurring at three different levels:

- 1. Integration at the school level: Is the school a more integrated learning setting as a result of adopting the two-way dual language program?**

It is important to measure the level and type of integration (racial, ethnic, economic, and linguistic) at several points before instituting the program and for some years afterward, holding constant the demographics of the neighborhood surrounding the school. Data would be historical and current enrollment data. We have access to such data from the last 25 years and a great deal of experience in using it. It is important to distinguish between whole school programs and programs that operate within a larger school context. Programs within schools need to account for over 50 percent of the school population in our design to be large and visible enough to have a possible impact. School personnel would also be interviewed to determine if desegregation figured into the decision to site the program in this school.

- 2. Integration of the neighborhood surrounding the school: Has the presence of a two-way dual language program had any effect on the neighborhood segregation/integration given that some families might choose to move into, or remain in the area in order to access the program?**

In this case, we would measure the neighborhood demographics before and for several years after the establishment of the program. Census tract data would be used and parents would be surveyed about decisions to live in the area based on access to the school.

3. Integration at the individual student level.

In this case, we would measure the extent to which students in the program initially were assigned to, or attended, more segregated schools (either by majority or minority composition) than the dual language school they now attend. This could be accomplished by getting school district records on their prior school enrollments and by surveying parents and then examining the racial/ethnic/poverty and EL data of those schools from enrollment records for those years. That data could answer whether individual students experience greater diversity (racial, ethnic, or socio-economic) by enrolling in such a program.

Details of all studies depend on policies associated with access to the school and program: Do neighborhood children have priority access? Is access through a lottery system and/or does area of residence affect access? Is transportation provided for students out of the immediate school area?

Enrollment data and school level data before and after the initiation of a program is in public use datasets. We have access to federal civil rights data on EL and other school statistics and familiarity with using census data at the block level as well as American Community Survey data. Prof. Gándara has been extensively involved in researching two-way dual immersion schools. Prof. Orfield has been involved with the creation of such schools in some desegregation plans.

Principal Researchers:

Dr. Patricia Gandara, UCLA

Dr. Gary Orfield, UCLA

Assessing Target/Partner Language Proficiency in Dual Language Immersion

Dual language education operates on the premise that students who receive instruction in two languages are able to achieve academically in core subjects such as math and English language arts. Research has demonstrated that learning subject matter in a second language does not disadvantage students; in some cases, dual language learners even outperform their monolingual peers (Collier & Thomas, 2004; Lambert & Tucker, 1972; Lindholm-Leary & Howard, 2008; Steele et al, 2015; Swain & Lapkin, 1982; Thomas & Collier, 1997; 2002; Watzinger-Tharp et al, 2016). These studies serve as vital accountability measures to reassure stakeholders and policymakers that dual language education does not impede core subject learning, which is assessed in English.

Given the strong evidence of dual language students' academic achievement, and the explicit goal of dual language education to promote bilingualism and biliteracy, practitioners and researchers have turned their attention to students' proficiency in the partner/target language. Utah and Portland Public Schools, for example, use standardized proficiency tests. In addition, Utah has established statewide proficiency targets for grades 1-12, using the scale established by the American Council on the Teaching of Foreign Language (ACTFL).

However, studies that investigate partner/target language proficiency in dual language education are often limited to one or two schools (e.g. Fortune and Tedick, 2015; Padilla et al, 2013; Xu et al, 2015). Even studies that draw from multiple sites rely on relatively small student samples, especially in higher grades (e.g. Burkhauser et al, 2016; CASLS, 2013). To address the critical need for systematic large-scale data, we will assess students' proficiency across grades at four Alliance partner sites. We will also determine which districts and schools are producing higher levels of proficiency, adjusting for students' baseline characteristics, including but not limited to whether their home language matches the partner language. Our findings will guide dual language programs in setting proficiency targets and identifying instructional practices that produce high levels of proficiency.

More specifically, our research of partner/target language proficiency will address the following questions:

1. What levels of partner/target language proficiency do dual language students achieve over time — and do levels differ by partner/target language, by students' native language and by one-way and two-way program type?
2. How does students' proficiency grow from grade to grade in each of the four skills; to what extent does growth differ across skills and languages; and does the development of proficiency in one skill such as listening, correlate with another skill, like speaking?

3. Do students who reach high levels of partner/target language proficiency also achieve at high levels in academic subjects, and do levels and correlations differ by partner/target language, by students' native language, and by one-way and two-way program type?

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Comparing the Effects of Two Types of Dual Language Programs on English Learners' Academic Achievement

Recent research findings on the cognitive advantages of bilingualism and multilingualism have contributed to the proliferation of dual language programs in the U.S. For English learners, the evidence points to better academic outcomes than other types of programs (Genesee, Lindholm-Leary, Saunders, & Christian, 2006; Thomas & Collier, 2002, 2012; Valentino & Reardon, 2014).

While a variety of dual language program types exist, with few exceptions (Christian, Genesee, Lindholm-Leary, & Howard, 2004; de Jong, 2004), the research conducted on these programs has grouped them together and compared them with programs whose goal is to immerse or transition students to English instruction (ESL or transitional bilingual education). Therefore, there is not much of a research base in this area to guide schools interested in starting a dual language program for English learners in their district.

Among dual language programs, the two-way model, which integrates English native speakers with English learners, has received a lot of attention from school districts and communities around the country. Integration offers all students expanded second language learning opportunities through interaction with peers as native speaker models. In contrast, one-way dual language models (world language immersion for English speakers or developmental bilingual education for English learners) group students by native language and the teacher is the main source of target language input. Moreover, because differences between English learners and native English speakers are generally not only linguistic and cultural but also socio-economic in nature, bringing these two groups of students together in the two-way model may contribute to the development of positive intergroup relationships.

In spite of the potential of two-way classrooms to level the playing field between language minority and language majority students, given a socio-political context in which the English language is afforded higher status than other languages, many challenges remain to ensure equity for both groups. Some researchers fear that two-way programs may be accommodating the needs of language majority students at the expense of language minority students, thus expanding the privilege of the former, while diminishing the status of the latter (Scanlan & Palmer, 2009; Valdés, 1997). Without the challenge of serving both groups, one-way programs may be better suited to focus on meeting the needs of English learners.

We will conduct a systematic examination of the effects of two-way and one-way dual language programs on the English and Spanish academic outcomes of students in grades K-8 in a large urban school district with 20 two-way and 10 one-way Spanish/English programs. The focus will be on Spanish-speaking English learners, the largest minority group in the district. More specifically, we propose to answer the following research questions:

1. What are the differential effects of two-way and one-way dual language programs on the English academic outcomes of English learners?
2. What are the differential effects of two-way and one-way dual language programs on the Spanish academic outcomes of English learners?
3. Does the rate of reclassification of English learners as fully English proficient differ in two-way and one-way programs?
4. What factors contribute to the level of satisfaction with two-way and one-way programs by English learners and their families?

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DLI and High School Achievement and College Attainment

If ever there were a time to devote attention to immigrant populations in the U.S., more specifically the Latino population, it would be now. Nearly one in four children in the U.S. is Latino, and Latinos represent one in five children in households where a language other than English is spoken. To be sure, the U.S. educational system is making significant progress in improved high school graduation rates. However, the statistics on the education success of Latino children, which is surely a key to their future economic success, remain far less than encouraging. Among Latinos, only 18 percent are proficient in reading and 24 percent proficient in math in fourth grade, while only 63 percent graduate from high school (see Figueras-Daniel and Barnett, 2013). A recent paper prepared for the American Academy of Arts and Sciences' National Commission on Language Education (Kroll, 2015) states:

The 2004 National Center for Education Statistics has reported that about 30% of children who speak English but who are exposed to another a language at home do not complete high school. Many studies have shown a well-established relation between low socio-economic status and low English skill level in children from homes where a language other than English is spoken. Recent work also suggests that speaking a language other than English at home acts as an independent risk factor.

Contemporary research has begun to establish the important academic benefits of dual language immersion on achievement in elementary and middle school, particularly for non-native speakers of English. Rapidly advancing literature and research on the “bilingual advantage” for Latinos reveal that there is a positive and statistically significant relationship between the odds of going to college and being bilingual and an association between being “high-use” bilingual and attending a four year college (Santibanez & Zarate, 2014).

What we do not yet know, and must identify, is how these significant early academic benefits can and should translate into continuing achievement and attainment of high school graduation and college matriculation. Specifically, our research questions address:

- What is the relationship between enrollment and sustainment in DLI from kindergarten for native speakers of Spanish and their eventual success in high school measured by retention, academic grades, and graduation? Do native speakers of Spanish in DLI outperform their non-DLI peers in high school success?
- What is the relationship between enrollment and sustainment in DLI for native speakers of Spanish and their acceptance and enrollment in college? Do native speakers of Spanish enrolled in DLI outperform their non-DLI peers in rates of college attainment?
- What are the major factors that assist or inhibit native speakers of Spanish sustaining their enrollment and advancing their bilingualism throughout middle and high school?

There are important corollaries to these key questions as well:

- How much exposure in elementary school and, if available, middle school to DLI makes a difference, if at all, in high school achievement and college attainment?
- What is the impact of different modes of middle and high school DLI follow-up on retention in language learning programs, high school graduation, and college attainment?

Our effort will focus on the key hypotheses that extend from the major research questions articulated earlier:

- Enrollment in DLI among students whose home language is Spanish results in higher academic grades in core academic subjects (language arts, math, and science) and higher retention rates in grades 9, 10, 11, and 12 when compared with Spanish speaking students who are not enrolled in DLI.
- Enrollment in DLI among students whose home language is Spanish results in higher graduation rates when compared with Spanish speaking students who are not enrolled in DLI.
- Enrollment in DLI among students whose home language is Spanish results in high levels of college matriculation when compared with Spanish speaking students who are not enrolled in DLI.

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Strengthening Dual Language Implementation: Policies, Practices, and Program Design

Recent research has begun to systematically and more rigorously explore the impact of dual language education on student achievement in mathematics, English language arts, and science. Studies in Portland, Oregon and Utah have found positive impacts. We have also assessed the potential of dual language education to close the achievement gap for English learners. We have analyzed teaching practices and language use in dual language classrooms. However, as dual language experts have acknowledged, more information is needed surrounding program design, implantation practices, and policies (Howard et al, 2007; Boyle et al, 2016). As dual language education continues to grow across the country, there is a critical, unmet need for thorough assessment of implementation policies and their variation across school systems; identification of factors that impede success; and recommendations for adapting policies and practices to different contexts.

These policies determine student eligibility, languages taught, instructional models, supports, and allocation of instructional time; they provide the foundation for all activities used to implement and support the programs. This research project will be the first to analyze multiple sites in order to understand how and why dual language implementation policies and practices vary.

Our research efforts will focus on dual language implementation policies and practices across multiple school systems in order to inform the field about best practices. The research team will focus on such implementation policies across a selection of diverse public school systems. Examining these sites will allow us to compare and contrast dual language implementation in a variety of systems. We will address research questions such as:

- How do the implementation policies for dual language immersion programs in these systems compare to established and respected guidelines for dual language implementation?
- How do implementation policies vary across school systems and what factors account for their variation?
- What do those findings tell us about promising practices for dual language implementation in other school systems?

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New Pathways From K-12 to Higher Education for Dual Language Students

A vital element for long-term success of K-12 programs is retention of students throughout primary and secondary school and attainment of college. This is especially true for high-need students whose high school achievement and college attainment remain critical goals of the K-12 system.

Beginning in 2016-17 the state of Utah, as part of its systematic effort to expand the impact of DLI to higher education, implemented a Bridge Program designed to “bridge” the gap between language study in high school and higher education. The Utah Bridge Program is a unique partnership between seven Utah state institutions of higher education and school districts with DLI programs. Each Bridge course is developed by a statewide team of university and high school instructors and delivered during a full academic year by a pair of instructors, one from the university hosting the course and one from the high school site working in a co-teaching model. Through challenging and sophisticated approaches to cultural content, Bridge courses focus on developing critical thinking skills and advancing students’ language proficiency towards state grade level targets. The courses further the state goal of graduating students from high school with language proficiency levels more typical of students completing a language major in college. Utah’s institutions of higher education are actively preparing for this influx of linguistically advanced students.

Not only does it ensure uninterrupted language education and articulate a vision for K-16 language study, it provides a clear vision, pathway, and motivation for students to pursue continuous language study through 12th grade. It promotes educational equity, and access to *bilingual and bicultural citizenship* by offering rigorous, upper division university language and culture courses to any qualified student in designated high schools. Moreover, by producing high school graduates with an unprecedented level of proficiency, colleges and universities now can graduate career ready students with the professional language abilities that are in great demand by employers.

Through direct collaboration with our Alliance practitioner partners and major state universities, we propose to develop and expand the bridge model to a larger number of states, resulting in a replicable and sustainable national K-16 model. The first phase will be working with Alliance partners that most resemble the Utah environment, with state-sanctioned separate and district-wide DLI programs and state universities and colleges. The next phase will involve potential articulations with out of state colleges and universities particularly those designated as federally supported Language Flagship institutions who are interested in identifying pipelines of advanced language students into their programs.

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