

The Office of Innovation, Alignment, and Accountability
UNDERSTANDING AND SUPPORTING DUAL LANGUAGE
LEARNERS IN ECEAP CLASSROOMS



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Cummings, K. (2021). Understanding and Supporting Dual Language Learners in ECEAP Classrooms. Washington State Department of Children, Youth, and Families – Office of Innovation, Alignment, and Accountability.

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## Introduction

## **Background and Purpose**

Statewide Early Childhood Education and Assistance Program (ECEAP) enrollment data suggests that the percentage of children from homes where English is not the primary language has remained steady over the past four years at around a third of the enrolled population (33% in 2015-16 and 32% in 2019-20). Spanish is the most common non-English language spoken, accounting for 74-76%. The population of children from homes where English is not the primary language is becoming increasingly diverse each year, evidenced by the increase in unique primary and secondary languages reported by ECEAP families, from 84 in 2015-16 to 95 in 2019-20. In ECEAP, children from homes where English is not the primary language are broadly referred to as Dual Language Learners (DLL). The exact definition was established by the U.S. Department of Health and Human Services and Head Start programs nationwide<sup>1</sup> (see Box 1).

### Box 1: Defining Dual Language Learner in ECEAP

For this report, we use the term Dual Language Learner (DLL) to refer to children who live in homes where English is not the primary language. This means that, upon enrollment in ECEAP, a child's parent or guardian indicated that a language other than English is primarily used when speaking to the child. In the context of this report, the term DLL does not apply to children who are exposed to a non-English language in the home, but for whom English is still indicated as the primary language.

Learning two or more languages from birth or in the first five years of life is associated with a range of benefits across cognitive, linguistic, and sociocultural domains. There is evidence to suggest these advantages persist across the lifespan. However, it is also true that DLLs, as a group, consistently fall behind their monolingual English-speaking peers in school achievement. For example, upon kindergarten entry, DLLs are significantly less likely to be kindergarten ready on six of six domains of the WaKIDS kindergarten entry assessment, and this gap persists regardless of household income category (see Table 1).

The good news is we know that participation in ECEAP is associated with much better outcomes for young DLLs when compared to same-age DLLs who are also from low-income families. The benefits of ECEAP for DLLs appear to be slightly more pronounced than for non-DLLs (see Table 1).

| Table 1: Percentage of Students Who Were Kindergarten Ready on Six of Six WaKIDS Domains (2018-19) |     |     |     |  |  |  |
|--|-----|-----|-----|--|--|--|
| DLL Non-DLL All  |     |     |     |  |  |  |
| ECEAP  | 26% | 38% | 34% |  |  |  |
| Lower Income   | 21% | 34% | 30% |  |  |  |
| Difference   | 5%  | 4%  | 4%  |  |  |  |

Note: Lower income corresponds to children who qualify for free or reduced-price lunch and did not receive ECEAP services before kindergarten entry.

Despite the ever-increasing linguistic diversity among ECEAP-enrolled children and concerns around achievement gaps leading up to and beyond kindergarten, little is known at the state level about how DLLs are supported in ECEAP classrooms and how these supports and strategies may contribute to improved outcomes. This report examines this question using a three-step approach.

First, it is necessary to understand how DLLs are being identified in ECEAP and, relatedly, what is known about these children as a group and as specific subgroups.

<sup>&</sup>lt;sup>1</sup> U.S. Department of Health and Human Services. (2016). *Policy statement on supporting the development of children who are dual language learners in early childhood programs*. Retrieved from <a href="https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/dll-policy-statement-final.pdf">https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/dll-policy-statement-final.pdf</a>.

Second, this report examines the available classroom language models (CLM) data, which are formal approaches<sup>2</sup> to instructing DLLs.

There are four CLMs, which range in the degree to which DLLs' home language(s) are supported (see Box 2). This section examines ECEAP CLMs relative to geographic location and demographic characteristics of enrolled children.

Third and finally, we examine the relationship between CLM type and academic and developmental outcomes for DLLs.

### Box 2: ECEAP Classroom Language Models

English Only: Teachers intentionally use English as the language of instruction and communication.

**English with Home Language Support (EHLS):** Every child is provided with daily instruction in English. Staff specifically plan and provide support for the home language of each child by engaging families and providing examples of each child's culture and language.

**Dual Language:** Teachers intentionally use English and a selected other language as the languages of instruction and communication, with equal time and focus in all areas of the curriculum.

**Home Language as a Foundation for English Development (HLFED):** DLLs are provided with daily instruction in their home language and over time, increasingly provided with instruction in English.

We explore this relationship with the understanding that context matters and different supports may be more appropriate for different children and different situations. Thus, the analysis explores interactions between child characteristics and classroom contexts to highlight the influence of various classroom factors such as classroom language composition, staff DLL training, and staff language characteristics. Based on previous research, we hypothesize that DLL English language outcomes on the Teaching Strategies GOLD® (TSG) assessment will be greater in classrooms where a child's home language is one of the languages of instruction (i.e., Dual Language or HLFED CLMs) and in classrooms where their home language is recognized and meaningfully incorporated into classroom activities and artifacts (i.e., EHLS CLMs). This finding has been well established broadly for early learning populations with demographic characteristics similar to that of ECEAP enrolled children.<sup>4</sup>

#### Data

This analysis includes all 3 and 4-year-olds enrolled in ECEAP during the 2018-19 academic year. This is the first year programs began reporting CLM information in ECEAP's Early Learning Management System (ELMS). It is also the most current academic year when child and program data collection was not impacted by COVID 19.

Using the 2018-19 student cohort, we were able to construct a single analytic data file that contains information from various sources in ELMS, including:

- Child/family demographic characteristics and prioritization factors
- Child enrollment duration
- Child outcomes (via TSG assessment)
- Site and classroom characteristics

<sup>&</sup>lt;sup>2</sup> ECEAP programs are instructed to indicate in ECEAP's ELMS the CLM of each classroom or "closest approximation."

<sup>&</sup>lt;sup>3</sup> Durán, L. K., Roseth, C. J., & Hoffman, P. (2010). An experimental study comparing English-only and transitional bilingual education on Spanish-speaking preschoolers' early literacy development. *Early Childhood Research Quarterly*, 25(2), 207-217.

<sup>&</sup>lt;sup>4</sup> Oliva-Olson, C. (2019). Dos Métodos: Two Classroom Language Models in Head Start. Strengthening the Diversity and Quality of the Early Care and Education Workforce Paper Series. Research Report. *Urban Institute*.

## Part 1: Understanding ECEAP's Dual Language Learners

## **Identifying DLLs in ECEAP**

ECEAP programs collect information about the home language and English language speaking ability in many different ways and for various reasons. Currently, several data fields are used by ECEAP programs to capture information about children's English-speaking ability and primary/secondary home languages. Each of these fields serves a different purpose. This information is depicted in Table 2 below.

Some of this information is more objectively associated with children's language ability, particularly in English, while other information aims to capture children's exposure to a language other than English in the home. Broadly, ECEAP programs collect information on children's English-speaking ability and primary/secondary language(s) spoken in the home to:

- Inform classroom practice and better serve the individual child
- Inform decisions made at the site, contractor, or state level about enrollment priority, program policies, or resource allocation

| Table 2: ECEAP Language Fields, Descriptions, and Percent Missing Data |  |                                       |  |  |
|--|--|---------------------------------------|--|--|
| Language Field   | Description  | Percent of Children with Missing Data |  |  |
| Primary/Secondary Language Spoken at Home                              | Indicates primary and secondary languages spoken in the home per parent report.  | 0%                                    |  |  |
| Child Speaks   | Indicates if a child speaks 'no,' 'some,' or 'only English' as determined by parent report. Currently, if a child's ECEAP application indicates that they speak only a home language other than English, or some English but mainly another home language, they receive eligibility priority points under the status of DLL. | 28%                                   |  |  |
| Parent Needs Interpreter   | Determined by parent report during the enrollment application process. If the answer is 'yes,' the child receives related eligibility priority points.   | 0%                                    |  |  |
| Home Language Survey (HLS)   | Collected by classroom staff as part of the TSG assessment as a means of determining the child's level of fluency in English.  | 33%ª                                  |  |  |
| Spanish Language and<br>Literacy Assessment                            | When administering the TSG assessment, programs have the option of assessing children's language and literacy skills in Spanish in addition to the required English language and literacy domains.   | 92% <sup>b</sup>                      |  |  |

<sup>&</sup>quot;Missingness includes 'Unspecified.'

Among the data fields listed in Table 2, the first, *Primary/Secondary Language Spoken at Home*, aligns most closely with the global definition for DLL provided in Box 1 of this report. It is also a data field that is collected consistently for every child enrolled in ECEAP. Other fields listed above provide more nuance about the child's actual language abilities in both English and a given second language and may in fact be more objectively collected than *Primary/Secondary Language Spoken at Home* (which is collected through parent report), but missingness in the data limits the ability to use these variables for broader cross-program analysis. For these reasons, this report will use *Primary/Secondary Language Spoken at Home* to broadly identify DLLs enrolled in ECEAP. Specifically, we will define DLL as any child whose primary home language is something other than English.

### A Note on Tribal DLLs

Tribal language preservation and revitalization are a top priority for tribes. ECEAP has several tribal providers who provide dual-language learning as part of tribal language preservation and revitalization efforts. It is important to point

<sup>&</sup>lt;sup>b</sup>Percentage not assessed in at least one Spanish domain in both fall and spring, among children whose primary home language was Spanish.

out that the definition of DLL established in this report may not encompass children who are DLLs within the context of a given tribal program. For many tribal DLLs, English is reported as the primary language spoken in the home, yet they are receiving instruction in both English and a tribal language in the classroom. While this report does not focus on children whose primary home language is English but are otherwise considered DLL (or are enrolled in DLL programs), we hope that the information provided can still help understand this subgroup, albeit indirectly.

### Characteristics of DLLs Enrolled in ECEAP

ECEAP DLLs bring incredible diversity to their classrooms, both linguistically and in terms of their lived experiences. This section summarizes the demographics of ECEAP's 2018-19 DLL population and how these children were distributed in ECEAP programs across the state.

ECEAP DLLs spoke about 95 different languages at home, with Spanish being the most common by a wide margin. Across the state, ECEAP enrolled families reported about 50 unique primary languages and 47 additional unique secondary languages spoken in the home. By a wide margin, the most common primary home language among ECEAP DLLs was Spanish, spoken at home by 76% of all DLLs. The next five most common languages were Somali, Arabic, Amharic, Vietnamese, and Russian (see Table 3).

| Table 3: Most Common Primary Home Languages Among ECEAP DLLs (2018-19) |           |                 |  |  |  |
|--|-----------|-----------------|--|--|--|
|  | DLL Count | Percent of DLLs |  |  |  |
| Spanish  | 3,754     | 76%             |  |  |  |
| Somali   | 216       | 4%              |  |  |  |
| Arabic   | 190       | 4%              |  |  |  |
| Amharic  | 111       | 2%              |  |  |  |
| Vietnamese   | 102       | 2%              |  |  |  |
| Russian  | 96        | 2%              |  |  |  |
| Punjabi  | 67        | 1%              |  |  |  |
| Chinese  | 58        | 1%              |  |  |  |

### Most ECEAP-enrolled DLLs are Hispanic.

Of the 4,956 DLLs enrolled in ECEAP in 2018-19, 3,722 (75%) were Hispanic. The other quarter of DLLs were Black (9%), Asian (7%), White (6%), and Native Hawaiian/Pacific Islander (NH/PI) (1%). All other racial/ethnic groups – American Indian/Alaskan Native (AI/AN), AI/AN-Multi, Black-Multi, and Multi-Other – made up less than 1% of DLLs (see Figure 1).<sup>5</sup>

4

<sup>&</sup>lt;sup>5</sup> This report reports mutually exclusive race and ethnicity categories according to <u>DCYF's WSRDAC/M standard</u>. It should be noted that ECEAP uses non-exclusive categories in many applications, including when engaging families around the topic of diversity.

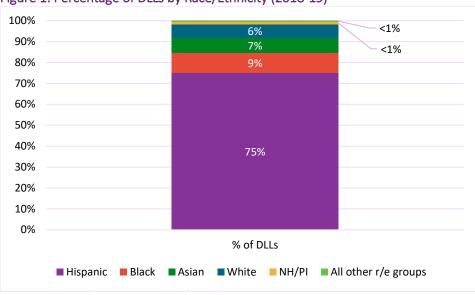


Figure 1: Percentage of DLLs by Race/Ethnicity (2018-19)

\*Note: All other r/e groups include AI/AN, AI/AN-Multi, Black-Multi, and Multi-Other.

### Most ECEAP enrolled children who are Asian and Hispanic are also DLLs.

The majority of children enrolled in ECEAP who were Asian or Hispanic were also DLLs. Roughly one-third of Black and one-quarter of Native Hawaiian or other Pacific Islander children were DLLs, respectively (see Figure 2).

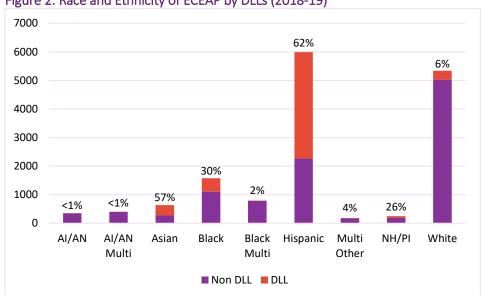


Figure 2: Race and Ethnicity of ECEAP by DLLs (2018-19)

\*Note: Percentages indicate the percentage of the total count of children in each racial/ethnic category who were DLL.

### ECEAP DLLs experience a range of risk factors but typically at much lower rates than non-DLL peers.

Across 24 risk factors reported by ECEAP families upon enrollment, DLLs were less represented or comparable with non-DLL peers in all categories except for four. These were *Parent Education at 6<sup>th</sup> Grade or Less, Parent Education 7<sup>th</sup>-12<sup>th</sup> No Diploma or GED, Migrant Parents, and Isolated Household.* Notably, 25% of DLLs had parents with a sixth grade education or less, compared to 2% of non-DLLs.

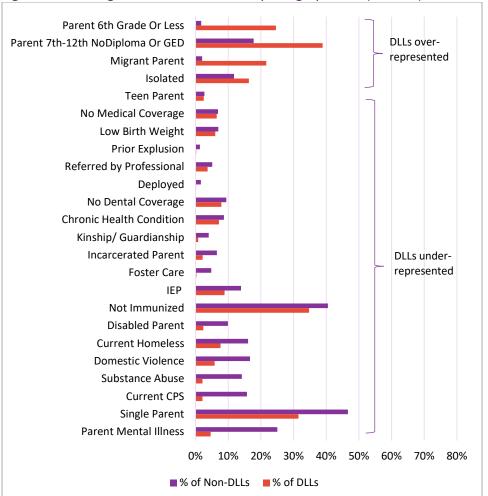


Figure 3: Percentage of DLLs and Non-DLLs by Category of Risk (2018-19)

### **Other Characteristics of DLLs**

#### Upon enrollment, 87% of DLLs speak little or no English.

ECEAP providers are limited in their capacity to assess fluency in children's non-English home languages, especially for languages other than Spanish. Providers are able to reliably assess English fluency among DLLs using the home language survey (HLS). From the subset of DLLs who received the HLS in 2018-19 (n=3,249), we can see that 87% were deemed to be below the threshold for English fluency. Among DLLs given the HLS who spoke a home language other than Spanish (n=790), 83% were below the threshold for English fluency.

### Most DLLs attended classrooms with other DLLs who spoke the same home language.

Among all 4,956 DLLs, 92% were in classrooms with at least one other child who spoke their home language, however, this percentage drops to 71% when Spanish was not the home language (99% when Spanish was the home language).

A greater number of primary home languages are reported in ECEAP sites located in metropolitan areas of the state. Figure 4 displays the number of different primary home languages reported across ECEAP sites within zip codes. More unique languages are reported in the state's metropolitan areas, including the greater Puget Sound region, Spokane, Vancouver, and Tri-Cities.

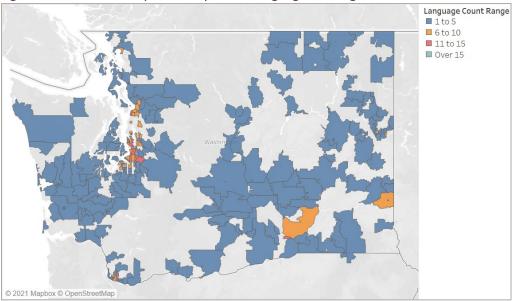


Figure 4: Number of Unique Primary Home Languages Among ECEAP-Enrolled Children by Zip Code (2018-19)

\*Note: Only ECEAP-served zip codes are shown.

## ECEAP contractors vary considerably in terms of the number of DLLs they enrolled and the percentage of their enrolled population who are DLLs.

In 2018-19, 49 of 53 contractors served at least one DLL (311 of 374 active ECEAP sites). Figure 5 shows the distribution of DLLs across ECEAP contractors, with the total number of DLLs plotted along the horizontal axis, and the percentage of DLLs plotted along the vertical axis. In 2018-19, most contractors (47 of 53) enrolled 200 or fewer DLLs. The percentage of contractors' total enrollment that was DLLs varied widely from 0% to 93%. There were three contractors with more than 250 DLLs, again with wide variations in the percentage of total enrollment from 27% to 72%.

Figure 5: Scatterplot Comparing the Percentage of Contractors' Total Enrollment Who Are DLLs, With the Count of DLLs Enrolled Under Individual Contractors

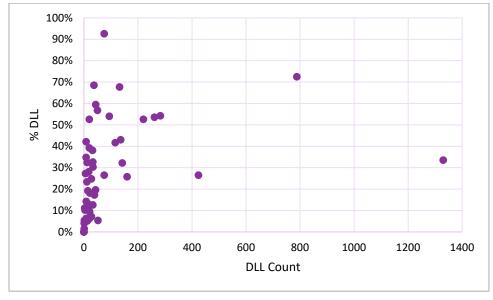


Table 4 shows the six contractors with the highest numbers of DLLs, as well as the six contractors with the highest percentage of DLLs. Note that many contractors with the highest percentages of DLLs are relatively small in terms of total enrollment. Yet, one contractor, Inspire Development Centers, appears in the top six contractors for both the numbers and percentage of DLLs. Inspire, whose programming includes Migrant Head Start, has ECEAP sites throughout the state, ranging from the northwest and Puget Sound regions to north and south-central Washington. Also, note that the Puget Sound, north-central, and south-central regions of the state are the most represented regions across all of these contractors.

| Table 4: Number and Percentage of DLLs by Contractor (2018-19) |                           |              |                     |  |
|--|---------------------------|--------------|---------------------|--|
|  | DLL Count                 | % DLL        | WA Regions Served   |  |
| Contr  | actors with Largest Numb  | per of DLLs  |                     |  |
| ESD 121 - Puget Sound ESD                                      | 1,330                     | 34%          | PS                  |  |
| Inspire Development Centers                                    | 788                       | 72%          | East, North, NC, SC |  |
| Snohomish County   | 424                       | 27%          | PS, North           |  |
| Enterprise for Progress in the Community                       | 283                       | 54%          | NC, SC              |  |
| ESD 123  | 261                       | 54%          | East, SC            |  |
| City of Seattle  | 220                       | 53%          | PS                  |  |
| Contra   | ctors with Largest Percen | tage of DLLs |                     |  |
| Wahluke School District  | 75                        | 93%          | NC                  |  |
| Inspire Development Centers                                    | 788                       | 72%          | East, North, NC, SC |  |
| Manson School District   | 37                        | 69%          | NC                  |  |
| Neighborhood House   | 132                       | 68%          | PS                  |  |
| Chelan-Douglas Child Services Association                      | 44                        | 59%          | NC                  |  |
| Edmonds Community College                                      | 50                        | 57%          | PS                  |  |

<sup>\*</sup>Note: PS = Puget Sound, NC = North Central, SC = South Central.

Roughly half of all DLLs are in classrooms where the lead teacher or assistant teacher speaks their home language. Among the 4,956 DLLs enrolled, 46% were in classrooms where either the lead teacher or an assistant teacher spoke their home language. This percentage was much higher for Spanish-speaking DLLs (59%) than non-Spanish speaking DLLs (6%).<sup>6</sup>

#### Most DLLs are taught in classrooms where English was the only formal language of instruction and/or assessment.

The majority of DLLs (73%) were taught in classrooms with a primary focus on English language development with varying degrees of home language support (i.e., English Only and EHLS CLMs). Among the remaining 27% of DLLs taught in Dual Language or HLFED classrooms, 95% were Spanish-speakers (see Table 5 for child counts).

| Table 5: Distribution of DLLs Across CLMs (2018-19) |       |       |       |     |  |  |
|---|-------|-------|-------|-----|--|--|
| English Only EHLS Dual Language HLFED               |       |       |       |     |  |  |
| Spanish-Speaking DLLs                               | 1,120 | 1,348 | 1,157 | 129 |  |  |
| Non-Spanish Speaking DLLs                           | 662   | 473   | 61    | 6   |  |  |
| Non-DLLs  | 6,418 | 3,479 | 619   | 44  |  |  |
| Total   | 8,200 | 5,300 | 1,837 | 179 |  |  |

In classrooms where Spanish is one of the languages of instruction, providers have the option of assessing the literacy and language development of DLLs in both English and Spanish. However, this is not done widely. Among all 3,754 Spanish-speaking DLLs, just 299 (8%) were assessed in at least one Spanish literacy and one Spanish language objective in both the fall and the spring of 2018-19. Almost all of these 299 children (99%) were in Dual Language classrooms.

<sup>&</sup>lt;sup>6</sup> These percentages speak only to lead and assistant classroom teachers. It is important to note that ECEAP family support staff also provide some support in the classroom in addition to extensive support to families, and many of these individuals are also bilingual.

## Part 2: Understanding ECEAP Classroom Language Models

## **Characteristics of Classroom Language Models**

### Four major CLMs are provided across all ECEAP classrooms.

In 2018-19, ECEAP funded slots in 965 classrooms. Among these classrooms, 534 (55%) were English Only, 313 (32%) were EHLS, 104 (11%) were Dual Language classrooms, and 14 (1%) were HLFED. For the remainder of this report, Dual Language and HLFED classrooms will be combined into one group since there is a relatively small number of HLFED classrooms and instructional approaches are similar across the two models.

## Teachers in Dual Language and HLFED classrooms are much more likely to receive/participate in DLL-focused training opportunities.

Teachers in Dual Language and HLFED classrooms were more likely to participate in DLL-focused training (78%) than EHLS and English Only classrooms (50% and 23%, respectively). Teachers in Dual Language and HLFED classrooms were also more likely than teachers in English Only and EHLS models to participate in various training opportunities with higher rates of participation in every type of training other than conferences.

| Table 6: Percentage of Teachers Participating in DLL-Focused Trainings by CLM (2018-19) |         |          |           |            |           |            |          |
|---|---------|----------|-----------|------------|-----------|------------|----------|
| CLM   | Reading | Coaching | Learning  | Conference | Workshops | In-Service | Any DLL  |
|   |         |          | Community |            |           |            | Training |
| Dual Language/  | 72%     | 68%      | 19%       | 10%        | 23%       | 73%        | 78%      |
| HLFED   |         |          |           |            |           |            |          |
| EHLS  | 22%     | 28%      | 9%        | 15%        | 18%       | 43%        | 50%      |
| English Only  | 15%     | 17%      | 8%        | 7%         | 14%       | 14%        | 23%      |

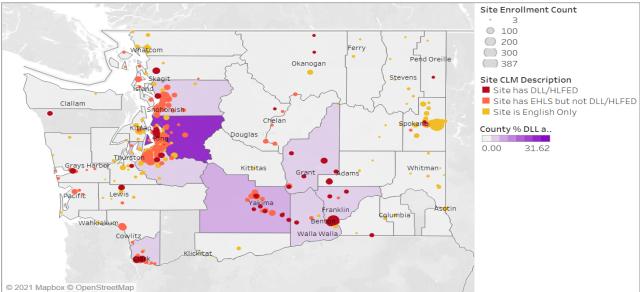
<sup>\*</sup>Conditional formatting (green = highest percent, <mark>yellow</mark> = medium, and <mark>red</mark> = low) is applied separately by column.

## **Classroom Language Supports for DLLs**

## Dual Language/HLFED classrooms are most concentrated in areas of the state with higher percentages of DLLs (among ECEAP enrolled children).

ECEAP sites with Dual Language/HLFED and EHLS classrooms were more likely to be located in counties where DLLs made up a higher percentage of ECEAP-enrolled children. Specifically, sites with non-English Only classrooms were concentrated in the South Puget Sound, south-central, and southwest regions of the state.

Figure 6: Geographic Distribution of CLMs and Percent DLL Among ECEAP Enrolled, Within Counties (2018-19)



## CLMs varied in terms of the average composition of DLLs enrolled, yet a sizable number of English Only classrooms enrolled more than 50% DLLs.

As was expected, classrooms implementing Dual Language/HLFED models had the highest percent of classrooms with more than half DLL enrollees (80%). Conversely, 13% of English Only classrooms enrolled more than 50% DLLs. Eleven English Only classrooms had classes composed of 75% or more DLLs.

| Table 7: Count and Percentage of CLMs by Classroom Composition of DLLs |          |          |  |  |  |
|--|----------|----------|--|--|--|
| CLM More Than 50% DLL More Than 75% DLL                                |          |          |  |  |  |
| Dual Language/HLFED  | 95 (80%) | 47 (40%) |  |  |  |
| EHLS   | 85 (27%) | 22 (7%)  |  |  |  |
| English Only   | 72 (13%) | 11 (2%)  |  |  |  |

# Part 3: Examining the Relationship Between CLMs and Language Outcomes for DLLs

## **Analysis**

This analysis explores the relationship between CLM and DLL outcomes. DLL outcomes were measured by fall to spring growth on the 1000-point language domain of the TSG assessment (English version). First, we compared language growth scores of DLLs in Dual Language/HLFED classrooms with those of DLLs in English Only classrooms. Second, we compared language growth scores for DLLs in EHLS classrooms with those of DLLs in English Only classrooms. Both comparisons were conducted through a series of regressions controlling for a range of program and child characteristics.<sup>7</sup>

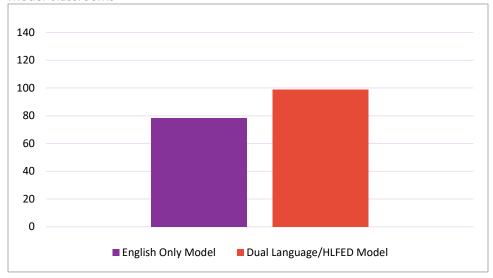
### **Results**

Compared with English Only models, Dual Language/HLFED classrooms are associated with increased fall to spring language growth scores for DLLs.

The regression model used for this analysis controlled for a range of child-level and classroom-level characteristics. This analysis reveals that DLLs in Dual Language/HLFED classrooms experience a significant increase in language growth scores compared to DLLs in English Only classrooms. Figure 7 displays predicted growth scores for DLLs in Dual Language/HLFED classrooms compared to DLLs in English Only classrooms using predicted margins from the regression post-estimation. This represents the predicted average growth for children in English Only model classrooms vs. Dual Language/HLFED model classrooms, controlling for a range of child- and classroom-level characteristics.

<sup>&</sup>lt;sup>7</sup> Controls include, [child level factors] fall TSG language scores, gender, age, family FPL, homelessness, CPS involvement, IEP, Spanish-speaking, [classroom level factors] classroom DLL composition, classroom model (part/school/working day). All models were clustered at the classroom level.

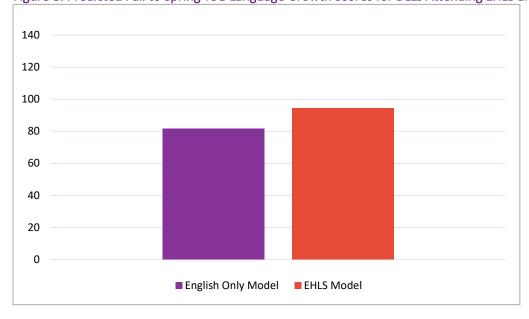
Figure 7: Predicted Fall to Spring TSG Language Growth Scores for DLLs Attending Dual Language/HLFED and English Only Model Classrooms



## When compared with English Only models, EHLS classrooms were associated with increased fall to spring language growth scores for DLLs.

The regression model used for this analysis controlled for a range of child-level and classroom-level characteristics. This analysis reveals that DLLs in EHLS classrooms experience a significant increase in language growth scores compared to DLLs in English Only classrooms. Figure 8 displays predicted growth scores for DLLs in EHLS classrooms compared to DLLs in English Only classrooms using predicted margins from the regression post-estimation. This represents the predicted average growth for children in English Only model classrooms vs. EHLS model classrooms, controlling for child- and classroom-level characteristics.

Figure 8: Predicted Fall to Spring TSG Language Growth Scores for DLLs Attending EHLS and English Only Model Classrooms

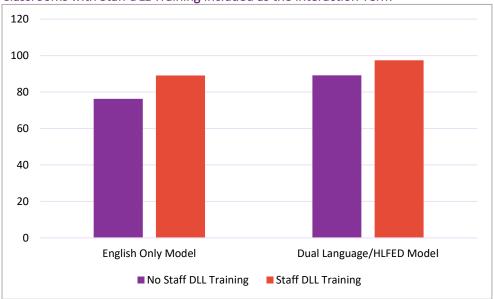


## **Key Interactions**

## The benefit of DLL/HLFED classroom models compared to English Only models are partially moderated by whether or not teachers received some form of DLL-focused training.

Subsequent to the main analysis, interaction terms were included to test the degree to which staff DLL training and teacher DLL language match act as potential moderators on the main effect. This reveals two important findings which may help to explain the apparent benefit of DLL/HLFED and EHLS models for DLL language growth over the course of the year. First, the benefit of DLL/HLFED models compared to English Only models is partially moderated by whether or not teachers received some form of DLL-focused training. DLL language growth scores improved with staff DLL training in both models, but the improvement is more substantial for DLLs in English Only classrooms. In both instances, the difference between DLL training and no DLL training is significant (see Figure 9). DLL training was not a strong moderator relative to the second comparison between EHLS and English Only classrooms.

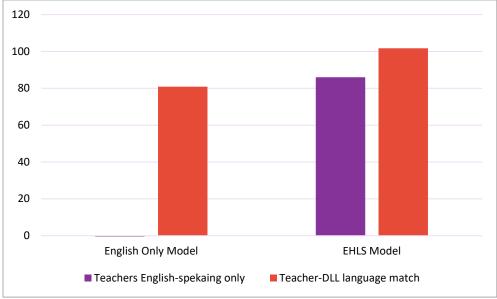




## The benefit of EHLS models for DLL language growth is largely moderated by whether or not DLLs have teachers who speak their primary home language.

The second finding revealed by the interaction analysis is that the benefit of EHLS models for DLL language growth is largely moderated by whether or not DLLs have teachers who speak their primary home language. That is to say, DLL language growth scores in EHLS models are comparable to English Only models when DLLs do not have a teacher who speak their primary home language. Only when DLLs have a teacher who speaks their primary home language that EHLS models are associated with increased language growth scores relative to English Only models. Within EHLS models, the difference between the existence of this language support and the absence thereof is significant. Note that in this sample, no teachers in English Only formats speak the same language(s) as the DLLs in their classroom, so we do not know how teacher DLL language match might benefit DLLs in those classrooms (see Figure 10). Teacher DLL language match was not examined as an interaction relative to the effect of Dual Language/HLFED models because teacher DLL language match was a fairly ubiquitous characteristic of these classrooms which prevents a meaningful comparison.

Figure 10: Predicted Language Growth Scores for DLLs Attending EHLS and English Only Model Classrooms with Presence of a Teacher DLL Language Match Included as the Interaction Term



## **Conclusions and Recommendations**

### **Identification of DLLs in ECEAP**

An exploration of ELMS data fields found multiple fields intended to capture children's home language and English language speaking abilities. Several fields are good candidates for the program-level identification of DLLs. However, they are either not collected reliably or only capture a partial definition of the construct. For example, the Child Speaks flag captures both home language and English language abilities, yet there is too much missing data to be relied upon for program-level analysis. Conversely, the Primary Home Language field in ELMS enrollment extract is reliably collected, yet captures DLL status fairly indirectly. This is because the field is based on parent report and does not use a standardized and objective assessment of children's language abilities.

**Recommendation:** Define the intent for collecting each DLL-related field and how the data are used. Implement training and QA structures to ensure DLL fields are consistently and accurately populated.

## **Characterizing DLLs Language Backgrounds**

Descriptive data reveals that DLLs are not monolithic but represent a range of language backgrounds. While most DLLs are from Spanish-speaking homes (75%), the remaining 25% of DLLs represent roughly 94 different language groups. DLLs from language backgrounds other than Spanish are less concentrated in sites and classrooms but could benefit from the same kinds of supports received more commonly by Spanish-speaking DLLs.

**Recommendation:** Develop language support resources for the additional 94 languages or a resource that can be universally applied. For example, techniques for supporting a wider range of language backgrounds might be explored and discussed in DLL training modules.

## **Understanding Social Factors Impacting DLLs**

Compared to English Only speakers, DLLs in ECEAP are disproportionally from homes where parent's educational attainment is limited, parents are migrants, and the family lives in an isolated location.

**Recommendation**: Effective strategies for enrolling DLLs and supporting them in the classroom should consider common risk characteristics and unique circumstances of their families. For example, implications surrounding the unique characteristics of DLLs and their families might be explored and discussed in DLL training modules.

## **Understanding Benefits of CLMs with Varying Degrees of Home Language Support**

Dual Language/HLFED and EHLS classrooms were shown to be significantly more effective than English Only classrooms for supporting English language development among ECEAP DLLs.

**Recommendation:** ECEAP should promote the implementation of Dual Language/HLFED and EHLS classroom models so long as these models are implemented intentionally and to fidelity. It may not be feasible for all classrooms serving DLLs to adopt a CLM with dedicated home language supports. For many classrooms, the composition of DLLs to non-DLLs may not be high enough to warrant such an approach which may require staffing and resource investments. However, the descriptive analysis conducted in Part Two of this report indicates that as many as 72 of 534 English Only classrooms enrolled more than 50% DLLs in 2018-19 (amounting to 751 DLLs). In these situations, where most of the children enrolled in the classroom are non-English speaking, adopting a CLM with some level of home language support is warranted.

## **Understanding the Benefit of DLL-Focused Training for All ECEAP Classroom Teachers**

Teachers in Dual Language/HLFED and EHLS classrooms were much more likely than teachers in English Only classes to participate in some DLL-focused training and also tended to participate in a broader range of training opportunities (Table 6). Moreover, a series of interaction models presented in Part Three of this report revealed that DLLs language growth scores were greater for both English Only and Dual Language/HLFED formats when the classroom staff received some form of DLL-focused training. Curiously, staff DLL training did not appear to have a positive impact on DLL outcomes in EHLS classrooms. Nevertheless, analyses presented in the report broadly point to the benefits of DLL-focused training for ECEAP teachers.

**Recommendation**: Ensure that DLL-focused trainings are promoted and made available to all ECEAP teachers, even those with only a small percentage of DLLs enrolled in their classrooms or those who teach in English Only formats. ECEAP might also examine the extent to which lack of access to DLL-focused trainings may be a barrier to programs that may otherwise wish to adopt non-English Only CLMs.

# **Understanding the Value of Staff-to-Child Language Match for Promoting Outcomes Among DLLs**

As would be expected, DLLs in Dual Language/HLFED and EHLS classrooms were much more likely than those in English Only classes to have a teacher who speaks their primary home language (97% of DLLs in Dual Language/HLFED classrooms, 54% of DLLs in EHLS classrooms, and 0% of DLLs in English Only classrooms). Moreover, staff-to-child language match appeared to be a primary driver behind the effectiveness of EHLS classrooms in promoting DLL language outcomes. This was not examined relative to Dual Language/HLFED classrooms, as instruction in a language other than English is a fundamental characteristic of this model.

**Recommendation**: ECEAP should continue recruiting and supporting bilingual teachers, especially those who match the language characteristics of the communities various programs are serving.

# Accurate Characterization and Identification of CLMs Being Implemented Across ECEAP Programs

Currently, programs are prompted with a list of brief definitions of each CLM and asked to indicate to which their classroom practices most closely align. Thus there is some level of subjectivity in determining the degree of intentional planning and instruction in English and non-English that qualifies a classroom as Dual Language or HLFED. The same is likely true in determining exactly what level of home language support qualifies as EHLS. Future research on this topic will benefit from more valid and reliable data collection in this area.

**Recommendation:** Language model indicators may be more valid if the question consisted of several checklist items. Checklist items would correspond to the technical definitions of each CLM, and programs would be designated by a given CLM based on the items selected. This could remove some of the subjectivity in responses and lead to more robust

examinations of this topic in the future. ECEAP might also explore building these definitions into QA, site review, or certification processes already in place.