Preparation and Practice Among Teachers in California’s Transitional Kindergarten Classrooms

Understanding How Teachers Support a Diverse, Multilingual Population of Young Learners

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Introduction

With the expansion of transitional kindergarten (TK) across the state of California, all 4-year-old children will be eligible to enroll in TK classrooms in the 2025–26 school year. This shift in eligibility marks a massive increase in the number of young children in the state who will be served by TK programs, with enrollment expected to quadruple by 2026 (Melnick et al., 2022). Previous investigation has shown that TK has positive impacts on children’s academic learning and engagement (Manship et al., 2017); for these benefits to be sustained as eligibility expands, it is critical to ensure that TK teachers are well prepared and able to provide developmentally appropriate instruction in these classrooms. However, TK teachers have a range of training and experience with this age group. Elementary education teacher preparation programs currently offer the only pathway to obtain a credential to teach TK, and yet these programs often do not incorporate early childhood education or child development into their training (Elliott et al., 2024).

TK expansion also stands in a unique position to address inequities in early education. More than half of all children in California under age 5 have at least one parent who speaks a language other than English at home (UCLA Center for Health Policy Research, 2020), and the benefits of attending TK are particularly pronounced for these dual language learners (DLLs) (Holod et al., 2020; Manship et al., 2017). As a larger number of DLLs become eligible to enroll in TK, there is a growing need to understand how TK teachers support these students, including potential supports for the home language in the classroom that have been shown to predict learning outcomes (Holtzman et al., 2022).

In this study, we describe teachers’ perspectives and practices in a small sample of TK classrooms in California to understand how teachers support 4- and 5-year-olds broadly, as well as their DLLs. Specifically, the study team conducted teacher interviews and classroom observations in a sample of TK classrooms across the state to identify common practices, supports, and strategies used in TK classrooms and additional resources that TK teachers may need.

Highlights

- Most teachers in our sample felt confident about teaching TK but wanted additional training, supports, and resources specific to TK, including professional development, curricula, and materials.
- The teachers in this sample provided developmentally appropriate instruction in terms of the activities, settings, and classroom layouts observed.
- Spanish dual language immersion programs provided rich exposure to Spanish in both instruction and materials, and teachers in non-dual language immersion classrooms also integrated occasional Spanish support, though they had fewer classroom environment materials in Spanish.
- There were many different home languages represented by the TK students across the sampled classrooms, but home language support by TK teachers occurred only in Spanish (and in Vietnamese in the Vietnamese dual language immersion program).

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1 By August 2025, TK teachers will be required to have additional coursework or professional experience specific to early childhood education.
The following topics are addressed in this report:

1. **TK Teacher Training and Support**
   - How prepared do teachers feel to teach TK?
   - How prepared do TK teachers feel to support the DLLs in their classroom?
   - What kinds of supports do teachers receive to teach TK?
   - What additional training or support do teachers feel they need to effectively teach TK?

2. **TK Classroom Activities and Structure**
   - What instructional activities do TK teachers provide for their students?
   - What does the layout of TK classrooms look like?
   - What curricula and assessments do TK teachers use?
   - What additional resources or materials do teachers feel they need in their classrooms?

3. **Linguistic and Environmental Supports for Dual Language Learners**
   - To what extent do TK classrooms use the home language of DLLs?
   - How do teachers promote the development of oral language in both English and students’ home languages?
   - To what extent are the linguistic and cultural backgrounds of DLLs and all students represented in the classroom?

**Sample**

To address these questions, we conducted a descriptive, exploratory study of 18 TK classrooms in California. Participating schools and classrooms were selected based on student demographic/language backgrounds and geographic location of the district to ensure diversity in our small sample. To be included in the study, all classrooms needed to have at least one student enrolled who was exposed to a language other than English at home. Because of the study’s descriptive nature and small sample, this study is not intended to be representative of all classrooms across the state.

Classrooms came from 16 schools in eight districts and were selected to ensure diversity by region, size, and student population. Of the 18 classrooms, five were Spanish dual language immersion (DLI) classrooms, one was a Vietnamese DLI classroom, and the remaining 12 were non-DLI classrooms. Four of the Spanish DLI classrooms were 90-10 models (in which Spanish was
spoken for the majority of the day and English was used for approximately 10% of the time) and one followed a 50-50 model (in which they used Spanish the first half of the day and English the second half of the day). The Vietnamese classroom also followed a 50-50 model (with Vietnamese instruction for the first half and English instruction for the second half). All but two classrooms were stand-alone TK classes; the other two were TK/Kindergarten combination classrooms.

On average, 83% of students in the DLI classrooms were DLLs (with a range of 63%–100%), and 51% in non-DLI classrooms were DLLs (with a range of 13%–89%). Spanish was the most common language spoken by DLLs; 98% of the DLLs in Spanish DLI programs were exposed to Spanish at home, and 100% of DLLs in the Vietnamese DLI programs were exposed to Vietnamese at home. In non-DLI classrooms, only 73% of DLLs, on average, were exposed to Spanish at home. In 10 of the 12 non-DLI classrooms, additional home languages other than Spanish were reported, with 1–3 students per classroom hearing each language at home. In total, there were nine other home languages represented across these classrooms; Exhibit 1 shows the number of classrooms with DLLs for whom a given language is their home language.

Exhibit 1. Distribution of DLLs’ Home Languages Across Classrooms in Our Study

<table>
<thead>
<tr>
<th>Language</th>
<th>Number of classrooms with DLLs exposed to this language at home</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish</td>
<td>17</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>5</td>
</tr>
<tr>
<td>Punjabi</td>
<td>4</td>
</tr>
<tr>
<td>Persian</td>
<td>3</td>
</tr>
<tr>
<td>Tagalog</td>
<td>3</td>
</tr>
<tr>
<td>Hmong</td>
<td>2</td>
</tr>
<tr>
<td>Indigenous American languages³</td>
<td>2</td>
</tr>
<tr>
<td>Mandarin</td>
<td>2</td>
</tr>
<tr>
<td>Japanese</td>
<td>1</td>
</tr>
<tr>
<td>Hindi</td>
<td>1</td>
</tr>
<tr>
<td>Laotian</td>
<td>1</td>
</tr>
</tbody>
</table>

² The Vietnamese classroom was a unique case. The 50–50 model was split by teacher/classroom: the children spent the first half of the daily instructional time in the Vietnamese immersion classroom with one teacher and the second half of the day in a different classroom with an English teacher (the children would move classrooms after recess). The first classroom was observed for four cycles, and the second classroom was observed for nine cycles.

³ There were multiple indigenous American languages spoken by the DLLs in our sample, but the teachers interviewed did not always know or share the names of each language or the exact number of different indigenous languages spoken. Two that were known included Tolowa and Yurok.
Approach

Because this exploratory study drew on a small sample of classrooms, the results presented in this report are not representative of instruction in all TK classrooms in California but rather reflect what we observed and learned from this specific sample. The investigation comprised classroom observations, teacher surveys (included as the first part of the observation tool), and teacher interviews. The study team interviewed the 18 lead TK teachers about their classroom composition (e.g., number of DLLs, languages spoken, age distribution), their own backgrounds (e.g., experience, qualifications, language skills), professional development received, classroom language model and language use, classroom practices, and classroom materials and resources. We used qualitative analysis methods to characterize TK classrooms and teachers, describe trends in supports and strategies for teaching DLLs, and identify needs for additional supports or resources for teachers to support DLLs’ learning. The full interview protocol is in Appendix A.

The classroom observations were conducted using the Classroom Observation of Language and Environmental Supports for Dual Language Learners in Early Learning Settings (COLES-DLL) observation instrument. The goal of the observations was to understand language use and supports for DLLs in TK classrooms. The full COLES-DLL instrument is in Appendix B.

The COLES-DLL observation instrument consists of the following four parts:

- **Part 1.** A brief survey of the teachers’ background and classroom structure (completed before the observation)
- **Part 2.** Observations of language interactions between teachers and DLL children across the observation period (using a cycle coding approach, described in more detail later)
- **Part 3.** Ratings of the environment, including linguistic, cultural, and racial representation of materials (e.g., environmental print, media, books, displays)
- **Part 4.** A checklist of content areas and instructional activities/routines observed (including the extent of English and home language used for each) and other global ratings that reflect the full observation period

In Part 2 of the COLES-DLL, observers followed a cycle coding approach, in which they observe and code interactions on a single coding sheet until a transition point, at which time they start a new coding sheet. Cycles lasted between 2 and 15 minutes each. Observers began a new cycle with any change in content area or setting (and coded up to 15 minutes for new activity). For each cycle, observers recorded the frequency with which teachers used strategies to support

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4 Adapted from the Preschool Assessment of Interactions: A Culture, Race, and Language Scale (Oliva-Olson et al., 2023). We obtained permission from the first author, Dr. Carola Oliva-Olson, to modify the original tool, based on the needs and questions of interest for this specific study.
DLLs’ language learning (e.g., reinforcing or explicitly teaching vocabulary, using props or gestures, modeling language, asking questions) and in which language these occurred (see Appendix B for more detail). Observers also recorded the setting of the activity (e.g., large group, small group, free choice/centers) and the content area focus (e.g., literacy, math, science, social studies, social-emotional learning, music and movement, art) for each cycle.

Observations were conducted from the beginning of the school day and typically ranged from 3 to 4 hours in length. Observers tried to observe the full range of content areas and activities covered in a typical morning (depending on schedules). For example, if book reading typically occurred after lunch, observers tried to stay to ensure they observed a book reading session. On average, observers coded approximately nine cycles for a given observation period (with a total range of 7–13 cycles for all classrooms).

Data from all observations, surveys, and interviews were synthesized and quantified. In the sections that follow, we provide an overview of the study’s findings by each of the broad topic areas examined: (a) teacher training and support, (b) classroom activities and structure, and (c) linguistic and environmental supports for DLLs.
1. TK Teacher Training and Support

During interviews, we asked teachers how they came to teach TK and how prepared and confident they feel about teaching the grade. We also probed teachers about their confidence in supporting DLLs in their classrooms. To learn more about how professional learning and teacher preparation could be improved, we also delved into what kinds of training these teachers had received and what additional training or support they feel they need to be able to teach TK effectively.

How prepared do teachers feel to teach TK?

Overall, the majority of TK teachers in our sample were newer to teaching TK but have had years of experience teaching other grades (largely preschool or kindergarten). The teachers reported an average of more than 10 years of classroom experience overall. Prior to teaching TK, roughly half taught in preschools or other early childhood settings (e.g., child care centers), but many reported having taught in kindergarten classrooms. A few also reported having experience in Grades 1–3, in addition to their kindergarten or preschool experience. More than half of the interviewed teachers reported that this was their first or second year teaching TK, but a few had been teaching TK between 6 and 11 years (since its inception in 2012). Two teachers were currently teaching under an emergency credential. All but four teachers reported that they had completed the 24 early childhood education units or a degree in early childhood education, which will be required to teach TK as of August 2025. More than two thirds of the TK teachers in the sample had completed at least some education beyond a bachelor’s degree.

Overall, the TK teachers we interviewed reported feeling confident about teaching TK. Confidence levels among TK teachers were generally high, with teachers reporting that they feel most prepared in areas such as communicating with young children, managing behavior, supporting cognitive development, and teaching literacy. Areas of less confidence included adapting to newly announced curricular changes, adhering to a prescribed curriculum (compared to private preschool settings with more flexibility), managing children of a lower maturity level than what they were accustomed to, and working with children facing learning challenges. Prior experience in preschool or kindergarten classrooms emerged as the most frequently cited factor in what teachers felt prepared them most for TK instruction. Working collaboratively with a mentor or with other teachers also played a significant role. Some

In Their Own Words

“We collaborate with other teachers that are teaching TK and K. Just hearing what they’ve been doing for a while, because some of them have been experienced teachers in TK or kinder, has been very helpful.”

“Working in preschool definitely braced me for a really big chunk of what TK is.”
teachers mentioned their early childhood coursework and district-provided training as being helpful, although one teacher specifically noted that her training was not as beneficial as her prior experience in the classroom.

How prepared do TK teachers feel to support the DLLs in their classroom?

Many study teachers reported feeling confident about teaching DLLs, and being bilingual (as opposed to any particular training) was identified as the most helpful factor in teaching DLLs. More than half of the interviewed teachers reported feeling confident about teaching DLLs, though several said that teaching DLLs was a challenge or potential area of growth for them. When asked what experiences or training had most helped teachers feel prepared to teach DLLs, many of them highlighted the advantage of being bilingual (and growing up as a DLL) themselves—and not any particular training they had received. Other beneficial factors included prior work experience, coursework or credentialing in bilingual education (e.g., Bilingual, Cross-Cultural, Language and Academic Development [BCLAD]), and having an aide in the classroom who spoke at least one of the same languages as the DLL students. Challenges included communication barriers with children speaking languages other than the language(s) teachers speak, difficulties in communicating with families, obtaining classroom materials in various languages, and addressing behavioral issues with students who may be bored or who struggle to understand the teacher because of a language barrier.

What kinds of supports do teachers receive to teach TK?

The majority of study teachers had participated in training or workshops, but just a few reported training that was specific to TK. When asked about professional development or training related to teaching TK, teachers frequently mentioned attending workshops on topics such as curricula, assessments, social-emotional learning, behavior, math and STEM, and play-based learning, but just a few reported that these workshops were specific to the TK grade level. In addition, more than half of the teachers interviewed mentioned participating in a professional learning community with other teachers in their school or district, or otherwise meeting with teachers to collaborate and share ideas; however, several teachers specifically mentioned wishing that their professional learning communities were not mixed with teachers
from grades other than TK. Specifically, while several teachers shared that hearing from other teachers about what works in their classrooms is very helpful, others expressed that the content of their professional learning communities is not particularly relevant or useful because they are grouped with kindergarten teachers, as opposed to just with other TK teachers. Several teachers also mentioned attending early learning conferences such as the California Kindergarten Conference or the ELEVATE Conference. One teacher who attended the California Kindergarten Conference mentioned that there was a lot of beneficial content specific to TK.

Fewer than half of the teachers received training specifically on teaching DLLs; of these teachers, several mentioned that the training was infrequent, not specific to TK, and/or not particularly helpful. A few teachers mentioned seeking out training, courses, or professional associations to learn more about teaching DLLs. For example, one teacher reported joining the California Association for Bilingual Education to learn more about how others teach DLLs.

**About half of the teachers in our sample receive coaching.** In addition to training and workshops, approximately half of the teachers we interviewed also reported receiving coaching. The majority of these teachers’ coaches are current or former teachers employed by the school district. Teachers mentioned working with their coaches to understand curricula, manage difficult behaviors, prepare materials, and set up their classrooms. Several interviewed teachers spontaneously mentioned how “amazing,” “really helpful,” or “very knowledgeable” their coaches are. Teachers receiving coaching highlighted their coaches’ expertise, responsiveness, and experience teaching TK-aged students as particularly beneficial to them.

**What additional training or support do teachers feel they need to effectively teach TK?**

Despite their general feelings of confidence, the TK teachers in this study feel they need more training and support in particular areas. When asked what additional training or support they need to help them effectively teach TK, the most common requests included training or other professional development on

- teaching the TK grade level specifically,
- working with students who have special needs or behavioral challenges,
- supporting DLLs, and
- teaching math or STEM.

Other needs teachers mentioned included wanting opportunities to observe or shadow experienced TK...
teachers, time to collaborate with other TK teachers, guidance on how to use given curricula, and support for teachers to take language classes so they can better communicate with their DLLs who do not speak English.

Summary
The TK teachers in our sample generally reported that they feel confident about teaching TK, with an average of 10 years of teaching experience, even though they are largely new to the TK grade level. Fewer than half, however, reported feeling confident about teaching DLLs in their TK classrooms. Teachers who are bilingual mentioned being bilingual as the most helpful factor in teaching DLLs. Teachers generally participate in training and workshops, but they feel that they would benefit from having more professional learning opportunities, such as training focused on how to teach the TK grade level in particular, how to work with students who have special needs, how to support DLLs, and how to teach math or STEM.

2. Classroom Activities and Structure

TK sits in a unique position between traditional preschool programs and kindergarten, embedded in the K–12 public school system but with different facilities and curriculum requirements than kindergarten classrooms. Given this position, it is important to understand how teachers and school leaders build TK classrooms that are developmentally appropriate for young children, both in terms of instruction and materials, especially when considering the range of experience and confidence in teaching 4- and 5-year-olds described earlier. In considering classroom layouts, for example, elements such as a rug for circle time centers for play and exploration are commonly found in preschools but not in older grades. These physical environments allow children to choose different ways to sit, move their bodies freely, and explore hands-on objects, as is developmentally appropriate for young children’s learning (Wixson, 2021). In this next section, we describe the activities, layout, and materials in TK classrooms to understand how TK teachers supported their 4- and 5-year-old students within the K–12 public school system.

What instructional activities do TK teachers provide for their students?

Content

Literacy was the most frequently observed content area covered and was, in fact, the only content area observed in all classrooms during the observation period. In all classrooms (100%) in our sample, we observed the teacher leading a lesson or activity focused on literacy, and two thirds (67%) of classrooms were observed doing at least one math lesson. Social-emotional and music and/or movement activities occurred in slightly less than half (both 44%)
of classrooms, and science occurred in just one third (33%) of classrooms. Social studies (22%) and art lessons (22%) were the least frequently observed. Examples of the types of activities observed for each content area are provided in Exhibit 2.

**Exhibit 2. Activity Examples for Each Content Area**

<table>
<thead>
<tr>
<th>Content area</th>
<th>Examples of activities observed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Literacy</strong></td>
<td>• Making letters with different materials (e.g., Play-Doh, wooden sticks, tracing on worksheet)</td>
</tr>
<tr>
<td></td>
<td>• Phonological awareness activities (e.g., letter sounds; blending and segmenting words)</td>
</tr>
<tr>
<td></td>
<td>• Practicing reading sight words</td>
</tr>
<tr>
<td></td>
<td>• Teacher-led book reading activities</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td>• Counting items</td>
</tr>
<tr>
<td></td>
<td>• Identifying and drawing shapes</td>
</tr>
<tr>
<td></td>
<td>• Learning about patterns by stacking cubes</td>
</tr>
<tr>
<td><strong>Social studies</strong></td>
<td>• Lesson and worksheet on “Las Posadas” holiday celebration</td>
</tr>
<tr>
<td></td>
<td>• Students sharing what they were doing to celebrate different holidays</td>
</tr>
<tr>
<td></td>
<td>• Show and tell</td>
</tr>
<tr>
<td><strong>Social-emotional learning</strong></td>
<td>• Discussing emotions</td>
</tr>
<tr>
<td></td>
<td>• Individual shares or “news” from each child</td>
</tr>
<tr>
<td></td>
<td>• Breathing exercises or “mindful moments”</td>
</tr>
<tr>
<td><strong>Science</strong></td>
<td>• Identifying the five senses and what they are used for</td>
</tr>
<tr>
<td></td>
<td>• Discussing properties and sorting of fruits and vegetables</td>
</tr>
<tr>
<td></td>
<td>• Learning about specific life science concepts (e.g., trees growing, sharks)</td>
</tr>
<tr>
<td><strong>Music/movement</strong></td>
<td>• Playing songs with academic content (e.g., ABCs, colors)</td>
</tr>
<tr>
<td></td>
<td>• Singing/moving along to songs on YouTube (e.g., Bear Hunt, Christmas songs)</td>
</tr>
<tr>
<td></td>
<td>• “Brain breaks” (e.g., running in place, movement)</td>
</tr>
<tr>
<td><strong>Art</strong></td>
<td>• Coloring (e.g., worksheets, thank-you cards)</td>
</tr>
</tbody>
</table>

Not only was literacy observed in all classrooms, it was also the most frequently observed activity, on average. On average, 45% of cycles were literacy lessons, though the range across classrooms was wide: literacy was the focus of just 10% of cycles in one classroom, while in another, 75% of the cycles were literacy focused. On the other hand, an average of 17% of cycles were math-focused. The range included a classroom with no math at all on the low end, and a classroom with 40% math lessons on the high end. Exhibit 3 presents the means and ranges for all observed content areas.
Exhibit 3. Range and Average Percentage of Cycles Focused on Each Content Area

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literacy</td>
<td>45%</td>
</tr>
<tr>
<td>Math</td>
<td>17%</td>
</tr>
<tr>
<td>SEL</td>
<td>6%</td>
</tr>
<tr>
<td>Music and/or Movement</td>
<td>6%</td>
</tr>
<tr>
<td>Science</td>
<td>5%</td>
</tr>
<tr>
<td>Social Studies</td>
<td>4%</td>
</tr>
<tr>
<td>Art</td>
<td>2%</td>
</tr>
</tbody>
</table>

Note. SEL = social-emotional learning. The average percentages of cycles focused on each content area are shown in the figure, with bars representing the observed range. Some activities included multiple content areas in the same activity (e.g., reading a book about science was coded in both literacy and science), so these are not mutually exclusive. Codes reflect activities/lessons that were part of the main focus for the entire cycle. Typical morning meeting routines were not included in the content counts, even if they included brief reference to a content area (e.g., letter of the day, counting “friends”).

Setting

Large group was the most common setting observed in the TK classrooms, but all classrooms also included other instructional settings, such as free-play or small groups. All classrooms were observed participating in at least two large-group activities across the observation period. Slightly more than three quarters of TK classrooms also conducted at least one small-group instruction activity during the observation, and two thirds of TK classrooms provided opportunities for free play during the observation. One-on-one instruction between the teacher and a student was observed in just one classroom.

The majority of TK classrooms in the sample also provided opportunities for individual work time during the observation period. During individual work time, children were more likely to be working on their own without teacher guidance (72% of classrooms were observed providing this opportunity at least once), rather than completing teacher-guided independent work (28% of classrooms), where children worked individually on an activity that was led by the teacher. About two thirds of classrooms had at least one free choice/play session during the observation period. Exhibit 4 gives the classroom settings observed, by frequency of cycles.

5 These findings reflect only what observers were able to observe during the observation period. While observers did try to observe all content areas and settings that were covered on a typical day of TK instruction (based on reviewing their typical schedules), some observations may not reflect all activities that a given classroom routinely provided, particularly if a certain content area or activity typically occurred in the afternoon.
**Exhibit 4. Settings Observed**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Percentage of classrooms with at least one coded cycle of a given setting (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large group</td>
<td>100% (18)</td>
</tr>
<tr>
<td>Small group</td>
<td>78% (14)</td>
</tr>
<tr>
<td>Individual</td>
<td>72% (13)</td>
</tr>
<tr>
<td>Free choice/play</td>
<td>67% (12)</td>
</tr>
<tr>
<td>Teacher-led independent work</td>
<td>28% (5)</td>
</tr>
<tr>
<td>One-on-one</td>
<td>6% (1)</td>
</tr>
</tbody>
</table>

**Activities**

A variety of instructional activities were observed in our sample of TK classrooms, including morning meeting, book reading, and writing. All classrooms engaged in some type of “morning meeting” (which typically involved a morning greeting, attendance, brief calendar and/or weather activity, and occasionally a brief reference to instructional content, like letter of the day, or counting friends). Most TK teachers also conducted a read-aloud book reading session and offered opportunities for children to practice writing. Fewer teachers (half) provided opportunities for some type of hands-on guided lesson, which were defined as children being able to explore, work with, or manipulate some type of object or material to achieve a learning goal (not including drawing or writing). Examples of hands-on activities included using manipulatives to count or practice math concepts or using materials to make letters.

**Exhibit 5. Percent of Classrooms Observed Engaging in Specific Instructional Activities**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage of classrooms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning meeting</td>
<td>100% (n = 18)</td>
</tr>
<tr>
<td>Book reading (teacher-led)</td>
<td>83% (n = 15)</td>
</tr>
<tr>
<td>Opportunities for writing practice</td>
<td>83% (n = 15)</td>
</tr>
<tr>
<td>Hands-on guided lesson</td>
<td>50% (n = 9)</td>
</tr>
</tbody>
</table>

*Note. These specific instructional practices were included in the observation protocol given that they are common in early childhood classrooms. Observers recorded whether or not they occurred across the full observation period, regardless of the content area or setting in which they occurred.*

**What does the layout of TK classrooms look like?**

All TK classrooms in the sample had developmentally appropriate elements in their classrooms, such as a rug for circle time and centers. There was variability in terms of the
availability and setup of learning centers: some had very clearly defined centers integrated into the classroom with labels and toys easily accessible to children, while others were more on the periphery of the classroom and sometimes involved teachers taking out certain types of materials relevant to the center theme for children to access. The majority of classrooms (72%) had a “cozy corner,” a developmentally appropriate classroom element provided for young children to go to calm down, practice emotional regulation, or just take a break. Almost all classrooms (94%) had a sink, but only slightly more than half (56%) had a bathroom in the classroom. The absence of bathrooms in the classroom is a noted challenge because younger children may have less success traveling longer distances to get to a bathroom, need assistance from an adult, or have difficulty using toilets or sinks designed for larger children. The presence of desks was observed in only one classroom, and the desks were grouped so that they functioned like a large table. It is encouraging to see that TK classrooms still reflect many of the key elements of preschool classrooms and mimic these environments—rather than traditional primary school settings—though there is room for more attention to this.

What curricula and assessments do TK teachers use?
The TK teachers in this study generally follow a district-selected curriculum. In six of the eight districts, TK teachers reported using a curriculum selected by the district, such as Benchmark (including Advance, Adelante, Ready to Advance), Wonders/World of Wonders, or Creative Curriculum. In the other two districts, TK teachers are not given a specific curriculum to follow. Some districts supplement their primary curriculum with programs such as Heggerty for phonics, Handwriting Without Tears for writing, and Second Step or Kimochis for social-emotional learning. One teacher noted that there was not a good math curriculum available; teachers in another district mentioned that their district staff developed a set of STEM units themselves.

Teachers use either preschool- or kindergarten-level standards, or a combination of the two. When asked about what standards they use in their classroom, most teachers reported using California Preschool Learning Foundations, the California Common Core State Standards for Kindergarten, or a combination of the two. Several teachers mentioned confusion about whether to use preschool or kindergarten standards because of ambiguous or changing guidance from their district. One teacher commented, “TK is still working on standardizing their standards.”

In Their Own Words
“We just switched our curriculum, so last year we started it, it’s called Creative Curriculum, and this is my second year. And I was assigned a coach last year, but we didn’t get to meet until February, so we’re still kind of trying to catch up with all the changes. Heggerty was just introduced this year, too; that’s another phonics curriculum we’ve been trying to implement. . . . We’re still trying to figure out the best curriculum for our kids and how to roll that out, and we’re kind of learning as we go.”
TK teachers typically use the Desired Results Developmental Profile, district-developed assessments, or self-created assessments to measure their students’ learning. About half of the teachers in the sample reported using the observation-based Desired Results Developmental Profile to assess student development and learning, although some teachers shared that they find the tool to be too time-consuming or not academic enough. Several teachers mentioned that they use assessments developed within their district, while a few others reported that they create their own assessments based on the standards they use. Online programs such as ESGI (Educational Software for Guiding Instruction), Learning Genie, and Imagine Learning help teachers collect and review assessment data. Most teachers reported using the same assessments for their DLL students as their non-DLL students, with a few adding that they will ask DLLs the assessment questions in both English and Spanish, and two others reporting that they used additional assessments to monitor DLLs’ language development.

What additional resources or materials do teachers feel they need in their classrooms?

TK teachers feel they need a TK-specific curriculum, as well as other resources and classroom supplies such as manipulatives. When asked what resources or materials they need to help them effectively teach TK, several teachers reported on the inadequacy of the current curricular guidance. A few mentioned wanting a specific social-emotional learning curriculum, one wanted a math-specific curriculum, and another mentioned wanting a curriculum that incorporates more higher order thinking skills like problem solving and memory. This finding aligns with observation findings, showing that a focus on literacy was most common, whereas math, and particularly science, occurred less often. This may not be because of the lack of a specific TK math curriculum, but it is worth noting.

A few teachers mentioned wanting a more developmentally appropriate curriculum, commenting that their current curriculum is too difficult or not age appropriate for their students. As one teacher expressed, “these kids are younger” than kindergarteners. Other requests included a curriculum that includes more pre-made materials and manipulatives, as well as a common curriculum for all TK teachers, so that, as one teacher commented, “we will all be on a straight playing field and everybody will . . . be doing the same thing.”

Multiple teachers also reported wanting additional supplies, including

- manipulatives and other hands-on items for children to explore (e.g., blocks, Legos, Play-Doh, water/sand tables, felt boards),
• arts/crafts supplies (e.g., painting easels, construction paper),
• visuals for walls, and
• outdoor play equipment or items (e.g., bicycles).

Other resources mentioned include having a bathroom inside the classroom (and more guidance/support for children who are not toilet trained). Intangible desires included smaller class sizes, an aide, and more time. Just two teachers said they have everything they need.

Summary
Across all TK classrooms in the study, we observed variation in instructional focus and activities, classroom layout, and classroom resources and materials. Literacy instruction was observed in all classrooms observed. Math instruction was also commonly observed, though it was not noted during all observations (however, math instruction may have occurred outside of the observation window in this study; e.g., later in the day). All teachers provided instruction in large-group settings and conducted a “morning meeting.” In terms of settings, most teachers also provided small-group instruction, individual work time, and free choice/play time during the observation period. The majority of teachers engaged in specific instructional activities such as book reading and writing practice, whereas hands-on guided lessons were less common, occurring in only half of the classrooms observed. In general, classroom layouts were developmentally appropriate, with rugs for sitting/circle time, tables with child seats, and themed play and exploration centers (as opposed to rows of desks). Just over half of classrooms had bathrooms present in the classroom, though teachers tended to express a desire for all classrooms to be equipped with bathrooms for students who may be newer to toilet training. TK teachers mostly use a district-selected curriculum, but not one specific to TK. Teachers reported that they would like a curriculum specific to TK-aged children (including curricular guidance for math and social-emotional learning).
3. Linguistic and Environmental Supports for Dual Language Learners

Optimal learning environments for young dual language learners are characterized by teachers providing intentional home language use and support (when possible), using key strategies to help children develop a second language (e.g., bridging, explicit vocabulary instruction, opportunities for practicing oral language), and providing a wide range of cultural and linguistic representation in the classroom, through items such as environmental print, books, and play materials (Castro et al., 2011). Given the evidence of cross-language transfer (i.e., the idea that a strong foundation in the first language can help children learn a second language; Cummins, 2013; Dickinson et al., 2004; López & Greenfield, 2004), along with the extensive cognitive, social, and economic benefits associated with early bilingualism (Barac et al., 2014; Bialystok et al., 2012; Espinosa, 2015), research provides sound evidence for this approach. These features are important to help DLLs feel comfortable in the classroom environment and provide a sense that teachers value their own language and culture. Furthermore, research shows that when teachers use the home language of the DLLs in their classroom, it can benefit their language and learning outcomes (Burchinal et al., 2012).

Drawing on data from the classroom observations, we examined how much DLLs’ home languages are used, how much English is used, and the patterns of language use across content areas and different types of activities. We also looked at the ways in which TK teachers support DLLs’ vocabulary development and use other key language development strategies for DLLs, such as modeling, bridging, and questioning. In these analyses, we examine classroom practices separately by language instruction model, given differences in how DLI programs are structured to explicitly support language development. Findings are summarized across Spanish DLI programs and non-DLI programs separately. The one Vietnamese DLI program that was included in this sample had a very distinct format (e.g., the Vietnamese and English portions of the day split into separate classrooms led by different teachers) and is therefore not included with the Spanish DLI classrooms but is described in more detail next.

To what extent do TK classrooms use the home language of DLLs?

To measure the amount of home language used, observers documented the amount of English and home language(s) use in the classroom, overall and by content area and activity.

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6 As noted in the sample description, to be included in this study, classrooms must have at least one DLL student enrolled. As such, the makeup of these classrooms is not intended to be generalizable to the broader population of TK classrooms in California.
Amount of Home Language and English Use by Teachers

Teachers in our sample were observed using the home language and English to varying degrees, but when home language use occurred, it occurred only in Spanish (with the exception of the Vietnamese DLI classroom). Teachers in the Spanish DLI classrooms used Spanish all or almost all of the time across the observation period (and thus little English), while those in non-DLI classrooms used mostly English (and used Spanish anywhere from never to approximately one-third of the time).

In the Spanish DLI classrooms in our sample, teachers spoke mostly Spanish. Teachers in these classrooms, regardless of role, spoke Spanish between 85% and 100% of the time during the observation, demonstrating high level of Spanish use across classrooms.7

In non-DLI classrooms in the sample, instruction occurred mostly in English, but several classrooms integrated some home language support. On average, lead teachers spoke mostly English (92% of the time), with minimal support in Spanish (8% on average), and no support in any other home languages.8 Because these are non-DLI classrooms, we expect the percentages to be lower than in a Spanish DLI classroom where dual language use is intentional, but some home language support was observed to support DLLs from Spanish language backgrounds. Of the 12 classrooms, three patterns

In the Vietnamese DLI Class

This classroom’s 50-50 model was split by teacher/classroom: the children spent the first half of the daily instructional time in the Vietnamese immersion classroom with a Vietnamese-speaking teacher, and the second half in the English classroom, with an English-speaking teacher (who was also proficient in Vietnamese).

Language Use and Activities

In the Vietnamese immersion classroom, the lead teacher mostly spoke Vietnamese (approximately 90% Vietnamese), and the assistant teacher spoke more English (approximately 30% Vietnamese).

• During this portion of the observation, morning meeting and literacy activities were observed, including children practicing the alphabet and writing words in Vietnamese.

In the English classroom, the lead teacher primarily spoke English (though incorporated a little bit of Vietnamese a few times during the observation), and the assistant teacher only spoke English.

• During this portion of the observation, we observed the morning meeting, math, and literacy, in addition to center time.

Environment

In the Vietnamese immersion classroom, we observed various examples of environmental print in Vietnamese, including

• the Vietnamese alphabet;
• the feelings chart;
• the calendar/weather and daily activities chart; and
• food, clothes, and animals charts.

In the English classroom, environmental print was observed only in English; however, there were some bilingual Vietnamese-English books available.

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7 In the 50-50 classroom, we observed Spanish for 100% of the observation period by both the lead and assistant teachers (given that the instructional model was Spanish in the morning, and English in the afternoon, which was not observed).

8 Even though a few teachers in the study spoke languages other than English and Spanish, they were not observed speaking those languages (and there were no DLLs from those language backgrounds enrolled in their classrooms).
Three lead teachers were observed using Spanish between 15% and 35% of the time during the observation; these teachers were also English–Spanish bilingual themselves, and the bilingual assistant teachers in the classrooms were also observed using Spanish.

Another three classrooms had teachers who spoke English and at least some Spanish and were observed using Spanish for classroom instruction around 10% of the time; two of these classrooms also included a bilingual assistant teacher who used Spanish more often than the lead teacher (around 20%–30% of the time).

In the remaining six non-DLI classrooms, little to no Spanish use was observed.

**Home Language Use Across Content Areas and Settings**

In Spanish DLI classrooms, Spanish was used in similar amounts across all content areas and settings, as well as for routines and behavior management. In all five Spanish DLI classrooms, instruction occurred either all in Spanish or mostly in Spanish, with occasional English support for math, literacy, writing, and book reading activities, as well as during individual work, hands-on lessons, free choice/play time, and for routines/behavior management (Exhibits 6a and 6b). Given the large percentage of time Spanish was used overall (93%), there was no observed differential use of Spanish for particular purposes.

In non-DLI classrooms, Spanish was used less frequently than in DLI classrooms, but was still occasionally observed across a range of content areas, settings, and routines. While the majority of instruction occurred in English in the non-DLI classrooms, providing home language support in Spanish for DLLs was observed—particularly in literacy and math instruction. English use was more common in other activities: the majority of teachers spoke all English during writing practice (70% of teachers) and book reading (64% of teachers; see Exhibit 6a) as well as during independent work and hands-on lessons (60% respectively; see Exhibit 6b). Apart from specific content instruction (i.e., literacy and math), the most Spanish support was observed during free play time, when approximately two thirds of teachers spoke at least some Spanish, alongside English. The patterns of home language use were spread evenly across instructional activities and across unstructured activities and behavior management. It is particularly promising that Spanish was used for academic content and not exclusively for behavior management or free play, given the importance of academic instruction in a child’s home language for building reading and math skills (Burchinal et al., 2012).
Exhibit 6a. Percentage of Spanish DLI and Non-DLI Classrooms in Which Spanish and English Are Used in Select Content Areas and Activities

![Bar chart showing the percentage of Spanish DLI and Non-DLI classrooms in which Spanish and English are used in select content areas and activities.](chart1)

Note. DLI = dual language immersion.

Exhibit 6b. Percentage of Spanish DLI and Non-DLI Classrooms in Which Spanish and English Are Used in Each Setting

![Bar chart showing the percentage of Spanish DLI and Non-DLI classrooms in which Spanish and English are used in each setting.](chart2)

Note. DLI = dual language immersion.
How do teachers promote the development of oral language, in both English and students’ home language?

We also examined the extent to which teachers supported oral language development for DLLs by examining a range of strategies, including vocabulary support (through either reinforcing meaning of words to promote comprehension or explicitly teaching/defining words), bridging strategies (i.e., using one language to support learning of another), and other more general language strategies (e.g., modeling language and asking questions). We examined the extent to which teachers were observed using each strategy and whether strategies were observed in specific settings or content areas.9

Supporting Vocabulary Development

The COLES-DLL observation tool defined reinforcing vocabulary as a teacher intentionally drawing attention to vocabulary words to help support students’ understanding of the word (e.g., using a gesture/prop, employing verbal emphasis, repeating the word multiple times). In contrast, explicitly teaching vocabulary involves clearly defining a word through a verbal description or explicit instruction with a prop (e.g., “This is a pencil.”). Both of these strategies go beyond simply using a vocabulary word casually in everyday talk.

Teachers in the sample were more likely to reinforce vocabulary than explicitly teach it and tended to do so in the primary language of instruction. All teachers in our sample, regardless of classroom type (DLI vs. non-DLI), reinforced and/or explicitly taught vocabulary in their classrooms frequently across the observation period. For example, one teacher, when doing a “mat man” activity, where children used wooden panels of different shapes to construct “mat man,” reinforced vocabulary by saying “time for the hand,” while holding the shape. In another example, a teacher explicitly taught the vocabulary word “woods” by saying “woods are trees,” and pointing to the picture of the woods in the book, in the context of a reading activity. Differences in the frequency of vocabulary support provided in English and Spanish were observed when broken down by language model, as described next.

Teachers in the Spanish DLI classrooms reinforced or explicitly taught vocabulary in the home language. All teachers (100%) in DLI classrooms were observed reinforcing or explicitly teaching home language vocabulary at least once (in Spanish only, not in any other home languages), whereas just 40% of these teachers reinforced English vocabulary and 20% explicitly taught English vocabulary (see Exhibit 7a) during our observations.10 When teachers in

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9 Additional settings (e.g., one-on-one activities) and content areas (e.g., social studies, art) were observed in these classrooms but are not shown here because of their relative infrequency (see Exhibits 3 and 4).

10 The limited English use in the DLI classrooms is not surprising given the language models in these classrooms. As noted previously, in four classrooms, 90% of instruction was in Spanish; in the fifth classroom, the study team intentionally observed
DLI classrooms reinforced Spanish vocabulary, it most often occurred in whole group settings, and most often in literacy and math content areas (Exhibit 7b). Although explicitly teaching vocabulary was observed slightly less frequently than reinforcing vocabulary, explicitly teaching was more common in literacy instruction than other content areas. Teachers in DLI classrooms also frequently used props and/or gestures (91% of the observed time) when they were explicitly teaching or reinforcing Spanish vocabulary.

**Exhibit 7a. Percentage of Teachers in Spanish DLI Classrooms Observed Supporting Vocabulary, by Setting**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Reinforce English Vocabulary</th>
<th>Explicitly Teach English Vocabulary</th>
<th>Reinforce Home Language Vocabulary</th>
<th>Explicitly Teach Home Language Vocabulary</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Settings (5)</td>
<td>20%</td>
<td>40%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Whole Group (5)</td>
<td>20%</td>
<td>40%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Teacher-Led Individual (2)</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Small Group (4)</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Free Choice (3)</td>
<td>0%</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Independent (1)</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note. HL = home language. Percentages in the exhibit were calculated based on only the teachers who were observed in that activity. The number of teachers who were observed in each activity at least once are shown in parentheses (e.g., two teachers were observed engaging in teacher-led individual activities, and both reinforced home language vocabulary during these activities).

the classroom when Spanish was likely to be used, as instruction in the morning typically occurred in Spanish and instruction in the afternoon in English. Classrooms were selected and scheduled strategically so that the study team could observe rich instruction in the home language, and so these observations may not fully capture the ways that teachers support English language development in DLI classrooms more generally.
Exhibit 7b. Percentage of Teachers in Spanish DLI Classrooms Observed Supporting Vocabulary, by Content Area

Note. HL = home language; SEL = social-emotional learning. Percentages in the exhibit were calculated based on only the teachers who were observed in that activity. The number of teachers who were observed in each activity at least once are shown in parentheses (e.g., two teachers were observed engaging in music and movement activities, and one reinforced home language vocabulary during these activities).

Teachers in the non-DLI classrooms more often reinforced or taught vocabulary in English, though some also occasionally provided home language vocabulary support or instruction. All non-DLI teachers (100%) were observed reinforcing and teaching English vocabulary at some point during the observation. On the other hand, slightly fewer than half (42%) of teachers were observed reinforcing home language vocabulary (in Spanish only) during the observation period, and just one quarter (25%) were observed explicitly teaching Spanish vocabulary. Teachers reinforced English vocabulary most often in whole group settings (Exhibit 8a) and in literacy and social-emotional learning content areas (Exhibit 8b). In these classrooms, teachers frequently used props and/or gestures (92% of the observed time) to reinforce or teach English words.

Examples of Home Language Support in Non-DLI Classrooms

Three non-DLI classrooms incorporated a fair amount of Spanish throughout the observation (e.g., one teacher spoke Spanish at least 30% of the time across the morning) and consistently incorporated props and gestures to support the home language understanding. For example, in one activity, the teacher had a variety of fruit and vegetable toy items, and they were doing a large-group lesson to sort them. The teacher consistently used words in both English and Spanish to name the items, and these were always paired with a prop. They later read the book Growing Vegetable Soup, and although the book was written in English, the teacher incorporated Spanish support throughout, using the book and images as props to support understanding. This example shows this teacher’s understanding that DLL students may need some home language support to better understand new (or familiar) vocabulary words in English.
Exhibit 8a. Percentage of Non-DLI Teachers Observed Supporting Vocabulary, by Setting

Note. HL = home language. Percentages in the exhibit were calculated based on only the teachers who were observed in that activity. The number of teachers who were observed in each activity at least once are shown in parentheses (e.g., nine teachers were observed engaging in small-group activities, and three explicitly taught English vocabulary during these activities).

Exhibit 8b. Percentage of Non-DLI Teachers Observed Supporting Vocabulary, by Content Area

Note. HL = home language; SEL = social-emotional learning. Percentages in the exhibit were calculated based on only the teachers who were observed in that activity. The number of teachers who were observed in each activity at least once are shown in parentheses (e.g., six teachers were observed engaging in math activities, and three explicitly taught English vocabulary during these activities).
Additional Language Strategies for DLLs

The COLES-DLL observation tool also looked at additional strategies to support language for DLLs, including modeling language (i.e., mapping actions to language) asking questions (both closed and open-ended), and using bridging strategies (using one language to support the learning of another).

Across the sample, teachers were frequently observed asking questions and modeling, and occasionally used bridging strategies. Teachers typically used the primary language of instruction for these strategies, though some differences emerged by language model (see Exhibits 9a and 9b). In particular, teachers in non-DLI classrooms were more frequently observed bridging, by using Spanish to support language learning in English.

Among the additional strategies to build language, teachers in the Spanish DLI classrooms used modeling (of Spanish) most frequently across the observation period. Modeling of Spanish was observed at least once in 69% of cycles in DLI classrooms, but modeling of English was never observed (0% of cycles, see Exhibit 9b). For example, on the carpet during free play, one teacher joined a few children playing with blocks and said “estamos limpiando porque se cayó” (“we are cleaning up because it fell”), a clear example of mapping the teacher and student actions onto language. Teachers in DLI classrooms occasionally used English to help build the home language (in 10% of cycles; e.g., “shoulders, yes, estos son hombros”), but did not tend to use the home language to build English (which would not be expected, given the primary goal of these classrooms’ language model was to build Spanish). Question-asking in Spanish was also observed frequently (with very few questions asked in English). Closed-ended questions were more commonly observed than open-ended questions.

Teachers in non-DLI classrooms used modeling and questions, among other strategies, to build language, but these strategies typically occurred in English. In non-DLI classrooms, teachers used the home language to build vocabulary in English in slightly more than a quarter of observation cycles (see Exhibit 9a). This most often took the form of translating (e.g., “‘calabaza’ is ‘pumpkin’ in English”) or repeating the same phrase directly after in the other language (“between, en el medio”). Drawing connections between the home language and the second language being learned is an important strategy for DLLs who have little English knowledge, and so teachers may have intentionally used this strategy to support language development among the DLLs in their classroom who had less English knowledge. In contrast, modeling and question asking were more common, occurring in between 58% and 82% of cycles in English, but were not frequently observed in Spanish (see Exhibit 9b).
To what extent are the linguistic and cultural backgrounds of DLLs and all students represented in the classroom?

Observers also looked at various aspects of linguistic and cultural representation in the classroom environment to document the presence of environmental print, such as labels, posters, or other items with written language around the classroom; books; media; and play materials that represent the DLL children’s language and cultural backgrounds.
**Linguistic Representation**

Materials were available in English, Spanish, and Vietnamese in the classrooms in the sample, but many other languages spoken by students were *not* represented in classroom materials. Although there were DLLs representing these home languages, there were no books, media, or environmental print available in the following languages:

- Persian
- Hindi
- Punjabi
- Laotian
- Hmong
- Tagalog
- Mandarin
- Japanese
- Indigenous American languages (e.g., Tolowa and Yurok)

Ideally, every student’s home language would be represented in the classroom, but materials in certain languages may be hard to come by. For example, one teacher noted during the interviews, “We have a high Hmong population, and . . . we really don’t have any Hmong resources.”

As shown in Exhibit 10, Spanish language books, media, and environmental print were much more prevalent in Spanish DLI classrooms than in non-DLI classrooms. This is perhaps not surprising, given the focus on Spanish instruction in DLI classrooms, but these resources are also important for DLLs in non-DLI classrooms. We discuss these materials further in the following section.
Environmental Print

All classrooms in the sample had environmental print accessible and visible to children in the classroom. There was a range of examples in terms of type of print and language.

All the Spanish DLI classrooms had environmental print present in Spanish. Two of these classrooms also had print present in English. Examples of Spanish environmental print observed in Spanish DLI classrooms included center labels, posters with print (e.g., songs, classroom values, school pledge), daily schedules with visuals, and alphabet charts.

Only one non-DLI classroom had environmental print in Spanish. The remaining 11 classrooms all had environmental print exclusively in English, including center labels, written songs on easel paper, calendars, weather charts, sight word lists, behavior expectation charts, and feeling charts. No examples of environmental print were observed in languages other than English and Spanish, despite the presence of children from other language backgrounds enrolled in the classrooms.

Books and Media

All TK classrooms in the sample had books available to the children, but classrooms varied in terms of the number of books they had, and whether or not they were representative of the home languages of the children in the classrooms. The majority (15 of 18) had some type of media present in the classroom, most often in the form of songs played on YouTube, but also SmartBoard activities, iPads, or read-alouds with a “virtual” book/magazine.
All observed Spanish DLI classrooms had Spanish-language books available for children, and more than half used Spanish media. Three of these classes also had some books available in English. DLI classrooms had an average of 17 total Spanish books (with a range from 5 to 33) in their classroom libraries. More than half of the Spanish DLI classrooms used media in Spanish during the observation, most often songs played in Spanish. The other Spanish DLI classrooms did not have media (in any language) present.

Fewer than half of the observed non-DLI classrooms had books or media available in Spanish. Non-DLI classrooms had, on average, more than 100 English books (with the lowest number observed being 21), but only five classrooms had books in Spanish. Interestingly, the few non-DLI classrooms that did have Spanish language books available actually had slightly more than the Spanish DLI classrooms—19, on average, compared to 17 in the Spanish DLI classrooms. However, the range was wide: one classroom had just one Spanish book, whereas another had 50. Similar to environmental print, even though the classes had DLLs from other language backgrounds such as Tagalog, Persian, Laotian, Punjabi, and Mandarin, there were no books observed in languages other than English, Spanish, and Vietnamese. Few non-DLI classrooms used media in Spanish during the observation (in one classroom, a Spanish song was played and, in another, the class followed a video of the principal reciting the Pledge of Allegiance in Spanish).

Cultural Representation

The TK teachers in our sample made some efforts to support cultural diversity, but the cultures of their particular students were not necessarily represented. Many TK teachers reported that they collect information about their students’ language and cultural backgrounds through surveys or conversations with parents, which informs their communication with families, holidays and traditions celebrated in the classroom, and additional resources those students may need (including translators or additional monitoring). About half of the teachers shared that they read aloud or keep books in their classroom that represent a diversity of cultures and ethnic backgrounds, though only a few mentioned that their efforts include the cultures of their students specifically. Another common practice several teachers reported was highlighting holidays: they discuss and honor the holidays celebrated by their students (e.g., Diwali or Chinese New Year), and talk about ways that different cultures may celebrate a common holiday (e.g., eating tamales on

In Their Own Words

“A lot of the food that we have in the playhouse is diverse in cultures as well, so they’re not just eating cheeseburgers or pizza. There’s dumplings, and there’s egg rolls, and there’s rice, and there’s beans.”

“Last year, I had a student who was Punjabi Indian, and I remember during this time of the year, Christmastime, a lot of the kids were talking about Christmas and she was like, ‘I don’t celebrate Christmas.’ So honestly, I didn’t know that much about Punjabi culture. So I looked into it and I found books and I read about Diwali and taught the kids about that holiday. I remember her being so happy and excited when we were doing crafts and books on her culture.”
Thanksgiving). Several teachers reported that they provide opportunities for students and their families to share about their culture, such as by bringing food into the classroom or performing a traditional dance for the class. In the interviews, a few teachers reported including culturally diverse toys in their classrooms, including toy food, puppets, and dress-up clothing from different cultures (though, again, these items were not necessarily representative of their students specifically). Some teachers shared that discussing diverse cultures is incorporated into their social studies units, including a unit about Tolowa culture at a school that has Tolowa students.

**Summary**

In the 18 TK classrooms in the study, we observed a wide range of home language use. However, outside of the Vietnamese DLI classroom, Spanish was the only language used when providing home language support, despite the presence of DLLs from many different language backgrounds. In the Spanish DLI classrooms, teachers spoke mostly Spanish and very little English during the observations, as expected based on the classroom’s language model and schedule. In the non-DLI classrooms, instruction mostly occurred in English, but some classrooms integrated varying levels of Spanish support, representing a bit more language diversity than the DLI classrooms, in which almost all instruction occurred in Spanish.

The teachers in the sample were also observed using a range of vocabulary support and additional strategies to promote oral language development (e.g., bridging, modeling language, and asking questions). Teachers were observed frequently reinforcing or explicitly teaching vocabulary, most often in literacy and whole group instruction, and frequently accompanied this instruction with the use of props and gestures. Vocabulary support tended to occur in the main language of instruction for that classroom, though in non-DLI classrooms we also saw instances of vocabulary support in students’ home language (not just in English). Teachers across the sample were also frequently observed modeling language and asking questions and were less often observed using bridging strategies (using one language to help the understanding of another).

The classrooms in the sample varied in the extent to which they provided materials that reflected the linguistic and cultural backgrounds of the students in the classroom environment. In Spanish DLI classrooms, print, books, and media were largely available in Spanish to students, and there was some Vietnamese print in the Vietnamese DLI class. In non-DLI classrooms, materials observed were typically in English, though some classrooms had books in Spanish and/or bilingual English–Spanish books, as well as occasional examples of media and environmental print in Spanish. Besides Spanish and Vietnamese, the other home languages of the DLLs in these classrooms were not represented in the classroom environments. In the interviews, teachers did provide anecdotal examples of how they promote cultural
representation (e.g., by celebrating holidays and cultural traditions) in their instruction, though at times their efforts at including cultural diversity in their classrooms were more general and did not necessarily include the cultures of their particular students.

**Key Takeaways and Promising Strategies**

Although we studied only a small number of California’s TK classrooms for this investigation, the emerging themes from the observations and teacher interviews offer an opportunity to learn from these experiences and contexts. In this section, we consider new directions for districts, schools, and classrooms to support the continuous improvement of TK education and strengthen the learning experience for all TK students, including DLLs, as the program expands.

**Most teachers in our sample felt confident about teaching TK but wanted additional training, supports, and resources specific to TK, including professional development, curricula, and materials.**

Overall, teachers we observed reported that they generally feel confident about teaching TK—particularly teachers with preschool teaching experience. However, teachers also reported a need for more training or professional development on teaching the TK grade level specifically, teaching math or STEM, working with students who have special needs or behavioral challenges, and supporting DLLs. Although several teachers in the study indicated that teaching DLLs was an area of growth for them, more than half reported that they felt prepared to teach DLLs. However, when asked what experiences or training have most helped them feel prepared to teach DLLs, the most salient response was not a training or workshop, but rather the simple fact of being bilingual themselves. The majority of teachers do participate in training and in professional learning communities, but they reported mixed experiences regarding the effectiveness of this training, particularly with regard to teaching DLLs. These findings suggest that more attention may need to be given to teacher training, ensuring both that they are useful for teachers coming from different backgrounds, that they are specific to TK, and that they address areas where teachers have identified additional needs, especially with regard to supporting DLLs.

When asked about other resources and supports they needed, TK teachers in this sample noted that they would benefit from having more adults in the classroom, smaller class sizes, and more teacher collaboration time with fellow TK teachers. Teachers also reported that they needed additional curricula specific to TK-aged children, especially as TK standards and guidance differ from older grades that teachers had more experience with. Teachers also requested curricular guidance for math and social-emotional learning. Especially given the findings regarding the
inconsistency of observed math activities in these classrooms, with a third of classrooms never engaging in math activities during the observation period, additional guidance regarding how to support math learning could be warranted. In addition to these challenges, many teachers reported that they needed additional material items, such as manipulatives, art/craft supplies, posters and other visuals for classroom walls, and outdoor play equipment, and only two teachers in our sample reported that they had all the resources they need. Finally, just over half of classrooms had bathrooms present in the classroom, which presented a challenge for teachers. These findings align with a theme emerging from this study’s companion project with district and school leaders, who identified the importance of adequate and developmentally appropriate facilities in these classrooms (including bathroom access) and recognized the salience of these concerns for teachers (Anthony et al., 2024). Districts might consider allocating more resources to TK classrooms to support these youngest learners in a developmentally appropriate way.

The teachers in this sample provided developmentally appropriate instruction in terms of the activities, settings, and classroom layouts observed. TK classrooms observed in this study typically included a “morning meeting,” small-group instruction, teacher-led book reading, and free choice/play time. Given the importance of play-based instruction in early childhood settings and links to key aspects of child development, including in the areas of language (Stagnitti et al., 2016), math (Vogt et al., 2018), learning behaviors (Zosh et al., 2017), and social and emotional development (Parker & Thomsen, 2019) this is a promising finding that suggests that teachers are incorporating developmentally appropriate instruction for these young learners. In addition, TK teachers in this sample showed a strong focus on literacy (i.e., book reading and writing), with math and science less commonly observed. Although this sample of classrooms is not intended to be generalizable to TK more broadly, this pattern is consistent with other research indicating that children spend considerably more time in language and literacy activities than math and science activities in TK (American Institutes for Research, 2016) and prekindergarten programs (Early et al., 2010), despite the importance of these activities for STEM learning in the early years (Clements & Sarama, 2016; Greenfield et al., 2017). Districts may consider how they can support TK teachers to incorporate more STEM learning in their classrooms.

Spanish DLI programs provided rich exposure to Spanish in both instruction and materials; teachers in non-DLI classrooms also integrated occasional Spanish support, though they had fewer classroom materials available in Spanish. Although not necessarily representative of TK classrooms across the state, it is encouraging to see in our sample the frequency of home language use in the non-DLI TK classrooms, in particular. It appears that, though learning the home language is not an explicit goal of non-DLI
classrooms, some teachers in these classrooms do recognize the value of providing support in a child’s home language. In addition, across language models, home language support was not limited to discipline or behavior management circumstances; rather, it was incorporated across content areas and instructional activities as well. These practices represent a clear shift away from attitudes and practices common in the Prop 227 era that discouraged home language use and development (Muñiz, 2017). Given the work showing relationships between teachers’ attitudes about home language use and their actual use of supportive practices for DLLs (Rizzuto, 2017; Garrity & Guerra, 2015), as well as better outcomes for children (Oh & Mancilla-Martinez, 2021), these findings are highly encouraging. It is important to continue the development of positive beliefs about bilingualism at all levels (classrooms, schools, districts, etc.), to encourage a culture that values and supports home language development for DLLs. In addition, providing teachers with guidance on how to incorporate home language use (particularly in non-DLI models), could be useful to promote home language development across classroom contexts.

In addition to oral language support, including environmental print and labels in the home language is also a beneficial strategy for DLLs (Espinosa & Magruder, 2015). Specifically, exposing young children to print in their home language can help DLLs to map written language onto the item labeled (for example, if the play-kitchen center is labeled “cocina,” then Spanish-speaking DLLs can repeatedly see the word cocina near the play kitchen and map the word for kitchen (cocina) onto the actual item (the play kitchen). Even when home language use is not possible (e.g., when the teacher does not speak the home language), including these environmental supports, such as labels in the classroom, can help DLLs feel represented and included in the culture of the classroom (Castro et al., 2011). Providing teachers with environmental materials in diverse languages that are representative of the children in their classrooms could be a useful strategy to ensure that more DLLs have access to these linguistic and environmental supports.

It should be noted that the prevalence of home language in the classrooms we observed was likely made possible by the fact that many teachers across both DLI and non-DLI settings were themselves bilingual. There is guidance for early learning teachers to support DLLs when they do not speak their home language, including incorporating strategies like learning key words in the home language, providing targeted, small-group instruction, and working closely with parents and families to provide opportunities for DLLs in their classroom to hear their language (National Academies of Sciences, Engineering, and Medicine, 2017). Teachers who do not speak the home languages of their students may benefit from more explicit training on how to approach instruction with DLLs, and from support incorporating these languages into their classroom environment and instruction.
There were many different home languages represented by the TK students across the sampled classrooms, yet home language support by TK teachers occurred only in Spanish and Vietnamese.

Across the 18 classrooms in our sample, home language support was observed only in Spanish and Vietnamese, despite the presence of many other language backgrounds of DLLs. This brings up the important issue of teacher–child language match. In some classrooms in this study, the teachers’ language background matched that of the DLLs enrolled in their classrooms (particularly when the teachers spoke Spanish and DLLs in their classroom were only from Spanish-speaking backgrounds), while in other cases, there was a mismatch between teacher language competency and the children they served (either because the teachers did not speak a language other than English and Spanish or, if they did, they did not serve any children from that language background). **District and school leaders should consider intentionally hiring and staffing more multilingual teachers from language backgrounds other than Spanish and being intentional about the classrooms where children from certain language backgrounds are placed, to optimize the opportunities DLLs have to be in classrooms where they can receive support in their home language.**

As noted previously, there are many strategies that teachers can use if they have students in their classrooms with language backgrounds that teachers themselves do not share, such as learning key vocabulary words and providing print in that language. To do so, however, teachers must know this information about the cultural and language backgrounds of their students. Many teachers in our sample collected information on the linguistic and cultural backgrounds of each student enrolled in their classroom, either through a formal survey or informal conversations with families, but these practices were not consistently observed. Information collected from families could then be used to inform teaching and to determine the need for additional materials in the classroom environment. Collecting this information in a systematic way can help teachers identify opportunities to incorporate the home languages of all children in the classroom, such as through activities, books, media, and environmental print. **Teachers with students from language backgrounds other than their own may need to make extra effort to collect information about their students from families. Additionally, teachers may need support in obtaining materials in languages other than English and Spanish when students from new language backgrounds enter their classroom.**
Conclusion

Taken together, the findings of this study capture a glimpse of California’s expanding TK program, from a small sample of TK classrooms across California. Although this study is limited to 18 classrooms—and therefore not generalizable to the experiences of all TK teachers and children across the state—it provides important context to help understand how TK teachers are implementing instruction and supporting DLLs. Findings show that teachers largely lead developmentally appropriate activities and support DLLs in many ways (most often through home language support, vocabulary reinforcement, and asking questions), though teachers also feel that they could use more training and resources to help them effectively teach the TK grade level, and in some cases training to support DLLs, in particular. As TK continues to expand, more research is needed to help determine the effectiveness of TK in preparing California’s youngest learners for kindergarten and what is effective in preparing the workforce to teach them. A larger scale study representative of the whole state would be valuable in understanding the full range of instructional practices across TK classrooms in different locales and areas of differing language densities in California. In the meantime, the promising strategies listed can be taken as a jumping-off point for districts, schools, and teachers navigating the TK landscape and supporting California’s young elementary learners.
References


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Appendix A. TK Teacher Interview

Thank you for agreeing to participate in this interview today. My name is [NAME] and I am a [POSITION] at the American Institutes for Research (AIR). AIR, with funding from the Heising-Simons Foundation, is studying the expansion of TK across the state. The goal of the study is to help identify needs and strategies to support successful expansion and effective learning opportunities for eligible children, including the state’s many dual language learners. Exploring these issues will help us understand the context of TK across the state and identify the most effective ways to support the work of district and school leaders to expand TK.

This interview will take about 45 minutes to an hour and we are offering a $50 Amazon gift card as a thank you for your time. Your responses will be summarized along with the responses of other TK teachers across the state who we are interviewing as part of the study and organized by theme in our reporting.

With your permission, we will record this interview for note-taking purposes only. Neither the recording nor the transcript will be shared outside the AIR study team. Although, if you’d like to say anything off the record just let me know and we can stop the recording. Once we have transcribed our notes, the recording will be deleted.

Do I have your consent to record the interview?

NOTE TO FACILITATOR: If they agree, start the recording.

Section A: TK Experience and Preparation

Our first set of questions is about your preparation for teaching TK and professional development you may have received before or while teaching TK.

1. First, can you tell me a bit about how you came to teach TK?
   [Note for interviewer: Reference answers from pre-survey about what ages/grades they have taught, as appropriate]
   a. How long have you been teaching TK? And how long have you been teaching TK at this school, specifically?

2. How confident/well-equipped do you feel to teach TK?
   a. What do you feel the most/least prepared for?
   b. How prepared do you feel for supporting your TK students’ social-emotional needs and behavior in the TK classroom? the social-emotional/behavioral aspects of TK teaching?
c. What about the *academic content* of TK teaching?
d. What has most helped you to feel prepared to teach TK?

3. **How prepared do you feel to teach dual language learners (DLLs) in your classroom?**
   
   [Note for interviewer: *define DLLs as those students who are exposed to a language other than English at home*]

   a. What aspects of supporting the DLLs in your class do you feel most/least prepared for?
   b. What experiences or training have most helped you to feel prepared to teach DLLs?
   c. What challenges related to teaching DLLs have you encountered or do you anticipate?

4. **Have you received any professional development or training specifically related to teaching TK?**
   
   [Note for interviewer: *Ask specifically about training related to teaching TK if they give a broad response about general ECE or elementary teacher preparation*]

   a. Probe about specific types of PD, including:
      i. Pre-service ECE courses in teacher prep program?
      ii. Inservice seminars, workshops, or training?
      iii. Webinars/online training?
      iv. Formal peer support activities (Professional Learning Communities)?
      v. Conferences?
   b. What content did these resources cover?
   c. How effective or useful have these resources been?

5. **What about PD/training related to teaching DLLs?**

   a. Probe about specific types of PD, including:
      i. Pre-service ECE courses in teacher prep program?
      ii. Inservice seminars, workshops, or training?
      iii. Webinars/online training?
      iv. Formal peer support activities (Professional Learning Communities)?
      v. Conferences?
   b. What content did these resources cover?
   c. How effective or useful have these resources been?
6. Do you currently receive coaching support? What does that look like for you?
   a. How often?
   b. With whom?
   c. What is the focus/content of your coaching sessions?

Section B: Classroom Practices
For the next section, I have some questions about your current TK classroom.

7. Can you tell me about the curriculum(a) you use in your classroom?
   a. How did you select this curriculum?
   b. What age groups/grades was the curriculum designed for? Have you had to adapt or modify it in any ways?

8. What standards (if any) do you use in your classroom?
   a. Who selected these standards and how?

9. What assessments do you use in your classroom?
   a. How do you use assessments?
   b. Are there any assessments you use with your dual language learners in particular? Do you use these assessments for DLLs differently from assessments you use for all students?

10. Do you collect information about the language and cultural backgrounds of students in your class?
    a. What information do you collect?
    b. How do you collect it?
    c. Does this inform your teaching? If so, how?

11. Thinking about the diversity of your classroom, what do you do to make sure that all of your students feel included and accepted in your class?
    [Note for interviewer: probe about diversity as it relates to cultural, linguistic, and racial backgrounds]
    a. How much of a priority is this in the classroom, compared to your other classroom goals?
    b. How do you encourage children to be inclusive and accepting in their interactions with others?
c. Are there any specific instructional approaches you use (like selecting materials, curricula, activities, etc.) to help ensure inclusivity in your classroom?

12. Are there opportunities available for families and community members to get involved in informing the design and implementation of learning activities in the classroom?
   a. If so, how have families/community members contributed to learning activities? What does this look like in practice?

13. What do you feel like you need to help you effectively teach TK?
   a. What resources or materials do you need for your classroom?
   b. What additional training or support do you need for yourself?

14. Do you have any other thoughts about your experiences teaching TK and/or teaching young dual language learners that you would like to share?
Appendix B. Classroom Observation of Language and Environmental Supports for Dual Language Learners in Early Learning Settings (COLES-DLL) Observation Instrument

Part 1. Classroom Snapshot
The Classroom Snapshot contains background information about the teachers and dual language learner students in the classroom. Teacher information includes the number of teachers, role titles, and their language backgrounds. Teachers also report on what languages are used for instruction and how. Student information includes number of students enrolled and number of DLL students enrolled, the age range, and the language backgrounds and number of students for each language background represented in the class. The Snapshot was typically completed via a brief online survey with teachers prior to the day of the observation. Then, on the morning of the observation, the observer would confirm the responses and obtain some additional information about the number of students and DLLs present during the observation and if the teacher was following their typical schedule.

Part 2. Classroom Observation of Teacher Interactions With DLLs
Part 2 of the observation involves direct coding of teacher–child interactions across the full observation period, with an intentional focus on vocabulary use and language strategies that are important for DLLs.

Part 2 is completed using the “cycle coding” approach. A cycle is considered a 2- to 15-minute segment of time during the full observation period that is defined by the start of a new setting or new content area for instruction.

For each cycle, observers coded the following items:

- **Setting** (large group, small group, free choice/centers, mealtime/snack)
• **Content area** (math, literacy, science, social studies, social-emotional learning, music and/or movement, art, other, N/A)

• **Additional cycle details** (start and end time, teacher present, description of activity, and any other activities occurring)

During a given cycle, observers looked for the frequency with which the following types of strategies occurred, in English and the home language for each strategy:

**Vocabulary Instruction**

• Reinforce or explicitly teach simple vocabulary (and if props and/or gestures were used)

• Reinforce or explicitly teach complex vocabulary (and if props and/or gestures were used)

• Use of songs/chants to build vocabulary and support learning goal (yes/no)

**Language Interactions**

• Use of home language to build English

• Use of English to build the home language

• Encouraging child to use the home language

• Repeat/extend children’s verbalizations

• Modeling language

• Asking questions (both closed and open-ended)

For each strategy (except for the use of songs/chants, which was just a yes/no), observers noted how often this occurred throughout the cycle, wrote vocabulary words and examples of language interactions as evidence for observations, and assigned scores (1 to 5) at the end of the observation. A score of
1 indicated that this was not observed, and a score of 5 indicated that it was observed often/all the time (six or more times across the cycle).

**Part 3. Classroom Observation of Environment**

Observers also examined the classroom environment to gather information about the linguistic and cultural/racial representation present in the classroom.

Specifically, observers looked for if environmental print, books, and media were present in the classroom, and if so, in which languages (English and/or the home languages of children represented in the classroom). They also examined if toys/play items represented the backgrounds of children in the classroom and if there were visual displays, like pictures of routines, self-portraits, and family photos) that represented the children and cultures.

**Part 4. Checklist of Routines Observed**

At the end of the observation period, observers were asked to complete a checklist that reflected observations from the entire morning. The checklist included questions about the content and instructional activities that occurred, the extent of English and home language use for each, and the overall percentage of time that the lead and assistant teacher spoke English and any of the home languages of the children present in the classroom. They also filled out other questions including the layout of the classroom, the overall social-emotional climate of the classroom, and examples of teachers providing individualized support for DLLs.
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