

**Instructional Practices and Supports of Emergent Multilingual Learners
in Universal Prekindergarten Classrooms in New York City**

Tiedan Huang
Chun Zhang
Caitlin Coe

Graduate School of Education, Fordham University

June 2022

Acknowledgements

This research was made possible by generous funding from the Foundation for Child Development. Our team is grateful for the opportunity to participate in the New York City Early Childhood Research Network, a collaboration of researchers and policymakers dedicated to supporting the continuous improvement of early childhood education in New York City and to strengthening the trajectory of success for NYC's prekindergarten students, a large proportion of whom are emergent multilingual learners. We also thank the National Institute for Early Education Research (NIEER) for granting use of their promising instrument, the Classroom Assessment of Supports for Emergent Bilingual Acquisition (CASEBA), and for their work in adapting this tool to meet our research needs. The adapted instrument was consequently named the Classroom Assessment of Supports for English Language Acquisition (CASELA). Dr. Alexandra Figueras-Daniel, in particular, provided in-depth CASELA implementation training to our observer team.

We further acknowledge the contributions of our experienced observers (Patricia Watkins, Elisa Valle, Mariel Acevedo, Gregorio Figueroa, Kate Abdalla, Jere Davis, and Barbara Boveda Baroni), our committed team of graduate research assistants (Elizabeth King, Pham Huynh, Lina Zhang, Qiong Yu, Ying Wu, Jordan Abrams, Jacqueline Hwang, and Eitan Zecher), as well as Fordham GSE faculty member Marilyn Bisberg, for supporting this work in myriad ways. Above all, we thank participating teachers, program leaders, and school staff for welcoming us into their classrooms and engaging in reflective practice with us.

Table of Contents

- I. Executive Summary
- II. Introduction
 - II.1. Purpose
 - II.2. Background
- III. Research Questions and Methods
 - III.1. Sampling and Recruitment
 - III.2. Data Instruments and Collection
 - III.2.a. Quality of Teacher-Child Interaction Measures: CLASS
 - III.2.b. Quality of Linguistic and Cultural Responsiveness: CASELA
 - III.2.c. Teacher and Program Leader Questionnaires
 - III.3. Data Analysis
- IV. Key Findings
 - IV.1. Teaching Team and Program Leader Characteristics
 - IV.1.a Demographic and Background Information
 - IV.1.b Language Backgrounds of Teaching Teams
 - IV.1.c Multicultural Beliefs of Teaching Teams
 - IV.2. Relationships Between EML, Classroom, and Teacher Characteristics
 - IV.3. Quality of Teacher-Child Interactions
 - IV.4. Quality of Linguistic and Cultural Responsiveness
 - IV.5. Relationships Between Site Characteristics and Measures of Classroom Quality
 - IV.6. Exemplary Practices
 - IV.6.a. Global Teacher-Child Interactions
 - IV.6.b. Embracing Diversity and Building Community
 - IV.6.c. Enacted Curriculum Promoting Language Development
 - IV.6.d. Comprehensive Supports for Individual Students
 - IV.7. Preparation, Professional Development, and Job-Embedded Support for NYC UPK Leaders and Teachers
- V. Summary of Findings and Policy Implications
- VI. Limitations
- VII. Conclusion
- VIII. Appendices

Tables and Figures

Tables

Table 1. Site Descriptive Statistics

Table 2. Student Language Diversity in Sampled UPK Classrooms.

Table 3. Multicultural Beliefs of Teaching Teams

Table 4. Staff Characteristics

Table 5. Teaching Team Language Backgrounds

Table 6. Descriptive Statistics of Teacher-Child Interaction Quality in PreK Classrooms

Table 7. Descriptive Statistics of Linguistic/Cultural Responsiveness

Table 8. Preparation of NYC UPK Leaders and Teachers

Table 9. Supports for NYC UPK Leaders and Teachers

Table 10. Self-Identified Professional Learning/Support Needs of Teaching Teams

Table 11. Self-Identified Professional Learning/Support Needs of Program Leaders

Figures

Figure 1. Program Study Logic Model

Figure 2. CLASS Domains and Corresponding Dimensions

Figure 3. CASELA Domains and Item Descriptions

Figure 4. Program Leader and Teaching Team Race/Ethnicity

Figure 5. Program Leader and Teaching Team Educational Attainment

Figure 6. Program Leader and Teaching Team College Major

Figure 7. Teaching Teams' Multicultural Beliefs and Perceptions

Figure 8. CLASS Domain Scores vs. National Norms

Figure 9. CASELA Linguistic and Cultural Responsiveness Scores

Presentations and Publications

Huang, T., Coe, C., & Zhang, C. (2022). *Classroom as a co-constructed discursive space for emergent multilingual learners*. Manuscript submitted for publication.

Huang, T., Coe, C., & Zhang, C. (2022). *Assessing classroom supports for young dual language learners in New York City*. Manuscript submitted for publication.

Huang, T., Zhang, C., & Coe, C. (2022). *Supporting young emergent multilingual learners in prekindergarten classrooms*. Manuscript submitted for publication.

Huang, T., Coe, C., & Zhang, C. (2022). *Workforce diversity and supports for young multilingual learners in NYC*. [Manuscript in preparation]. Graduate School of Education, Fordham University.

Huang, T., Coe, C., & Zhang, C. (2022). *Workforce diversity and supports provided to prekindergarten multilingual learners in NYC*. Paper to be presented to The University Council for Educational Administration.

Huang, T., Coe, C., & Zhang, C. (2021, April). *Instructional practices, supports, and learning in Universal Pre-Kindergarten (UPK) classrooms in New York City* [Paper presentation]. American Educational Research Association Annual Meeting, Virtual.

Huang, T., Zhang, C., & Coe, C. (2020, December). *Instructional Practices in supporting dual language learners in Universal Pre-Kindergarten Classrooms in New York City*. [Poster presentation]. The Administration for Children and Families' National Research Conference on Early Childhood, Virtual.

Huang, T., Zhang, C., & Coe, C. (2020). *Measuring quality of experience of young dual language learners* [Paper accepted for presentation but not presented due to COVID-19 public health emergency]. American Educational Research Association Annual Meeting.

Huang, T., Zhang, C., & Coe, C. (2019, December). *Investigating instructional practices, supports, and learning needs of dual language learners in New York City UPK Classrooms* [Poster presentation]. The New York City Early Childhood Research Network Symposium, New York, NY.

Huang, T., Zhang, C., Coe, C., & Yu, Q. (2018, April). *High-quality pre-k classroom practices for dual language learners: A review of the quantitative research* [Round table presentation]. The American Educational Research Association Annual Meeting, New York, NY.

Instructional Practices and Supports of Emergent Multilingual Learners in Universal Prekindergarten (UPK) Classrooms in New York City

I. Executive Summary

Emergent multilingual learners (EMLs), children who have a home language other than English and are learning two or more languages at the same time, or who are learning a second language while continuing to develop their first language, comprise a rapidly growing population in the United States P-12 educational system. The current study, implemented during the 2017-18 and 2018-19 school years, sought to examine teacher practices in support of EMLs in New York City Universal Prekindergarten (UPK) classrooms, as well as workforce characteristics and professional learning opportunities provided to UPK teachers and program leaders. Using structured, direct observations of 50 UPK classrooms, we examined: (1) the quality of teacher-child interactions in terms of emotional support, classroom management, and instructional support, measured by the Classroom Assessment Scoring System (CLASS), and (2) the extent to which teachers nurtured a culturally and linguistically responsive environment and supported EMLs' acquisition of English and home language, measured by the Classroom Assessment of Supports for English Language Acquisition (CASELA). Additional survey data was collected to examine workforce characteristics and professional supports related to preparation, professional development, and ongoing job-embedded support.

The following research questions guided our study:

1. What are teaching team and program leader characteristics across our sample of UPK classrooms with EML students?
2. Are there relationships between site characteristics, concentration of EMLs, and teacher characteristics across the sampled classrooms?
3. How do practices at each site reflect the construct of high-quality instructional practices for Prekindergarten EMLs, as measured by developmentally, linguistically, and culturally sensitive instruments (i.e., CLASS, CASELA)?
4. How does classroom quality, as measured by the above structured observations, vary by site, school, classroom, teaching team, and EML characteristics?
5. What emerging high-quality practices—both general and EML-specific—are enacted by teaching teams to facilitate EMLs' language and literacy development (in both the home language and in English) and to support their social emotional development?
6. What support (e.g., preparation programs, professional development, ongoing job-embedded support) do NYC Universal Prekindergarten teachers and site leaders currently receive related to teaching and supporting young EMLs?

We observed 50 UPK classrooms between January 2018 and June 2019. Within this sample, 49 classrooms were monolingual (i.e., English was the primary language of instruction) and one classroom was designated as a dual language classroom (i.e., 50% of instruction was conducted in English and 50% in Spanish). Sites received varied levels of resources and were located in communities endowed with varied levels of wealth – 46% in low-income communities, 34% in middle-income communities and 20% in high-income communities. The average size of a classroom teaching team was two, and average class size was 17 students. The average proportion of EMLs was 40% with the majority of EMLs (57%) speaking Spanish.

Our analyses demonstrated the following main findings:

1. Over 90% of program staff (i.e., site leader(s), lead teacher, assistant teacher(s) and classroom aides) were female. Leaders (77%), lead teachers (70%), and assistant teachers/aides (92%) came from diverse backgrounds. All program leaders had a bachelor's degree and 90% held a master's degree. Ninety-eight percent of lead teachers had a bachelor's degree with 74% holding a master's degree. Comparatively, 25% of assistant teachers/aides had a bachelor's degree. Of note, 78% lead teachers had, or were on track with, certification in either early childhood or childhood education. Questionnaire data indicated that teachers held consistently positive beliefs about EMLs and their presence in the classroom, as indicated by an asset-oriented view of children learning a second language, recognition of the long-term benefits of multilingualism, and their motivation to create a welcoming environment for their EML students.
2. When examining relationships among site, EML, and teacher characteristics, we found no significant bivariate relationship between resource provision and teachers' age, race, and certification status, and no significant relationship between community wealth and these teacher characteristics. Similarly, no relationship was found between the proportion of EMLs in the classroom and teachers' age, race, or certification.
3. The teachers and teaching teams in our sample provided a high degree of emotional support for students, as demonstrated by overwhelmingly positive classroom climates, sensitivity to student needs, and a high regard for student perspectives. Teachers and teaching teams were also rated highly in their classroom management skills. Teachers and teaching teams were rated lower in the instructional support domain. Within this domain, the lowest rated area was facilitating concept development for their students. In contrast to the high-quality teacher-child interactions observed, the quality of linguistic and cultural responsiveness was lacking. Collectively, the sampled classrooms did not demonstrate "good" or "strong" evidence in any of the six CASELA domains. Whereas the classrooms performed relatively better in the areas of gathering EMLs' background information, having rich curriculum materials, and demonstrating support for English language learning, there was little evidence of cultural inclusion and integration, assessment, or supports for EMLs' home language.
4. While Emotional Support, Classroom Organization, and Instructional Support were rated relatively higher at sites located in high-income communities, none of the differences were statistically significant. When examining these practices across sites with varied levels of resource provision, no fixed trend emerged, nor did we find any statistically significant differences in the three domains of teacher practices associated with resource provision. A Pearson correlation analysis suggested a positive relationship between EML concentration and Emotional Support. In other words, as sites had more EMLs, teachers tended to offer more emotional support towards EMLs. Correlational analysis also indicated interdependency among the Emotional Support, Classroom Organization, and Instructional Support domains.
5. Although most teachers were challenged to provide the necessary instructional support for EMLs and incorporate their cultural and linguistic experiences, we observed strong teacher agency in exercising culturally responsive practices across several classrooms. These practices included but were not limited to (a) embracing diversity and building community,

(2) enacting curriculum that promoted English language development, and (3) providing comprehensive support for individual EMLs.

6. While teaching teams reported engaging in professional development in core areas related to teacher-student interactions and cultural responsiveness, training opportunities were not systematic or intensive; for example, approximately half of lead teachers indicated that they had engaged in fewer than six hours of professional development over the past 12 months in areas surveyed.

In light of the findings described above, we offer the following policy recommendations:

Key Finding #1: Most program leaders and teaching teams have positive beliefs about EMLs and value multilingualism but lack the pedagogical capacity to deliver culturally and linguistically responsive instruction.

- Policy Recommendation: Assess the capacity and skills of the current program leader and teacher workforce to meet the needs of EMLs.
- Policy Recommendation: Formally incorporate professional learning for program leaders and teachers into district- and citywide improvement strategies and curate resources among inter-governmental agencies.
- Policy Recommendation: Establish infrastructure and culture to provide program leaders with continuous opportunities to build competency in providing for EMLs and in supporting teaching teams to meet EMLs' varied needs.

Key Finding #2: Sites collect some information about EMLs' cultural and language backgrounds (i.e., home language survey); however, data collected may not be accurate and/or is not shared or used by program leaders and teaching staff for instructional support for EMLs.

- Policy Recommendation: Use the Emergent Multilingual Learner Language Profile developed by New York State¹ to collect students' home language information as part of student enrollment process across all sites.
- Policy Recommendation: Collect comprehensive data related to children's language and cultural backgrounds, disseminate, and authentically utilize these data in the classroom to enhance children's engagement and learning.
- Policy Recommendation: Families provide a wealth of information that is necessary for teachers to implement culturally responsive practices. Communicate with EMLs' families to affirm their funds of knowledge and rich literacy practices at home; create and nurture home-school partnerships and enhance families' and communities' capacity to work with schools.

Key Finding #3: While a large proportion of assistant teachers and classroom aides are multilingual, their language expertise and instructional resources are under-utilized. Their roles and potential contributions to the provision of culturally and linguistically responsive instruction should be carefully examined.

¹ New York State Education Department Office of Early Learning (2017). *Emergent Multilingual Learners Language Profile*. Retrieved from <http://www.nysed.gov/common/nysed/files/emergent-multilingual-learners-language-profile-october-2017.final-accessible.docx>

- Policy Recommendation: Strategically recruit, assign, and retain teachers and assistant teachers to promote demographic congruency between leaders, teaching teams and the students they serve.
- Policy Recommendation: Leverage Assistant teachers' and classroom aides' languages and cultural backgrounds by providing professional learning focused on instructional strategies to support EMLs' home languages in the classroom.
- Policy Recommendation: In addition to ongoing, site-based professional development, policymakers and administrators should consider providing encouragement and financial support (e.g., tuition reimbursement) to advance assistant teachers' professional trajectory. Such efforts will lead to greater workplace satisfaction and ongoing commitment that will further support the development and retention of a diverse workforce.

Key Finding #4: Teachers' open-ended survey responses indicated an urgent desire for better professional development and job-embedded training around supporting EMLs. Current professional development for both program leaders and teachers is neither systematic nor targeted.

- Policy Recommendation: Provide teachers with focused professional development for high-quality instructional support. Having coaches or program leaders provide ongoing, targeted feedback based on direct classroom observation serves as an evidence-based approach to continuously improve teaching practice and enhance children's educational experiences.

In summary, this study identifies large mindset, knowledge, and practice gaps—and real opportunity—among NYC early childhood professionals, specifically in the areas of providing adequate instructional and linguistic support for EMLs as well as partnering with families in capturing their cultural and home literacy assets. Consistent, rigorous, and meaningful use of data is necessary to support both EMLs and teachers'/leaders' professional development.

II. Introduction

II.1. Purpose

Emergent multilingual learners (EMLs) in this project are defined as children who have a home language other than English and are learning two or more languages at the same time, or who are learning a second language while continuing to develop their first language. Young EMLs are a rapidly growing population in the United States P-12 educational system, comprising about 23% of the preschool population.² The provision of high-quality instruction and support for EMLs presents a key challenge for policymakers, program leaders and educators, particularly given the largely monolingual English-speaking early childhood workforce. This problem is further magnified in the large urban areas such as New York City, where there are a disproportionately large number of EMLs facing multiple risk factors.³

Accordingly, it is imperative to closely examine the extent of access and quality of learning opportunities for EMLs and specific support provided to EMLs, teachers, and program leaders. The current study sought to examine instructional practices in support of EMLs, workforce characteristics, and professional development opportunities provided to New York City's universal prekindergarten (UPK) educators specific to supporting EMLs. Research findings will help scholars, policymakers, and practitioners to identify, highlight, and support culturally and linguistically responsive practices and policies for early childhood educational professionals.

II.2. Background

New York City has witnessed unprecedented expansion of UPK programs for young children and the hiring of teachers to serve young children. Due to the highly diverse student population in New York City, UPK classrooms have a high concentration of EMLs. In 2017, EMLs made up 28% of its total prekindergarten population in New York State, with 75% of those students attending programs within the New York City Department of Education.⁴ Notably, not all programs have implemented a formal process for identifying EMLs; consequently, this is likely an underrepresentation of New York's EML concentration. This study aimed to explore the instructional needs of EMLs and the professional development needs of the workforce that serve this swiftly growing population of students.

In its Blueprint for English Language Learners Success, the New York State Education Department articulates a framework that emphasizes the responsibility of teachers and leaders to meet the academic, linguistic, social, and emotional needs of EMLs. In line with this guidance, instruction for young EMLs should be developmentally appropriate, academically rigorous, and aligned with state learning standards (Note: at the time of data collection, these standards were articulated in the NYS Prekindergarten Foundation for the Common Core and P-12 Common

² National Institute for Early Education Research (2018). *Supporting dual language learners in state-funded preschool*. Retrieved from http://nieer.org/wp-content/uploads/2018/04/YB2017_EML-Special-Report.pdf

³ Park, M., O'Toole, A., & Katsiaficas, C. (2017). *Dual language learners: A national demographic and policy profile fact sheet*. Washington, DC: Migration Policy Institute.

⁴ Park, M., O'Toole, A., Katsiaficas, C. (2017). *Dual language learners: A demographic and policy profile for New York State*. Washington, DC: Migration Policy Institute.

Core Learning Standards.⁵ These standards were updated in 2019 and are now articulated in The New York State Prekindergarten Learning Standards: A Resource for School Success⁶). NYSED’s framework calls on early childhood education programs to further support EMLs by recognizing bilingualism and biliteracy as assets; engaging families in their children’s education; integrating EMLs’ home languages, cultures, and prior knowledge into interactions and instruction; using formative assessment in both English and home languages; and providing teachers and leaders with evidence-based professional learning focused on early childhood language development and bilingualism. It is under this policy context that we commenced our study.

In addition to state standards, social interactionist and sociocultural theories provide the theoretical underpinnings for our research. Grounded in constructivism, social interactionist theory posits that meaningful interactions with linguistically knowledgeable adults are the basis of language acquisition; further, an environment conducive to proximal language development must incorporate a learner’s sociocultural characteristics and daily life experiences.⁷ For young learners, the presence of this socially and culturally relevant environment is critical, as it affords them the opportunity to be co-constructors of joint learning activities, where “linguistic and other competencies are put to work within a constant process of adjustment vis-à-vis other social agents.”⁸

Corresponding evidence from several longitudinal studies in early childcare, state-funded preschool programs, and early elementary school grades provides empirical support for these theories and practices.⁹ Warm, sensitive, and responsive interactions with caring adults in organized, well-managed preschool classrooms are linked to increases in young children’s social skills and reductions in problematic behaviors.¹⁰ Furthermore, exposure to supportive, instructionally rigorous teacher-child interactions, including responsive feedback and language stimulation, leads to gains in young children’s literacy and language development.¹¹ Importantly,

⁵ New York State Education Department (2014). *Blueprint for English Language Learners (ELLs) Success*. Albany, NY: Office of Bilingual Education and Foreign Language Studies. Retrieved from <http://usny.nysed.gov/docs/blueprint-for-ell-success.pdf>

⁶ New York State Education Department (2019). *The New York State Prekindergarten Learning Standards: A Resource for School Success*. Albany, NY: Office of Bilingual Education and Foreign Language Studies. Retrieved from https://earlychildhoodny.org/pdfs/NYS_Prek_Learning_Standards-2019.pdf

⁷ Vygotsky, L. S. (1987). Thinking and speech. In R.W. Rieber & A.S. Carton (Eds.), *The collected works of L.S. Vygotsky, Volume 1: Problems of general psychology* (pp. 39–285). New York: Plenum Press.

⁸ Sarem, S. N., & Shirzadi, Y. (2014). A critical review of the interactionist approach to second language acquisition. *Journal of Applied Linguistics and Language Research*, 1(1), 62-74.

⁹ Howes, C., Burchinal, M., Pianta, R., Bryant, D., Early, D., Clifford, R., & Barbarin, O. (2008). Ready to learn? Children's pre-academic achievement in pre-kindergarten programs. *Early Childhood Research Quarterly*, 23(1), 27-50; Rimm-Kaufman, S. E., Curby, T. W., Grimm, K. J., Nathanson, L., & Brock, L. L. (2009). The contribution of children’s self-regulation and classroom quality to children’s adaptive behaviors in the kindergarten classroom. *Developmental Psychology*, 45(4), 958-972.

¹⁰ Mashburn, A. J., Pianta, R. C., Hamre, B. K., Downer, J. T., Barbarin, O. A., Bryant, D., Burchinal, M. B., & Howes, C. (2008). Measures of classroom quality in prekindergarten and children’s development of academic, language, and social skills. *Child Development*, 79(3), 732-749.

¹¹ Burchinal, M. R., Roberts, J. E., Riggins, Jr, R., Zeisel, S. A., Neebe, E., & Bryant, D. (2000). Relating quality of center-based child care to early cognitive and language development longitudinally. *Child development*, 71(2), 339-357; Burchinal, M., Howes, C., Pianta, R., Bryant, D., Early, D., Clifford, R., & Barbarin, O. (2008). Predicting child outcomes at the end of kindergarten from the quality of pre-kindergarten teacher-child interactions and instruction. *Applied Development Science*, 12(3), 140-153.

the positive effects of these interactions appear to be more pronounced among children from disadvantaged and marginal groups.¹²

Accordingly, our definition of high-quality early childhood education for EMLs starts with warm, sensitive, responsive, and instructionally rigorous teacher-child interactions but further posits that student engagement is best leveraged through meaningful linguistic interactions and the authentic use of languages in everyday activities.¹³ EMLs are more likely to gain language competency and learn to interpret their world and construct meanings through socially mediated activities in culturally relevant contexts.¹⁴ Research suggests that a reciprocal interaction model of teaching in which teachers engage in genuine dialogues with students is associated with the development of higher-level cognitive skills and higher student achievement among young learners.¹⁵ In these dialogic exchanges, effective teachers use embedded strategies to provide explicit, meaningful and comprehensible language input and support in the target languages, promote comprehension, and reinforce language interactions among children from different language backgrounds.¹⁶ Such authentic teacher-child interactions require the integration of children's home languages and cultures, cultivation of proficiency in both home language and English, high-quality curriculum, and promotion of sociocultural integration of all students.¹⁷ In summary, high-quality practices in the context of our study are those that provide meaningful linguistic interactions and comprehensive language input, and that take place in a warm, responsive, well-organized, cognitively stimulating, culturally relevant environment.

Ultimately, integrating Pianta and Walsh's Contextual Systems Model,¹⁸ Bronfenbrenner and Morris' Bioecological Model,¹⁹ and Rimm-Kaufman and Pianta's Ecological and Dynamic Model of Transition,²⁰ as well as the theoretical and empirical literature described above, we developed the following logic model (See Figure 1) to guide our study of NYC's UPK program in its supports for EMLs. Use of a logic model is significant in that a logic model depicts assumptions about the resources needed to support program activities and produce intended outcomes.²¹ Also referred to as program theory,²² a logic model depicts the rationale

¹² Downer, J. T., Rimm-Kaufman, S. E., & Pianta, R. C. (2007). How do classroom conditions and children's risk for school problems contribute to children's behavioral engagement in learning? *School Psychology Review*, 36(3), 413-432.

¹³ Gumperz, J. J., & Cook-Gumperz, J. (2005). Making space for bilingual communicative practice. *Intercultural Pragmatics*, 2(1), 1-23.

¹⁴ Wertsch, J. V. (1998). *Mind as Action*. Oxford University Press.

¹⁵ Levine, D. U., & Lezotte, L. W. (1995). Effective schools research. In J. Banks and C. Banks (Eds.) *Handbook of research on multicultural education*. New York: Macmillan Publishing.

¹⁶ Gort, M., Pontier, R. W., & Sembiente, S. F. (2012). Function, type, and distribution of teacher questions in dual-language preschool read alouds. *Bilingual Research Journal*, 35(3), 258-276.

¹⁷ Brisk, M. (2006). *Bilingual education: From compensatory to quality schooling* (2nd ed.). Mahwah, NJ: Lawrence Erlbaum; López, F., & Iribarren, J. (2014). Creating and sustaining inclusive instructional settings for English language learners: Why, what, and how. *Theory Into Practice*, 53(2), 106-114.

¹⁸ Pianta, R. C., & Walsh, D. J. (1996). *High-risk children in schools: Constructing sustaining relationships*. New York: Routledge.

¹⁹ Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental process. In W. Damon & R. Lerner (Eds.) *Handbook of child psychology* (Vol. 1, pp. 993-1028). New York: John Wiley & Sons.

²⁰ Rimm-Kaufman, S. E., & Pianta, R. C. (2000). An ecological perspective on the transition to kindergarten: A theoretical framework to guide empirical research. *Journal of Applied Developmental Psychology*, 21, 491-511.

²¹ United Way of America. (1996). *Measuring program outcomes: A practical approach* (Item No. 0989).

²² Weiss, C. H. (1997). How can theory-based evaluation make greater headway? *Evaluation Review*, 21(4), 501-524.

policymakers use in making key program decisions and should be used as an integrative framework to guide program evaluation.²³ Based on this understanding, we used integrated designs and collected data from multiple sources using mixed methods.

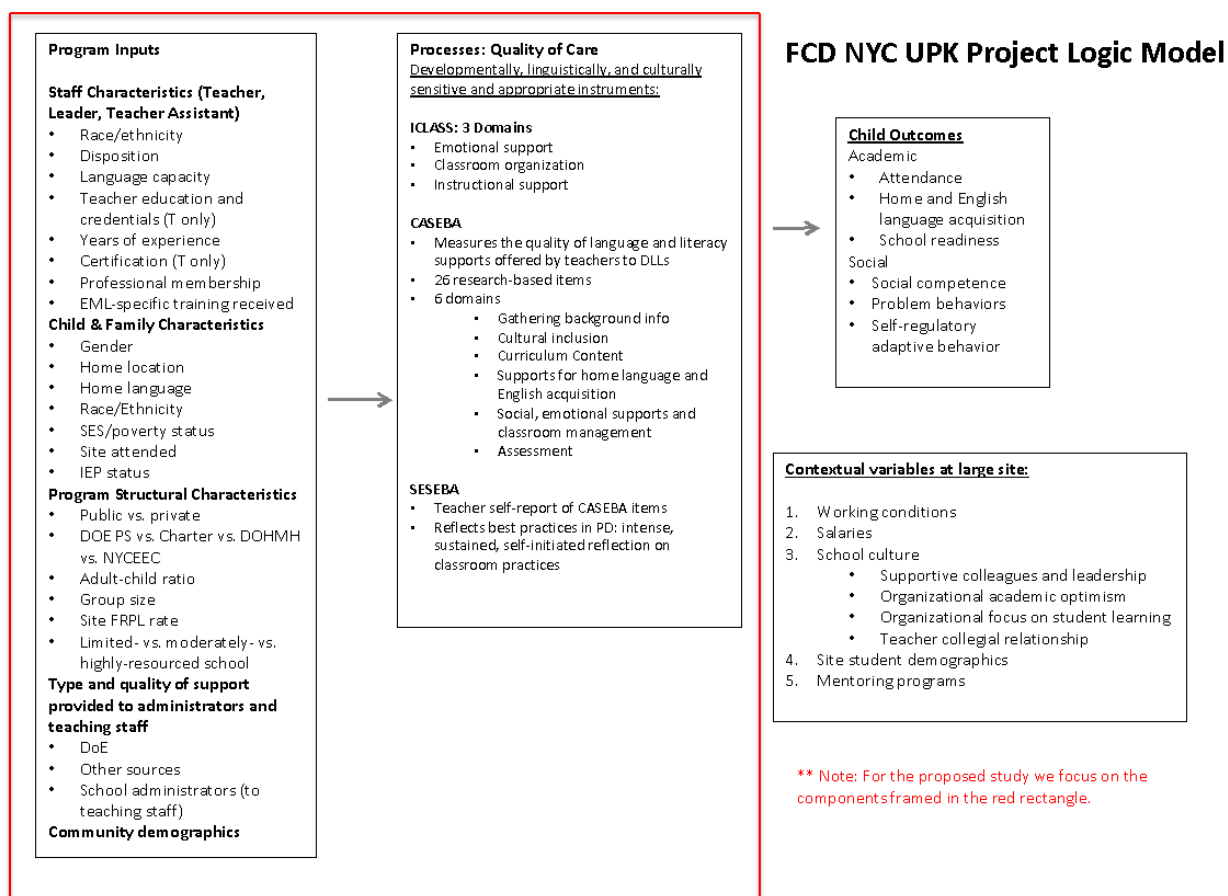


Figure 1. Program Study Logic Model

III. Research Questions and Methods

Using mixed methods—direct structured observation augmented by interviews and field observation notes, along with survey questionnaires—we identified the instructional practices of and professional supports for teaching teams in meeting the needs of young EMLs in New York City Prekindergarten classrooms, as well as workforce characteristics within these programs. The following research questions were investigated:

²³ Cooksy, L. J., Gill, P., & Kelly, P. A. (2001). The program logic model as an integrative framework for a multimethod evaluation. *Evaluation and Program Planning*, 24(2), 119-128.

1. What are teaching team and program leader characteristics across our sample of UPK classrooms with EML students?
2. Are there relationships between concentration of EMLs, teacher characteristics (e.g., credentials), and site characteristics (e.g., resource provision)?
3. How do practices at each site reflect the construct of high-quality instructional practices for Prekindergarten EMLs, as measured by developmentally, linguistically, and culturally sensitive instruments (i.e., CLASS, CASELA)?
4. How does classroom quality, as measured by the above structured observations, vary by school, classroom, teaching team, and EML characteristics?
5. What emerging high-quality practices—both general and EML-specific—are enacted by teaching teams to facilitate EMLs’ language and literacy development (in both the home language and in English) and to support their social emotional development?
6. What support (e.g., preparation programs, professional development, ongoing job-embedded support) do NYC UPK teachers and site leaders currently receive related to teaching and supporting young EMLs?

III.1. Sampling and Recruitment

Sites were recruited for the study subsequent to Institutional Review Board (IRB) approval from Fordham University, the NYC DOE, Administration for Children’s Services (ACS), and NYC’s Department of Health and Mental Hygiene (DOHMH), respectively. Our study used a blended sampling method to draw 50 classrooms from designated community districts of NYC with varied resource provision and concentrations of EMLs. Programs met inclusion criteria for the study if they had a UPK classroom with at least one EML student enrolled.

Initially, disproportional stratified sampling was used to oversample certain groups that are relatively small in the population. Stratification variables included resource provision (limited-, moderately-, and highly-resourced), school SES (percentage of low-, middle-, and high-income families), program delivery model (Administration for Children’s Services Early Education Center [ACS NYCEEC]; DoE Early Education Center [DOE NYCEEC]; DoE Public School; Charter School; and Pre-K Center), and concentration of EMLs in the classroom (low concentration is defined as less than 20%, medium as 20% to 49%, and high as 50% and more). We recruited the initial 37 sites using this method; however, due to difficulty in recruiting participant sites, we had to utilize snowball and quota sampling to recruit the remaining 13 sites.

Table 1 provides descriptive statistics for the 50 participating sites in our sample. Sites received varied levels of resource. They were located in communities endowed with varied levels of wealth – 46% in low-income communities, 34% in middle-income communities and 20% in high-income communities.²⁴ The average size of a classroom teaching team was two, and the average class size was 17 students. The average proportion of EMLs was 40% with the majority

²⁴ A proxy variable for community wealth was generated using census tract income data from the 2018 American Community Survey (ACS).

of EMLs (57%) speaking Spanish. Classrooms varied in language diversity; over 40% of classrooms had 3 or more home languages other than English spoken by EMLs and their families.

Table 1. Site Descriptive Statistics

Variable	<i>N</i>	<i>%</i>	<i>Mean</i>
Resource Provision (<i>n</i> = 36²⁵)			
Limited	14	39	
Moderate	10	28	
High	12	33	
Site/School SES (<i>n</i> = 50)			
Low-income families	23	46	
Middle-income families	17	34	
High-income families	10	20	
Program Delivery Model (<i>n</i> = 50)²⁶			
ACS NYCEECS	25	50	
DOE NYCEECS	12	24	
DoE Public School	9	18	
Charter School	1	2	
Pre-K Center	3	6	
Concentration of EMLs (<i>n</i> = 50)			
Low	10	20	
Medium	26	52	
High	14	28	
Size of Teaching Team			2
Class Size			17
% EMLs			40
% Spanish-Speaking			57
% Non-Spanish-Speaking			43
# Classrooms by Home Languages Other than English			
1 Home Language			20

²⁵ Statistics related to resource provision were not available for the 11 sites recruited using a snowball sampling strategy.

²⁶ At the time that the study was initiated (2017), center-based programs (NYCEECS) fell under the auspice of either ACS or DOE. This program structure has since changed. MDRC used the previously existing structure to draw samples for each grantee within the research network.

2 Home Languages	9
3 Home Languages	10
4 Home Languages	4
5 Home Languages	4
6 Home Languages	1
7 Home Languages	1
8 Home Languages	1

Program staff and leaders at each site constituted the participants of the study. Specifically, program staff or teaching team refers to head teacher, assistant teacher, and classroom aide; program leaders include those responsible for supervising and providing professional support to UPK program staff, i.e., director, principal, or his/her designee. Program staff and leaders' characteristics and professional backgrounds specific to serving EMLs are presented in the results section.

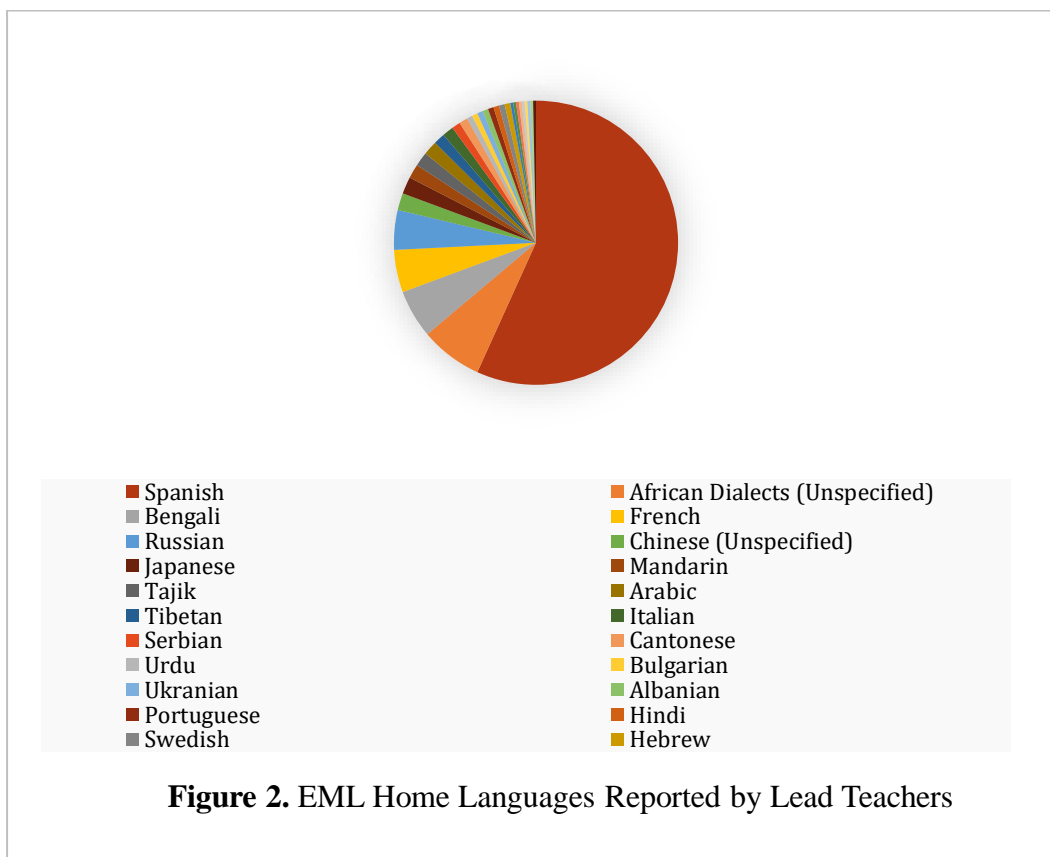
Lead teachers in the sampled classrooms reported home languages spoken by their EML students who were present during classroom observations. As shown in Table 2 and Figure 2 below, there was significant linguistic diversity among the EMLS ($N=295$) in our sample, with at least 31 home languages represented in the sampled classrooms.

Table 2. Student Language Diversity in Sampled UPK Classrooms.

Language	<i>N</i> ($N=310$)
Spanish	176
African Dialects (Unspecified)	22
Bengali	17
French	15
Russian	14
Chinese (Unspecified)	6
Japanese	6
Mandarin	5
Tajik	5
Arabic	5
Tibetan	4
Italian	4
Serbian	3
Cantonese	3
Urdu	2
Bulgarian	2
Ukrainian	2

Albanian	2
Portuguese	2
Hindi	2
Swedish	2
Hebrew	2
Vietnamese	1
Yoruba	1
Greek	1
Danish	1
Korean	1
Lebanese	1
American Sign Language (ASL)	1
Romanian	1
Armenian	1

Note. The number of languages spoken is larger than the number of EMLs because some EMLs spoke more than one home language.



III.2. Data Instruments and Collection

The measurement of high-quality practices entailed assessment of (1) the quality of teacher-child interactions and (2) the quality of linguistic and cultural responsiveness. Survey data was utilized to examine workforce characteristics and professional supports related to preparation, professional development, and ongoing job-embedded support.

III.2.a. Quality of Teacher-Child Interaction Measures: CLASS

The quality of teacher-child interactions was assessed in each sampled classroom via intensive live observations using the Classroom Assessment Scoring System (CLASS).²⁷ A trained observer rated each classroom and teacher-child interactions on nine dimensions for four 20-minute cycles of observation. Observations began just after children's morning arrival and lasted until the observer felt that he/she had captured sufficient evidence, or until the children left for the day. On several occasions, observers conducted a second or third visit to collect sufficient data to demonstrate the authentic quality of the program.

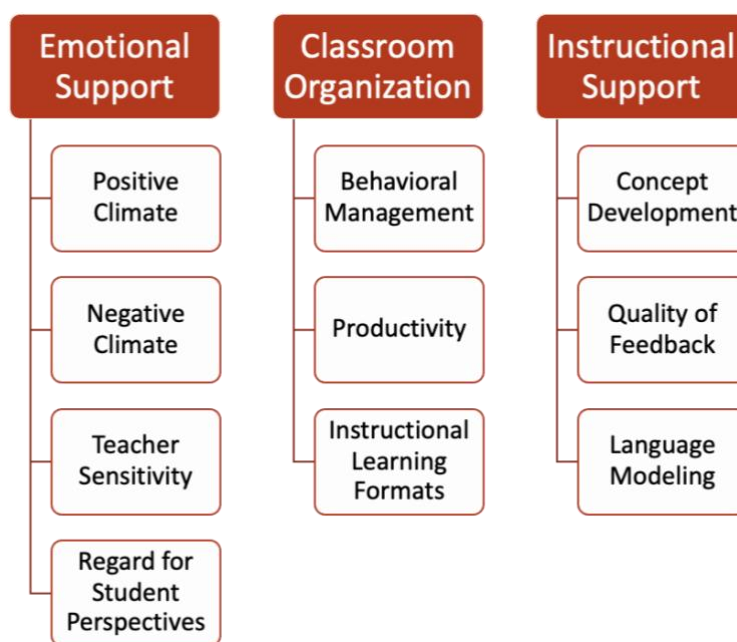


Figure 2. CLASS Domains and Corresponding Dimensions

As shown in Figure 2, the CLASS instrument assesses three overarching domains, which in turn comprise nine dimensions of teacher-child interactions. *Positive Climate* reflects the emotional connection, respect, and enjoyment demonstrated between teachers and students, and among students. *Negative Climate* describes the level of expressed negativity such as anger, hostility, or aggression exhibited by teachers and/or students in the classroom. *Teacher Sensitivity* refers to teachers' awareness of and responsiveness to students' academic and emotional concerns.

²⁷ Pianta, R. C., La Paro, K. M., & Hamre, B. K. (2008). *Classroom Assessment Scoring System: Pre-K*. Baltimore, MD: Brookes Publishing.

Regard for Student Perspectives is the degree to which teachers' interactions with students and classroom activities place an emphasis on students' interests, motivations, and points of view. *Behavior Management* concerns how effectively teachers monitor, prevent, and redirect children's misbehavior. *Productivity* reflects how well the classroom runs with respect to routines and the degree to which teachers organize activities and directions so that maximum time can be spent in learning. *Instructional Learning Format* focuses on how teachers facilitate activities and provide interesting materials so that students are engaged and learning opportunities are maximized. *Concept Development* considers how teachers use instructional discussions and activities to promote students' higher order thinking skills. *Quality of Feedback* addresses how teachers extend students' learning through their responses to students' ideas, comments, and work. Finally, *Language Modeling* concerns the extent to which teachers facilitate and encourage students' language.

Each dimension included in the CLASS instrument is rated on a 7-point Likert scale, with 1 or 2 indicating low quality interactions, 3, 4, or 5 indicating mid-range of quality, and 6 or 7 indicating high quality. Factor analyses of the CLASS yields three factors of teacher-child interaction quality.²⁸ The first factor, ***Emotional Support***, is measured as the average of the *Positive Climate*, *Negative Climate* (reverse scored), *Teacher Sensitivity* and *Regard for Student Perspectives* dimensions. The second factor, ***Classroom Organization***, is computed as the average of the *Behavior Management*, *Productivity*, and *Instructional Learning Format* dimension scores. The final factor, ***Instructional Support***, is computed as the average of *Concept Development*, *Quality of Feedback*, and *Language Modeling* dimensions.

III.2.b. Quality of Linguistic and Cultural Responsiveness: CASELA

The quality of linguistic and cultural responsiveness was measured by the Classroom Assessment of Supports for English Language Acquisition (CASELA), an instrument constructed by the National Institute for Early Education Research (NIEER) and adapted from their original instrument, the Classroom Assessment of Supports for Emergent Bilingual Acquisition (CASEBA).²⁹ Specifically, given that our sample included almost exclusively monolingual English classrooms, items that were relevant only to bilingual classrooms were eliminated. Additionally, due to the nature of the interactions that the CASELA aims to capture, it was beneficial for the observer to be proficient in the language of most of the EML children in the classroom that they were observing; this was not always possible given the myriad languages spoken in NYC classrooms, and items that required advanced second language proficiency of observers were also eliminated.

CASELA observations were conducted during a single morning of instruction for approximately 3 hours. Observers rated the 20 CASELA items on a 7-point scale, with four anchor points: 1 indicating no evidence, 3 indicating minimal evidence, 5 indicating good evidence and 7 indicating strong evidence. Prior to beginning each CASELA observation, observers conducted a

²⁸ Hamre, B., Mashburn, A., Pianta, R., & Downer, J. (2006). Validation of 3-factor model for classroom quality across preschool to fifth grade. *Early Childhood Research Quarterly, 15*(2), 167-184.; La Paro K. M., Pianta, R. C., & Stulman, M. (2004). The classroom assessment scoring system: Findings from the prekindergarten year. *The Elementary School Journal, 104*, 409-426.

²⁹ Freedson, M., Figueras-Daniel, A., Frede, E., Jung, K., & Sideris, J. (2011). The Classroom Assessment of Supports for Emergent Bilingual Acquisition. In C. Howes, J. Downer, & R. Pianta (Eds.). *Dual language learners in the early childhood classroom*. Baltimore, MD: Paul H. Brookes.

brief 10- to 15- minute interview with the classroom’s lead teacher to elicit information that could not be gleaned from a single observation (i.e., teacher’s degree of knowledge about the language and cultural backgrounds of their EML students, parent and family engagement, and information about the classroom curriculum). Mirroring the CLASS protocol, observations began at the beginning of the school day and lasted until sufficient data was collected to demonstrate the authentic quality of the program. Observers utilized a score sheet to collect evidence for each of the twenty CASELA items during the observation and assigned a score for each item immediately following the observation.

The CASELA instrument consists of 20 research-based items which, as shown in Figure 3, cluster around six broad domains: 1) support for English language acquisition; 2) curriculum materials; 3) support for home language; 4) cultural inclusion and integration; 5) gathering EML background information; and 6) assessment of learners in both home language(s) and in English. Systematic psychometric evidence was not available from the developers at the time of the study because the instrument had only recently been developed. A factor analysis of our study data was also not feasible due to our limited sample size ($n = 50$). Consequently, we followed the test developers’ recommendations in scoring the CASELA domains similar to the scoring of CLASS factors; specifically, when there were multiple indicators under a domain, we computed the average scores of individual items and assigned the average as the individual domain score.

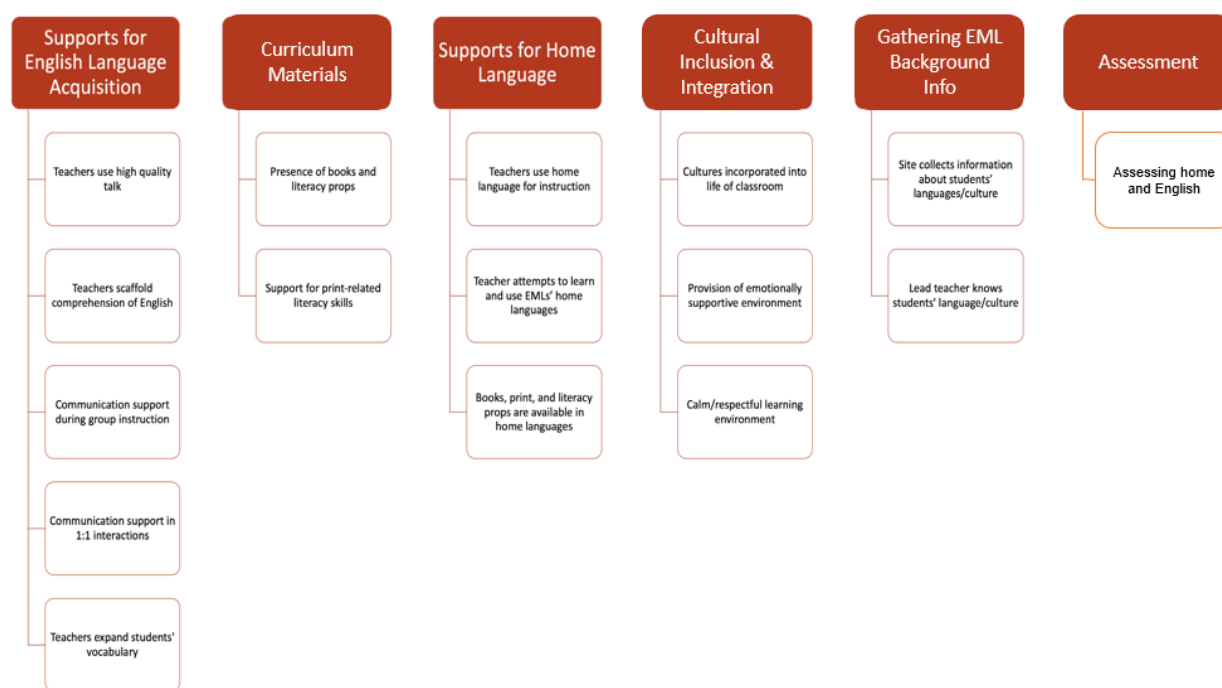


Figure 3. CASELA Domains and Item Descriptions

III.2.c. Teacher and Program Leader Questionnaires

Finally, we used two separate instruments to collect program leader and teaching-team characteristics as well as professional support that these individuals received (i.e., preparation, professional development, and ongoing job-embedded support). An online survey emailed to each of the classroom’s educators examined general workforce and demographic characteristics of the teaching team and school site, and elicited information about teachers’ level of academic

preparation; in-service training related to supporting emergent multilingual learners and their families; and beliefs about multiculturalism. The survey, created in Qualtrics, took 30-45 minutes to complete, and consisted of 60 seven-point Likert scale questions and five short-answer or open-ended questions. The survey instrument was primarily based on existing instruments developed by Karabenick and Noda³⁰ and the National Center for Education Statistics Schools and Staffing Survey.³¹ A panel of experts consisting of early childhood faculty, coaches, and practitioners were invited to critique the questionnaire. Multiple rounds of pilot testing were also conducted to evaluate the clarity of direction, relevance of items, and ease of survey flow. Revisions were incorporated according to feedback received from the above processes.

To evaluate lead teacher and assistant teachers' multicultural beliefs, we first conducted a principal axis factor analysis of the 10 items using oblique rotation. The Kaiser-Meyer-Olkin measure (KMO = 0.64) confirmed the sampling adequacy. Using eigenvalues (≥ 1) in combination with scree plot, our initial analysis revealed a four-factor structure which explained 58% of the variance. Table 3 shows the factor loadings after rotation. The items that cluster on the same factor suggest that Factor 1 pertains to Misconceptions and Deficit Thinking relating to EMLs, Factor 2 represents perceiving EMLs' Home Language as Strength, Factor 3 reflects self-perception of creating a Welcoming Classroom for EMLs, and Factor 4 represents Lasting Benefits of Multilingualism. We followed up the factor analysis with a reliability analysis and reported each factor's Cronbach's alpha (see Table 3).

III.3. Data Analysis

To analyze teaching team and program leader characteristics, including demographic information, educational backgrounds and certifications, preparation, and professional learning experiences (research questions 1), we conducted primarily descriptive analysis, computing percentages and means of the variables. To respond to research question 2 regarding the relationship between site characteristics and teacher characteristics, we conducted Pearson correlation and Chi-square analyses. To examine the quality of teacher-child interactions as captured by CLASS and CASELA (research question 3), we conducted multiple descriptive analyses that involved computing means, standard deviations, and frequency analysis. To determine whether site characteristics led to differences in program quality (part 1 of research question 4), we conducted multivariate analysis of variance (MANOVA). Correlational analyses were used to assess the strength of relationships between EML concentration and aspects of program quality (part 2 of research question 4). To answer research question 5, we conducted a content analysis of observers' field notes. To identify teaching team and program leaders' professional preparedness, self-identified professional learning and support needs (research question 6), we used primarily content analysis, in combination with descriptive statistical analyses.

³⁰ Karabenick, S. A., & Noda, P. A. C. (2004). Professional development implications for teachers' beliefs and attitudes toward English language learners. *Bilingual Research Journal*, 28(1), 55-75.

³¹ National Center for Educational Statistics (2011). *Schools and Staffing Survey*. Retrieved from <https://nces.ed.gov/surveys/sass/question1112.asp>

Table 3. Multicultural Beliefs of Teaching Teams

Item	Factors			
	Factor 1 Misconception & Deficit Thinking	Factor 2 Perceiving Home Language as Strength	Factor 3 Welcoming Classroom	Factor 4 Lasting Benefits of Multilingualism
All things considered, I would rather not have dual language students in my class.	.75			
It is not possible for a dual language student to be equally proficient in more than one language.	.66			
Dual language students have a difficult time relating to other English-speaking students in my class.	.56			
Time and resources spent on dual language students are at the expense of English-speaking students.	.54			
If dual language learners develop literacy in their first language, it will facilitate the development of reading and writing in English.		.98		
Dual language students will do better in school if they learn to read and write in their first language.		.68		
I like to have dual language learners in my class.			.93	
Dual language learners are a welcome addition to my classroom.			.65	

Higher levels of bilingualism can lead to practical, career-related advantages.				.83
Higher levels of bilingualism can result in the development of greater knowledge or mental skills.				.77
Reliability Coefficient (α)	.71	.80	.77	.79

Note. $N = 101$. The extraction method was principal axis factoring with an oblique (Promax with Kaiser Normalization) rotation. Only factor loadings above .40 are retained.

IV. Key Findings

IV.1. Teaching Team and Program Leader Characteristics

The following section presents demographic information and educational backgrounds of program leaders, lead teachers, and teaching assistants/classroom aides, as illustrated in Table 4 and in Figures 4-6.

Table 4. Staff Characteristics

Variable	Program Leader ($n = 52$)	Lead Teacher ($n = 50$)	Assistant Teacher/Aide ($n = 53$)
Age	45(10 ^a)	39 (11 ^b)	38(13 ^c)
Female	90%	92%	90%
Race/Ethnicity			
White	23%	30%	8%
Black	33%	24%	28%
Hispanic or Latino	23%	36%	40%
Asian/Pacific Islander	12%	0%	13%
Other	--	2%	2%
Multiracial, or Identify with >1 Race/Ethnicity	9%	8%	9%
Highest Education			
Doctoral Degree	4%	--	--
Post-Master Professional Diploma	15%	--	--
Master's Degree	71%	74%	2%
Bachelor's Degree	10%	24%	23%
Associate Degree	--	2%	26%
High School or Below	--	--	47%

College Major			
Early Childhood	15%	64%	45%
Elementary Education	17%	14%	6%
Secondary Education	--	0%	4%
General Education	6%		
Other ³²	62%	22%	45%

Note. ^{a,b,c} Standard deviation value.

IV.1.a Demographic and Background Information

As indicated in Table 4, a typical program leader is in her/his mid-forties; 90% of the leaders are female; 77% of the leaders are from racially diverse backgrounds. Approximately 90% of them have master's degrees and above. When their discipline/major is examined, 15% of them majored in early childhood education. Similar patterns were observed among lead teachers as well; for example, 98% of teachers in this sample have bachelor's degrees and 74% have master's degrees. A typical lead teacher is 39 years old, and 64% of lead teachers majored in early childhood education. Compared to lead teachers, assistant teachers and classroom aides are similar in age and more racially diverse. Interestingly, our sample included a large proportion of Asian assistant teachers (13%) but no Asian lead teachers. Not surprisingly, assistant teachers/aides received significantly less education than both the lead teachers and program leaders. Also distinctive among lead and assistant teachers is their early aspiration for the field of early childhood education (ECE) as revealed by the high proportion of teachers selecting ECE as their college major (64% and 45% among lead and assistant teachers, respectively).

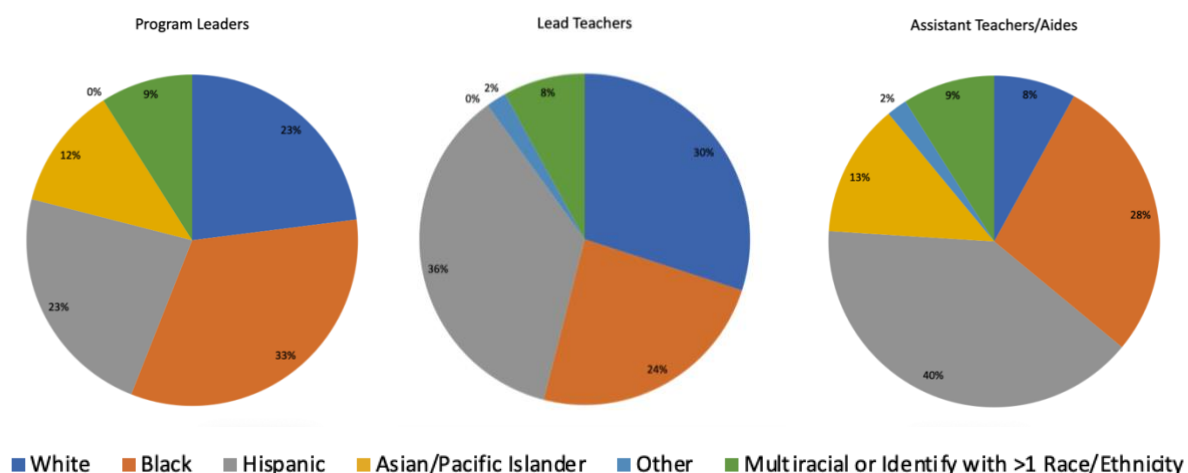


Figure 4. Program Leader and Teaching Team Race/Ethnicity

³² Other college majors identified by site leaders include History, Psychology/Human Services, Management/Business and Finance/Music Business, Linguistics and Communication Disorders, English, Speech Pathology, Children's Theater Arts, Biology, Criminal Justice, Media Study, etc.

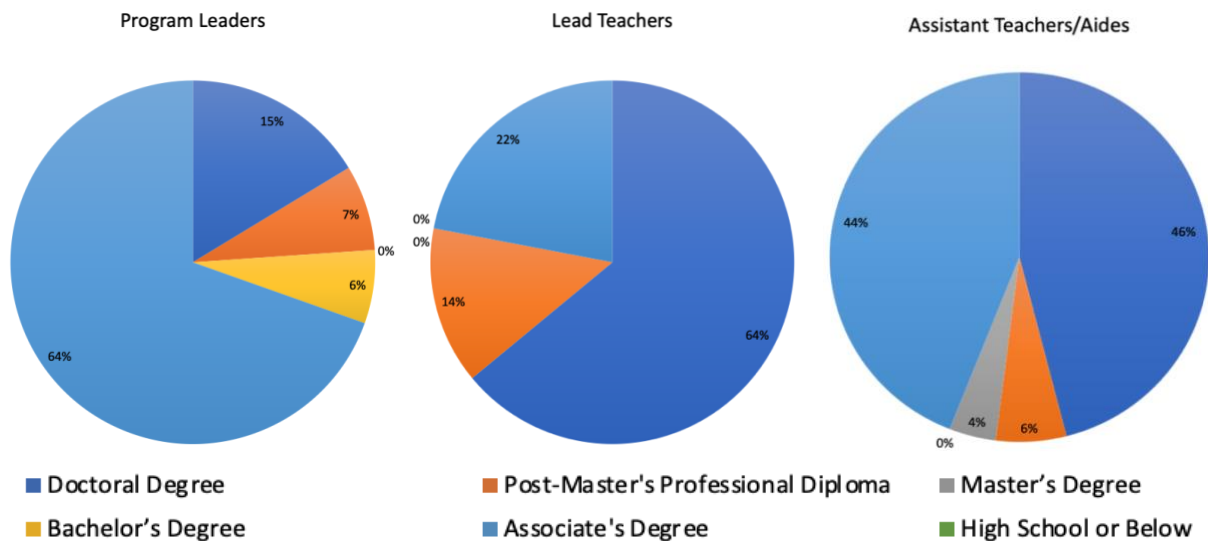


Figure 5. Program Leader and Teaching Team Educational Attainment

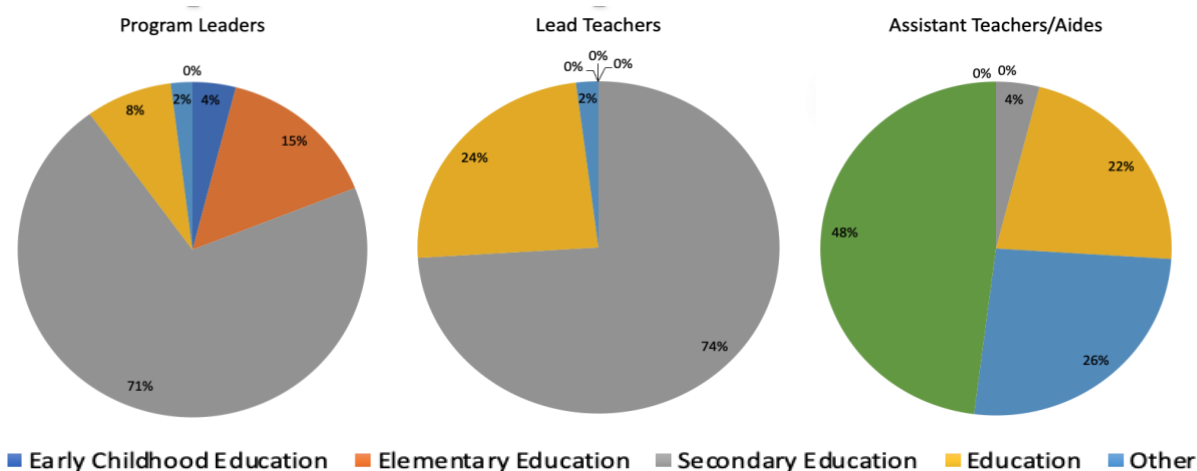


Figure 6. Program Leader and Teaching Team College Major

IV.1.b Language Backgrounds of Teaching Teams

Members of the teaching teams (including lead teacher, assistant teacher and/or aides) identified languages that they spoke at school and at home and reported their level of language proficiency.³³ Table 5 shows the language backgrounds of teachers in the sampled classrooms.

³³ Language proficiency levels are defined as: *Novice* (I can conduct simple conversations using this language but often I struggle to find the right words and my sentences are often incomplete); *Intermediate* (I am comfortable using this language to ask children about their family, home life, daily activities, interests as well as their physical and social needs); *Advanced* (I can speak this language fluently with ease and I can explain issues in detail using this language); *Superior* (I can communicate with

Table 5. Teaching Team Language Backgrounds ($n=103$)

Language	Speaking Environments				Levels of Language Proficiency					
	Speak at Home Only	Speak in Class Only	Speak at Both Settings	Neither	Novice	Intermediate	Advanced	Superior	Distinguished	N/A/Missing
English	57	60	46	33	8	9	13	22	49	2
Spanish	29	31	20	63	26	7	8	11	11	40
Arabic	2	1	1	101	2	0	1	2	0	98
Bengali	2	2	2	101	3	0	0	0	0	100
Haitian Creole	2	0	0	101	3	1	1	2	2	94
Russian	3	1	1	100	2	0	0	1	2	98
Korean	0	0	0	103	2	0	0	0	0	101
Urdu	0	0	0	103	2	0	0	0	0	101
Mandarin	3	4	3	99	5	2	2	2	2	90
Greek	2	1	1	101	0	0	0	2	0	101
French	1	1	1	102	1	0	0	1	0	101
Italian	0	0	0	103	0	0	1	0	0	102
Maltese	0	0	0	103	0	0	1	0	0	102
Twi	0	0	0	103	0	0	0	1	0	102

Note. N/A = Do not speak/understand at all.

IV.1.c Multicultural Beliefs of Teaching Teams

As shown in Figure 7, the teaching teams in our study reported low ratings of deficit thinking ($M = 1.70$ on a 5-point scale), high ratings of appreciation for children learning a second language ($M = 3.70$), strong beliefs in the long-term benefits of multilingualism ($M = 4.30$), and a strong desire to create a welcoming environment for EMLs ($M = 4.50$).

native speakers with accuracy and fluency. I can use this language to explain complex matters in detail and provide coherent narrations with ease); and *Distinguished* (I can use this language with complete accuracy, efficiency, and effectiveness).

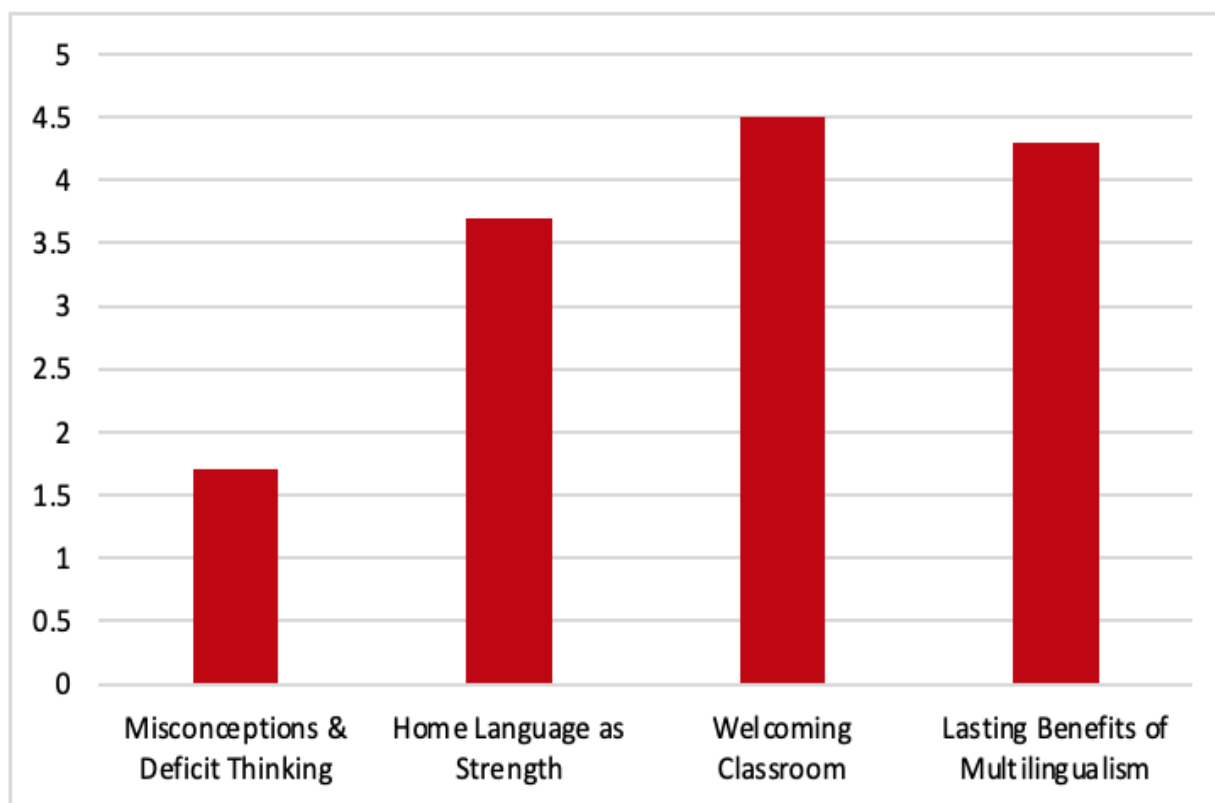


Figure 7. Teaching Teams’ Multicultural Beliefs and Perceptions

As described in the sections that follow, this is unsurprising given that our results indicate that NYC’s UPK classrooms offered warm, supportive environments and responsive instruction. Indeed, several lead teachers expressed these positive, critical multicultural beliefs about their EML students and families.

In Pre-K a lot of kids come in not knowing any English or how to be in school...and you think in September, ‘How am I going to crack this egg?’ But you just have to know that they can do it. And now at this time they are all doing things on their own, talking, writing, helping...It doesn’t matter where they come from or when they got here. It’s so beautiful, you know? They can all do it, even if it takes some more [sic] longer to pick up the language. You just need to see that they can do it. -NYCEEC Lead Teacher

IV.2. Relationships Between EML, Classroom, and Teacher Characteristics

Examining relationships among classroom, EML, and teacher characteristics, we found no significant bivariate relationship between resource provision³⁴ and teachers’ age, race, or

³⁴ According to the NYC Early Learning Network Data Dictionary, resource provision data for each site was provided by FCD/PDI. Community district resource level for each site was categorized as either “High Resource,” “Moderate Resource,” or “Low Resource.”

certification status, and no significant relationship between community wealth and the above teacher characteristics. Similarly, no relationship was found between the proportion of EMLs in the classroom and teachers' age, race, and or certification.

IV.3. Quality of Teacher-Child Interactions

Our observations of teacher-child interactions using CLASS, a global measure of classroom quality, revealed that our sample performed similarly to national norms³⁵ (see Figure 8). Teachers' social emotional support (Mean Emotional Support: 5.94 on a 7-point scale, vs. a national norm of 6.05) and classroom organization (Mean Classroom Organization: 5.60 on a 7-point scale, vs. a national norm of 5.79) were consistent areas of strength. General instructional support across these classrooms was relatively low, though slightly above the national average (Mean Instructional Support: 3.02 on a 7-point scale, vs. a national norm of 2.91). Within this domain, the lowest rated area was teachers' facilitation of concept development for students (Mean Concept Development: 2.34), which includes use of discussions and activities to promote higher order thinking skills. Our sample performed slightly higher in the areas of quality of feedback (i.e., teachers' extension of students' learning through responses to students' ideas, comments, and work; Mean Quality of Feedback: 3.20) and language modeling (i.e., facilitation and encouragement of students' language; Mean Language Modeling: 3.53). More detailed information on all dimensions of CLASS is presented in Table 6.

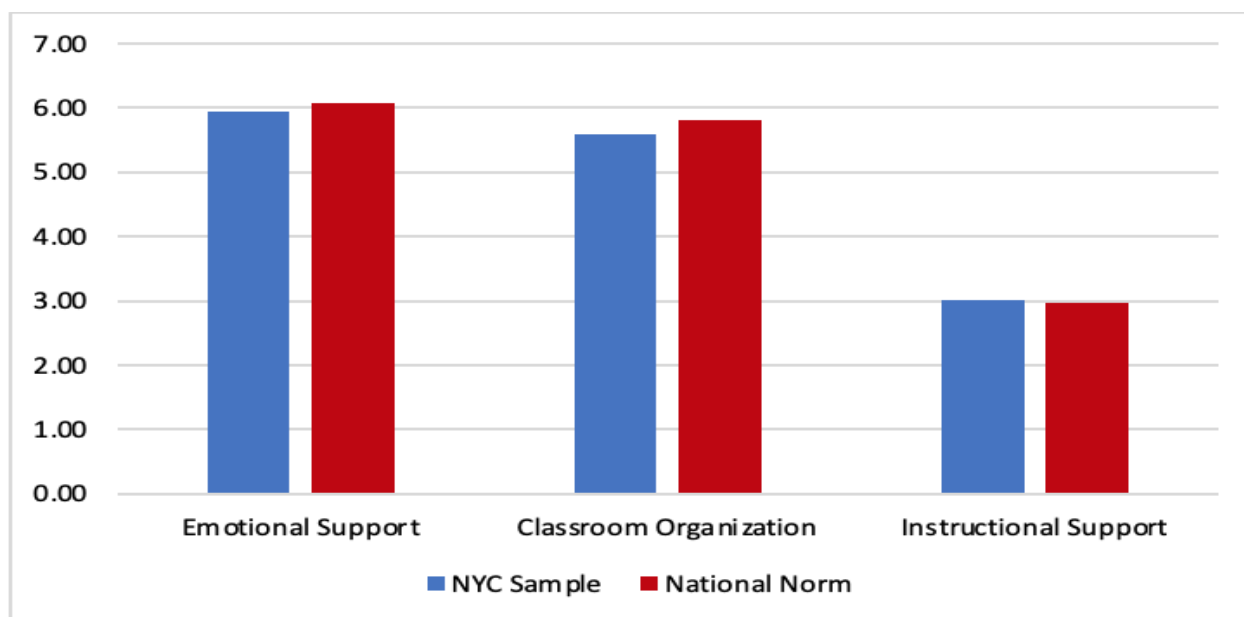


Figure 8. CLASS Domain Scores vs. National Norms

Importantly, the domains of teacher-student interactions were interdependent. In other words, sites that thrived in one CLASS domain tended to do relatively well in the other domains. Also, juxtaposing CLASS and CASELA, we found sites that systematically collected information about families, integrated students' cultural and language backgrounds into the life of the classroom and engaged families in their children's language and literacy development tended to

³⁵ U.S. Department of Health and Human Services (2019). *A National Overview of Grantee CLASS Scores in 2019*. Retrieved from <https://eclkc.ohs.acf.hhs.gov/data-ongoing-monitoring/article/national-overview-grantee-class-scores-2019>

have higher indicators of quality across the emotional support, classroom management, and instructional support domains.

Table 6. Descriptive Statistics of Teacher-Child Interaction Quality in PreK Classrooms ($n = 50$)

CLASS Domain/Indicator	$M(SD)$
<i>Emotional Support</i>	5.94 (.63)
Positive Climate	6.14 (.84)
Negative Climate	1.20 (.41)
Teacher Sensitivity	5.65 (.89)
Regard for Student Perspectives	5.19 (.86)
<i>Classroom Organization</i>	5.60 (.79)
Behavior Management	5.97 (.80)
Productivity	5.93 (.89)
Instructional Learning Format	4.90 (.92)
<i>Instructional Support</i>	3.02 (.97)
Concept Development	2.34 (.69)
Quality of Feedback	3.20 (1.25)
Language Modeling	3.53 (1.23)

IV.4. Quality of Linguistic and Cultural Responsiveness

Within these generally warm and supportive environments, CASELA observations revealed significant variation in the extent of teachers' incorporation of individual EML students' backgrounds and experiences into classroom instruction. Collectively, the sampled classrooms did not demonstrate "good" or "strong" evidence in any of the six CASELA domains (Figure 9). Whereas programs performed relatively better in the areas of gathering EMLs' background information, having rich curriculum materials, and demonstrating support for English language learning, there was little evidence of cultural inclusion and integration, bilingual assessment, or instructional support for EMLs' home language.

In addition to quantitative analysis (Table 7), content analysis of observers' field notes reveals that materials and manipulatives did not always reflect the languages and cultures of the site's EML students. Further, few teachers either implemented in-depth explorations of children's families and cultures or sought out opportunities for students to be aware of the languages and cultures present in their classroom. Teachers' instructional support for EML students was also inconsistent. Teachers mainly focused on EMLs' acquisition of English; facilitating development of the home language was rarely observed, and formal bilingual assessment practices were not evident. Also, teachers' support for English acquisition was seldom tailored to the level of individual EML children, and teachers did not consistently utilize strategies to engage individual

EML children in extended discussions, nor did they consistently model meaningful language use in English. Notably, few teachers reported to regularly engage families in their children's language and literacy development. Whereas most teachers emphasized the importance of family engagement, they provided parents little guidance about reading in English or the home language, and few teachers provided activities for parents to support their children's learning outside of school.

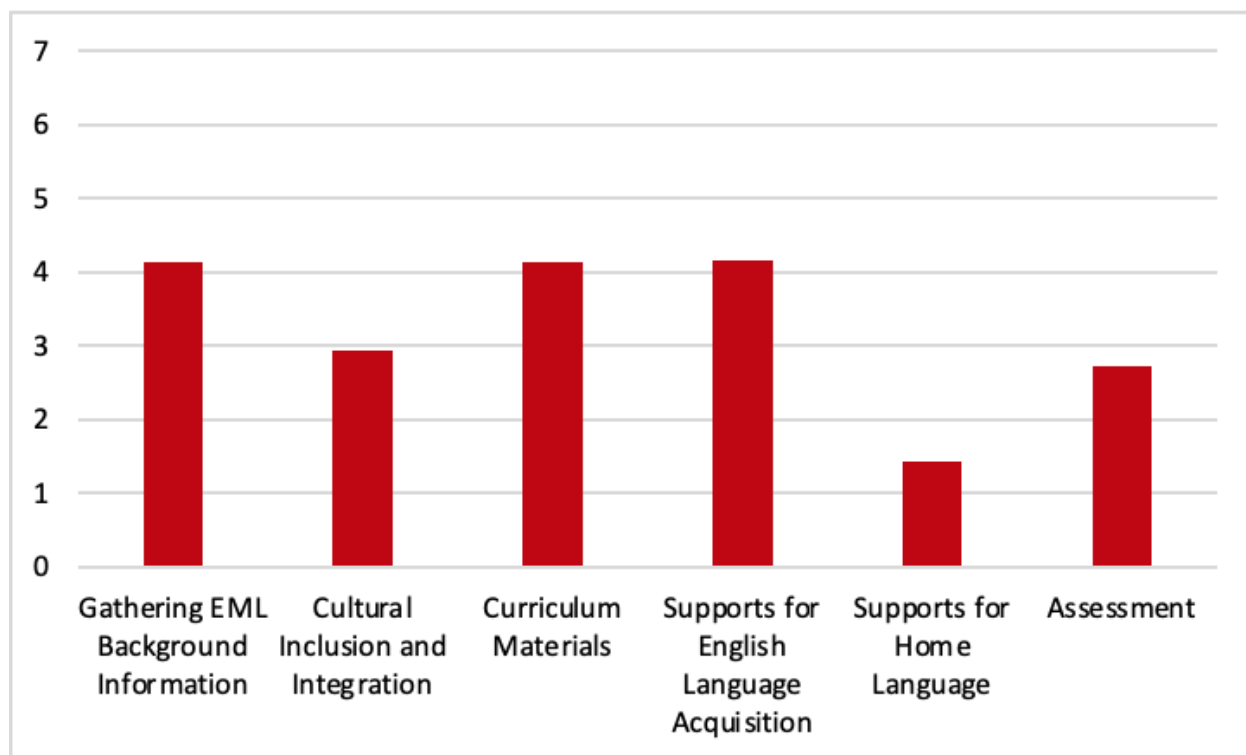


Figure 9. CASELA Linguistic and Cultural Responsiveness Scores

IV.5. Relationships Between Site Characteristics and Measures of Classroom Quality

CLASS scores related to Emotional Support, Classroom Organization, and Instructional Support were relatively higher at sites located in high-income communities; however, these differences were not statistically significant. Similarly, we found no statistically significant differences in the three CLASS domains associated with resource provision. When relating Emotional Support, Classroom Organization, and Instructional Support, respectively, to EML concentration across sites, only one positive relationship emerged; in classrooms with higher proportions of EMLs, teachers tended to offer more emotional support.

Table 7. Descriptive Statistics of Linguistic/Cultural Responsiveness ($n = 50$)

CASELA Domain	<i>M(SD)</i>
Gathering EML Background Information	4.13 (1.47)
Cultural Inclusion and Integration	2.94 (1.97)
Curriculum Materials	4.12 (0.90)
Supports for English Language Acquisition	4.15 (1.08)
Supports for Home Language	1.43 (0.50)
Assessment	2.72 (1.76)

IV.6. Exemplary Practices

The analyses presented above present a broad picture of the quality of learning opportunities experienced by EMLs situated in sites and communities with different characteristics. To further highlight exemplary practices in these classrooms, we further examined the details of unique, high-quality interactions that were observed between teachers and EMLs in the classroom. Qualitative examination of CLASS and CASELA observation data, interviews, and field notes revealed a number of these exemplary practices—embracing diversity and building community; enacting a curriculum that promotes language development and social emotional support; and providing comprehensive support for individual students.

The following discussion names several critical teacher practices we observed that served to recognize and affirm EML children and families' funds of knowledge and to create vibrant educational spaces for multilingual young learners. Sites that demonstrated these high-quality practices can help inform and guide construction of professional development experiences for sites that need additional support.

IV.6.a. Global Teacher-Child Interactions

Qualitatively, in a typical classroom, there were many indications that teachers and their students enjoy warm, supportive relationships with one another. Teachers were generally sensitive to students' needs and supported individual differences, allowing everyone to participate in the classroom community; lead teachers often shared in activities, sitting and conversing with children on the rug and at tables in the classroom. There were frequent, positive verbal and physical communications between teachers and children, including hugs, high fives, and physical supports and comforts offered to students. Teachers and children consistently demonstrated respect for one another. Children were encouraged to speak and express themselves. Students

were encouraged to help themselves during their daily routine and build on their own autonomy; however, teacher support was offered to students when needed. Regarding classroom organization, in most classrooms, rules and expectations were clear to students, and they generally followed them; teachers often used proactive management strategies or subtle prompts and were able to resolve conflicts promptly and effectively.

IV.6.b. Embracing Diversity and Building Community

Though data pertaining to EMLs' cultural and language backgrounds was not collected or shared with teachers consistently across sites, several individual teachers gathered comprehensive data related to their students' language and cultural backgrounds. These educators then authentically utilized these data both to structure the classroom environment and to inform instruction. During semi-structured interviews, we spoke with some teaching teams who collected extensive information from parents and caregivers through questionnaires or home visits at the beginning of the school year to learn more about their EML students and their families. In these cases, teachers were often able to identify the home language(s) and cultural background of all EMLs in the classroom without referring to written records, including all languages spoken at home; parents' countries of origin; and children's frequency and sources of exposure to English and their home language. Collection of these data allowed teaching teams to incorporate children's languages and cultures authentically into the classroom environment, as illustrated in the example below.

Cultural inclusion/integration at a DOE NYCEE center:

Several bulletin board displays celebrate children's families and cultures: one wall displays laminated photos of each child's family accompanied by written text describing their traditions, favorite meals and celebrations, and a "Home-School Connections" board displays children's drawings and comments about books that children and families recently read together at home. In the classroom's various "centers," books, music, and play items (e.g., puzzles, matching games, pretend food, dress-up clothing) reflecting students' backgrounds are visible and, importantly, utilized by children and teachers during the day.

In addition to physical materials, teachers reported that they hold regular community events to celebrate families' cultures. During an international festival in November, parents bring foods, music, and photographs of their countries to share with the class. On each child's birthday, parents are invited to school to read a book in their child's home language, to tell a story in their native language, or to prepare/bring food, clothing or objects that are important to the family's culture.

Teachers described myriad ways that they connect daily lessons to students' cultural backgrounds and experiences (e.g., classroom activities and units centered around language or family traditions; conversations about dwellings, modes of transportation, and cooking food specific to families' countries of origin). These descriptions came to life during observers' visits,

as illustrated in the example below, as children’s backgrounds were authentically incorporated into the life of the classroom.

Cultural integration and support for home language at a DOE NYCEEC center:

An “Our Countries” poster-sized book created by the class was prominently displayed in the morning meeting area. A group of children noticed the researcher looking at this book and approached her, clamoring to show her “their” page; each family had contributed a page to the book, which featured facts, images and drawings related to the child’s cultural heritage. Later in the day, a group of three children sat on the rug together during center time, reading a class-made version of Eric Carle’s “The Very Busy Spider.” Each page featured an animal name and sound translated into a child’s home language. As the children read together, they called specific classmates over to them to read the page in their respective home languages.

IV.6.c. Enacted Curriculum Promoting Language Development

The enactment of a curriculum offering meaningful opportunities for children to acquire and practice new language skills was an area of relative strength across classrooms. By implementing a thematic curriculum over an extended period and extending related learning experiences through different learning domains (e.g., math, literacy, science), children were afforded opportunities to deepen their understanding of both concepts and language. In one example classroom, observer field notes indicated that the current thematic unit, *Transformations*, was evident throughout the classroom environment as well as observed activities:

Enacted curriculum at an ACS NYCEEC center:

Teachers were concluding a two-week study of babies and growing; photographs of each child as a baby, accompanied by children’s descriptions of how they have changed, were displayed on the walls and books about babies, growing, and transformations were prominently displayed throughout the classroom. The classroom’s dramatic play area was converted into a baby nursery (as one child reported to the observer, “we transformed it!”) with dolls and various props. During a morning meeting, the lead teacher led a shared writing activity in which the class brainstormed ways in which caregivers took care of their babies. The lead teacher led a small group “rain painting” science activity in which children transformed their artwork by spraying it with water.

Within the conceptually rich themes explored in classrooms, teachers’ attempts to use specific strategies to promote English language acquisition were inconsistent. Nevertheless, during group instruction, we often observed lead teachers using instructional time to support the development of English, (e.g., through songs, discussions, and shared reading/writing activities). Teachers

scaffolded children’s comprehension of content and supported their understanding using pictures, objects, charts, music, hands-on activities, and gestures, as shown below:

Supports for EMLs’ comprehension of English at a DOE NYCEEC center:

In this classroom, music featured prominently throughout the day: there were songs with associated hand motions for many of the agenda items (e.g., a “Sitting in a Circle” song to prepare for morning meeting; “Weather Watcher” and “Days of the Week” songs during circle time; songs for cleanup time and preparation to walk in the hallway). One EML student, Rafael, had recently arrived in the United States from Brazil and spoke almost exclusively Portuguese. Teachers provided myriad opportunities for him to practice English and map actions to English words; he sang several of the songs to himself on his own at different times in the day. When Rafael had difficulty transitioning between activities, the lead teacher accompanied him to the posted schedule to help clarify what he should be doing: “See, Raphael? We had center time [points to centers], and gym time [points to schedule, makes running motion], and now we have hand washing time [pretends to wash hands] and then lunch!” The teacher guided the student to the handwashing station to participate with his peers.

Less frequently observed during both group instruction and in one-on-one interactions were teacher moves such as open-ended questions; sustaining conversational feedback loops (i.e., multiple back and forth exchanges); expanding on children’s language to model new vocabulary and sentence structures; and using lexically complex language when speaking to students. While some educators incorporated these strategies during group instruction, a small subset of teachers consistently did so throughout the day, across settings, and with different groupings of children (e.g., class discussions, small group activities, and one-on-one interactions), as illustrated by “small moments” like this one, in which a child announced to his teacher at morning arrival that he had encountered a “Don’t Walk” sign before entering the classroom:

Teacher-child exchange at an ACS NYCEEC center:

Teacher: Mahmoud, why do you think there is a don’t walk sign on the floor outside?

Mahmoud: (Shrugs)

Teacher: Why don’t you go outside and take a look? Walk out there and look up.

Mahmoud: (Walks outside and returns to the classroom)

Teacher: What did you see?

Mahmoud: Water coming from the ceiling.

Teacher: That is called a leak. When the water is coming in from the ceiling, inside where it is not supposed to, we call that a leak. Why do you think there is a leak?

Mahmoud: Because there is a hole in the ceiling.

Teacher: Yes, you’re right, and now the floor is all wet. What do you think that we should do about this?

Mahmoud: Clean it up.

Teacher: We have already called the custodian to clean it, but yes, it would be nice to help him. There will also be someone coming to fix the leak.

This spontaneous, yet intentional, conversation illustrates several strategies for supporting a child's conceptual and language development: initiation of conversation, multiple back-and-forth exchanges, extensions of children's comments, lexically complex language and vocabulary, and open-ended questions that encourage creative thinking and problem solving.

Regarding EMLs' home language development, in almost exclusively monolingual classrooms, development of children's home language was rarely observed, even in classrooms in which teaching teams spoke EMLs' home language. Teachers instead focused on EMLs' acquisition of English. Though rare, a few teaching teams were observed to incorporate EMLs' home language during instruction. This was accomplished in various ways, including: repetition of activities in both English and students' home language (e.g., counting, identifying letters, matching cards with different numbers of objects to Arabic numerals); encouraging children to experiment with writing in both English and the home language; singing songs in children's home languages; translating books read aloud into children's home languages; and incorporating key vocabulary words in children's home languages into daily lessons and discussions. Notably, these practices were observed in classrooms in which one or both teachers spoke the home language of their EML students; several lead educators individually expressed to the observers that their own bilingualism was an important aspect of their identity, and that it informed their teaching beliefs and practices, including use of EMLs' home languages in the classroom. Qualitatively, we observed that teachers' incorporation of EMLs' home languages into instruction had more to do with the teachers' language backgrounds than the number of EMLs in their classrooms.

IV.6.d. Comprehensive Supports for Individual Students

All teaching teams reported that they use formal assessments, informal observations, or some combination to support children's learning and communicate with parents. While it was evident that teachers conducted various forms of assessment (e.g., observation, standardized measures, qualitative information from parents) at predetermined points throughout the school year, it was not clear through observations or educator interviews how teaching teams utilize these data to make instructional decisions. Several teachers noted during interviews and in open-ended questionnaire responses that they required additional training to effectively assess EMLs. Notably, formal bilingual assessment practices were not evident across sites in our sample.

Without consistent use of assessment data to guide planning, we did not always observe language instruction that was tailored to the level of individual EML children. Teachers did not consistently engage individual EML children in back-and-forth discussions or meaningfully expand on EML children's ideas by introducing vocabulary and novel sentence structures. However, teachers did utilize differentiation strategies including adjusting talk to each EML child's level of English ability in one-on-one interactions, e.g., by using slower, deliberate speech, enunciation, eye contact, gestures, pointing, and repetition. Encouragingly, and consistent with CLASS scores in the emotional support domain, these gentle scaffolding techniques to support children's participation in classroom routines and conversations took place frequently throughout the day.

Most teachers strongly emphasized the importance of family engagement to support individual children's learning. Nevertheless, few teachers reported to regularly engage families in their children's language and literacy development. Indeed, while most classrooms distributed information and questionnaires to families in multiple languages, sites did not always have

teaching staff at the school who were able to communicate in parents' preferred or strongest language. Strategies utilized for engaging parents in their children's learning included the distribution of monthly newsletters (including reading suggestions, books related to the current unit, and topics for them to speak about with their children at home), and weekly lending library routines incorporating collaborative parent-child activities. Teachers at one site reported to hold monthly parent meetings to provide guidance for working with their children at home, in which EML parents were encouraged to speak and read to their children in their strongest language and were also provided strategies for reading with their child (e.g., engaging a "picture walk," looking at books' illustrations and discussing them in the home language).

The influence of teachers' personal experiences on their beliefs and classroom practice and their natural caring sentiment toward students emerged as a prominent theme when teachers described how they advise parents about their children's language learning. Observers' field notes revealed that many teachers struggled to address a tension between their desire to achieve positive outcomes for children and some EML families' expectation that their children practice only English in early childhood settings. Other teachers encouraged families to read and speak to their children in English as much as possible, to reinforce the language of instruction. Several multilingual teachers used their own language learning or parenting experiences to support their approaches to these conversations:

I also give them the example of my son. Sometimes the parents from my country, they say, I don't like my child speaking Bangla, I like them speaking English. They feel proud when they speak English. I say no, the child needs their culture. This is their own language - they need that. Please try to keep both languages so that when he grows up he can say, 'I'm from Bangladesh, my parents are from Bangladesh, and I know the Bangladesh, I know the Bangla language.' Sometimes the parents don't want to hear that, but I try to help them nicely.

- DOE NYCEEC Teacher Assistant

In all, our observations reflected an urgent need for more frequent communication with EMLs' families to affirm their funds of knowledge and rich literacy practices at home, and to emphasize to parents the value of bilingualism for children's development.

IV.7. Preparation, Professional Development, and Job-Embedded Support for NYC UPK Leaders and Teachers

As shown in Table 8, few leaders and teachers surveyed in our sample held both ECE certification and bilingual education credentials. The majority of lead teachers (74%) held childhood or early childhood education certification and indicated prior experience teaching EMLs. While less than half of program leaders indicated having prior experience leading programs with EMLs, the majority of leaders (62%) did have prior experience teaching EMLs.

Table 8. Preparation of NYC UPK Leaders and Teachers

Variable	Program Leader (<i>n</i> = 52)	Lead Teacher (<i>n</i> =50)	Assistant Teacher/Aide (<i>n</i> = 53)
Professional Certification(s)			
Childhood/Early Childhood and Bilingual Education (including on track)	1 (2%)	3 (6%)	2 (4%)
Bilingual Education (ESOL)	2 (4%)	0 (0%)	4 (8%)
Childhood or Early Childhood (including on track)	23 (44%)	37 (74%)	15 (28%)
Other	26 (50%)	10 (20%)	3 (6%)
Experience Leading Programs with EMLs			
Yes	25 (48%)	n/a	n/a
No	27 (52%)		
Experience Teaching EMLs			
Yes	32 (62%)	35 (70%)	13 (25%)
No	20 (38%)	15 (30%)	40 (75%)

As demonstrated by teachers' multicultural beliefs and qualitative observations, the importance of educators' determination to embrace culturally responsive methods cannot be overstated. While these positive, critical multicultural beliefs were evident in the high-quality emotional support provided generally, this often did not translate into the enactment of high quality instructional and language-related supports for EMLs.

Our findings point to potential areas requiring increased support for educators. Leaders, lead teachers, and assistant teachers all reported to receive professional development in core areas related to teacher-student interactions and cultural responsiveness in supporting EMLs (see table 9). However, these opportunities did not seem to be intensive; for example, approximately half of lead teachers indicated that they had received fewer than six hours of professional development in the areas surveyed over the past 12 months.

Table 9. Supports for NYC UPK Leaders and Teachers

Variable	Program Leader (<i>n</i> = 52)	Lead Teacher (<i>n</i> = 50)	Assistant Teacher/Aide (<i>n</i> = 53)
% Received Professional Development in the 12 months related to:			
Emotional Support	64%	56%	57%
Classroom Organization	64%	60%	57%
Instructional Support	73%	70%	62%
Inclusion of students from Diverse Backgrounds	71%	50%	57%
Supports for Dual Language Acquisition	52%	46%	47%
Early Literacy Assessment	60%	58%	53%
Hours of Professional Development Received Over Past 12 Months Related to Supporting EMLs			
None	10 (19%)	13 (26%)	17 (32%)
< 6 hours	14 (27%)	12 (24%)	14 (26%)
6-15 hours	18 (35%)	8 (16%)	7 (13%)
16-35 hours	9 (17%)	11 (22%)	11 (21%)
More than 35 hours	1 (2%)	6 (12%)	4 (8%)

Teachers' open-ended survey responses indicated an urgent desire for better professional development and job-embedded training to translate their inclusive mindsets and good intentions into instructional practices that meet the varied needs of EMLs. This was consistent with program leaders' perceived professional development and support needs.

I would love to learn more about and build my practices around authentically including and representing various cultures in our classroom. I feel like my students come from such varied backgrounds and I struggle with ways of understanding and making all feel like a welcome, valuable part of the classroom community.

-DOE Teacher Assistant

[I need] resources that are more inclusive to support bilingual learners. Example books, training, and hiring more bilingual staff.

-ACS NYCEEC Program Leader

As illustrated in Table 10, four general themes emerged in teaching teams' self-identified professional development needs: professional training and workshops (i.e., instructional information and support, multicultural competence); strategies and research-aligned "best practices" for serving EMLS (e.g., instructional support, social emotional support, language and literacy strategies); materials and resources; and family engagement strategies.

Table 10. Self-Identified Professional Learning/Support Needs of Teaching Teams

Selective Major Themes	Minor Themes	Teaching Teams' Perceived Needs
Professional learning experiences (trainings and workshops)	Instructional information and support:	<ul style="list-style-type: none"> ● EML support-focused workshops, web seminars, and reading material ● Explicit training in dual language acquisition ● Information about dual language classroom models, citywide policies and regulations related to EMLs
	Cultural knowledge/sensitivity & "multicultural competence"	<ul style="list-style-type: none"> ● Cultural awareness/sensitivity/multicultural competence training for staff ● Language instruction (in EMLs' home language) for teachers and school staff ● Learn more about students'/families' cultures and traditions, understanding students' backgrounds (e.g., Hispanic; Asian)

Research-aligned strategies and “best practices” to support EMLs	Social emotional support/cultural integration of EML students	<ul style="list-style-type: none"> ● Strategies for social emotional support ● Strategies for cultural inclusion and integration of EML students
	Instructional support and strategies	<ul style="list-style-type: none"> ● Targeted instructional support ● Guidance about implementation and/or differentiation of lessons/thematic units ● Instructional strategies and activity ideas (e.g., games, technology use, fingerplays)
	Language and Literacy Strategies	<ul style="list-style-type: none"> ● Literacy strategies ● Support for home language (e.g., bilingualism, biliteracy) ● Balancing home language instruction and English instruction ● Supporting EMLs in learning English ● Increasing/enhancing language instruction ● Strategies for communicating with students who speak very little English ● Literacy assessment
	Other	<ul style="list-style-type: none"> ● Supporting EML students with disabilities ● Classroom/behavior management strategies ● Structuring classroom environment for EMLs
Materials and resources	--	<ul style="list-style-type: none"> ● Sample lesson plans/activities ● Visual materials ● Music ● Assessment tools
Family engagement strategies	--	<ul style="list-style-type: none"> ● Collaborating/communicating with parents ● Involving families in the classroom ● Handouts/materials for EML families ● Parent workshops and guest speakers
Other	Continuation of existing support	<ul style="list-style-type: none"> ● Continuation of PD provided by DOE ● Continue to leverage existing support from university or professional networks

	Administrative Support	<ul style="list-style-type: none"> • Administrative support
	Unspecified	<ul style="list-style-type: none"> • Any professional support • Unsure

The perceived professional development needs of program leaders reflected similar themes (see Table 11). Program leaders additionally requested support with program development, including support for building a dual language program and hiring additional bilingual staff.

Table 11. Self-Identified Professional Learning/Support Needs of Program Leaders

Theme	Subtheme	Program Leaders' Perceived Needs
Professional Learning Experiences (Training and Workshops)	Instructional information and support	<ul style="list-style-type: none"> • Opportunities/support for staff and leaders to attend EML-focused workshops, presentations, or hands-on sessions • Training/coursework about leadership in multicultural settings • Research on bilingualism/language acquisition • PD for teachers about the “importance” of bilingualism
	Cultural/linguistic knowledge and multicultural competence	<ul style="list-style-type: none"> • Cultural norms and biases • Knowledge of different cultures • Language training for teachers/leaders
	Coaching/Classroom Intervisitation	<ul style="list-style-type: none"> • Trainers/coaches to work onsite with teachers • Class intervisitation
Research-aligned strategies and “best practices” to support EMLs	Social emotional support/cultural integration of EML students	<ul style="list-style-type: none"> • Social emotional support for EMLs • Integrating students’ cultures into teachers’ lessons
	Instructional support and strategies	<ul style="list-style-type: none"> • General support strategies/teaching techniques • Research on best practices

		<ul style="list-style-type: none"> ● Instructional Support (e.g., adding home languages to word wall and classroom meetings)
	Language and Literacy Strategies	<ul style="list-style-type: none"> ● Supports for dual language acquisition ● How to balance use of home language/English in the classroom ● How to provide home language support while also meeting English language instructional standards ● EMLs and writing ● Early literacy assessment
Materials and resources	--	<ul style="list-style-type: none"> ● Books and CDs for children ● Books ● General resources
Family engagement strategies	--	<ul style="list-style-type: none"> ● Ideas for ways to get to know current families ● PD for families about the “importance” of bilingualism ● Home-school communication (e.g., with families with a language barrier) ● Resources for Asian families ● Local resources for families
Program Development	--	<ul style="list-style-type: none"> ● Hiring of more bilingual staff ● How to create a robust dual language program
Other	--	<ul style="list-style-type: none"> ● Continue to leverage existing support from university or professional networks ● Other trainings: First aid, Trauma

V. Summary of Findings and Policy Implications

Our systematic examination of the specific pedagogical practices and supports for emergent multilingual learners and workforce characteristics calls for urgent need for professional development related to support for EMLs. Our results indicate that NYC’s UPK classrooms offered warm, supportive environments for children. Nevertheless, general instructional support across these classrooms was relatively low. We observed wide variation in the extent to which teachers incorporated EMLs’ backgrounds and experiences into the life of the classroom and utilized this information to inform instruction.

Based on our findings, we offer the following policy considerations:

Key Finding #1: Most teaching teams have positive beliefs about EMLs and value multilingualism but lack the pedagogical capacity to deliver culturally and linguistically responsive instruction. Accordingly, we recommend a multi-faceted approach to help close the disposition to practice gap.

- *Recommendation: Formally incorporate professional learning for program leaders and teachers into district- and citywide improvement strategies.*

Districts and city agencies should make program leaders' and teachers' learning support of EMLs part of a strategic and focused course of design. Teachers and leaders should have frequent opportunities for professional development to promote positive dispositions through deep and sustained engagement with intercultural principles and practices.

- *Recommendation: Curate resources among inter-governmental agencies.*

We recommend a close collaboration of inter-governmental municipal agencies in curating valuable resources and models of teaching for use with EMLs. Such models will give practical meaning to the idea of optimal teacher behavior to reflect positive beliefs about, and attitudes toward, cultural, ethnic, and racial diversity.

- *Recommendation: Establish infrastructure and culture to provide program leaders with continuous opportunities to build competency in providing for EMLs and in supporting teaching teams to meet EMLs' varied needs.*

We recommend reframing the role of district central office or city agency director as one mainly involving the teaching of site leaders instead of managing or monitoring,³⁶ and elevating support of site leaders as an executive-level responsibility. This will entail recruiting and assigning staff – instructional leadership directors (ILDs) - with the appropriate knowledge, skills, and mindset to work with site leaders. Strong partnerships between ILDs and site leaders will enable both parties to engage the professional development work with both intensity and continuity. A networked improvement community (NIC) of ILDs can develop a clear conception of target practices for site leaders and teachers for supporting EMLs, and future professional development of site leaders can be anchored in these identified core practices. The work of other units at districts and city agencies should be realigned to support ILDs' instructional leadership focus. Note that the role of an ILD is more complex than that of an instructional coach, who serves as a content expert. The role of ILDs is to establish, maintain, and fine-tune a large system of support for program leaders as instructional leaders. In addition to providing supports to site leaders and teachers, the role of an ILD has a significant leadership element and a greater sphere of influence that provides those in that role the technical and political legitimacy to potentially address the structural inequities in the ECE system.

³⁶ Honig, M. I. (2012). District central office leadership as teaching: How central office administrators support principals' development as instructional leaders. *Educational Administration Quarterly*, 48(4), 733-774.

Program leaders should apply learning provided by ILDs to develop teacher competencies at their respective sites. This can involve intellectual stimulation (e.g., sharing resources and examples related to high-leverage practices in support of EMLs); habitually modeling multiple culturally diverse examples to illustrate teaching concepts, knowledge, and skills; helping teachers to develop descriptive protocols for these examples; and collaborating with teachers to enact the protocols in their individual classrooms.

At the site level, we also recommend that program leaders establish a structure for teacher collaborative teams or professional learning communities (PLCs). These teams should be encouraged to reflect on best personal or learned practices and ways of modifying them to be more culturally responsive and sustaining. Analysis of video recordings of practicing classroom teachers can be useful transformative strategies.³⁷ Teams can identify patterns and trends in exemplary practices, and to extract beliefs underlying them. Teachers may use PLCs as a safe place to a) articulate their beliefs and discuss the implementation of specific instructional practices; and b) help one another in clarifying and translating their beliefs into practice.

Key Finding #2: Sites collected some information about EMLs' cultural and language backgrounds (i.e., home language survey); however, data collected may not be accurate and/or does not get shared or used by program leaders and teaching staff for instructional support for EMLs. To best meet the needs of EMLs, we recommend the following:

- *Recommendation: Use the Emergent Multilingual Learner Language Profile developed by New York State³⁸ to collect students' home language information as part of student enrollment process across all sites. Nurture a data culture among program leaders, teachers, and teaching teams, prioritizing additional data collection and analysis to guide instructional planning for EMLs.*

The Emergent Multilingual Learner Language Profile gathers information about a student's existing languages and linguistic experiences with parents, caregivers, or siblings, and can assist teachers in determining instructional services that best meet the needs of EMLs. Site leaders should be held accountable to make this language information readily accessible to every member of the teaching team.

Teachers and school staff should gather additional information about EMLs by interviewing parents or guardian to learn about families' cultural and language practices. Teachers, assistant teachers, teachers' aides, and other community volunteers who speak the child's language should also conduct individual, bilingual interviews with the child (and in the presence of the child's parent or guardian). Children's language information and the information collected through initial screening can be synthesized into a "learning profile" for each EML.

³⁷ Gay, G. (2010). Acting on beliefs in teacher education for cultural diversity. *Journal of Teacher Education*, 61, 143-152.

³⁸ New York State Education Department Office of Early Learning (2017). *Emergent Multilingual Learners Language Profile*. Retrieved from <http://www.nysed.gov/common/nysed/files/emergent-multilingual-learners-language-profile-october-2017.final-accessible.docx>

Many aspects of the above guidelines are already acknowledged by the New York State Department of Education.³⁹ The varied, idiosyncratic responses to the guidelines that we witnessed across the sampled sites requires an “implementation perspective.”⁴⁰ Close analysis is necessary to unpack the implementation process and focus on the interplay of policy and practice; this perspective calls for attention to individuals rather than institutions and frames central implementation challenge in terms of individual actors’ incentives, beliefs, and capacity. Consequently, we ask scholars and policy analysts who are interested in studying EMLs’ language data use to zero in on program leaders and teaching teams’ incentives, beliefs, capacity, and commitment to learning about students’ language and cultural backgrounds.

- *Recommendation: Form strong partnership with parents and guardians in joint decision-making concerning EMLs’ learning. This includes communication with EMLs’ families to affirm their funds of knowledge and rich literacy practices at home; ensuring consistent messaging about the assets of being multilingual; and encouraging and supporting families to help their children become multilingual.*

Observers’ field notes revealed that many teachers struggled to address a tension between their desire to achieve positive outcomes for children and some EML families’ expectation that their children practice only English in early childhood settings. Professional development in such circumstances needs to emphasize multiple strategies to work with parents and communicate with families to affirm their funds of knowledge, and to encourage and support families in helping their children become multilingual. These efforts ultimately will help to extend children’s zones of proximal development.⁴¹

Key Finding #3: While a large proportion of assistant teachers and classroom aides are multilingual, their language expertise and instructional resources are underutilized. Their roles and potential contributions to the provision of culturally and linguistically responsive instruction should be carefully examined.

- *Recommendation: Support and leverage assistant teachers’ language and cultural backgrounds by providing professional learning focused on instructional strategies to support EMLs’ home languages in the classroom.*

While almost all lead teachers in our sample were monolingual professionals, a large proportion of the assistant teachers were multilingual. Unfortunately, most assistant teachers were assigned non-instructional roles and therefore their language strengths were greatly underutilized, particularly as it relates to instructional support for EMLs’ home language. Accordingly, we recommend policymakers and City agencies provide targeted professional support for assistant teachers. Professional development for lead teachers could also focus on collaborative team

³⁹ New York State Education Department (n.d.). *Emergent multilingual learners in prekindergarten programs*. Retrieved from <http://www.nysed.gov/bilingual-ed/emergent-multilingual-learners-prekindergarten-programs>.

⁴⁰ McLaughlin, M. W. (1987). Learning from experience: Lessons from policy implementation. *Educational Evaluation and Policy Analysis*, 9(2), 171-178.

⁴¹ Moll, L.C., & Greenberg, J.B. (1990). Creating zones of possibilities: Combining social contexts for instruction. In L.C. Moll (Ed.), *Vygotsky and education: Instructional implications and applications of sociohistorical psychology* (pp. 319–348). Cambridge, UK: Cambridge University Press.

teaching with assistant teachers, replicating a model that has been shown to be effective in special education. Further, we observed a frequent lack of differentiation in the roles of classroom support staff, including assistant teachers and classroom aides. Classroom Aides' contribution to the teaching team and their support for EML students should be acknowledged and nurtured. We recommend the inclusion of both assistant teachers and classroom aides in professional learning activities, PLCs, and coaching initiatives; this is particularly important given that many assistant teachers and classroom aides (75%) did not report any prior experience teaching EMLs.

Although we encourage leveraging teacher assistants' strengths, we are by no means conveying that teachers and teacher assistants alone should be carrying the full burden of providing EMLs with a culturally and linguistically responsive education. For example, community-based organizations (CBOs) provide cultural and language brokering activities to link families with resources, and to build a foundation for families' sociocultural capital development.⁴² Lawson and Alameda-Lawson⁴³ found that CBOs engaged in multiple and complex social processes for supporting families, and for reducing barriers and resource constraints—such as parent and child isolation, family stress, and cultural and linguistic differences—that may prevent families from engaging in schools and other institutional settings. Participation in the focal CBO program was shown to foster the development of parent competencies, along with building a sense of community, social capital, and collective efficacy among families and professionals.

- *Recommendation: Strategically recruit, assign, and retain teachers and assistant teachers to promote demographic congruency between leaders, teaching teams and the students they serve.*

Our results indicate that there was a rich racial and ethnic diversity among the leaders and lead teachers. However, the assignment of program leaders and lead teachers did not necessarily reflect a demographic congruency between the leaders/teachers and the student population. The present pattern of assignment may not best accrue benefits for students of color and/or EMLs considering the research evidence on the effects of demographically similar teachers on student achievement and noncognitive outcomes.^{44,45} We recommend that policymakers and the New York City agencies consider leaders and teachers' cultural and linguistic backgrounds along with their professional preparation when assigning them to sites or programs. We recognize the complexities involved in achieving racial, ethnic, and linguistic congruency between students and teachers. Simultaneously, we also recognize that a congruency-driven personnel assignment is a highly malleable practice related to human resource management, which is subject to a more sophisticated, macro-level political intervention.

⁴² Samuelson, C. (2013). The community-based organization as a cultural broker: Building bridges between recent immigrant families and schools in low-income communities [Doctoral dissertation, University of Washington]. Retrieved from <http://hdl.handle.net/1773/24203>.

⁴³ Lawson, M. A., & Alameda-Lawson, T. (2011). A case study of school-linked, collective parent engagement. *American Educational Research Journal*, 49, 651-684.

⁴⁴ Dee, T. S. (2005). A teacher like me: Does race, ethnicity, or gender matter? *American Economic Association*, 95(2), 158-165.

⁴⁵ Egalite, A. J., Kisida, B., & Winters, M. A. (2015). Representation in the classroom: The effect of own-race teachers on student achievement. *Economics of Education Review*, 45, 44-52. doi:10.1016/j.econedurev.2015.01.007

Additionally, we identified an extreme disproportionality – across 50 sites, there were *no* Asian lead teachers. We found this void intriguing considering the relatively large proportions of Asian program leaders (21%), assistant teachers (26%), and Asian population in New York City (14%). The presence of Asian leaders and assistant teachers indirectly points to a desire of Asian educators to serve the Prekindergarten population. Thus, policymakers should develop appropriate incentives to recruit and retain Asian American teachers with Asian language and cultural backgrounds. As one of the forerunners of educational reforms in the United States with a disproportionately large student population of Asian heritages, New York City has both the responsibility and opportunity to experiment with—and respond to—cultural pluralism that is inclusive of Asian American children and educators. The relatively strong interest among Asian assistant teachers could be a promising starting point for such an effort. Herein we share some of specific strategies, recommended by Ahmad and Boser to address the “leaky pipeline” we identified in this project.⁴⁶ Such strategies can be equally effective for other underrepresented ethnic groups. The NYC Department of Education may consider the following:

- Providing generous scholarship support to future teachers of color that are tied to the effectiveness of the training program and the performance of the teacher candidates. Strategic partnership could be based on the relative strength and history of higher education institutions with five-year or other transition programs.
- Improving compensation packages to attract bright and resilient people of color into the teaching profession.
- Supporting efforts to place effective teachers of color and providing induction support to promote retention.

Additionally, teacher preparation programs may also consider providing instructional space and designing their curriculum intentionally around critical praxis so that Asian American preservice teachers can have “a space to deeply interrogate their racial identity as teachers.”⁴⁷ To avoid further marginalizing Asian American preservice teachers and other teachers of color, preparation programs must attend to the intersection of race, migration, gender, language, and other cultural identities of Asian American teachers.⁴⁸ We suggest two research-based approaches here:

- Framing the need for such discussions around empowerment and healthy self-concept for teachers and their students.⁴⁹
- Engaging with the term “Asian American” as a political-racial identity, one forged through a history of systematic marginalization, racism, and exploitation in the United States.⁵⁰

⁴⁶ Ahmad, F. Z., & Boser, U. (2014). *America's Leaky Pipeline for Teachers of Color: Getting More Teachers of Color into the Classroom*. Center for American Progress.

⁴⁷ Philip, T. M. (2014). Asian American as a political–racial identity: Implications for teacher education. *Race Ethnicity and Education*, 17(2), 219–241.

⁴⁸ Kim, G. M., & Cooc, N. (2021). Recruiting and Retaining Asian American and Pacific Islander Teachers. *The Urban Review*, 53(2), 193-217.

⁴⁹ Kim & Cooc, Recruiting and Retaining Asian American and Pacific Islander Teachers.

⁵⁰ Philip, Asian American as a political–racial identity: Implications for teacher education

Aside from the recruitment and preparation efforts described above, retention of Asian American teachers is equally important. Most teachers leave the profession because of feelings of frustration, inefficacy, and alienation on the job,⁵¹ as well as a lack of affirmation and tangible support from their administration.⁵² Accordingly, a supportive site leadership focused on teacher professionalism, shared leadership, and collegial trust may particularly be beneficial to Asian American teachers' commitment.

Key Finding #4: Teachers' open-ended survey responses indicated an urgent desire for better professional development and job-embedded training around supporting EMLs. Recent professional development for both program leaders and teachers was neither systematic nor meaningful.

- *Recommendation: Provide teaching teams with professional learning focused on strategies to support EMLs' home languages in the classroom.*

Examination of teaching team and student language background information revealed that in many classes, there was little congruency between teacher and student language backgrounds, as teaching teams were largely monolingual. Consequently, teachers' support for EMLs' home languages (with the notable exception of Spanish) was limited or nonexistent. As described above, we recommend that teaching teams receive professional development related to supporting EMLs with a variety of home languages. Professional development activities such as co-creating bilingual books or dictionaries with families or bilingual teacher assistants, or training family members and bilingual teacher assistants to use dialogic reading strategies to facilitate language and vocabulary development, can be considered.

- *Recommendation: Provide teaching teams with focused professional development for high-quality instructional support.*

Our results revealed low ratings of instructional support on both CLASS and CASELA measures. When designing professional development, policymakers and related City agencies should purposefully target teachers' instructional support and disseminate research-based strategies for helping EMLs develop language skills, enhance conceptual understanding, and promote higher order thinking skills.⁵³ Interactive and dialogic reading, for example, builds EMLs' oral language skills, including listening, comprehension, and vocabulary. Embedded strategies within this practice includes: (a) anchoring text by giving a clear, intentional message as to what the teacher is trying to teach; (b) reinforcing vocabulary through songs and chants; and (c) using gestures and other visual clues to indicate the meaning of a word. Coaches may also direct teachers to resources such as What Works Clearinghouse to locate rigorous, evidence-based practices.

⁵¹ Johnson, S. M., & Birkeland, S. E. (2003). Pursuing a "sense of success": New teachers explain their career decisions. *American Educational Research Journal*, 40(3), 581–617.

⁵² Achinstein, B., Ogawa, R. T., Sexton, D., & Freitas, C. (2010). Retaining teachers of color: A pressing problem and a potential strategy for "hard-to-staff" schools. *Review of Educational Research*, 80(1), 71–107.

⁵³ Espinosa, L., Magruder, E. (2016). Practical and proven strategies for teaching young dual language learners. In *Getting it RIGHT for young children from diverse backgrounds: Applying research to improve practice with a focus on dual language learners*, (2nd Ed.). Pearson. Retrieved from https://www.earlychildhoodwebinars.com/wp-content/uploads/2016/01/Chapter-4_Practical-and-Proven-Strategies-for-Teaching-Young-Dual-Language-Learners.pdf

VI. Limitations

As described previously, we used a blended sampling method to recruit classrooms from designated community districts of NYC. Due to recruitment difficulties (i.e., classrooms were ineligible for the study because they did not meet inclusion criteria of having at least one EML student; site had been closed; program leader did not respond to recruitment contact; or program leader declined to participate), it was necessary to identify additional sites within the designated community districts utilizing snowball/quota sampling. Consequently, due to selection bias (i.e., self-selection of sites that had the time and resources to participate; selection of sites in our professional networks within the designated districts), the final sample may not necessarily be representative of the NYC UPK population at large.

Additionally, data related to teachers' cultural and linguistic responsiveness (i.e., CASELA) was collected via a recently developed instrument with limited psychometric data available. This instrument was modified by the tool's original developers for implementation in the current study's monolingual classrooms; further, the CASELA instrument was utilized by observers who, while proficient in Spanish, were not proficient in all of the languages spoken by EML students in sampled classrooms. Due to the nature of some interactions that the CASELA aims to capture (e.g., teachers' use of EMLs' home languages for instruction), it is often beneficial for the observer to be proficient in the language of most of the EML children in the classroom that they were observing. It should be noted that use of the home language was very rarely observed across classrooms; nevertheless, our interpretation of CASELA data should be considered with these limitations in mind.

VII. Conclusion

This research reflects one of few studies to date that has systematically examined specific pedagogical practices and supports for emergent multilingual learners in New York City, one of the country's most diverse cities. Our study identifies large knowledge, mindset, and practice gaps among NYC early childhood professionals, specifically in the areas of providing adequate instructional and linguistic support for EMLs as well as partnering with families in capturing their cultural and home literacy assets. Rigorous and meaningful use of data is necessary to support both EMLs and teaching teams' and program leaders' professional development; documenting program quality measures and linking them to workforce characteristics and ecological factors provides a key window of opportunity for evidence-based program improvement.

VIII. Appendices

Appendix A. Teaching Team Questionnaire Items

EXPERIENCE AND TRAINING

What is the highest level of formal education you have completed? (Check one)

- | | |
|---|---|
| Did not complete high school | Bachelor's degree (4-year college program) |
| Some high school | Master's degree or professional degree (MD, lawyer, minister) |
| High school diploma/GED | Doctorate (Ph.D., or Ed.D.) |
| Associate's degree (2-year college program) | |

During your college or university education, what was your major or main area of study?

- | | |
|--------------------------------|-----------------------|
| Education - Early Childhood | Education - Secondary |
| Education - Primary/Elementary | Other: |

If your major or main area of study was education, do you have certification in any of the following areas? (Select all that apply). If from NY, please specify type of certification (Transitional, Initial, Professional)

- | | |
|---|--|
| Early childhood education | Supervision certification |
| Elementary education | On track for certification (Please specify area of certification): |
| Bilingual credential | Other (Please specify): |
| English to Speakers of Other Languages (ESOL) | None |
| Students with disabilities | |

How many years have you worked with children of families in schools or community-based organizations, not counting this year?

How many years have you worked in your current position, not counting this year?

Do you have prior experience teaching dual language learners? If yes, please briefly describe your experience.

YOUR CURRENT POSITION AND CLASSROOM

Which of the following best reflects your job title: (Please select one)

- | | |
|--|-----------------------------------|
| Lead Teacher | Instructional Coach / Coordinator |
| Assistant Teacher | Social Worker |
| Teacher's Aide | Counselor |
| Director / Principal | Parent Coordinator |
| Assistant Director / Assistant Principal | Other: |

How many students do you have in your class at present?

How many of your students are dual language learners at present?

PERCEPTION OF DUAL LANGUAGE LEARNING AND DIVERSITY

For each item, select from the following: Strongly disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Strongly agree.

Dual language learners are a welcome addition to my classroom.

I like to have dual language learners in my class.

All things considered, I would rather not have dual language students in my class.

It is not possible for a dual language student to be equally proficient in more than one language.

Learning in one's first language interferes with learning English as a second language.

The use of the first or native language at home interferes with the speed and efficiency of English language acquisition.

If dual language learners develop literacy in their first language, it will facilitate the development of reading and writing in English.

Dual language students will do better in school if they learn to read and write in their first language.

The benefits of bilingual education are inconclusive based on my knowledge of the accumulative research.

Bilingual education means instruction primarily in students' native language, with little instruction in English.

Bilingual education is far more costly than English only instruction.

Higher levels of bilingualism can lead to practical, career-related advantages.

Higher levels of bilingualism can result in the development of greater knowledge or mental skills.

Dual language students have a difficult time relating to other English-speaking students in my class.

Dual language students are not much different than other English-speaking students in my class when it comes to socializing.

There is little conflict between dual language students and their English-speaking peers in my class.

Dual language students in my class spend as much time with English speaking students as they do with each other.

In my site, dual language children are viewed as problems.

In my site, dual language parents are welcomed as valuable contributors to our school's learning community.

My school administration pays full attention to the education of dual language learners.

The fact that parents continue to speak their native language at home is an indication that the parents of dual language learners want to preserve their home culture.

Parents of dual language learners believe that it is more important for their children to learn English than to maintain their native language.

Parents of dual language learners are just as involved in the schools as are parents of English-speaking students.

Cultural differences enrich the lives of community members.

The presence of different cultures often leads to unwanted tension in communities.

People from different cultures inevitably have difficulty living together in harmony.

Cultural differences are no barriers for families to work and socialize together.

Cultural groups are equal in how much they care about and support their children.

PERCEPTION ON SELF-EFFICACY

For each item, select from the following: Strongly disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Strongly agree.

I can conduct my classes in ways that help students learn knowledge and skills.

I know how to create lessons and activities that hold my students' interest.

I know how to teach learning strategies that will help students learn concepts and skills.

I possess the knowledge and skills necessary to teach pre-K children.

I have the teaching skills to help students learn what is expected of them.

I can adapt my instruction so that even those students who speak limited English can learn the concepts and skills.

I am good at helping dual language learners to learn the concepts and skills in my class.

I am prepared well to work with culturally and linguistically diverse students.

I need to acquire more knowledge related to the use of the home language of dual language learners in my class.

How much do you know about the dual language learners and their cultures in regard to the following? For each item, select one from the following: A great deal, A lot, A moderate amount, A little, None at all.

Child socialization practices
Family structure

Gender roles
Norms and values

PROFESSIONAL DEVELOPMENT NEEDS

In the past 12 months, have you participated in professional development/training related to supporting dual language learners in any of the following?

Emotional Support
Classroom Organization
Instructional Support
Inclusion of Students from Diverse
Backgrounds

Supports for Dual Language
Acquisition
Early Literacy Assessment
Other:

In the past 12 months, how many hours in total have you spent in formal in-service/professional development (e.g., workshops, seminars) for teaching dual language learners?

None
Less than 6 hours
6-15 hours

16-35 hours
More than 35 hours

What additional types of professional development do you need in order to effectively support dual language learners in your class?

DEMOGRAPHIC INFORMATION

How would you describe your race/ethnicity? (Select all that apply)

White
Black, African American
Hispanic or Latino
American Indian or Alaska Native
Asian Indian
Chinese
Filipino/a
Japanese
Korean

Vietnamese
Other Asian (Print race/ethnicity):
Native Hawaiian
Guamanian or Chamorro
Samoan
Other Pacific Islander (Print
race/ethnicity):
Other race or ethnicity (Print
race/ethnicity:)

Are you Spanish/Hispanic/Latino? (Select all that apply)

No, not Spanish/Hispanic/Latino
Yes, Mexican, Mexican American,
Chicano

Yes, Central American (Guatemala,
Honduras, El Salvador, Nicaragua,
Costa Rica, Panama)
Yes, South American
Yes, Puerto Rican

Yes, Dominican
Yes, Cuban

Yes, Other Spanish/Hispanic/Latino
(Print group):

Were you born in the United States?

Are you male or female?

What is your year of birth? (4 digit)

What languages do you speak and at what level of proficiency? (Check all that apply)

Novice: I can conduct simple conversations using this language but often I struggle to find the right words and my sentences are often incomplete. Intermediate: I am comfortable using this language to ask children about their family, home life, daily activities, interests as well as their physical and social needs. Advanced: I can speak this language fluently with ease and I can explain issues in detail using this language. Superior: I can communicate with native speakers with accuracy and fluency. I can use this language to explain complex matters in detail and provide coherent narrations with ease. Distinguished: I can use this language with complete accuracy, efficiency, and effectiveness.

English:

Haitian Creole:

Urdu:

Spanish:

Russian:

Mandarin Chinese:

Arabic:

Korean:

Other (please

Bengali:

specify):

CONTACT INFORMATION

Your Name:

Email:

Phone:

School/Site:

If there are additional comments, questions or concerns you would like to share with us, please use the space provided below.

Appendix B. Program Leader Questionnaire Items

EXPERIENCE AND TRAINING

Do you have a bachelor's degree?

Yes (Please list major area of study)

No

Do you have a master's degree?

Yes (Please list major area of study)

No

What is the highest degree you have earned?

Some high school

High school diploma

Associate's degree (2-year college program)

Bachelor's degree (B.A., B.S. etc.)

Master's degree (M.A., M.A.T., M.B.A., M.Ed., M.S., etc.)

Educational specialist or professional diploma (at least one year beyond master's level)

Doctorate or first professional degree (Ph.D., Ed.D., M.D., L.L.B., J.D., D.D.S.)

Don't have a degree

What professional certification(s) do you hold?

How many years have you worked as a leader in schools or a site leader in community-based organizations, not counting this year?

How many years have you worked in your current position, not counting this year?

Do you have prior experience LEADING schools or sites with dual language learners? If yes, please briefly describe your related experience.

Do you have prior experience TEACHING dual language learners? If yes, please briefly describe your experience.

CURRENT POSITION AND SITE INFORMATION

Which of the following best reflects your current job title? (Please select one)

Director / Principal

Instructional Coach / Coordinator

Assistant Director / Assistant

Other:

Principal

How many prekindergarten students do you have at your school/site at present?

How many of your prekindergarten students are dual language learners at present?

ENVIRONMENT FOR DUAL LANGUAGE LEARNERS

For each item, select from the following: Strongly disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Strongly agree

Regardless of a child's ethnic background, I treat each child as an individual learner instead of a representative of his/her social group.

I embrace interethnic conflict when it occurs and use it as an opportunity for making positive changes.

My site is a caring environment.

There is a high level of cooperation among students, teachers, and families at my site.

All children at my site have equal access to high-quality instruction regardless of their cultural and socioeconomic backgrounds.

I encourage my teachers to examine their daily practices for possible race, class, or gender biases.

I ensure linguistic equity by providing translators whenever needed.

My staff and I regularly examine and reflect our practices that may disempower some parents and groups.

DUAL LANGUAGE LEARNING AND DIVERSITY

For each item, select from the following: Strongly disagree; Somewhat disagree; Neither agree nor disagree; Somewhat agree; Strongly agree

Dual language learners are a welcome addition to my school.

I like to have dual language learners at my school.

All things considered, I would rather not have dual language students at my school.

It is not possible for a dual language student to be equally proficient in more than one language.

Learning in one's first language interferes with learning English as a second language.

The use of the first or native language at home interferes with the speed and efficiency of English language acquisition.

If dual language learners develop literacy in their first language, it will facilitate the development of reading and writing in English.

Dual language students will do better in school if they learn to read and write in their first language.

The benefits of bilingual education are inconclusive based on my knowledge.

Bilingual education means instruction primarily in students' native language, with little instruction in English.

Bilingual education is far more costly than English-only instruction.

Higher levels of bilingualism can lead to practical, career-related advantages.

Higher levels of bilingualism can result in the development of greater knowledge or mental skills.

Dual language learners take up more of the teachers' class time than English speaking students.

Based on my observation, teachers do not have to spend more time with dual language students.

Time and resource spent on dual language students are at the expense of English-speaking students.

Dual language students have a difficult time relating to other English-speaking students at my school.

Dual language students are not much different from other English-speaking students at my school when it comes to socializing.

There is little conflict between dual language students and their English-speaking peers at my school.

Based on my observation, dual language students at my school spend as much time with English speaking students as they do with each other.

At my school, dual language children are viewed as problems.

At my school, dual language parents are welcomed as valuable contributors to our school's learning community.

I pay full attention to the education of dual language learners.

The fact that parents continue to speak their native language at home is an indication that the parents of dual language learners want to preserve their home culture.

Parents of dual language learners believe that it is more important for their children to learn English than to maintain their native language.

Parents of dual language learners are just as involved in the schools as are parents of English-speaking students.

Cultural differences enrich the lives of community members.

The presence of different cultures often leads to unwanted tension in communities.

People from different cultures inevitably have difficulty living together in harmony.

Cultural differences are no barriers for families to work or socialize together.

Cultural groups are equal in how much they care about and support their children.

I possess the knowledge and skills necessary to lead my organization in providing a high-quality education for children of all ages.

I am good at leading my teachers in supporting dual language learners in their classrooms.

I am prepared well to work with culturally and linguistically diverse students and families.

I need to acquire more knowledge related to the use of the home language of dual language learners at my school.

How much do you know about the dual language learners and their cultures in regard to the following areas? (For each item, select one from the following: A great deal, A lot, A moderate amount, A little, None at all)

Child socialization practices

Gender roles

Family structure

Norms and values

PROFESSIONAL DEVELOPMENT NEEDS

In the past 12 months, have you participated in professional development/training related to supporting dual language learners and their teachers in any of the following areas?

Emotional Support

Supports for Dual Language

Classroom Organization

Acquisition

Instructional Support

Early Literacy Assessment

Inclusion of Students from Diverse

Other (If you select YES, please

Backgrounds

specify; otherwise, select NO):

In the past 12 months, how many hours in total have you spent in formal in-service/professional development (e.g., workshops, seminars) for supporting teachers who have dual language learners in their classrooms?

None

16-35 hours

Less than 6 hours

More than 35 hours

6-15 hours

What additional types of professional development do you need in order to effectively support dual language learners and their teachers in your site?

DEMOGRAPHIC INFORMATION

How would you describe your race/ethnicity? (Select all that apply)

White

Filipino/a

Black, African American

Japanese

Hispanic or Latino

Korean

American Indian or Alaska Native

Vietnamese

Asian Indian

Other Asian (Print race/ethnicity):

Chinese

Native Hawaiian

Guamanian or Chamorro
 Samoan
 Other Pacific Islander (Print

race/ethnicity):
 Other race or ethnicity (Print
 race/ethnicity):

Are you Spanish/Hispanic/Latino? (Select all that apply)

No, not Spanish/Hispanic/Latino
 Yes, Mexican, Mexican American,
 Chicano
 Yes, Central American (Guatemala,
 Honduras, El Salvador, Nicaragua,
 Costa Rica, Panama)

Yes, South American
 Yes, Puerto Rican
 Yes, Dominican
 Yes, Cuban
 Yes, Other Spanish/Hispanic/Latino
 (Print group):

Were you born in the United States?

Are you male or female?

What is your year of birth? (4 digit)

What languages do you speak and at what level of proficiency? (Check all that apply)

Novice: I can conduct simple conversations using this language but often I struggle to find the right words and my sentences are often incomplete. Intermediate: I am comfortable using this language to ask children about their family, home life, daily activities, interests as well as their physical and social needs. Advanced: I can speak this language fluently with ease and I can explain issues in detail using this language. Superior: I can communicate with native speakers with accuracy and fluency. I can use this language to explain complex matters in detail and provide coherent narrations with ease. Distinguished: I can use this language with complete accuracy, efficiency, and effectiveness.

English:

Haitian Creole:

Urdu:

Spanish:

Russian:

Mandarin Chinese:

Arabic:

Korean:

Other (please

Bengali:

specify):

CONTACT INFORMATION

Your Name:

Email:

Phone:

School/Site:

If there are additional comments, questions or concerns you would like to share with us, please use the space provided below.