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EMPIRICAL FEATURE ARTICLE

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# A comparison of integrated and designated ELD models on second and third graders' oral English language proficiency

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This article reports on a longitudinal, quasi-experimental comparison of two English language development (ELD) models implemented from kindergarten through Grade 3 to support oral English language development among Spanish-speaking English language learners (ELLs). Specifically, the study examined oral English language proficiency among students who received only integrated English language development (I-ELD; n = 39) and students who received I-ELD with 30 minutes of daily designated ELD (D-ELD) entailing four specific routines and strategies (n = 65). The study also compared oral proficiency with English-only speakers (EO) from the same school (n = 47). Oral language proficiency was measured by the IDEA Proficiency Test (IPT I-Oral; Ballard & Tighe, 2017). A repeated-measures analysis of variance (ANOVA) across Grades 2 and 3 indicated significant ($p < .001$; $\eta 2 = 0.53$) increases in oral proficiency for ELL students who received D-ELD. A follow-up analysis of covariance (ANCOVA) indicated significant positive effects ($p < .001$; $\eta 2 = 0.19$) of the D-ELD approach on ELL students' oral proficiency compared to only I-ELD in Grade 3. The ANCOVA also found no significant ($p > .05$)

differences in oral proficiency between ELL students who received D-ELD and EO students in Grade 3, indicating similar oral English skills. The D-ELD model's instructional strategies and practical implications are discussed.

## 1 | INTRODUCTION

Students identified as English language learners (ELLs) make up 10% of the student population in the United States and approximately 20% of the student population in states such as California and Texas (Hussar et al., 2020). The term *English language learner* is utilized, despite the varied terminology, to remain consistent with student classifications at the federal level (Hussar et al., 2020). ELLs are defined as students whose primary or home language is a language other than English and who are eligible for English language development instruction based on the results of an English language proficiency assessment. Recent research from the National Assessment of Educational Progress (NAEP) indicates that ELLs lag further behind academically than any other student group across race, ethnicity, and poverty levels (Hussar et al., 2020). Academic opportunity and performance disparities between ELL and non-ELL students have contributed to the relatively low performance of ELLs on state and national assessments. These results represent a consistent and alarming historical trend (National Center for Education Statistics [NCES], 2019a, 2019b). The combination of the persistent high number of long-term ELLs and the low academic performance of ELLs illuminates the inadequacy of the U.S. public education system thus far to provide appropriate educational support for ELLs to advance and excel in tandem with their non-ELL peers (WestEd, 2016).

Many factors contribute to the academic performance disparities that persist between ELLs and their non-ELL peers, one of which is the unique challenge that ELLs face learning English while simultaneously working to learn grade-level academic content (California Department of Education [CDE], 2020). While research has produced compelling evidence supporting the effectiveness of various dual language or bilingual instruction options (Collier & Thomas, 2017), most ELLs continue to attend schools where English remains the only language of instruction. Therefore, effective English language development (ELD) models remain a critical component in supporting the academic success of ELLs in mainstream English classrooms.

Although research has been conducted and curricula developed to broadly support ELD for ELLs (CDE, 2019; Goldenberg, 2013), more evidence-based research on the efficacy of specific ELD approaches over time is needed. This article addresses gaps in the existing ELD literature by reporting the results of an accelerated longitudinal study that examined trends in English oral language proficiency across early elementary school grades among students who received one of two distinct models of ELD instruction: integrated English language development (I-ELD) or I-ELD with designated ELD (D-ELD).

### 1.1 | English language development models

Language proficiency has multiple components, including reading, writing, listening, and oral speaking skills (Center for Literacy and Learning, n.d.). Oral language proficiency, the focus

of this study, is especially critical to be able to access English academic content and develop other English language proficiency skills, such as reading and writing (Center for Literacy and Learning, n.d.). To support oral language development among ELL students, multiple educational models have been used in classrooms over time. Of pertinence to this study, the I-ELD and D-ELD models are discussed.

English-only immersion education is generally identified as ELD or English as a second language (ESL). I-ELD, also often specified as structured or sheltered English immersion, is set within mainstream classrooms and incorporates ELD into academic content instruction. I-ELD emphasizes content instruction and modifies instruction so that ELLs can access academic language and content (Moughamian, Rivera, & Francis, 2009). I-ELD models can incorporate a push-in or coteaching approach in which ESL teachers work directly with ELL students in the mainstream classroom to provide academic content support and utilize teaching tools such as scaffolding and language modeling to facilitate ELLs' access to content (Moughamian et al., 2009). The research-based rationale for English-only immersion models in schools is that exposure to English through mainstream classroom content, with the use of integrated effective language instruction, facilitates students' acquisition of English proficiency while also delivering high-quality, academically challenging content (Hansen-Thomas, 2008; Short, Echevarría, & Richards-Tutor, 2011). There is fairly well-established and research-supported literature on specific sheltered English immersion routines within I-ELD models, such as the Sheltered Instruction Observation Protocol (SIOP; Echevarría, Vogt, & Short, 2013), that have demonstrated positive effects in supporting EL students' access to academic content in English instructional environments. Content-motivated models, such as SIOP, while supportive and effective, have limitations in meeting students' complex and nuanced linguistic needs (Hall, 2019). Research has shown that simply exposing students to the English language in the mainstream English classroom is beneficial but likely not sufficient for oral English language proficiency to transpire and requires additional explicit English language instruction (Garbati & Mady, 2015; Gibbons, 2007; Goldenberg, 2008).

Another model of oral English language instruction is D-ELD, which provides ELLs with specialized and protected English language development instruction time outside of mainstream academic teaching. This is often provided as an ELD class period or ELD pullout in which students are taken from their mainstream classroom to focus on language proficiency in English (Regional Educational Laboratory Northwest, n.d.). The central goal of D-ELD is to provide instruction specific to English language acquisition and develop students' English language proficiency levels so that ELLs can more readily access instruction in mainstream English classrooms (Moughamian et al., 2009). Successful D-ELD focuses on oral language development in which students are actively engaged in language use to increase their knowledge and skills in this area (Garbati & Mady, 2015; Saunders, Goldenberg, & Marcelletti, 2013).

## 1.2 | ELD programs and gaps in implementation

Challenges with the success of I-ELD and D-ELD include inconsistent and varied implementation of effective and well-specified ELD instructional models, as evidenced by the persistent discrepancy between ELLs' and non-ELLs' academic performance (NCES, 2019a, 2019b). Research demonstrates that English language development instruction needs to not only consistently implement ELD but also use empirically supported instructional routines and strategies (Saunders et al., 2013). Additionally, successful D-ELD models need to specify the amount and type of English language development instruction that is provided to ELLs (Garbati & Mady, 2015;

Gibbons, 2007). Yet the literature on D-ELD instruction lacks both the practical specificity and empirical foundation needed to provide adequate guidance to educators (Goldenberg & Coleman, 2010).

There is a need for more evidence-based guidance to support the use of a specific set of instructional strategies for ELL students. Comprehensive and specific research evidence is critical for schools that are making long-term and often financially costly commitments to adopt comprehensive ELD models for their ELLs. This a decision that would have lasting academic implications for ELLs.

### 1.3 | Purpose of the present study

The present study addresses a gap in the existing literature by providing specific guidance on a practical evidence-based D-ELD model in the general classroom designed to support native-Spanish-speaking ELL students' oral English language development. In addition, the study addresses the relative dearth of longitudinal research evidence needed to examine the impacts of replicable, practical, and comprehensive ELD strategies over time. This D-ELD model was systematically implemented by the participating school over time in combination with I-ELD to create a comprehensive and cohesive ELD experience for ELLs beginning in kindergarten in a representative California school setting. To examine the effects that specific instructional ELD routines and strategies have over time, along with which students are most likely to benefit, this study examined the effectiveness of the D-ELD model on the oral English language proficiency of students at a Central California elementary school. Specifically, the study compared the oral English language proficiency of ELL students who had received D-ELD, ELL students who had not received D-ELD, and English-only speakers (EOs) at the same school. Oral English language proficiency was measured by the oral language proficiency subtests of the IDEA Proficiency Test (IPT I-Oral; Ballard & Tighe, 2017). The research questions that the study addressed are as follows:

1. Did the oral English language proficiency scores of ELLs in the D-ELD model significantly increase between fall of second grade and fall of third grade?
2. How did the oral English language proficiency scores of ELLs in D-ELD compare to the scores of ELLs who had not received D-ELD and the scores of EO peers in fall of third grade?

## 2 | METHOD

### 2.1 | Participants and context

Data from this study were collected as part of a collaboration between a Central California elementary school, a local county office of education, and a partnering university to develop and evaluate an evidence-based D-ELD program with routines and strategies that prior research had identified as effective for developing oral English language proficiency among Spanish-speaking ELLs (Goldenberg, 2013). The first cohort of kindergarten students received the D-ELD program beginning during the 2015–2016 academic year. Data collection for this project was initiated in the fall of 2017 and continued through the fall of 2019.

The participating elementary school serves a large population ($N > 500$) of students in kindergarten through fifth grade, over 60% of whom qualify for free or reduced-price lunch and

over 40% of whom identified as ELLs with Spanish as their first language. Since 2017, data have been collected during fall and spring of each academic year in an accelerated longitudinal, quasi-experimental design that followed two cohorts of students ($N = 151$), which included both ELLs ($n = 104$) and EOs ($n = 47$). Of the students whose data were included in present analyses, approximately 50% identified as female and 50% identified as male. Additionally, 89% of the students identified as Hispanic or Latinx/a/o and 11% identified as non-Hispanic/non-Latinx. As a result of school district demographic data collection procedures, further specified race and ethnicity data were unable to be reported.

This study examined both I-ELD and D-ELD cohorts. The I-ELD cohort in this study was in Grades 3 and 4 at the beginning of data collection in 2017. The ELLs from this cohort ($n = 39$) had received the school's district-typical integrated approach to English language development (I-ELD) throughout their time at the school. None of the students in the cohort had received instruction using the D-ELD model or strategies developed within this collaborative effort. Thus, this cohort is referred to as the I-ELD cohort. The D-ELD cohort of students were in Grades 1 and 2 when data collection commenced in the fall of 2017, and the ELLs in this cohort ($n = 65$) received daily instruction utilizing the novel D-ELD strategies in addition to the school's foundational I-ELD model since the time that they had entered kindergarten. Hence, this cohort is referred to as the D-ELD cohort. Since all ELL students who entered kindergarten in 2015–2016 or onward received the D-ELD model in addition to the standard I-ELD, this study makes comparisons across cohorts who were in different grades during the multiple academic years of this research study (see Table 1). Both the I-ELD and D-ELD classrooms and cohorts included EO and ELL students, as determined by school-based classroom assignments that intentionally mixed students of varying language status but were otherwise randomly assigned. The EO students in both cohorts ($n = 47$) were combined for comparative purposes in the analyses because neither group of EO students in either cohort received any English language development intervention, as they were native English speakers. Table 1 provides a summary of the I-ELD and D-ELD cohorts' grade levels by academic year and data collection period, and Table 2 provides a summary of the sample sizes of students included in the analyses by language status, cohort, and gender.

## 2.2 | Measures

### 2.2.1 | Oral English language proficiency

Students' oral English language proficiency was assessed individually twice each year (fall and spring) using the oral language proficiency subtests of the IDEA Proficiency Test (IPT

**TABLE 1** Grade levels by cohort, academic year, and data collection periods

| | AY 17–18 | AY 18–19 | AY 19–20 |
|---|---|---|---|
| | Fall & Spring | Fall & Spring | Fall* |
| I-ELD | Gr **3** | | |
| D-ELD | Gr 1/**2** | Gr **2/3** | Gr **3**/4 |

*Note*. AY = academic year, **bold** = included in the following analyses.

*Data was unable to be collected in the spring due to the COVID-19 pandemic.

**TABLE 2** Sample sizes by language status, cohort, and gender

| Language status | Cohort | Gender | *N* |
|---|---|---|---|
| ELLs | I-ELD | Male | 21 |
| | | Female | 18 |
| | | Total | 39 |
| | D-ELD | Male | 33 |
| | | Female | 32 |
| | | Total | 65 |
| EOs | I-ELD & D-ELD (combined) | Male | 21 |
| | | Female | 26 |
| | | Total | 47 |
| Total | | | 151 |

I-Oral; Ballard & Tighe, 2017), a standardized, norm-referenced assessment of oral language proficiency in both English and Spanish. The specific test form used was the IPT I-Oral English Form G (2nd ed.). The IPT-I tests are computer-based, adaptive tests that prompt an examiner to ask students questions in the language being assessed and require the examiner to indicate whether the student answered the question correctly. For the purposes of this study, total unstandardized oral language proficiency raw scores were reported. Research evidence supports the psychometric functioning of the IPT-Oral, with reliability estimates of.91–.96 and overall standard error values between 10 and 13. Research evidence also shows moderate to strong associations between the IPT-Oral and teachers' ratings of student's English oral ability (Ballard & Tighe, 2017). The assessment was administered to both the ELL and EO students across the D-ELD and I-ELD cohorts to obtain a direct comparison of oral English language proficiency across time.

### 2.2.2 | Student and family demographics

Data on student and family demographics were shared by the participating school to serve as both grouping and control variables in our analyses. Data were collected on factors known to be associated with outcomes of interest, such as gender (Tong, Irby, Lara-Alecio, Yoon, & Mathes, 2010), parent education as a proxy of socioeconomic status (Crosnoe et al., 2010; Lindholm-Leary, 2012), and home language to determine students' ELL status.

## 2.3 | Procedures

The innovative ELD model implemented at the school was based on research findings that effective ELD requires both explicit instruction in English (D-ELD) and instructional strategies to support ELLs' learning of academic content in English (I-ELD; CDE, 2015; Garbati & Mady, 2015; Gersten & Baker, 2000; Gibbons, 2007). The I-ELD instructional model that students in both the I-ELD and D-ELD groups received at the school focused on sheltered

instruction, which utilizes a variety of explicit instructional strategies to support ELLs' understanding of academic content instruction provided in English (Echevarría et al., 2013).

### 2.3.1 | D-ELD instructional model

The D-ELD model is grounded in four instructional routines that accelerate ELLs' second language acquisition: oral language development (Gonzalez et al., 2014; Montelongo, Durán, & Hernández, 2013; Simsek & Erdogan, 2015; Trelease, 2013; Velasco, 2012), explicit academic vocabulary instruction (Gibbons, 2007; Saunders et al., 2013; Sheng, Lam, Cruz, & Fulton, 2016), meaningful interactions, and interactive games and activities (Gibbons, 2007; Goldenberg, 2013; Marzano & Pickering, 2005). This study specifically focused on the implementation of four strategies, one strategy embedded into each routine, that research has identified as effective in developing oral English skills among Spanish-speaking ELLs: (a) interactive read-alouds (Louie & Sierschynski, 2015; Trelease, 2013); (b) explicit vocabulary language development (Calderón, Slavin, & Sánchez, 2011; Gersten et al., 2007; Gibbons, 1993, 2007); (c) chanting of repetitive songs, poems, or rhymes (Paquette & Rieg, 2008); and (d) game-based language use activities (Derakhshan & Khatir, 2015; Gibbons, 1993, 2007).

Interactive read-alouds consisted of dialogic reading (Gonzalez et al., 2014; Montelongo et al., 2013; Simsek & Erdogan, 2015; Trelease, 2013; Velasco, 2012). This active book reading experience between the teacher and students focused on oral language development using open-ended questions and prompts and completing or filling in ideas or sentences. Consistent with empirically supported practices, teachers guided discussion to create a story with students using target vocabulary, standard English rules, and grammar. Second, explicit vocabulary language development was derived from concept picture card sort games. Teachers brainstormed with students regarding different categories and the nature of each category and would explicitly teach vocabulary that corresponds to each category. Teachers would then model by displaying key concepts for pictures and placing pictures or objects in the correct categories. Students were then prompted to identify and explain their logic behind categories of each picture or object. The third strategy, chanting of repetitive songs, poems, or rhymes, allowed students to practice target vocabulary words and oral language. Students were engaged in active language use and multiple exposures to vocabulary to promote oral language development. The fourth strategy, game-based language use activities, was implemented through several games. In Describe and Draw students took turns drawing an image and practicing their oral language use by describing what they drew so that their partner was able to recreate the drawing through verbal instruction alone. Find the Difference allowed students to verbally compare and describe nearly identical photos to help each other find minor differences between them. Teachers also engaged students in the Classification Game, which required students to practice their oral language by classifying objects or photos of animals in as many ways as possible. Kim's Game involved having students view an object in the classroom before it was covered so that they could describe what it looked like. Lastly, Guess the Animal was a game in which students were shown a variety of animal toys or pictures before one student secretly choose an animal. Other students then guessed the chosen animal by asking yes or no questions.

This combination of curriculum-based and activity-based strategies was created to offer teachers the scaffolding necessary to provide 30 minutes of daily D-ELD to all ELLs. Teachers at the participating school were provided with training on this approach to D-ELD annually, beginning

with the kindergarten and first-grade team of bilingual credentialed teachers during the 2016–2017 academic year.

### 2.3.2 | Evaluation of the ELD model

Beginning in fall 2017, each participating student in both the I-ELD and D-ELD cohorts completed one 30-minute IPT English oral language proficiency assessment session during the fall and spring of each academic year. To accurately assess students' oral language proficiency, teams of graduate and undergraduate researchers were trained to administer the IPT oral language proficiency assessment prior to each data collection period. Following training, the researchers administered the English proficiency assessments in a private, one-on-one quiet space on the school's campus.

## 2.4 | Data analyses

Data were analyzed in two ways to address the two primary research questions in this study. Research Question 1 examined whether oral English language proficiency scores of students participating in the D-ELD model increased significantly over time. To address this question, a repeated-measures analysis of variance (ANOVA) was conducted to examine within-subject effects of the D-ELD model on participating students' oral English proficiency across three time points (i.e., fall of second grade, spring of second grade, and fall of third grade). Data were examined to ensure that they met all the assumptions underlying one-way ANOVAs: (1) that the dependent variable is normally distributed as defined by different levels of the factor, (2) that the variances of the dependent variable are the same for the entire sample, and (3) that cases represent random samples from the population and the scores on the test variable are independent of one another (Green & Salkind, 2008). An a priori alpha level was set at $p < .05$ to determine the statistical significance of mean score differences.

Research Question 2 examined whether oral English language proficiency scores of children who participated in the D-ELD model in kindergarten through Grade 3 were significantly different from the English proficiency scores of a comparison group of ELL students who had received the I-ELD model during this time. In addition, this question sought to examine how the mean English proficiency levels of the ELL students from the D-ELD cohort compared to those of EO students at the same grade level. To address both dimensions of Research Question 2, a one-way analysis of covariance (ANCOVA) was conducted to analyze mean differences in English language proficiency scores across three groups of students (ELLs in D-ELD, ELLs in I-ELD, and EOs) in fall of Grade 3. EO students included those in both D-ELD and I-ELD cohorts. Data were examined to ensure that they met all assumptions underlying one-way ANCOVAs: (1) that the dependent variable is normally distributed for any specific value of the covariate and for any one level of the factor, (2) that the variances of the dependent variable for the conditional distribution described prior (assumption one) are equal, (3) that the cases in the sample represent a random sample from the population and the scores on the dependent variable are independent of one another, and (4) that the covariate is linearly related to the dependent variable for all levels of the factor and that the weights or slopes between the covariate and dependent variable are equal across all levels of the factor (i.e., homogeneity of slopes; Green & Salkind, 2008).

# 3 | RESULTS

## 3.1 | Research Question 1

A one-way within-subjects repeated measures ANOVA was conducted that included three distinct time points (fall of second grade, spring of second grade, and fall of third grade) as the factor variable and English proficiency as the dependent variable. Means and standard deviations for English proficiency raw scores are provided in Table 3. The results of the ANOVA indicated a significant time effect, with Wilks's $\lambda = .47$, $F(2, 63) = 35.70$, $p < .001$, and a multivariate $\eta^2 = 0.53$, which indicated a large effect size.

Follow-up polynomial contrasts also indicated a significant linear effect, with English proficiency mean scores increasing over time, $F(1, 64) = 72.40$, $p < .001$, and a partial $\eta^2 = 0.53$, which also indicated a large effect size. Higher order polynomial contrasts were nonsignificant. It should be noted that ELLs' oral English language proficiency mean scores increased by 10.52 points between fall of second grade and spring of second grade. Between spring of second grade and fall of third grade, these same students showed an additional mean increase in English proficiency of 7.08 points. Taken together, these results show significant increases in the mean oral English language proficiency scores of ELL students in the D-ELD cohort from the fall of second grade through the fall of third grade.

## 3.2 | Research Question 2

A one-way ANCOVA was used to examine mean differences between ELL students from the D-ELD cohort, ELLs from the I-ELD cohort, and EO students on oral English language proficiency levels in the fall of Grade 3, controlling for gender and parent education levels. The ANCOVA results showed significant mean differences in English proficiency across groups, $F(2, 146) = 17.00$, MSE = 282.67, $p < .001$. The effect size of the differences in English oral language scores across all three groups in the fall of Grade 3 was large, as assessed by a partial $\eta^2$, with group membership accounting for approximately 19% of the variance in the dependent variable, holding constant students' gender and parental education level (Cohen, 1988). An examination of the means between groups adjusted for parental education and student gender showed that ELLs in the D-ELD model outperformed ELLs in the I-ELD model and performed similarly to the combined EO group. The combined EO group had the highest adjusted mean ($M = 58.72$), the ELL D-ELD group had a slightly smaller adjusted mean ($M = 55.95$), and the ELL I-ELD group had the lowest adjusted mean ($M = 38.75$), as seen in Table 4. Follow-up tests were conducted to evaluate pairwise differences among these adjusted means. Based on

**TABLE 3** Oral English language proficiency scores of ELLs in D-ELD

| Time point | *M* | *SD* |
|---|---|---|
| Fall Grade 2 | 38.22 | 17.12 |
| Spring Grade 2 | 48.74 | 17.18 |
| Fall Grade 3 | 55.82 | 16.95 |

*Note.* Oral English language IPT raw scores for English language learner students in the D-ELD model. The repeated-measures ANOVA across Grades 2 and 3 indicated significant ($p < .001$; $\eta^2 = 0.53$) increases in oral proficiency for ELL students who received D-ELD.

**TABLE 4** Oral English language proficiency scores in fall of Grade 3

| Language status/cohort | *M* | *SD* |
|---|---|---|
| ELLs D-ELD | 55.95 | 2.09 |
| ELLs I-ELD | 38.75 | 2.72 |
| All EOs | 58.72 | 2.52 |

*Note*. Oral English language IPT raw scores in fall of Grade 3. A follow-up ANCOVA indicated significant effects ($p < .001$; $\eta^2 = 0.19$) of the D-ELD approach on ELL students' oral proficiency compared to students in I-ELD. There was no significant ($p > .05$) difference in oral proficiency between ELLs in D-ELD and EO students at Grade 3.

the least significant difference procedure, the adjusted means for ELLs in the D-ELD group differed significantly from the ELLs in the I-ELD group but did not differ significantly from the combined EO group.

## 4 | DISCUSSION

The main goal of the present study was to address a gap in the existing literature by providing specific guidance based on the comparison of two ELD models: district-typical integrated English language development (I-ELD) and I-ELD with evidence-based designated English development (D-ELD). Both the D-ELD and I-ELD models were systematically implemented by the participating school over time, and students' oral English language proficiency was measured at three time points: fall of second grade, spring of second grade, and fall of third grade.

The findings demonstrate that the oral English language proficiency of ELLs across both D-ELD and I-ELD models increased significantly. However, ELL students who participated in the D-ELD model demonstrated significantly higher English oral language proficiency outcomes than ELLs who participated in the I-ELD model. Perhaps most important, the ELLs in the D-ELD model demonstrated no significant difference in oral English language skills at Grade 3 when compared with English-only students across both I-ELD and D-ELD models. The findings provide strong evidence that the D-ELD model with 30 minutes of daily specific, evidence-based strategies was associated with a significant reduction of the oral English language proficiency gap that typically appears between EO and ELL students in third grade in a U.S. public school environment as measured by test results (Al Otaiba et al., 2009; Hakuta, Butler, & Witt, 2000; Kieffer, 2008; Umansky & Reardon, 2014; Valentino & Reardon, 2015).

### 4.1 | Practical implications

The results of the current study have practical implications for educators serving Spanish-speaking ELLs. First, the study provides strong evidence supporting the efficacy of the D-ELD model in significantly reducing the discrepancy in oral language skills between ELL and EO students by third grade at one Central California elementary school. In an English-only academic environment, oral English language skills are critical because they provide the fundamental building blocks that enable students to better access English academic content, especially as they begin transitioning into language-heavy topics typical of fourth grade. The current study provides research-based evidence in support of a D-ELD model that helps move beyond the limitations of I-ELD only to best support students. Furthermore, this specific D-ELD model can

serve as a low-cost and less time-intensive alternative to other strategies that may not always be feasible, such as dual-language immersion or transitional bilingual education.

Given the low English proficiency reclassification rates (Hill, Weston, & Hayes, 2014) and persistent academic performance disparities between ELL and EO students in the elementary grades across the United States (Hussar et al., 2020; NCES, 2019a, 2019b), action on behalf of educational leaders is critically needed. The decisions made by educators regarding how to support ELLs have significant and lifelong implications for these students. While oral language proficiency is only one of several key components of language proficiency, the results of the current study may provide one avenue to begin supporting English proficiency reclassification rates for ELLs.

Finally, this study details an innovative approach to D-ELD that was designed collaboratively between multiple community stakeholders as an efficient and effective use of limited school resources. Additionally, the present D-ELD model is low in implementation cost, requiring only one 30-minute daily session, and involves easily replicable, clearly specified evidence-based instructional strategies. These features taken together may offer school leaders and educators an opportunity to support their ELLs without making substantial programmatic changes required of alternative programs, which may necessitate larger budgetary commitments.

## 4.2 | Limitations and conclusions

Despite the promising results of the current study, there were several limitations. First, the sample sizes of the students in each model were relatively small, yielding limited statistical power and the possibility of unreliable estimates of the population's performance under similar instructional conditions. That said, the effect sizes found in the analyses were quite large and yielded statistical significance despite the relatively low levels of statistical power. The results of this study should be interpreted with caution, recognizing that additional replications are needed in broader educational contexts with more diverse samples of Spanish-speaking ELLs over time to further strengthen claims of effectiveness.

Second, although the students in the current study had received their respective ELD instructional model (e.g., I-ELD only vs. D-ELD combined with I-ELD) since kindergarten, data were available for analysis only from Grades 2 and 3 for this study. Additional research is needed to better understand the trajectories of these students starting in kindergarten through the end of elementary school, recognizing that there could have been key differences between cohorts of students at kindergarten entry and potential differences that might emerge by the end of elementary school.

Third, the data that were used in the current study were from a single measure of oral English language proficiency (IPT I-Oral; Ballard & Tighe, 2017). While this measure was selected due to evidence supporting its psychometric properties and general acceptance as a useful measure of oral language proficiency among educators and scholars, using a single measure to capture something as complex as oral language proficiency may be insufficient. Future research ought to also incorporate students' English language proficiency levels (i.e., emerging, expanding, and bridging) as measured by statewide school-based language proficiency assessments, to which researchers in this study did not have access. There also remain significant and noteworthy limitations to all existing measures of language proficiency, including but not limited to norming samples that often focus on either monolingual speakers or emerging bilinguals but that rarely include separate norms for both (Boerma & Blom, 2017; Edyburn, 2019).

Additionally, it is important to recognize that "there is no single EL profile and no one-size-fits-all approach that works for all English learners, programs, [or] curriculum, and instruction

must be responsive to different EL student characteristics and experiences" (CDE, 2018, p. 13). Recognizing this heterogeneity, the current study focused specifically on Spanish-speaking ELLs, as they represent approximately 75% of the overall ELL student population in the United States (Hussar et al., 2020). Moreover, while this study focused on educational models to specifically support oral English language proficiency as measured by one test instrument across I-ELD and D-ELD conditions, multiple other student factors, such as social–emotional, cultural, and broader contextual factors, would likely impact a students' English language development. Such diversity requires that effective models of ELD include flexible and individualized considerations to serve the varied needs of ELL students.

Finally, it must be acknowledged that many events occurred outside of the researchers' and school's control that may have impacted the results of the current study. During the duration of the D-ELD model's implementation and part of the data collection, multiple natural disasters significantly disrupted daily life in the school and the overall community. Although data collection was disrupted by COVID-19, data analyzed in this study were collected before the pandemic. It is unknown how these events might have impacted students' oral English language proficiency. However, despite these events, significant and substantial growth in oral English language proficiency endured at the time of the study. More specifically, this study showed that ELL students in the D-ELD cohort demonstrated significant increases in their mean oral English language proficiency scores from the fall of second grade through the fall of third grade. By third grade, students who were ELLs in the D-ELD model did not have significant differences in oral English language proficiency from their EO counterparts. This highlights both students' resiliency and the significance of implementing evidence-based curricula with fidelity and consistency over time for Spanish-speaking ELLs. This research study provides evidence for a sustainable, low-cost approach to D-ELD that was found to yield positive outcomes for ELLs even in the face of adversity. It is critical that educators and researchers continue to push for the development, implementation, and empirical evaluation of models that better address the inequities that ELL students experience in our schools and support ELLs' broader long-term development and functioning.

### 4.2.1 | THE AUTHORS

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