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#### **About New America**

New America is dedicated to the renewal of American politics, prosperity, and purpose in the Digital Age. We carry out our mission as a nonprofit civic enterprise: an intellectual venture capital fund, think tank, technology laboratory, public forum, and media platform. Our hallmarks are big ideas, impartial analysis, pragmatic policy solutions, technological innovation, next generation politics, and creative engagement with broad audiences.

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#### **Acknowledgments**

The paper benefited from the advice, input, and wisdom of many, many individuals. New America colleagues Lisa Guernsey, Laura Bornfreund, Isabella Sanchez, Ruby Takanishi, Janie Tankard Carnock, and April Ege provided considerable expert and editorial insight. Kelly Devlin, Ericka Guynes, Karen Thompson, Christine Blouke, Matthew Weyer, Evelyn Shoop, Sarah Ruttan, Swati Adarkar, Brendan Mortimer, Freeland Church, Esperanza de la Vega, Maria Adams, and Andreina Velasco all provided key advice and support.

We would like to thank the <u>Heising-Simons Foundation</u> and the <u>McKnight Foundation</u> for their generous support of this work. The views expressed in this report are those of its authors and do not necessarily represent the views of the Heising-Simons and McKnight Foundations, their officers, or employees.

The New America Education Policy Program's work is made possible through generous grants from the Alliance for Early Success; the Foundation for Child Development; the Bill and Melinda Gates Foundation; the Evelyn and Walter Haas, Jr. Fund; the Heising-Simons Foundation; the William and Flora Hewlett Foundation; the Joyce Foundation; the W.K. Kellogg Foundation; the Kresge Foundation; Lumina Foundation; the McKnight Foundation; the Charles Stewart Mott Foundation; the David and Lucile Packard Foundation; the J.B. & M.K. Pritzker Family Foundation; the Smith Richardson Foundation; the W. Clement and Jessie V. Stone Foundation; and the Berkshire Taconic Community Foundation.

#### Contents

Executive Summary	6
Introduction	8
David Douglas: Assets and Challenges	11
Earl Boyles: A School-Level Snapshot	21
Conclusion & Recommendations	32
Notes	34

#### Series Introduction for the District Profiles

The demographics of American schools have been changing rapidly for some years now. One of the most telling changes in the last decade has been the increase in ethnic and linguistic diversity in communities that have not historically had large numbers of recent immigrants. None of the five counties with the fastest growth in Hispanic residents (from 2000 to 2011) are in areas with traditionally high numbers of immigrants: Luzerne County (PA), Sevier County (TN), Frederick County (VA), Paulding County (GA), and Henry County (GA). While the number of dual language learners enrolled in U.S. schools grew by 18 percent from the 2000–01 school year to the 2010–11 school year, it grew by 610 percent in South Carolina, 306 percent in Kentucky, 255 percent in Nevada, and 230 percent in Delaware. The English language learner populations in Arkansas, Kansas, Mississippi, Alabama, Virginia, and North Carolina more than doubled over the same period.<sup>2</sup>

Educators and policymakers in these states—and many others—are grappling with this shift in a variety of ways. Few of them have experience supporting the linguistic and academic growth of linguistically diverse students. Some are exploring ways to use their investments in high-quality pre-K to support students who speak a language other than English at home. Others are wondering how they can prepare and support teachers working with these students. Still others are considering ways to assist language learners' families through wraparound services and community investments. Most are trying to find ways to serve these students without segregating them from the rigor of mainstream academic instruction.

Fortunately, communities wrestling with new linguistic diversity in their schools do not have to invent their own best practices from scratch. There are districts across the country—frontiers of integration—with a long history of supporting language learners in their schools. Some of these districts have already established education programs and services that help language learners and their families. The challenge, then, is to share institutional expertise and wisdom from places with experience serving these students well. This is the second in a series of district profiles from New America's Dual Language Learners National Work Group seeking to capture this knowledge and make it accessible to educators and policymakers across the country.

#### How New America Defines "Dual Language Learners" [DLLs]

A dual language learner (DLL) is a child between the ages of zero and eight years old who is in the process of learning English in addition to his or her home language(s). This student may or may not be enrolled in a school where instruction is conducted in both languages.

The profiles in this series use DLL to refer to these students for two reasons: 1) our research is focused on children in the PreK-3<sup>rd</sup> grades, where this term is generally the most accurate; and 2) to avoid confusion caused by labeling children based on various words associated with specific interventions or strategies (such as "dual immersion" or ESL) rather than on their language status.

### Reforming Early Education, Birth Through Third Grade

State and Local Reports

From 2015 through 2016, the Early Education Initiative will be producing a series of reports from states and localities across the United States to provide an inside look at efforts to support children's learning from infancy and extending into the early grades. Access to the reports is available through Atlas (atlas. newamerica.org), the data and analysis tool designed for New America's Education Policy Program. Reports are forthcoming, or have already been published, in the following geographic areas.

A report that provides analysis and ranks all 50 states and Washington, DC on progress in advancing early education policies will be published in November 2015. The David Douglas School District in Portland, OR

Focused on supporting dual language learners' linguistic and academic development.





The San Francisco
Unified School District

Focused on aligning teaching and learning across grade levels.



California

Focused on improving the workforce



### **EXECUTIVE SUMMARY**

Portland, Oregon is known more for its cultural eclecticism than almost anything else. The city is famous as a haven for eccentrics with ideas way off the beaten path. Fittingly, the Rose City is blazing new trails in how it educates dual language learners (DLLs). Approximately 19 percent of the city's families speak a language other than English at home.<sup>3</sup> And while Portland is the fastest gentrifying city in the United States, this infusion of wealth and education is not coming equally to all neighborhoods. The rapid increases in housing (and other living) costs in much of the city have pushed many lowincome families to the east side of Portland.<sup>4</sup>

Nowhere are these trends more evident than in the city's David Douglas School District, where more than 80 percent of students come from economically-disadvantaged families and more than 70 languages are spoken across students' households.<sup>5</sup> Some of the district's primary schools, like Mill Park Elementary, had dozens of languages represented in their classrooms in the 2014–15 school year.<sup>6</sup> (See sidebar: "Languages in David Douglas' Mill Park Elementary," page 8.) This means that multilingualism is the rule, not the exception, in most David Douglas classrooms.

In recent years, David Douglas leaders explored, designed, and implemented a new instructional model to support DLLs' needs. They switched from a pullout English as a Second Language (ESL) model, where DLLs would leave class for targeted English language instruction, to a push-in English Language Development (ELD) model, where the English language is explicitly taught to DLLs and non-DLLs alike in mainstream classrooms. The new ELD blocks are targeted at students with similar language needs and they focus on getting students talking with one another. The district's solution is particularly interesting because it has some qualities that make it replicable. It leverages the district's existing assets and human capital, supports linguistic integration of DLLs and non-DLLs, and-most importantly-is getting results. Last year, David Douglas was one of very few Oregon districts to hit state benchmarks for DLLs' academic achievement and success at learning English.

But the shift in instructional model is only part of the story in David Douglas. The district is also blending existing funding streams and securing new ones to expand its pre-K programs. It works with non-profit organizations and local officials to provide services, programs, and resources that support family engagement in elementary schools. And it is implementing all of its new programs carefully, with support from experts and attention to tweaks that could make everything work better.

David Douglas' situation offers a useful example for districts that are rethinking how to serve their DLLs. Here are some specific lessons from its experience:

## Lesson #1: It is not enough to set new priorities for how DLLs will be supported in schools—policy design matters.

David Douglas' new focus on DLLs' oral language development started as an experiment and was quickly expanded across the district. This expansion was possible in part because the new ELD model was designed to be ambitious, but not unattainable, for teachers. In other words, the change did not require a staff overhaul or a massive restructuring of how current systems were organized.

Upshot: This is an effective theory of implementation: reforms need to be big enough to make a real difference for students but not so dramatic that they are out of a district's reach to meaningfully put in practice.

## Lesson #2: It is not enough to design new DLL policies carefully—the implementation of reforms matters.

After district leaders decided to move ahead with the new ELD model, they built a number of systems to support effective implementation. The district built on existing staff strengths in professional development sessions, provided regular instructional coaching, and designed new curricular materials for teachers.

Upshot: Once they have designed new policies to get teachers and schools to better serve DLLs, districts need to build systems for supporting initial implementation and ongoing refinement of the new policies.

# Lesson #3: District investments in expanding access to quality early education across the PreK-3<sup>rd</sup> grades can help support DLLs' linguistic and academic development.

Research suggests that DLLs particularly benefit from investments in quality early education programs. With support from Oregon's Children's Institute, local government programs, and other organizations, David Douglas is expanding its own early investments. The district has long provided full-day kindergarten for its students, and is now working to expand pre-K access in its schools. It also partners with local government and community organizations to provide some programs for area infants and toddlers.

*Upshot: Districts should invest in expanding early education access for DLLs and connecting new investments to the rest of their PreK–3<sup>rd</sup> grades.* 

### Lesson #4: Families are a critically important educational resource for DLLs.

David Douglas' Earl Boyles Elementary is implementing a number of new initiatives in addition to the district's new ELD model. The school has a new early learning wing, some "dual-generation" programs that support both student and family success at once, new investments in education technology, and much more. Most of these efforts are the result of comprehensive, ongoing conversations with the broader Earl Boyles community. The school is working to involve families in setting priorities for the school's future. This engagement often begins when families enroll in the school's pre-K program.

Upshot: DLLs' families bring considerable assets to their children's educations. Schools and districts that involve them from the beginning support students' success and establish productive relationships for addressing future challenges.

#### Lesson #5: A district-wide focus on oral language development helps DLLs progress towards academic English proficiency—and also supports their academic development.

David Douglas gives schools and teachers considerable latitude in how they use the new ELD model. But it insists that students spend at least half of the 30-minute blocks talking with one another in complete sentences. This focus on oral language development provides students with a strong early foundation in English and helps them access more rigorous academic content.

Importantly, David Douglas leaders do not see oral language proficiency in English as an end goal for DLLs. Rather, they see it as a means to support students' development to full academic language proficiency. While the district provides a scope and sequence to help guide instruction to match DLLs' oral language development pathways, teachers build ELD lessons that link these language skills to content that the students have been learning in those classrooms. That is, the district builds academic content into its language development model. The reverse is also happening: educators across the district are starting to connect their oral language development strategies from the ELD blocks to their math, literacy, science, and social studies instruction.

Upshot: When districts focus on oral language development and connect it to academic content, they help build a foundation for future development of academic language proficiency.

### INTRODUCTION

"Portland's known for three things," announced Mill Park Elementary's bearded language coach. "Coffee. Beer. And weird people." He shoved a bag across the table.

"So: welcome to our school. Inside that bag, you'll find coffee from one of our best roasters, beer from one of our best microbreweries, and," he said, spreading his arms, "we're the weird people!"

There is something to this. In his *Fugitives and Refugees*, Chuck Palahniuk writes that Portland is a city full of "the most cracked of the crackpots. The misfits among misfits." This cultural eclecticism has come to define Portland—the city is known as a haven for eccentrics with ideas way off the beaten path.

But the Rose City is diverse in other ways as well. Portland's Bureau of Planning and Sustainability provides a "Timeline of Oregon and U.S. Racial, Immigration, and Education History" on its website. The document tracks the area's demographics since 8,000 BCE; it identifies the mid-1800s as a period when Oregon began to attract significant numbers of Chinese and Mexican immigrants, and the late 1800s as the time when Japanese immigrants began arriving in larger numbers. Russian immigrants began arriving in Oregon around the same time. Immigration from these—and other—groups waxed and waned over the ensuing years.

The state's growing diversity prompted considerable political pushback by the Ku Klux Klan and other groups, who launched (ultimately unsuccessful) statewide efforts to homogenize the education system with the slogan "One Flag, One School, One Language." <sup>10</sup> Oregon did not vote to ratify the U.S. Constitution's 15<sup>th</sup> Amendment—which guaranteed all (male) Americans the right to vote—until 1959, ninety years after it was certified and added to the Constitution.<sup>11</sup>

In recent years, the area has again attracted growing numbers of immigrants and other linguistically diverse families. Fortunately, Oregon voters are responding differently to this increased diversity than they did in the 20<sup>th</sup> century. In 2008, they solidly opposed a statewide referendum that would have effectively outlawed bilingual education for dual language learners (DLLs) in favor of English immersion instructional models.<sup>12</sup>

Approximately 19 percent of the city's families speak a language other than English at home. <sup>13</sup> Furthermore, while Portland is the fastest gentrifying city in the United States, this infusion of wealth and education is not coming equally to all neighborhoods. The rapid increases in housing (and other living) costs in much of the city have pushed many linguistically diverse, low-income families to the east side of Portland. <sup>14</sup>

Nowhere are these trends more evident than in the city's David Douglas School District, where more than 80 percent of students come from economically-disadvantaged families and more than 70 languages are spoken across students' households. 5 Some of the district's primary schools, like Mill Park Elementary,

#### Languages Spoken in Students' Households for David Douglas' Mill Park Elementary<sup>17</sup>

[Listed in order of prevalence]

English Pashto (Northern)

Spanish Farsi

Russian Chuukese Somali Bosnian

ſurkish Lao

Burmese Maay-Maay

Vietnamese Malay
Arabic Oromo
Karen Persian

Chinese (Cantonese) Urdu Ukrainian Swahili

Romanian Tigrinya

epali Tong

Hmong

had dozens of languages represented in their classrooms in the 2014–15 school year. (See sidebar: "Languages in David Douglas' Mill Park Elementary," page 8.) This means that multilingualism is the rule, not the exception, in most David Douglas classrooms.

While Portland Public Schools, the city's (and Oregon's) largest district, runs some of the country's oldest and best-established dual-immersion programs (in Spanish, Mandarin, Japanese, Russian, and Vietnamese), David Douglas has simply too many languages in most instances to support DLLs' home languages through immersion models. Even if administrators *could* replace their entire teaching force with hundreds of new octo-lingual teachers, and even if they *did* find a way to get the right languages spoken in the right classrooms for the right students, it is hard to imagine how they could slice up the school day to provide enough instruction in all of those languages.

In recent years, David Douglas leaders explored, designed, and implemented a new instructional model to support DLLs' needs. They switched from a pullout English as a Second Language (ESL) model, where DLLs would leave class for targeted English language instruction, to a push-in English Language Development (ELD) model, where English is explicitly taught in mainstream classrooms for 30 minutes every day. The district's solution is particularly interesting because it has some qualities that make it replicable. It leverages the district's existing assets and human capital, supports linguistic integration of DLLs and non-DLLs, andmost importantly—is getting results. Last year, David Douglas was one of very few Oregon districts to hit state benchmarks for DLLs' academic achievement and success at learning English.

But the shift in instructional model is only part of the story in David Douglas. The district is also blending existing funding streams and securing new ones to expand its pre-K programs. It works with non-profit organizations and local officials to provide services, programs, and resources that support family engagement in elementary schools. And it is implementing all of the new programs carefully, with support from experts and attention to tweaks that could make everything work better.

Portland's beer scene is impressive. And its refined taste in coffee ranks at the very top tier of American cities. But work like that shown in the David Douglas School District suggests that some of Portland's "weird people" should also be known for their commitment to supporting



Fliers for Multicultural Night at David Douglas' Cherry Park Elementary.

linguistic and academic development for DLLs. David Douglas is dreaming big—and implementing well—when it comes to helping DLLs succeed.

### **DLLs and Early Education in Oregon**

#### **State Changes**

David Douglas educators' hard work revamping the district's instructional model for DLLs coincided with a period of supportive changes at the state level. In 2013, the Oregon Department of Education (ODE) hired Woodburn (OR) School District superintendent David Bautista as part of an increased focus on DLLs. Around the time Bautista arrived at the ODE, the state released a new strategic plan "to address the unique needs of [DLLs] in Oregon." <sup>18</sup>

The new plan outlined a series of goals accompanied by justifications, metrics for determining success, and year-by-year implementation benchmarks. For instance, the plan's second goal is that "Systemic approaches to 'capacity building' for all stakeholders will occur and will positively impact academic achievement for [DLLs]." The plan breaks the goal into smaller pieces and outlines four years' worth of strategic implementation at different levels, from the state down to districts, schools, and classrooms."

Oregon State Professor Karen Thompson and others say that Bautista is using his position as an ODE assistant superintendent to make the plan a key part of Oregon's efforts to improve educational equity. The plan is powerful, Thompson says, because "a lot of people were involved in the drafting...they can legitimately say that hundreds of people were involved [and] it becomes this touchstone for telling the legislature that we need more money for [DLLs]." <sup>20</sup>

Oregon policymakers are continuing this momentum. In July 2015, the state enacted a law requiring the ODE to establish a new advisory group to review state DLL data, funding, and accountability systems.<sup>21</sup>

#### **Full-Day Kindergarten**

Starting in the 2015–16 school year, the state began funding full-day kindergarten for all school districts (at a cost of \$110 million annually). For many Oregon districts, this represented a considerable change from the status quo—just 355 of the state's 721 elementary schools provided full-day kindergarten the year before the change.<sup>22</sup> But David Douglas schools were already running full-day kindergarten out of existing funding streams, so the new state resources will free up some of those dollars for other district programming.<sup>23</sup>

#### Pre-K

Ten percent of Oregon four-year-olds and six percent of three-year-olds were enrolled in state pre-K programs in 2014. In July 2015, the state expanded its annual pre-K investment by \$27 million, which works out to around 2,700 new public pre-K seats. This expands existing enrollment by about one-third (from 7,209 students enrolled in 2014), but will still leave nearly 30,000 students from low-income families without access to high-quality public pre-K.<sup>24</sup>

# DAVID DOUGLAS: ASSETS AND CHALLENGES

At a recent meeting of David Douglas' language coaches, Belle Koskela, the district's Academic Language Coach, showed a series of slides announcing highlights from the past year. Some were relatively predictable: the language coaching team ran half-a-dozen professional development conferences with district teachers, assessed hundreds of DLL students on their English language proficiency, designed 162 weeks of new language curriculum, and so forth. Others were not: the district had 14 site visits from local, state, and national education organizations during that school year, including the U.S. Department of Education, the Oregon Department of Education, various Oregon school districts, and other groups like New America.28 This level of attention is rare for any district-let alone one that faces the array of challenges present in a high-poverty, highly-diverse district like David Douglas. (See sidebar: "David Douglas School District: 2014 Demographics," on page 12.)

#### Why the hubbub?

David Douglas popped up on the radar last fall, when the Oregon Department of Education announced that it was one of just eight Oregon districts to meet all three of No Child Left Behind's "Annual Measurable Achievement Objectives." That is, David Douglas' DLL students hit state benchmarks for their growing English skills, their success in becoming proficient in English, and their academic progress.<sup>29</sup> (See sidebar: "No Child Left Behind's Title III and Annual Measurable Achievement Objectives," page 13.)

The other seven districts that hit the state's goals serve generally more privileged student populations than David Douglas.<sup>30</sup> In some, the percentages of economically-disadvantaged students are half—or less—of those in David Douglas. Most of the districts also serve much lower percentages of DLLs. In several, the number of languages spoken by students at home is also in the single digits, a small fraction of David Douglas' total.<sup>31</sup>

But for those who had been paying close attention, David Douglas' success was less surprising. In 2014, almost a year to the day before the state announced David

Douglas' AMAO results, Superintendent Don Grotting was named Oregon's Superintendent of the Year by the Confederation of Oregon School Administrators.<sup>37</sup> The year before, the Confederation named David Douglas Principal Ericka Guynes Oregon's Elementary School Principal of the Year.<sup>38</sup>

More than these awards, however, the district's path to meeting AMAOs began with a major instructional shift for its DLLs. This was no casual tinkering around the margins. One in five David Douglas students is formally classified as a DLL. Even though this is over double the national rate (9.2 percent, or not quite one in ten students), it actually understates the district's linguistic diversity.<sup>39</sup> In the K–3 grades, 39 percent of David Douglas students have been formally classified at one point.<sup>40</sup> At Mill Park Elementary, over 60 percent of students have been classified as DLLs at some point in their academic careers. That number is over 30 percent at all but two of David Douglas' 14 schools.<sup>41</sup> Any change in the district's instructional model for supporting DLLs would be a heavy lift.

So, in 2011, after many years of running an English as a Second Language (ESL) pullout model, the district piloted a new model for better supporting DLLs' linguistic and academic development in its mainstream instructional classrooms. "We were sometimes pulling out 20 out of 28 students from some classes," says Koskela. <sup>42</sup> The district decided that it made more sense to bring language services *in* to support the larger group of students, rather than pulling so many DLLs out of class. The district called their new model "Language for All" and "Walk to Language." <sup>43</sup>

The new model put oral language development at the front and center of the early years. This focus on students talking (and listening) is a strong practice for DLLs.<sup>44</sup> Research suggests that it takes two to three years for DLLs to achieve basic social proficiency in English; academic English proficiency generally takes from four to seven years to reach.<sup>45</sup> Fortunately, a strong oral language foundation can help DLLs make the transition to full academic English proficiency. It can help them access rigorous academic content in English and develop

a deeper understanding of how different linguistic elements fit together. That is, DLLs who can speak in complex sentences and express nuance are in a strong position to build new vocabulary and understand difficult academic content at a deeper level.<sup>46</sup>

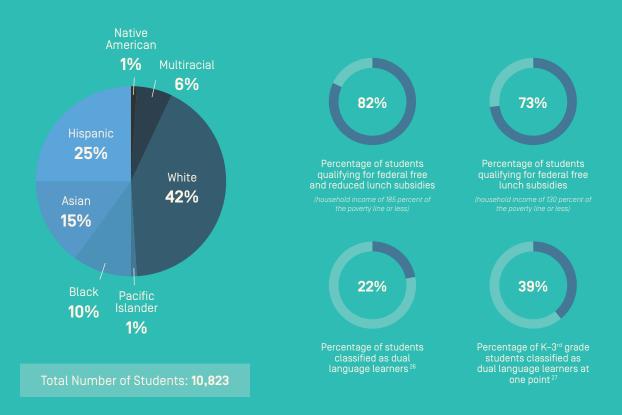
DLLs come to school with unique language development needs. They usually receive targeted ESL services, some form of sheltered English immersion, or bilingual instruction. One of the challenges of serving these students well is balancing effective language development instruction with academic content instruction. As Stanford education professor Claude Goldenberg recently wrote, "generally effective [teaching] practices are likely to be effective with [DLLs]," but they also "require additional instructional supports." <sup>47</sup> So what does it look like when these supports move to the center of a district's instructional model?

#### The Model

David Douglas leaders call their program "Language For All," but it also goes by the name of "content-based English Language Development," or "content-based ELD." The model is built from a number of resources, including E. L. Achieve's "Systematic ELD" model, which derives from the work of literacy expert Susana Dutro. 48 Dutro had been involved in Oregon for years; she worked with the state in the mid-2000s to revamp its English language proficiency standards. 49 The district also built on previous professional development investments in its teachers' skills and expertise. That is, rather than overhauling its workforce, the district found a way to get better results from existing human capital.

The ELD model's specifics vary from school to school. "It's a fine balance between consistency and allowing sites

The David Douglas School District: 2014 Demographics <sup>25</sup>



# No Child Left Behind's Title III and Annual Measurable Achievement Objectives [AMAOs]

When Congress passed No Child Left Behind in 2002, it significantly changed the federal government's role in supporting the education of DLLs. For years, this role consisted of providing targeted grants to help districts implement and expand bilingual education models. But NCLB's Title III offered a formula grant to support all districts serving these students. That is, Congress appropriated funding—usually between \$680 million and \$750 million annually—specifically designated for supporting DLLs' academic growth and English acquisition.

Title III funds are allocated to states based on their shares of the country's DLLs and immigrant children. States then subgrant these dollars to districts according to their shares of those two groups of students. Simple as this sounds, the allocation of these funds is plagued by unreliable data.

In return for these funds, states are required to identify DLLs using language screener assessments. NCLB's authors hoped that these screeners would eventually yield reliable counts of DLLs for each state. But these data have thus far proven problematic, so the U.S. Department of Education instead allocates Title III funds according to data from the U.S. Census Bureau's American Community Survey (ACS). Meanwhile, states are still required to spend those dollars on the students they identify through their screeners. As a result, the per-pupil allocations through this funding stream vary by state, depending on the gap between the ACS data and the data from state screeners. In 2009, Pennsylvania received \$457 in Title III funds per DLL, while New Mexico received just \$87.32

The law sets other requirements for states and districts in exchange for those resources. States must develop and use English language proficiency assessments to determine when DLLs have reached academic English proficiency. When DLLs score proficient on these assessments, they "exit" the official language learner designation and generally cease to receive formal language supports (e.g., ESL courses, enrollment in bilingual education programs, and so forth).<sup>33</sup> In other words, they cease to be DLLs in the eyes of their school, the district, the state, and the U.S. Department of Education.

In return for Title III funds, districts must also implement an instructional plan for supporting DLLs' academic growth and English acquisition. These plans may include native language instruction, but that is not a requirement. The law requires only that states push districts to implement a strategy that is "tied to scientifically based research on teaching limited English proficient children and that has been demonstrated to be effective."

As a result, there are myriad models in place in American schools. Since some of these are more effective than others, NCLB's authors sought a way to track programs' success over time and eventually pressure low-performing districts to improve their practices.

The system of policies they designed sets three benchmarks for districts under the name of "Annual Measurable Achievement Objectives," or AMAOs. The three benchmarks assess and monitor growth and achievement in English proficiency, along with math and reading growth and achievement.<sup>34</sup>

NCLB requires that states set goals for districts for each of these AMAOs, though states have considerable discretion in how they calculate success on each. The law also expects states to intervene in districts that consistently fail to meet those goals, though the law leaves states wide latitude in determining the scope of their interventions. State flexibility has grown through "waivers" the Obama Administration has granted states on particular elements of No Child Left Behind.

Oregon has taken advantage of that opportunity. For the 2013–14 school year, Oregon made several changes to its calculations to focus more on DLLs' linguistic and academic growth over time, rather than proficiency. For instance, the state had long defined successful DLL progress in learning English as increasing by one level each year on the state's English proficiency assessment. The 2013–14 change allowed DLLs an extra year at certain, particularly difficult, moments in their English language development. For instance, students who begin a particular school year with "early advanced" English skills now have two years, rather than one, before they count against a district's AMAO scores for failing to make progress.<sup>36</sup>

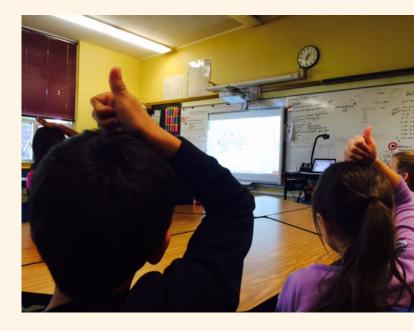
to be unique—because they *are* unique," says Director of ESL and Equity Kelly Devlin. "It's about saying 'here are our basic expectations, here's where we don't need to micromanage." <sup>50</sup>

However, the program generally follows these contours: schools set aside a daily block of 30 minutes explicitly devoted to students' oral language development. All elementary school students participate, beginning in kindergarten. Groups are homogeneous to allow for more targeted language instruction—students are assigned a group based on their English proficiency. This means that students in most schools "walk" for ELD instruction: they leave their home classrooms to join other students in their grade with similar English language proficiency levels. All are taught by classroom teachers. Instructional assistants and language coaches are allowed to support small group instruction within the lesson but not allowed to be the primary instructors.

David Douglas kicked off the first year of ELD with two seemingly simple goals: 50 percent student talk time and speaking in complete sentences (for both staff and students) across the 30-minute blocks. But these conversations are structured: teachers generally provide basic scaffolding to guide students' talk towards practicing key phrases and/or working on specific language elements. In one kindergarten ELD group, students practice asking one another, "What do you know about a sheep?" Partners explain, "A sheep is soft," with the help of a list of various animals and adjectives to describe them. These "sentence frames" provide students with a structure and a formula for generating language in English—or, to put it in plain terms, these frames make it easier for young DLLs to practice speaking in English.<sup>51</sup>

Meanwhile, in a first grade ELD group, students are learning to add sensory adjectives to declarative sentences. They start with "I am a person," and "This is an orange," and fill in a worksheet titled "I can describe using my five senses" with their teacher. Then she distributes oranges to each student and they return to their desks to describe them to their partners. "My orange is smooth," says one. "My orange smells stinky," says another. "My orange tastes yucky," complains a third.<sup>52</sup>

The specific content, strategies, and lessons used in ELD blocks are not scripted. While the district's language coaches mapped out a scope and sequence of language skills for beginner, intermediate, and advanced groups across the K–5 grades, these materials are offered as a resource rather than a prescription. Many teachers *do* rely on these materials to guide their instruction, however.



Earl Boyles students "light their candles" to show when they have finished a task.

They take the language skills from the district's map and connect them to content their students are working on in their main classrooms. Importantly, each lesson also aims at gradually releasing teachers' control so that eventually students are doing the bulk of the talking.

There are a variety of specific instructional and classroom management strategies in evidence across different David Douglas elementary campuses. Early in lessons, teachers call students up to model specific language use in a figurative "Fishbowl" in the front of the classroom. Later, when they are ready to release control of the lessons, they organize students into two groups, and then have them stand in parallel "Lines of Communication"—partners in one line work their way down the other line, asking and answering questions in turn. At the end of the ELD block, they close by calling pairs of partners to share and/or demonstrate their conversations back in the Fishbowl. Finally, adorably, teachers often ask students to "light their candles" by making a thumbs up and resting it on top of their heads when they have finished a task.<sup>53</sup>

The district's ELD blocks are homogeneous—all of the students in a particular group have roughly similar levels of English language proficiency. This means that the groups are often integrated between students who are formally classified as DLLs (according to the state) and students who speak English at home. That is, David Douglas educators have found that many of their

monolingual English-speaking students—especially those from low-income households—are *also* "English Learners." Even though these students speak English at home, the district's language screeners show that their academic English skills are still emerging. This means that they are placed in the intermediate ELD groups with DLL peers who speak a non-English language at home.

Shane Burchell, a language coach at Ventura Park Elementary, tells a funny story related to this part of their model. Pursuant to No Child Left Behind, all formally-classified language learners in the country must take a state-chosen assessment each year to gauge their English language proficiency (and the progress they have made towards reaching proficiency that year). But, he notes, "students don't know if they're officially identified [as DLLs] or not, so some of the English-only kids go, 'Hey! When are you gonna pull me? I wanna take that test too!"

Hence, the integrated nature of the ELD blocks has an additional advantage of removing most of the "visible" evidence that DLL students are different from their native English-speaking peers. Because David Douglas' "Language For All" model actually serves all students with language instruction, DLLs essentially never leave their non-DLL peers. Since they are not pulled out for separate, segregated language services, they are not stigmatized as being different or deficient from their peers.<sup>55</sup>

While districts' language policies usually focus on DLLs, *all* young students are English learners, no matter what languages their families speak at home. So David Douglas's ELD block supports *all* students in their oral language development, structural understanding of English, and steady acquisition of content vocabulary.

Just as significantly, the ELD groups' homogeneity also serves an instructional purpose. Since each group's students are at approximately the same level of English language development, teachers can provide targeted instruction that supports their group's needs without having to differentiate nearly as much as in whole class instruction to students with a wider variety of English language proficiency levels.

The district's language map helps guide teachers' instruction to meet the particular needs of their ELD groups. It provides them with a series of skills and strategies for targeting them that builds over time to support students' language development. These are also aligned to students' ages: kindergarten students in

a beginner group receive different language instruction than second grade students who have similar English language proficiency levels.

For instance, students in one kindergarten ELD group participate in a lesson with tight sentence frames that help them practice describing familiar objects. Second-graders working at a similar level of English proficiency use sentence frames as well, but also spend more time learning the technical terms involved: "nouns," "adjectives," and the like.<sup>56</sup>

Here is another example: students in another kindergarten group practice asking and answering "What do you like to do?" This requires them to articulate and express their own preferences. On the same day, second graders at a similar language proficiency level practice asking and answering basic questions about their favorite desserts. They then tally class responses on a bar graph and use different sentence frames to discuss and interpret the graph. "Do more people like ice cream or cookies?" asks one student. "More people like cookies than ice cream," says her partner. As students master this conversation, the teacher offers an extension: "we're going to add another sentence to this," she says. "We're going to ask, 'How do you know?"" Students go back to talk with partners, explaining, "I know that more people like cookies than ice cream because 'cookies' has more votes than 'ice cream." 57

In other words, while the older ELD groups are working on language skills that are similar to the kindergarten groups, teachers offer opportunities to develop additional, age-appropriate knowledge. In the second comparison offered here, both ELD groups practice expressing preferences—but the older group moves onto higher-order language and cognitive skills, like interpreting a chart and explaining it to a partner.

Finally, the strategies for supporting student talk vary by students' ages as well. Teachers generally release more control to groups of older students. While kindergarteners practice new language skills chorally or with frequent teacher oversight, third graders often rotate partners over an extended period of time to practice different ways of expanding on the lesson's suggested conversation.

Administrators and teachers admit that it has been difficult to get all of these moving parts balanced just right. It is one thing to understand how the new ELD model might work, and entirely another to put it in place and align the various pieces so that it effectively serves DLLs.

#### The Implementation

The district began rolling out the program with the 2011–12 pilot. But in 2012, state budget cuts put David Douglas in a bind. Under the new financial pressure, the district decided to accelerate its implementation of the new model. This meant moving some English as a Second Language (ESL) teachers into lead teacher roles in mainstream classrooms and others into language coaching roles to support teachers' implementation of the new ELD instructional block. If it worked, it would improve instruction for DLLs while simultaneously saving the district money.<sup>58</sup>

The new coaches would support groups of classroom *teachers*, while the ESL teachers had worked with small groups of *students*. Many David Douglas schools that had previously relied upon a handful of ESL teachers could now implement the new model with just one language coach. While many of the old ESL teachers found jobs as language coaches or classroom teachers, others did not. In other words, the new model saved money because the district found that it needed fewer language coaches than ESL teachers.

Beyond helping to balance tight budgets, there was another advantage to the new instructional model: it builds on existing teacher capacities. This meant that the model would be somewhat easier to implement. David Douglas had previously made Guided Language Acquisition Design (GLAD) training available to all district teachers. While this ended several years before the new ELD model was rolled out, it provided teachers with a common base of expertise in strategies for supporting DLLs' language development. Administrators say that their GLAD-trained teachers are often very careful to use structured, scaffolded language when working with language learners.<sup>59</sup>

By speaking in patterns, teachers can frame and emphasize key elements of language for students. But language is a two-way street, and deliberate teacher talk is only part of the equation. The new ELD blocks focus on getting students to talk as well. Beginner lessons particularly focus on prompting students to work from teachers' speech to build their own sentences.<sup>61</sup>

But while educators' experience with language support strategies for DLLs was an asset, the implementation of the new model was still a heavy lift. The district provided initial training to support implementation of the new model, of course, but it did not stop there. In keeping with research on professional development

for educators, it offered ongoing coaching and support from the language coaches. <sup>62</sup> Given the awkward nature of the model switch, there were some growing pains. Some of the new coaches were former ESL teachers and colleagues of the general classroom teachers they were now supporting. Many teachers who had been with the district for years chafed at the notion that they needed to dramatically overhaul their practice to meet DLLs' needs. Other teachers were simply anxious.

### Guided Language Acquisition Design (GLAD)

GLAD is an approach to language instruction that weaves DLL-specific language instruction strategies into general content instruction. GLAD-trained teachers use approaches such as "graphic organizer" worksheets to structure their lessons—and students' responses. Other common GLAD strategies involve using charts to identify sentence patterns or to connect speech and pictures from the lesson to text.<sup>60</sup>

"Many teachers didn't think they were qualified to teach [DLL] students!" says Earl Boyles Elementary language coach Maria Adams. 63 "It was a borderline shock for many of our teachers," agrees Director of Elementary Education Candy Wallace. But "there wasn't a choice. You had to be collaborative." Which, as it turned out, became an uncomfortable source of strength for the district: the new model was far enough from everyone's comfort zone that educators couldn't help but reach out to one another for support. 64

Since 2012, the language coaches have developed norms of coaching that work for each school's teachers. Just as David Douglas teachers learned to scaffold for their students and gradually release control of their ELD lessons, the district's language coaches learned to start with intensive supports at the beginning of the year and then scale back as teachers outgrew them. Now teachers are getting comfortable with the new model and the supports in place. "We have some of the best coaches that I've ever worked with," says long-time David Douglas

third grade teacher Alethea Mellor. "They are really personable and they make efforts to build relationships with everybody." 65

There are other policies in place to support teachers' success in the new model as well. Teachers who are new to the district get three days of training on the ELD model before they arrive in their classrooms. But the district also provides ongoing development opportunities for current teachers. In the 2014–15 school year, the district partnered with Stanford University, Oregon State University, the Oregon Department of Education, and the Oregon Leadership Network at Education Northwest to offer educators a free massive open online course (MOOC) on language development research and best practices for acting on it in the classroom: "Supporting English Language Learners under New Standards." 66

However, while many David Douglas teachers registered for the course, only some completed it. Furthermore, even those teachers who completed the MOOC needed additional support in implementing practices introduced in the course. So David Douglas worked with Education Northwest's researchers to develop a condensed version. The researchers went through the MOOC's lessons and designed a six-part professional module for David Douglas' language coaches. Over a series of district-wide language coach meetings, the researchers presented videos from the MOOC and facilitated discussions of key themes. The idea was to help coaches understand recent research on DLLs' development and best practices for teaching language skills that are central to higher-order critical thinking skills.<sup>67</sup>

One meeting focused on breaking down the skills and language practices involved in argumentation. The researchers highlighted ways that argumentation is embedded in Oregon's academic standards. They illustrated specific language practices through videos and discussions from the original MOOC, and then asked the coaches to dissect, discuss, and evaluate an example of student argumentation.<sup>68</sup>

The district offers other supports for its teachers. Because so many of the district's students come from low-income households, it receives enough federal Title I dollars to hire a number of reading specialists. Many of these specialists work in media classrooms that incorporate educational technology like iPads and the Imagine Learning program (a suite of software for literacy and language development that offers support in more than 15 languages). These resources serve multiple purposes. For example, the educational technology learning centers

"Sometimes it's hard to be first. You've gotta fall down and skin your knees a few times. [But] it was the right thing to do."

- Don Grotting, Superintendent

allow reading specialists to provide targeted small group language instruction as students rotate on and off of iPads or Chromebooks.<sup>69</sup>

Finally, and importantly, David Douglas is also aggressive about protecting teachers' morale and giving them a safe environment in which to work. Administrators send thank-you notes to teachers who get visitors—and ask the visitors to do the same. School starts late on Wednesdays, in order to give teachers more time for planning, professional development, and collaboration with their peers. <sup>70</sup>

In the 2014–2015 school year (Year Three of the new model's district-wide implementation), things were coming together. Visitors to David Douglas schools saw classroom after classroom of talkative students eagerly exploring language together. "Sometimes it's hard to be first. You've gotta fall down and skin your knees a few times," says Superintendent Don Grotting. But "it was the right thing to do." 71

#### What's Next?

It becomes clear, in conversations across David Douglas campuses, that the district is not content with its success. Teachers, principals, and district administrators note that they are trying to find ways to build student talk, structured and scaffolded teacher language, and explicit vocabulary instruction into the rest of the school day. Burchell says that the next step is mixing the ELD block's "teaching [strategies] with high academic language embedded in the content areas." <sup>72</sup> Koskela says, "now we're pushing structured student talk across K–12 [subjects]." <sup>73</sup> Devlin agrees. "Language is part of content," she says; "you can't separate them." <sup>74</sup>

The district's move towards building language instruction into academic content instruction aligns with state and national trends. Oregon adopted the Common Core State Standards as its math and reading standards in 2010. Unlike most pre-existing academic content standards, the Common Core incorporates students' language development into its scope and sequence for math and reading. 75 Adams sees this as an opportunity to show that DLLs' academic needs are similar to the academic needs of all students: "when teachers start to look at the demands of the Common Core and the rigorous language and cognitive skills involved, you start to realize why explicit language instruction is needed for all students." 76

Here is how the Common Core is changing things: most academic standards only set expectations for a student's ability to demonstrate specific skills. Consider a basic elementary-level math standard: students should be able to solve problems using the four mathematical operations—addition, subtraction, multiplication, and division. For decades, students have been taught shortcuts, tricks, or other basic algorithms for these processes (the formulaic approach to "long division" is one of the most common examples).

But the Common Core standards focus heavily on students' use of language. The corresponding math operations standards now ask students to "solve problems involving the four operations," but they also require students to be able to "identify and explain patterns in arithmetic" and "assess the reasonableness of answers." Throughout the Common Core's math standards, students are asked to explain how numbers relate to one another, defend their solutions to problems,

#### **Graphic Organizer for Solving Math Problems, David Douglas School District**

1. Understand the Problem:	Name:	
	Standard:	
2. Solve the Problem - Show Your Work:	3. Turn and Talk - Use Vocabulary	
4. Explain How You Know - Write an Explanation:		

and critique other possible solutions. These tasks require students to develop specific vocabulary and language skills, which are—for the first time—intentionally codified in the standards. One of the Common Core's unifying "Standards for Mathematical Practice" makes this particularly clear. It asks "educators at all levels" to help students learn to "construct viable arguments and critique the reasoning of others." <sup>78</sup>

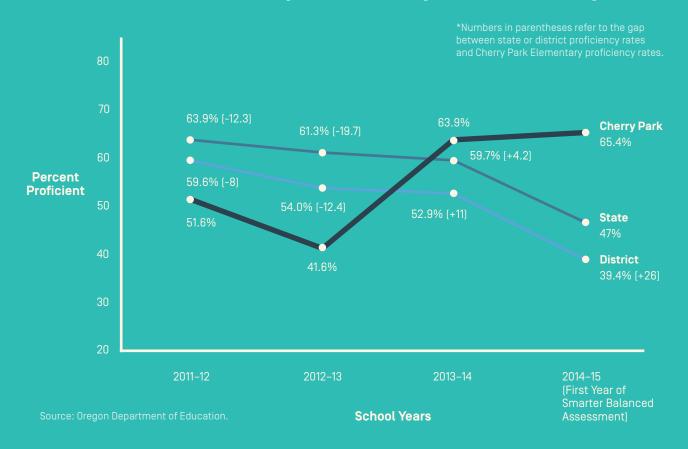
According to Devlin, "Teachers are starting to say, 'I have to teach language in math!' The savvy ones are starting to wonder why we don't do this all day long." <sup>79</sup> By that metric, Ventura Park Elementary third grade teacher Alethea Mellor is one of the district's savviest educators. The advent of the ELD blocks provided a foundation for rethinking her language instruction, but she soon "wanted to do more. It started with math. I noticed

that kids really couldn't explain their reasoning. So I worked with my language coach to do partner work and incorporate [structured language instructional strategies] into my math lessons. Once you get it down and train the kids how to have those conversations, it really just flows." <sup>80</sup>

Approximately half of Mellor's third-graders are either former or currently-classified DLLs. During one math lesson, Mellor's classroom is abuzz with children cheerfully using graphic organizers to solve math problems. They work in pairs: one student presents her answers—and the problem-solving strategies she used to reach their answers—while the other listens and provides feedback. The conversations are dynamic and productive, but they are also anchored in key vocabulary related to the lesson: the student who is coaching the presenter

Figure 2

3rd Grade Math Proficiency Rates: Cherry Park Elementary School



keeps a tally of how many (and which) vocabulary words she uses.

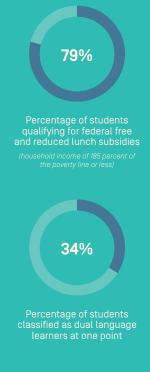
After all students had a chance to work through their strategies with their partners, Mellor asked several groups to share their conversations with the class. The norms of engagement—and students' comfort with one another—was palpable. During the whole-group sharing portion of the lesson, one student presented his work, and his partner used "I statements" to describe how it looked: "I see that your figure is labeled," and so forth. She then asked clarifying questions: "are you specifically

Figure 3

Cherry Park

Elementary School:

Demographics 87



sure that you got three quadrilaterals?" He explained his thinking and they discussed it in front of the class. He then called on other students in the class to take additional comments and field questions. One classmate asked, "why did you use 'top' and 'bottom' instead of 'length' and 'width' [to label your figure]?" He responded, "because I forgot how to spell 'length' and 'width." The questioner holds up her paper and said, "next time, look on the side of your sheet [at the vocabulary word bankl." 81

Talking about the lesson later, Mellor said, "that's my biggest thing: I want to hear them talking. I want to hear them critiquing. I want them used to feedback. In order to do that, it takes a lot of community-building in the classroom. You have to spend time getting them comfortable talking to one another and creating that culture." 82

Mellor says that Oregon's new standards make her efforts easier: "I find them completely integrated. I think this is the ticket. To deconstruct the Common Core Standards, I think that...when you look at embedding language instruction and critical thinking and discussing your thinking with others, you are basically getting at the heart of every standard. I love the Common Core standards. I think they're amazing." She is also seeing results: this year, "[my students] were putting down thoughtful answers and doing things that I hadn't seen third graders do before." 44

Mellor is a pioneer. But district leaders say they are planning to move the entire district her direction in the coming years. "The next thing," says Grotting, "is to make sure that language is woven through every content area, throughout the day." 85

David Douglas leaders say that teachers at Cherry Park Elementary School have also led the way in building math instruction into their daily ELD blocks-and language instruction into their math lessons. At the end of the 2014-15 school year, Oregon began using the new Smarter Balanced (SB) math assessment, which is aligned to the Common Core State Standards. Even though the SB assessment sets a higher bar for student performance and critical thinking, Cherry Park students outperformed state and district proficiency rates (the percentage of students meeting or exceeding third-grade proficiency) by 18.4 percent and 26 percent, respectively. Indeed, while the state's and district's proficiency rates fell on the new SB assessment, Cherry Park's actually increased.86 (See Figure 2, "3rd Grade Math Proficiency Rates: Cherry Park Elementary School," page 19.)

# EARL BOYLES: A SCHOOL-LEVEL SNAPSHOT

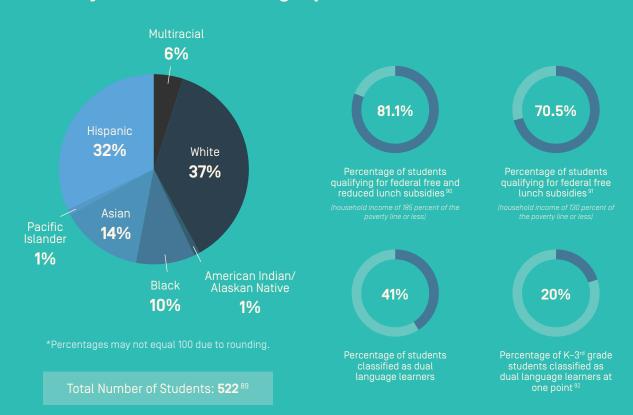
Shifting to the Language For All model may be the biggest, most comprehensive change David Douglas has recently made to support DLLs, but it is certainly not the *only* one. The district has a variety of other programs in place that also help these students succeed. These are particularly evident at Earl Boyles Elementary School.

The school's values are on display from the moment visitors enter the building. Earl Boyles' front lobby is a lending library stocked with books and a computer through a partnership with the Multnomah County Library—and it is maintained and staffed by family volunteers.

The library's prominence is not an accident, says Principal Ericka Guynes. Even little things like the placement of the lending library—"the school's physical characteristics"—are the product of planning that was "very intentional and done as a community...it was very collaborative." Guynes describes her philosophy as "one

Figure 4

Earl Boyles School Demographics 88



culture, one school." Every change the school has made in recent years "was designed around that [theme]. We were really thinking about when families came in the door: what's the first thing they would see?" For many of her school's families, the school felt "like somebody else's home," she says, and it made it difficult for the school to build relationships with them.<sup>93</sup>

Earl Boyles has garnered significant praise in recent years, largely because it has approached its families as valuable partners who understand what their children need and have significant assets to support their success. But this is not casual work. While most educators, administrators, or researchers agree that family engagement is a critical way to support young students—especially DLLs—there is considerably less agreement

on what it looks like to implement it in a school. (See sidebar: "Family Engagement and DLLs," below.)

That is, it is easy to say that schools should "engage with DLLs' families." But meaningful involvement is far more difficult. It is a give-and-take process that involves planning, discussing, revising, and careful implementation of new programs in a way that allows families input on the school's direction. This requires educators to offer ideas and guidance while also ceding some control of areas—from community events to school logistics and even unit planning—that have traditionally been exclusively the domain of professional educators.

While this sort of power-sharing can be uncomfortable, when done right, it is extraordinarily powerful. This is

#### **Family Engagement and DLLs**

David Douglas' continuous and intentional efforts to improve instructional quality in its classrooms are potent practices for supporting DLLs. But even these strategies have some limits. The most effective early education programs—like North Carolina's famed Abecedarian Project and the Chicago Parent-Child Centers—treat families as important assets for supporting their children's development.<sup>94</sup> That is why Earl Boyles Elementary and other David Douglas schools are trying to imitate these programs' robust approaches to family engagement.

This outreach is particularly important for families that do not speak English at home. These families can struggle to take advantage of early education opportunities for their children for a variety of reasons: linguistic barriers, socioeconomic pressures, low parental literacy rates, and more.<sup>95</sup> Effective outreach programs can help ensure that these families take advantage of available early education programs in their area.<sup>96</sup>

However, effective family engagement goes further. It takes seriously the old education adage: "parents are their children's first teachers." Recent research shows that early parenting practices are enormously consequential for children's long-term health, development, and success. A 2013 Brookings Institute report found that "parents are huge contributors to the knowledge, skills and character of their children. [Their] actions have dramatic public consequences for education, crime, welfare, mobility and productivity." <sup>97</sup> So there is reason to believe that high-quality early education programs that work with families to strengthen parents' and caregivers' practices will always outperform those that do not. And research suggests that schools do not often engage with linguistically diverse families in effective, culturally-sensitive ways. <sup>98</sup>

With these challenges and opportunities in mind, educators in David Douglas rely upon a number of programs to engage with families and support their children's development. These take at least three forms: 1) some aim at connecting families with what their students are doing at school, 2) others aim at improving families' work with children at home, and 3) still others connect families with health and social services in the area.

\*Note: this sidebar is quoted—with slight modifications—from the DLL National Work Group's profile of PreK–3<sup>rd</sup> efforts in San Antonio, *Boomtown Kids: Harnessing Energy and Aligning Resources for Dual Language Learners in San Antonio, Texas*.

particularly evident at a meeting of Earl Boyles' Padres Unidos/Parents United group. The meeting takes place in a community resource room dedicated for this—and other—community meetings. Posters on the wall articulate the community's goals:

#### **Earl Boyles Neighborhood Center**

**Mission:** Be a rich and vibrant community center that builds partnerships, trust, and collaboration with families to foster lifelong learning, health, and wellbeing for children and adults

**Vision:** Families partner with their school to create a diverse, supportive community that raises happy, healthy children who are successful in school and life.

Many attendees are wearing matching, maroon shirts that read "Padres Unidos." All discussions are bilingual—when they are conducted in Spanish, an interpreter provides simultaneous translation in English, and viceversa. Attendees listen in through headsets linked to the interpreters' microphones.<sup>99</sup>

The two mothers leading the meeting lay out the agenda posted on the room's whiteboard (see picture to the right). They then facilitate a series of check-ins and announcements from key participants. An Americorps volunteer working with Multnomah County's Schools Uniting Neighborhoods (SUN) program discusses her recent work and explains that she'll be leaving the role soon. Then there is a brief pitch from a representative of Portland's city government, who asks the group to spread the word about locally-available parenting and English classes.

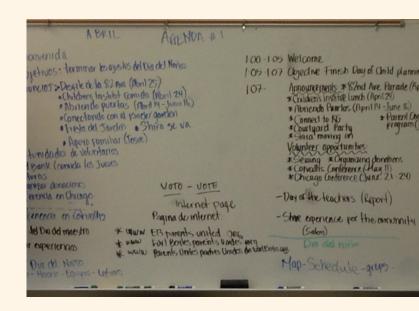
Staff from Oregon's Children's Institute discuss a recent day of advocacy at the state capital in Salem. Padres Unidos members and other Earl Boyles families attended a hearing on an upcoming bill that would establish a new statewide funding stream for supporting districts' efforts to expand access to high-quality pre-K. The group turns to one of the quieter mothers in the room and asks

her to share her experience. She blushes and demurs, but with some encouragement, launches into a moving account. Only one of her children attended Head Start, she explains, so she knew how much it had helped him at home and at school; she wished that her other children had been able to attend.<sup>101</sup>

This sparks a group-wide conversation about the value of Head Start. Many of the parents in the room speak from personal experience about how the program has changed their children's lives. Heads nod as each person around the table adds an anecdote to the consensus. They express optimism that the pre-K bill is bound to pass. (They were right. See sidebar: DLLs and Early Education in Oregon, page 10.)

But no other agenda item animates the room quite like the report from the Padres Unidos members who coordinated teacher support on parent-teacher conferences day. They talk about logistical challenges involved in preparing and serving dinner for teachers staying late to meet with parents. They talk about how happy teachers were, and how quickly the food went. There is a *detailed* discussion on just how much food was left over (very little). The room fills with smiles and laughter as they point to thank-you posters the teachers made in response.

As with the lending library, this room is not some add-on, corollary part of the school's mission. The core parts of the meeting agenda are not coincidental. Leaders at the



Agenda for Padres Unidos meeting at Earl Boyles.

school are in close contact with the group. Asked (a day *before* this particular Padres Unidos meeting) about how she engages new families, Principal Guynes explained, "cooking is really important to our community—and coming together. [A]s far as the process for planning, they were engaged in everything...they sat on planning teams, to providing input to the adult classroom about

a kitchen...advocating for spaces that would create that environment of partnership." 102

These parents are not just engaged—they are empowered. They are setting an agenda for their involvement with the school, as well as expectations for themselves, their children's teachers, and the community. Teachers and

#### **Why Pre-K Matters for DLLs**

There is a growing body of research suggesting that quality pre-K programs are uniquely valuable for DLLs. The specific reasons for this are still a matter for research, but there are a number of possible explanations. For instance, some research has demonstrated that multilingual children reap long-term cognitive benefits from the experience; these benefits are collectively referred to as "The Bilingual Advantage." <sup>108</sup> A recent book by that title explored a series of studies showing "the advantages of bilingualism, specifically in the areas of metalinguistic awareness, cognitive development, academic achievement, and cross-cultural awareness and understanding." <sup>109</sup>

These benefits appear to be particularly strong for students who develop their bilingualism from an early age. The reasoning is that those who are exposed to two languages early in their lives develop unique neurological pathways that give them correspondingly unique cognitive abilities. As they learn to consciously switch from one language to another for various communication purposes, for example, they learn to manage their attention more intentionally than monolingual children and adults.<sup>110</sup>

Others argue that pre-K programs offer exposure to higher-level English language usage, which can support rapid growth in DLLs' oral language development. In a recent analysis of the Head Start Impact Study, researchers Howard Bloom and Christina Weiland found that Head Start supported especially large growth in DLLs' receptive vocabularies—the bank of English words that they are able to recognize quickly when they hear them. They also found that DLLs in Head Start showed strong growth in early numeracy skills—basic counting skills, judging and comparing amounts, and so forth.<sup>111</sup> In both cases, the growth was greater for Head Start DLLs than for monolingual Head Start students.<sup>112</sup>

Bloom and Weiland ran a battery of tests to isolate what might be causing these strong gains for Head Start's DLLs. Their data indicated that Head Start's strongly positive effects were a result of "compensation for limited prior English." <sup>113</sup> That is, in this case, the increased amount and level of English spoken in Head Start centers appeared to be driving DLLs' impressive gains. Morgan State University professor Anita Pandey agrees: "oral language development (i.e., fluency) is the first step toward successful primary (L1) and secondary (L2) acquisition—and literacy." <sup>114</sup> Stronger speaking and listening skills help DLLs have more meaningful conversations with peers and teachers. This helps them develop a deeper understanding of the nuances of how to use a language. This foundation, in turn, supports stronger literacy—reading and writing—skills. <sup>115</sup>

A recent brief from the National Research Center on Hispanic Children and Families corroborates some of this research. Authors Arya Ansari and Michael López found that "Latino children classified as [DLLs] who attended public-school pre-K were more proficient in English than were their peers who had attended center-based care during the prior year." 116

\*Note: this sidebar is quoted—with some modifications—from the DLL National Work Group's profile of PreK-3<sup>rd</sup> efforts in San Antonio, *Boomtown Kids: Harnessing Energy and Aligning Resources for Dual Language Learners in San Antonio, Texas.* 

administrators repeatedly express appreciation both for the group's vitality and how it strengthens the broader school community. 103

But the Padres Unidos group did not spring forth spontaneously. It was part of an intentional strategy with support from the Children's Institute, staff at Earl Boyles, David Douglas administrators, local non-profit Metropolitan Family Service (MFS), and many others.

The Children's Institute is one of the leading advocates for reforming how the state supports underserved children. Like many similar organizations, the Children's Institute conducts and shares research on different policies. It also communicates with administrators and lawmakers about the importance of reforms. This is a relatively straightforward, common approach: the organization starts with research to inform policy and drive better actions on behalf of kids.

In 2011, the organization embarked on a different strategy: it decided to start with practices to make a point about the power of investing in underserved children. That year, the Children's Institute reached out to Superintendent Grotting and Principal Guynes to gauge their interest in establishing a new pre-K center at Earl Boyles.<sup>104</sup>

The idea, says Children's Institute President and CEO Swati Adarkar, "was not to build a perfect, one-site project; [we were] looking towards building a system." <sup>105</sup> While the project would provide Earl Boyles students with valuable pre-K access, it was also intended to demonstrate the possibilities—and limits—of current early education policies and funding streams. In a brief on their experience, Adarkar explains: "despite the growing drumbeat of enthusiasm [for early education investments], questions remain as to how best to weave early learning into the education continuum...we believe that learning laboratories are needed—places where programs, departments, and agencies come together fueled by data and research to learn how best to align the early years with the early grades." <sup>106</sup>

In the Children's Institute's eyes, building this new early education demonstration site was not actually just a project for "programs, departments, and agencies." From the beginning, it recognized that *families* needed to be a critical part of any new initiative. Few people know the Earl Boyles community's past and present quite like Children's Institute site liaison Andreina Velasco, and she says, "we really bring parents in as partners in every kind of setting: advocacy, planning, and implementation." 107

The Children's Institute's efforts at Earl Boyles began with a community needs assessment, which they conducted in partnership with researchers at Portland State University. The team worked with school leaders and community members to identify and interview a group of "key informants" who could serve as a representative sample of the neighborhood's diversity. The report generated from these interviews painted a community with considerable challenges relative to the rest of Multnomah County. In 2011, in the Earl Boyles enrollment zone:

- Median household income was \$29,457 (county median: \$49,049)
- Child poverty rates for children under five were 40 percent (county rate: 21 percent)
- 24 percent of adults had not completed high school (county rate: 11 percent)
- More than a quarter of families primarily spoke a non-English language at home
- 26 percent of families reported reading regularly to their children (national average: 83 percent)
- 24 percent of families had 10 or fewer books in their homes 118

Worryingly, "parents from Spanish-speaking households reported that their children were less likely to have the social and academic skills that create school readiness and reported more social and neighborhood isolation. Parents from Russian, Asian, and African-American households had generally lower expectations for children's school attainment." <sup>119</sup>

But the researchers also found community assets. There was widespread interest in working with the school and other organizations to address the area's challenges. Families "generated lengthy lists of suggestions for community improvements," and "were extremely enthusiastic about the quality of the Earl Boyles school, and the warmth and enthusiasm of its staff." They were also "eager" about the potential for changing the trajectory of their community and expressed interest in additional resources to help them support their children. 121

Once the community had identified these needs, it moved to generating solutions. As part of the county's SUN program, MFS provided support and leadership training for parents involved in the early days of the Padres

Unidos group.<sup>122</sup> Through conversations between the Children's Institute, MFS, families, the school, the district, and the researchers conducting the needs assessment, the community settled on two major solutions to be headquartered on-site at Earl Boyles: 1) the establishment of a new pre-K program and 2) enhanced social services to support families at school and home.<sup>123</sup>

In pursuit of these goals, families worked with MFS, the Children's Institute, the district, and the school. Given the Institute's strategy—delivering a quality early education program within the constraints of current federal, state, and local regulations and resources—leaders made "blending and braiding" central to their design. That is, they decided to build the program using a variety of funds from a variety of sources. As a matter of resource supply, this makes a great deal of sense: by combining funds from various sources, educators can support a more robust early education program.

But there is a catch: each funding stream comes with strings attached. Head Start funds may only be used in centers that comply with the *thousands* of Head Start Program Performance Standards.<sup>124</sup> Federal funds from No Child Left Behind's Title I and the Individuals with Disabilities Education Act both carry stipulations of their own.<sup>125</sup>

Combining these various programs was no easy task. In her account of the planning process, the Children's Institute's Katia Riddle reported that the benefits were still worth the logistical costs: "ultimately, though it took a good deal of careful choreography, it was this very process that helped the team to cultivate the allies that became the preschool's foundation of support." 126 They worked with representatives from different levels of government who could guide them through the regulations attached to each strand of funding, involved parents in discussions about how they would interact with the new program, and engaged the local teachers union about the details of the new pre-K staff positions.127 After considerable planning—and coordination—efforts, Earl Boyles' new pre-K program opened for the 2012–13 school year.128

Yet these combined funds—and will-building strategies—left one key challenge unaddressed. District administrators said, "there is a need for comprehensive wraparound services [in the Earl Boyles community], but space and a central location do not exist in the community for providers to deliver the critical services needed to address the underlying issues of poverty." <sup>129</sup> So the district decided to package a proposal for

expanding Earl Boyles' building to accommodate the new initiatives as part of an upcoming bond measure. It requested \$3.5 million from voters for the project. This was a big ask, say leaders at Earl Boyles, but the team's open, family-driven approach paid off: voters approved the project in 2012, private matching donations brought the total budget to \$7 million, and Earl Boyles' pre-K program moved into its new home at the start of the 2014–15 school year.<sup>130</sup>

As it prepared to launch the facility, the district called the new wing "a community hub" and explained its vision: "these new spaces form the Early Learning Wing, which will serve [PreK-3<sup>rd</sup>] grade students and will also provide a suite of family spaces that are unusual in most school buildings, but were needed in the...community." <sup>131</sup> As promised, the new wing contains several pre-K classrooms, but it also includes other early education and family support resources as part of the SUN program MFS runs in the building. Padres Unidos and other community groups meet in the neighborhood center's adult





The new playground in Earl Boyles Elementary's new early education wing.

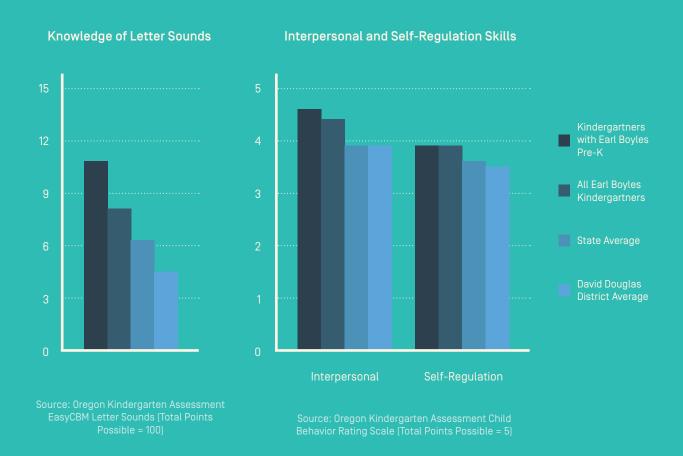
classroom. The Multnomah County Library helps run weekly English and Spanish storytimes in the infant and toddler room (and monthly Mandarin and Vietnamese storytimes). The district also secured nearly \$1 million in a community grant from Portland's Mount Hood Cable Regulatory Commission, which went toward the purchase of additional educational technology to support students' learning. 132

Earl Boyles' new pre-K classrooms are as carefully crafted as the rest of the new early education wing. Three- and four-year-olds spend  $3\frac{1}{4}$  hours in classes of 17 children

and two adults four days a week (there is no class on Wednesdays). Since each room holds classes in both the mornings and afternoons, this works out to more than 90 three- and four-year-olds in pre-K this year.<sup>133</sup>

Pre-K teachers spend Wednesdays on home visits (another part of the Head Start model). They also use their day without students to visit classrooms, huddle with other educators at Earl Boyles, and plan lessons. When they launched the program, Earl Boyles leaders set up specific observation sessions in their kindergarten classrooms so that the pre-K teachers would have a better

Figure 5 **Earl Boyles Kindergartners Compared to State and David Douglas District** 





Sign outside Earl Boyles' Infants and Toddlers Room.

idea of what their students would be expected to do after leaving pre-K.  $^{\scriptscriptstyle{134}}$ 

While they do not use the homogeneous ELD language blocks in pre-K, teachers emphasize building "foundational language" for all students by encouraging student talk and focusing on building vocabulary in English. An on-site speech pathologist supports this language work.<sup>135</sup>

School leaders talk about finding ways to craft the program to build students' social and emotional skills. As a Head Start program, the classes eat together "family-style" at common tables. Students are involved in setting up meals and cleaning up afterwards. The program uses decidedly play-based pedagogy—the rooms open onto a bright, beautiful playground space. "We spent a lot of time asking, 'What elements, what equipment do we want to allow children to create and explore?" says Principal Guynes. "36 When the new wing opened, a local reporter wrote that "the play equipment [is] so colorful and whimsical it could have been conjured by Dr. Seuss." "37

The new classrooms are also accessible to families. An observation room borders each classroom: each is outfitted with windows and with speakers so families can check in on children without disturbing instruction. Family volunteers are welcome, and with support from Children Institute site liaison Andreina Velasco, many parents and caregivers spend time supporting the pre-K

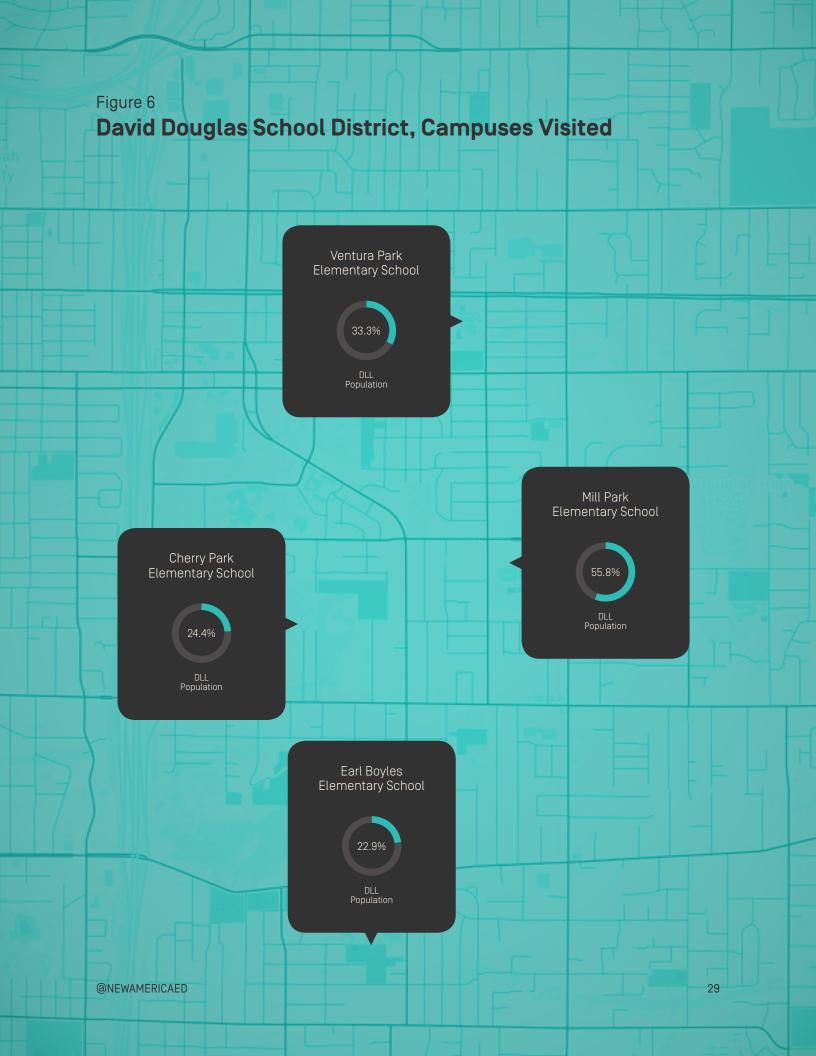
teacher during the day. Even better, she says, two of last year's volunteers "are currently pursuing their Child Development Associate [credential] so that one day they can be hired as instructional assistants." <sup>138</sup>

While some of the students who now attend pre-K at Earl Boyles might otherwise have attended privatelyprovided early education, many of their families might not have been able to afford it. Beyond cost savings, there are considerable advantages to building the program on-site. When students come to a school's kindergarten classrooms from a variety of different early education settings, it can be much more difficult for school leadership to determine—let alone support—these children's varying needs. At Earl Boyles, by contrast, Guynes and her team get to know children before they arrive in kindergarten. They are more readily able to gather data on students' strengths and needs. Over time, they are also able to adjust different parts of their PreK–3<sup>rd</sup> grade model to better support children's development. In other words, the pre-K program also allows the school to align its K-3 grades and better support student growth.

Early returns on the program are encouraging. Kindergarten benchmark data are up, and more incoming Earl Boyles kindergartners are qualifying for talented and gifted programs. These students scored above a number of comparison points on Oregon's new kindergarten readiness assessment. Children who completed pre-K at Earl Boyles outperformed the school-wide, district-wide, and statewide averages on interpersonal skills and knowledge of letter sounds. They also outperformed the state and district averages on self-regulation skills. This appears to be driving strong performance in kindergarten as well: 73 percent of kindergartners were meeting midyear benchmarks in the 2014–15 school year, up from 40 percent.

There are also resources on-site to support families. Earl Boyles—like other David Douglas schools—partners with several local agencies supporting the "community schools" model. That is, school leaders collaborate with MFS to make the new wing into a "full-service neighborhood [hub] where the school and partners from across the community come together to make sure kids and families have what they need to be successful—in school and in life." 141

MFS' work is supported with funds from Multnomah County's Department of County Human Services and provides a full-time Americorps volunteer on-site. The partnership supports a wide array of services to support



families, including English, parenting, literacy, financial training, exercise, and computer classes for adults. There are community-building social events and streamlined connections to food pantries, public assistance programs, health services, and adult education programs at local community colleges. There are gardening programs (in the community garden on campus), homework support sessions, and a variety of sports and enrichment programs for children.<sup>142</sup>

### Some Community-Identified Needs in Earl Boyles' Neighborhood

- Children's dental problems
- Children's emotional or behavioral problems
- Children's developmental delays
- Children's nutritional problems
- Child obesity

### Some Community-Identified Supports that Could Help

- "Help getting health insurance"
- "Help getting counseling/mental health services"
- "Parenting education groups/classes"
- "Adult education classes/training"
- "Help with cash assistance" 146

And while this list of available services is impressive, the school knows that it is not enough to simply offer them: it has worked closely with parents to make sure that the resources on offer are both accessible and the right ones. During conversations about appropriate responses to the

needs assessment, parents sifted through the data with researchers and then presented recommendations to the broader team. They explained their priorities—parent education and help with housing challenges joined early education on their list—and showed how these were borne out by patterns in the data.<sup>143</sup>

Families have also helped school leaders adjust to better serve different communities in the neighborhood. For example, a group of Latino parents pushed the school and district to translate volunteer forms into Spanish. When efforts to encourage families to read more regularly with their children were not bearing fruit, families helped school leadership overhaul the incentives (they recommended school-based movie nights with food). 144

Importantly, this dynamic has continued beyond the Children's Institute's initial push. Families who became comfortable with participating in—and taking charge of—changes at Earl Boyles through the process of establishing the early education wing have stayed involved. With help from Portland State University and David Douglas leaders, the Children's Institute conducted a community health assessment. They knocked on hundreds of doors in the neighborhood and asked families how they viewed the school and its community. To gather data, researchers from Portland State University trained neighborhood residents from a variety of ethnic and linguistic backgrounds on their survey methodology. 145

Once the data were collected, the team founded a "Coordinating Committee" to design and propose community responses. That is, the group was charged with guiding "the visioning process for the Earl Boyles Neighborhood Center" by working through a structured series of questions. Participants sifted through data to determine "Where are we now? What values, strengths, and gaps exist?" In later meetings, they explored "What options exist for moving forward?" and "What choices will best align with our goals?" 147

Once again, while the concrete resources—colorful early education classrooms and myriad social services—are enormously powerful, this shift in family engagement is just as important. When discussing the Children's Institute's work at Earl Boyles, leader Swati Adarkar says that the entire effort is, in some ways, geared towards "resetting the power relationships at the table." <sup>148</sup> This is another benefit of focusing on early education reform and investment, she says. Some families—particularly immigrant families with limited knowledge of American educational institutions—may find traditional K–12 school settings intimidating. <sup>149</sup> As a result of that unfamiliarity,

they may not assert themselves on behalf of their children as often as they perhaps should. The Children's Institute believes that if parents get used to engaging early with schools, when it may be less imposing, they will continue that work as their children age. <sup>150</sup>

And the strategy works both ways: parents learn to engage with teachers and administrators through the new pre-K program, but the school is also refining its approach based on what is happening there. Adams, Earl Boyles' language coach, says that the school's Family Engagement Committee decided "to implement schoolwide home visits [this school year]. Our main objective is to meet families outside of the school setting and establish relationships; on the first visit, we ask parents what their hopes and dreams are for their child." 151

Of course, there is no discounting the important role that the district's leadership plays in supporting these new relationships between families and schools. Superintendent Grotting prioritizes family involvement from the start, and says that investment in early education helps schools "drive that relationship with parents, children's first teachers." <sup>152</sup>

The school's partnership with parents is generating real results. After the 2014–15 school year, Multnomah County approved a budget with resources to expand Earl Boyles' SUN program. This will allow the SUN program to connect the school's families to available public services—especially those involving housing. 153

### **CONCLUSION & RECOMMENDATIONS**



"The Tree of Learning," by Hector Hernández.

Earl Boyles Elementary is a monument to the values of the school and its families. It is a place where everything, from the classrooms to the playground to the school's lobby library, has been designed with community input to meet the community's needs.

A mural (designed with community input) adorns one of the school's hallways. Earl Boyles' description of the mural explains, "the landscape of the mural at the left depicts a sunrise next to Mt. Hood, symbolizing the dawn of a new day/age, the age of learning." <sup>154</sup>

The mural's message is not unique to Earl Boyles. Across so many David Douglas campuses, educators are rethinking their instruction and working to support the needs of all of their students. The district has ample challenges—resource shortages, high poverty rates, and more—but it refuses to see its students' multilingualism as one of them.

Instead, David Douglas schools have embarked on a number of promising reforms to support DLLs' success. The district has prioritized oral language development in its new ELD instructional model, expanded its early education investments, given multilingual families ways to connect with schools, built partnerships with local organizations, and much, much more.

The new policies have required literal and figurative rewiring of David Douglas schools, but have been designed to be implementable by current staff and with available resources. They are neither so idealistic as to be impossible to replicate across a district nor so

insubstantial that they represent little meaningful change for students.

In sum, David Douglas' situation offers a useful example for districts that are rethinking how to serve their DLLs. Here are some specific lessons from their experience:

## Lesson #1: It is not enough to set new priorities for how DLLs will be supported in schools—policy design matters.

David Douglas' new focus on DLLs' oral language development started as an experiment and was quickly expanded across the district. This expansion was possible in part because the new ELD model was designed to be ambitious, but not unattainable, for teachers. In other words, the change did not require a staff overhaul or a massive restructuring of how current systems were organized.

Upshot: This is an effective theory of implementation: reforms need to be big enough to make a real difference for students but not so dramatic that they are out of a district's reach to meaningfully put in practice.

## Lesson #2: It is not enough to design new DLL policies carefully—the implementation of reforms matters.

After district leaders decided to move ahead with the new ELD model, they built a number of systems to support effective implementation. The district built on existing staff strengths in professional development sessions,

provided regular instructional coaching, and designed new curricular materials for teachers.

Upshot: Once they have designed new policies to get teachers and schools to better serve DLLs, districts need to build systems for supporting initial implementation and ongoing refinement of the new policies.

# Lesson #3: District investments in expanding access to quality early education across the PreK-3<sup>rd</sup> grades can help support DLLs' linguistic and academic development.

Research suggests that DLLs particularly benefit from investments in quality early education programs. With support from Oregon's Children's Institute, local government programs, and other organizations, David Douglas is expanding its own early investments. The district has long provided full-day kindergarten for its students, and is now working to expand pre-K access in its schools. It also partners with local government and community organizations to provide some programs for area infants and toddlers.

*Upshot: Districts should invest in expanding early education access for DLLs and connecting new investments to the rest of their PreK–3<sup>rd</sup> grades.* 

### Lesson #4: Families are a critically important educational resource for DLLs.

David Douglas' Earl Boyles Elementary is implementing a number of new initiatives in addition to the district's new ELD model. The school has a new early learning wing, some "dual-generation" programs that support both student and family success at once, new investments in education technology, and much more. Most of these efforts are the result of comprehensive, ongoing conversations with the broader Earl Boyles community. The school is working to involve families in setting priorities for the school's future. This engagement often begins when families enroll in the school's pre-K program.

Upshot: DLLs' families bring considerable assets to their children's educations. Schools and districts that involve them from the beginning support students' success and establish productive relationships for addressing future challenges.

#### Lesson #5: A district-wide focus on oral language development helps DLLs progress towards academic English proficiency—and also supports their academic development.

David Douglas gives schools and teachers considerable latitude in how they use the new ELD model. But it insists that students spend at least half of the 30-minute blocks talking with one another in complete sentences. This focus on oral language development provides students with a strong early foundation in English and helps them access more rigorous academic content.

Importantly, David Douglas leaders do not see oral language proficiency in English as an end goal for DLLs. Rather, they see it as a means to support students' development to full academic language proficiency. While the district provides a scope and sequence to help guide instruction to match DLLs' oral language development pathways, teachers build ELD lessons that link these language skills to content that the students have been learning in those classrooms. That is, the district builds academic content into its language development model. The reverse is also happening: educators across the district are starting to connect their oral language development strategies from the ELD blocks to their math, literacy, science, and social studies instruction.

Upshot: When districts focus on oral language development and connect it to academic content, they help build a foundation for future development of academic language proficiency.

### **NOTES**

- ¹ White House Initiative on Educational Excellence for Hispanics, "America's Engine of Economic Growth Hinges on Latino Educational Success," August 2014, https://dan8a8prozyhmx.cloudfront.net/naaonline/pages/36o/attachments/original/1407210463/WHIEEH- America%27s Engine of Economic Growth Hinges on Latino Educational Success.pdf?1407210463.
- <sup>2</sup> Sonya Douglass Horsford and Carrie Sampson, "High-ELL-Growth States: Expanding Funding Equity and Opportunity for English Language Learners," *VUE* 37 (Providence, RI: Annenberg Institute, Summer 2013), <a href="http://vue.annenberginstitute.org/issues/37/high-ell-growth-states">http://vue.annenberginstitute.org/issues/37/high-ell-growth-states</a>.
- <sup>3</sup> American Community FactFinder, So<sub>5</sub>o<sub>1</sub>, SELECTED CHARACTERISTICS OF THE NATIVE AND FOREIGN-BORN POPULATIONS, 2009–2013 American Community Survey 5-Year Estimates.
- <sup>4</sup> Mark Friesen, "Portland Neighborhood At Risk of Gentrification," 2013, *Oregonian*, <a href="http://projects.">http://projects.</a>
  <a href="http://projects.">oregonlive.com/maps/gentrification/</a>; Anna Griffin, "Portland Study Targets Neighborhoods Next Up for Gentrification," *Oregonian*, June 22, 2013, <a href="http://www.oregonlive.com/portland/index.ssf/2013/06/">http://www.oregonlive.com/portland/index.ssf/2013/06/</a>
  <a href="portland-study-targets-neighbo.html">portland-study-targets-neighbo.html</a>; Perry Stein, "Portland Is the Only City Gentrifying Faster than D.C., Report Says," <a href="https://www.washingtonpost.com/news/local/wp/2015/02/05/">www.washingtonpost.com/news/local/wp/2015/02/05/</a>
  <a href="portland-is-the-only-city-gentrifying-faster-than-d-c-report-says/">https://www.oregonlive.com/news/local/wp/2015/02/05/</a>
  <a href="portland-is-the-only-city-gentrifying-faster-than-d-c-report-says/">https://www.oregonlive.com/news/local/wp/2015/02/05/</a>
  <a href="portland-is-the-only-city-gentrifying-faster-than-d-c-report-says/">https://www.oregonlive.com/news/local/wp/2015/02/05/</a>
  <a href="portland-is-the-only-city-gentrifying-faster-than-d-c-report-says/">Washington Post</a>, February 5, 2015, <a href="https://www.washingtonpost.com/news/local/wp/2015/02/05/">https://www.washingtonpost.com/news/local/wp/2015/02/05/</a>
  <a href="portland-is-the-only-city-gentrifying-faster-than-d-c-report-says/">https://www.washingtonpost.com/news/local/wp/2015/02/05/</a>
  <a href="portland-is-the-only-city-gentrifying-faster-than-d-c-report-says/">https://www.washingtonpost.com/news/local/wp/2015/02/05/</a>
- <sup>5</sup> David Douglas School District, English Language Development Plan (Portland: David Douglas School District, May 31, 2013), 3, <a href="http://www.ode.state.or.us/opportunities/grants/nclb/title-iii/david-douglas-sd-ell-local-plan-2013-15.pdf">http://www.ode.state.or.us/opportunities/grants/nclb/title-iii/david-douglas-sd-ell-local-plan-2013-15.pdf</a>; David Douglas School District Boundaries Map (Portland), <a href="http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/DDSD-Boundary-Map.ipg">http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/DDSD-Boundary-Map.ipg</a>.
- <sup>6</sup> David Douglas School District, *Mill Park Elementary School Home Language Survey* (Portland: David Douglas School District, 2015).
- <sup>7</sup> Chuck Palahniuk, Fugitives and Refugees (New York:

Crown Journeys, 2003), 14.

- <sup>8</sup> Elaine Rector, *Looking Back in Order to Move Forward* (Portland: Coaching for Educational Equity, 2010), <a href="https://www.portlandoregon.gov/bps/article/412697">https://www.portlandoregon.gov/bps/article/412697</a>.
- <sup>9</sup> Melissa Binder, "Russian-Speaking Immigrants in Oregon: A Historical Explainer," *Oregonian*, November 22, 2013, <a href="http://www.oregonlive.com/portland/index.ssf/2013/11/russian-speaking\_immigrants\_in.html">http://www.oregonlive.com/portland/index.ssf/2013/11/russian-speaking\_immigrants\_in.html</a>.
- <sup>10</sup> Sura Rubenstein, "Roaring with the 1920s," (Portland: www.OregonLive.com, 2011), <a href="http://www.oregonlive.com/century/1920">http://www.oregonlive.com/century/1920</a> intro.html; Elaine Rector, Looking Back in Order to Move Forward (Portland: Coaching for Educational Equity, 2010), 12–13, <a href="https://www.portlandoregon.gov/bps/article/412697">https://www.portlandoregon.gov/bps/article/412697</a>.
- <sup>11</sup> Elaine Rector, *Looking Back in Order to Move Forward* (Portland: Coaching for Educational Equity, 2010), 18, <a href="https://www.portlandoregon.gov/bps/article/412697">https://www.portlandoregon.gov/bps/article/412697</a>.
- <sup>12</sup> Sieon Roux, "Measure 58's Goal of English-Only Classes Already a Reality," *Oregonian*, September 20, 2008, <a href="http://www.oregonlive.com/politics/index.ssf/2008/09/measure 58s goal of englishonl.html;">http://www.oregonlive.com/politics/index.ssf/2008/09/measure 58s goal of englishonl.html</a>; Mark Friesen, "Oregon Ballot Measures," *Oregonian*, November 13, 2008, <a href="http://www.oregonlive.com/special/index.ssf/2008/11/measures.html">http://www.oregonlive.com/special/index.ssf/2008/11/measures.html</a>.
- <sup>13</sup> American Community FactFinder, So<sub>5</sub>o<sub>1</sub>, SELECTED CHARACTERISTICS OF THE NATIVE AND FOREIGN-BORN POPULATIONS, 2009–2013 American Community Survey 5-Year Estimates.
- Mark Friesen, "Portland Neighborhood At Risk of Gentrification," 2013, Oregonian, <a href="http://projects.">http://projects.</a>
  oregonlive.com/maps/gentrification/; Anna Griffin, "Portland Study Targets Neighborhoods Next Up for Gentrification," Oregonian, June 22, 2013, <a href="http://www.oregonlive.com/portland/index.ssf/2013/06/">http://www.oregonlive.com/portland/index.ssf/2013/06/</a>
  portland study targets neighbo.html; Perry Stein, "Portland Is the Only City Gentrifying Faster than D.C., Report Says," February 5, 2015, Washington Post, <a href="https://www.washingtonpost.com/news/local/wp/2015/02/05/">https://www.washingtonpost.com/news/local/wp/2015/02/05/</a>
  portland-is-the-only-city-gentrifying-faster-than-d-c-report-says/; David Douglas School District, Boundaries
  Map (Portland: David Douglas School District, 2014),

## http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/DDSD-Boundary-Map.jpg.

- <sup>15</sup> David Douglas School District, English Language Development Plan (Portland: David Douglas School District, May 31, 2013), <a href="http://www.ode.state.or.us/opportunities/grants/nclb/title-iii/david-douglas-sd-ell-local-plan-2013-15.pdf">http://www.ode.state.or.us/opportunities/grants/nclb/title-iii/david-douglas-sd-ell-local-plan-2013-15.pdf</a>, 3.
- <sup>16</sup> David Douglas School District, *Mill Park Elementary School Home Language Survey* (Portland: David Douglas School District, 2015).
- <sup>17</sup> David Douglas School District, *Mill Park Elementary School Home Language Survey* (Portland: David Douglas School District, 2015).
- "Woodburn Superintendent David Bautista Hired to Improve Oregon's English Language Learner Programs," Oregonian, January 22, 2013, <a href="http://www.oregonlive.com/education/index.ssf/2013/o1/woodburn\_superintendent\_david.html">http://www.oregonlive.com/education/index.ssf/2013/o1/woodburn\_superintendent\_david.html</a>; Oregon Department of Education, Oregon English Learners Statewide Strategic Plan 2013–16 (Salem: Oregon Department of Education, April 17, 2013), 3, <a href="http://www.ode.state.or.us/opportunities/grants/nclb/title\_iii/or-el-statewide-strategic-plan.pdf">http://www.ode.state.or.us/opportunities/grants/nclb/title\_iii/or-el-statewide-strategic-plan.pdf</a>.
- <sup>19</sup> Oregon Department of Education, *Oregon English Learners Statewide Strategic Plan* 2013–16 (Salem: Oregon Department of Education, April 17, 2013), 7–9, <a href="http://www.ode.state.or.us/opportunities/grants/nclb/title-iii/or-el-statewide-strategic-plan.pdf">http://www.ode.state.or.us/opportunities/grants/nclb/title-iii/or-el-statewide-strategic-plan.pdf</a>.
- <sup>20</sup> Karen Thompson, interview with Conor P. Williams, April 15, 2015; Esperanza De La Vega, interviews with authors, February 20, 2015 and April 13, 2015.
- <sup>21</sup> Oregon House Bil 3499, "Relating to English Language Learner Programs; and Declaring an Emergency," enacted July 1, 2015, <a href="https://legiscan.com/OR/text/HB3499/2015">https://legiscan.com/OR/text/HB3499/2015</a>.
- <sup>22</sup> Oregon Department of Education, *Oregon Full-Day Kindergarten Enrollment* (Salem: Oregon Department of Education, 2015), <a href="http://www.ode.state.or.us/gradelevel/kindergarten/full day k enrollment report.pdf">http://www.ode.state.or.us/gradelevel/kindergarten/full day k enrollment report.pdf</a>; Salam Noor, *Oregon School Directory 2015–16* (Salem: Oregon Department of Education, 2015), 117, <a href="http://www.ode.state.or.us/pubs/directory/schooldirectory\_20120904.pdf">http://www.ode.state.or.us/pubs/directory/schooldirectory\_20120904.pdf</a>; Betsy Hammond, "Oregon Goes All-Out for All-Day Kindergarten," *Oregonian*, September 5, 2015, <a href="http://www.oregonlive.com/education/index.ssf/2015/09/oregon\_goes\_all-">http://www.oregonlive.com/education/index.ssf/2015/09/oregon\_goes\_all-</a>

- out for all-da.html#incart 2box education index. ssf; for more discussion of the value of full-day kindergarten, see Aaron Loewenberg, "Oregon Embraces Full-Day Kindergarten," EdCentral (blog), New America, September 15, 2015, <a href="http://www.edcentral.org/">http://www.edcentral.org/</a> oregonkinder/.
- <sup>23</sup> Belle Koskela, interview with authors, April 13, 2015.
- <sup>24</sup> W. Steven Barnett, Megan E. Carolan, James H. Squires, Kirsty Clarke Brown, and Michelle Horowitz, *The State of Preschool 2014* (New Brunswick, NJ: the National Institute for Early Education Research, 2015), 111–12, <a href="http://nieer.org/sites/nieer/files/Yearbook2014">http://nieer.org/sites/nieer/files/Yearbook2014</a> full2 o.pdf; Lillian Mongeau, "Oregon Expands Early Education Programs at Last Legislative Second," *Education Week* (blog), July 8, 2015, <a href="http://blogs.edweek.org/edweek/early-years/2015/07/oregon expands early education-programs at last legislative second.html">http://blogs.edweek.org/edweek/early-years/2015/07/oregon expands early education-programs at last legislative second.html;
- <sup>25</sup> Unless otherwise noted, all data in this sidebar are from *David Douglas School District: Demographic History* (Portland: David Douglas, 2014), <a href="http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/District-Demographic-History-2014.pdf">http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/District-Demographic-History-2014.pdf</a>.
- <sup>26</sup> Kim Miller, Oregon Department of Education, e-mail with New America, August 19, 2015.
- <sup>27</sup> Oregon Department of Education, *Report Card*, 2013–14: *David Douglas SD 40* (Salem: Oregon Department of Education, 2014).
- <sup>28</sup> Belle Koskela, "2014/2015 Elementary Language Development, by the Numbers as of 4/15/15," (presentation), (Portland: David Douglas School District, April 2015). Staff at Earl Boyles report that they actually had more than 25 visits during the last calendar year. Andreina Velasco, e-mail with Conor P. Williams, September 6, 2015.
- <sup>29</sup> Dana Hepper, "David Douglas Makes Strides for English Learners" *Children's Institute* (blog), November 6, 2014, <a href="http://www.childinst.org/news/blog/608-david-douglas-makes-strides-for-english-language-learners">http://www.childinst.org/news/blog/608-david-douglas-makes-strides-for-english-language-learners</a>; Oregon Department of Education, *Annual Measurable Achievement Objective (AMAO) Report for 2014* (Salem: Oregon Department of Education, November 5, 2014), <a href="http://www.ode.state.or.us/news/announcements/announcement.aspx?=10217">http://www.ode.state.or.us/news/announcements/announcement.aspx?=10217</a>; Oregon Department of Education, *Changes to AMAO Calculations* (Salem: Oregon Department of Education, August 2014), <a href="http://www.ode.state.or.us/opportunities/grants/nclb/title-iii/amao-state.or.us/opportunities/grants/nclb/title-ii

## calculations sai 2014 final updated.pdf.

- <sup>30</sup> With the possible exception of Portland's Centennial School District, where the percentage of economically-disadvantaged students is only marginally lower than the percentage in David Douglas. Cf. Oregon Department of Education, *Report Card*, 2013–14: Centennial SD 28J (Salem: Oregon Department of Education, 2014).
- <sup>31</sup> Oregon Department of Education, *Report Card*, 2013–14: *David Douglas SD 40* (Salem: Oregon Department of Education, 2014).
- <sup>32</sup> Department of Education, *National Evaluation of Title III Implementation—Report on State and Local Implementation* (Washington, DC: 2012), 108–9, <a href="https://www2.ed.gov/rschstat/eval/title-iii/state-local-implementation-report.pdf/">https://www2.ed.gov/rschstat/eval/title-iii/state-local-implementation-report.pdf/</a>.
- <sup>33</sup> For more on trends in state legislation related to DLLs, see Matthew Weyer, *Educating Young Dual- and English-Language Learners* (Denver: National Conference of State Legislatures, September 2015).
- <sup>34</sup> For more details on No Child Left Behind and AMAOs, see *NCLB*: *Title III and AMAOs* (Washington, DC: New America, 2015), <a href="http://atlas.newamerica.org/title-iii">http://atlas.newamerica.org/title-iii</a>.
- <sup>35</sup> Department of Education, *National Evaluation of Title III Implementation—Report on State and Local Implementation* (Washington, DC: 2012), 75–77 and 85–100, <a href="https://www2.ed.gov/rschstat/eval/title-iii/state-local-implementation-report.pdf/">https://www2.ed.gov/rschstat/eval/title-iii/state-local-implementation-report.pdf/</a>.
- <sup>36</sup> Oregon Department of Education, 2013–14 Annual Measurable Achievement Objectives (AMAOs) Policy and Technical Manual (Salem: Oregon Department of Education, November 11, 2014); Oregon Department of Education, Changes to AMAO Calculations (Salem: Oregon Department of Education, August 2014), <a href="http://www.ode.state.or.us/opportunities/grants/nclb/title-iii/amao-calculations">http://www.ode.state.or.us/opportunities/grants/nclb/title-iii/amao-calculations</a> sai 2014 final updated.pdf.
- <sup>37</sup> Betsy Hammond, "David Douglas School Superintendent Don Grotting is Oregon's Superintendent of the Year," *Oregonian*, October 23, 2015, <a href="http://www.oregonlive.com/education/index.ssf/2013/10/david\_douglas\_school\_superinte.html">http://www.oregonlive.com/education/index.ssf/2013/10/david\_douglas\_school\_superinte.html</a>.
- <sup>38</sup> Rob Manning, "'The Guynes Effect': Can One Principal Change a School," *Oregonian*, November 7, 2013, <a href="http://www.opb.org/news/series/classof2025/the-guynes-effect-can-one-principal-change-a-school/">http://www.opb.org/news/series/classof2025/the-guynes-effect-can-one-principal-change-a-school/</a>; David

- Douglas principal James Johnston was also recognized in 2013 at the middle school level: Eric Apalategui, "James Johnston of Alice Ott Middle School Named 2013 Middle School Principal of the Year," *Oregonian*, October 23, 2013, <a href="http://www.oregonlive.com/gresham/index.ssf/2013/05/james">http://www.oregonlive.com/gresham/index.ssf/2013/05/james</a> johnston of alice ott mi.html.
- <sup>39</sup> David Douglas School District, *Demographic History* (2004 to 2014) (Portland: David Douglas School District, 2014), <a href="http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/District-Demographic-History-2014.pdf">http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/District-Demographic-History-2014.pdf</a>.
- <sup>40</sup> Oregon Department of Education, *Report Card*, 2013–14: *David Douglas SD 40* (Salem: Oregon Department of Education, 2014).
- <sup>41</sup> Oregon Department of Education, *Report Card*, 2013–14: *David Douglas SD 40* (Salem: Oregon Department of Education, 2014); cf. Conor Williams, "How to Measure English Learners' Development More Accurately," *EdCentral* (blog), New America, March 27, 2015, <a href="http://www.edcentral.org/totalenglishlearners/">http://www.edcentral.org/totalenglishlearners/</a>.
- <sup>42</sup> School site visit, Mill Park Elementary, April 13, 2015.
- <sup>43</sup> Maria Adams, e-mail with Conor P. Williams, September 10, 2015.
- <sup>44</sup> Claude Goldenberg, "Unlocking the Research on English Learners," *American Educator*, Summer 2013: 20, <a href="http://www.aft.org/sites/default/files/periodicals/">http://www.aft.org/sites/default/files/periodicals/</a> English Learners.pdf.
- <sup>45</sup> Carol Scheffner Hammer, "The State of Research on Dual Language Learners: What We Know and What We Need to Know," presentation December 11, 2014 at New America, Washington, DC; Kenji Hakuta, Yuko Goto Butler, and Daria Witt, "How Long Does It Take English Learners to Attain Proficiency?" *The University of California Linguistic Minority Research Institute Policy Report 2000-1* (Palo Alto: Stanford University, January 2000), <a href="https://web.stanford.edu/~hakuta/Publications/%282000%29%20-%20HOW%20LONG%20DOES%20IT%20TAKE%20ENGLISH%20LEARNERS%20TO%20ATTAIN%20PR.pdf">https://web.stanford.edu/~hakuta/Publications/%282000%29%20-%20HOW%20LONG%20DOES%20IT%20TAKE%20ENGLISH%20LEARNERS%20TO%20ATTAIN%20PR.pdf</a>.
- <sup>46</sup> Virginia Buysse, Ellen Peisner-Feinberg, Mariela Páez, Carol Scheffner Hammer, and Meagan Knowles, "Effects of Early Education Programs and Practices on the Development and Learning of Dual Language Learners: A Review of the Literature," *Early Childhood Research Quarterly* 29, no. 4 (2014): 765–85; Carol

Scheffner Hammer, Erika Hoff, Yuuko Uchikoshi, Cristina Gillanders, Dina Castro, and Lia E. Sandilos, "The Language and Literacy Development of Young Dual Language Learners: A Critical Review," *Early Childhood Research Quarterly* 29, no. 4 (2014): 715–33.

- <sup>47</sup> Claude Goldenberg, "Unlocking the Research on English Learners," *American Educator*, Summer 2013: 5, <a href="http://www.aft.org/sites/default/files/periodicals/English Learners.pdf">http://www.aft.org/sites/default/files/periodicals/English Learners.pdf</a>; cf. his 2008 article on a similar subject, where he wrote, ""what we know about good instruction and curriculum in general holds true for [DLLs] as well...[but] when instructing [DLLs] in English, teachers must modify instruction to take into account students' language limitations." Goldenberg, "Teaching English Language Learners: What the Research Does—and Does Not—Say," *American Educator*, Summer 2008: 14, <a href="http://www.aft.org/sites/default/files/periodicals/goldenberg.pdf">http://www.aft.org/sites/default/files/periodicals/goldenberg.pdf</a>.
- <sup>48</sup> Betsy Hammond, "As Teaching Methods Improve, Oregon Cuts Years Off English-Language Instruction," *Oregonian*, February 21, 2015, <a href="http://www.oregonlive.com/education/index.ssf/2015/02/oregon schoolsmore effective.html">http://www.oregonlive.com/education/index.ssf/2015/02/oregon schoolsmore effective.html</a>; Susana Dutro and Carrol Moran, "Rethinking English Language Instruction: An Architectural Approach," in *English Learners: Reaching the Highest Level of English Literacy*, ed. Gilbert G. Garcia (Newark, DE: International Reading Association, 2003), 227–58; E.L. Achieve, *Services for Building District Capacity* Rancho Santa Margarita, CA: E.L. Achieve, 2014, <a href="http://www.elachieve.org/images/pdf/elachieveCapacityBuilding.pdf">http://www.elachieve.org/images/pdf/elachieveCapacityBuilding.pdf</a>.
- <sup>49</sup> Kelly Devlin, interview with Conor P. Williams, February 4, 2015.
- <sup>50</sup> School site visit, Mill Park Elementary, April 13, 2015.
- <sup>51</sup> School site visit, Mill Park Elementary, April 13, 2015.
- <sup>52</sup> School site visit, Mill Park Elementary, April 13, 2015.
- 53 School site visit, Cherry Park Elementary, April 15, 2015.
- <sup>54</sup> Shane Burchell, interview with authors, April 16, 2015.
- <sup>55</sup> Andreina Velasco and Maria Adams, phone interview with Conor P. Williams, January 23, 2015.
- <sup>56</sup> School site visit, Mill Park Elementary, April 13, 2015; School site visit, Cherry Park Elementary, April 15, 2015.

- <sup>57</sup> School site visit, Cherry Park Elementary, April 15, 2015.
- <sup>58</sup> Don Grotting, interview with authors, April 16, 2015.
- <sup>59</sup> School site visit, Mill Park Elementary, April 13, 2015.
- <sup>60</sup> Isabella Sanchez, "Project GLAD: So Much More to Learn," *EdCentral* (blog), New America, July 21, 2015, <a href="http://www.edcentral.org/project-glad/">http://www.edcentral.org/project-glad/</a>.
- <sup>61</sup> School site visit, Mill Park Elementary, April 13, 2015; Alethea Mellor, interview with Conor P. Williams, August 7, 2015.
- 62 Allison Gulamhussein, Teaching the Teachers: Effective Professional Development in an Era of High-Stakes Accountability (Washington, DC: Center for Public Education, 2013), http://www.centerforpubliceducation. org/Main-Menu/Staffingstudents/Teaching-the-Teachers-Effective-Professional-Development-inan-Era-of-High-Stakes-Accountability/Teaching-the-**Teachers-Full-Report.pdf**; Thomas R. Guskey and Kwang Suk Yoon, "What Works in Professional Development?," Phi Delta Kappan 90, no. 7 (March 2009): 495-500; Sarah Archibald, Jane G. Coggshall, Andrew Croft, and Laura Goe, High-Quality Professional Development for All Teachers: Effectively Allocating Resources (Washington, DC: National Comprehensive Center for Teacher Quality, February 2011), <a href="http://www.gtlcenter.org/sites/default/">http://www.gtlcenter.org/sites/default/</a> files/docs/HighQualityProfessionalDevelopment.pdf.
- <sup>63</sup> Maria Adams, email with Conor P. Williams, September 10, 2015.
- <sup>64</sup> School site visit, Ventura Park, April 16, 2015; Kelly Devlin agrees: "we still have people who push back at both ends. We have former ESL teachers who believe that the only way to teach English Learners is to have them isolated in groups of five, learning grammatical forms...We still have classroom teachers who want us to pull them out, sprinkle that magic ELD dust on them, fix them, and [think] then I'll have them in my classroom." Kelly Devlin, phone interview with Conor P. Williams, February 4, 2015.
- <sup>65</sup> Alethea Mellor, phone interview with Conor P. Williams, August 7, 2015.
- 66 "Supporting English Language Learners under New Standards," <a href="https://novoed.com/osu-stanford-ELL">https://novoed.com/osu-stanford-ELL</a>
- <sup>67</sup> District Language Coach Meeting, April 15, 2015; *ELL MOOC Support Schedule* (Portland: Education Northwest,

2015).

- <sup>68</sup> District Language Coaches Meeting, April 15, 2015.
- <sup>69</sup> School site visit, Earl Boyles Elementary, April 14, 2015; David Douglas School District, *David Douglas School District Grant Project, Project Title: Earl Boyles Early Learning Technology Integration Project* (Portland: Mount Hood Cable Regulatory Commission, 2014), <a href="http://www.mhcrc.org/wp-content/uploads/2015/01/DDSD-Earl-Boyles-Project-Plan-Final.pdf">http://www.mhcrc.org/wp-content/uploads/2015/01/DDSD-Earl-Boyles-Project-Plan-Final.pdf</a>.
- <sup>70</sup> School site visit, Mill Park Elementary, April 13, 2015; School site visit, Cherry Park Elementary, April 15, 2015.
- <sup>71</sup> School site visit, Ventura Park Elementary, April 16, 2015.
- <sup>72</sup> School site visit, Ventura Park Elementary, April 16, 2015.
- <sup>73</sup> School site visit, Mill Park Elementary, April 13, 2015.
- <sup>74</sup> School site visit, Ventura Park Elementary, April 16, 2015.
- <sup>75</sup> Amaya Garcia, "The Common Core Just Might be the Greatest (or Worst) Thing to Happen to DLLs," *EdCentral* (blog), New America, February 2, 2015, <a href="http://www.edcentral.org/dllsandccss/">http://www.edcentral.org/dllsandccss/</a>.
- <sup>76</sup> Maria Adams, e-mail with Conor P. Williams, September 10, 2015.
- <sup>77</sup> Common Core Math Standards, "CCSS. MATH.CONTENT.3.OA.D.8" and "CCSS.MATH. CONTENT.3.OA.D.9."
- <sup>78</sup> Common Core Math Standards, "CCSS.MATH. PRACTICE.MP3," <u>http://www.corestandards.org/Math/Practice/#CCSS.Math.Practice.MP3</u>.
- <sup>79</sup> Kelly Devlin, phone interview with Conor P. Williams, February 4, 2015; cf. Maria Adams, e-mail with Conor P. Williams, September 10, 2015: "as teachers plan for the rest of the day they naturally begin to ask themselves 'What is the language need to complete this task?' If the language needed is particularly rigorous, that's usually a sign of a good content to pull into the ELD block."
- <sup>80</sup> Alethea Mellor, phone interview with Conor P. Williams, August 7, 2015.

- <sup>81</sup> School site visit, Ventura Park Elementary, April 16, 2015.
- $^{82}$  Alethea Mellor, phone interview with Conor P. Williams, August 7, 2015.
- <sup>83</sup> Alethea Mellor, phone interview with Conor P. Williams, August 7, 2015.
- <sup>84</sup> Alethea Mellor, phone interview with Conor P. Williams, August 7, 2015.
- <sup>85</sup> School site visit, Ventura Park Elementary, April 16, 2015; Maria Adams, interview with authors, April 14, 2015: Earl Boyles' Maria Adams says almost exactly the same thing: "the language strategies are starting to bleed out into the rest of the day, which is exactly what we want."
- <sup>86</sup> School site visit, Cherry Park Elementary, April 15, 2015; Oregon Department of Education, *Report Card*, 2013–14: *Cherry Park Elementary* (Salem: Oregon Department of Education, 2014); Maria Adams, e-mail with Conor P. Williams, September 10, 2015; *Oregon Department of Education, Assessment Results* (database), (Salem: Oregon Department of Education, 2015), <a href="http://www.ode.state.or.us/search/page/?id=1302">http://www.ode.state.or.us/search/page/?id=1302</a>.
- <sup>87</sup> Oregon Department of Education, *Report Card*, 2013–14: *Cherry Park Elementary* (Salem: Oregon Department of Education, 2014).
- <sup>88</sup> Unless otherwise noted, all enrollment and demographic data are from: Oregon Department of Education, *Report Card*, 2013–14: Earl Boyles Elementary (Salem: Oregon Department of Education, 2014).
- <sup>89</sup> Andreina Velasco, e-mail with Conor P. Williams, September 6, 2015.
- <sup>90</sup> David Douglas School District, Free and Reduced Lunch Count—Percentage by School (Portland: David Douglas School District, October 31, 2014), <a href="http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/Free-Reduced-Separate-Percentages-Oct-2014.pdf">http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/Free-Reduced-Separate-Percentages-Oct-2014.pdf</a>.
- <sup>91</sup> David Douglas School District, *Free and Reduced Lunch Count—Percentage by School* (Portland: David Douglas School District, October 31, 2014), <a href="http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/Free-Reduced-Separate-Percentages-Oct-2014.pdf">http://www.ddouglas.k12.or.us/wp-content/uploads/2014/11/Free-Reduced-Separate-Percentages-Oct-2014.pdf</a>.
- <sup>92</sup> Andreina Velasco, e-mail with Conor P. Williams, September 6, 2015.

- 93 School site visit, Earl Boyles Elementary, April 14, 2015.
- 94 Craig T. Ramey, Frances A. Campbell, Margaret Burchinal, Marite L. Skinner, David M. Gardner, and Sharon L. Ramey, "Persistent Effects of Early Childhood Education on High-Risk Children and Their Mothers," *Applied Developmental Science* 4, no. 1 (2000), 2–14; Arthur J. Reynolds, Judy A. Temple, Dylan L. Robertson and Emily A. Mann, "Age 21 Cost-Benefit Analysis of the Title I Chicago Child-Parent Centers," *Educational Evaluation and Policy Analysis* 24, no. 4 (Winter 2002), 267–303. Cf. Jacob Vigil, Cristina Pacione-Zayas, and Sylvia Puente, *Primeros Pasos: Strengthening Programs that Support Illinois Infants and Toddlers* (Chicago: Latino Policy Forum, October 2013), 14, <a href="http://www.latinopolicyforum.org/resources/reports/document/LPF-PrimerosPasos-Report-FINAL-1.PDF">http://www.latinopolicyforum.org/resources/reports/document/LPF-PrimerosPasos-Report-FINAL-1.PDF</a>.
- 95 Maki Park and Margie McHugh, Immigrant Parents and Early Childhood Programs: Addressing Barriers of Literacy, Culture, and Systems Knowledge (Washington, DC: Migration Policy Institute, 2014), <a href="http://www.migrationpolicy.org/sites/default/files/publications/ParentEngagement-FINAL.pdf">http://www.migrationpolicy.org/sites/default/files/publications/ParentEngagement-FINAL.pdf</a>.
- <sup>96</sup> Julia Gelatt, Gina Adams, and Sandra Huerta, Supporting Immigrant Families' Access to Prekindergarten (Washington, DC: Urban Institute, 2014), 8–9, <a href="http://www.urban.org/UploadedPDF/413026-Supporting-Immigrant-Families-Access-to-Prekindergarten.pdf">http://www.urban.org/UploadedPDF/413026-Supporting-Immigrant-Families-Access-to-Prekindergarten.pdf</a>.
- <sup>97</sup> Richard V. Reeves and Kimberly Howard, *The Parenting Gap* (Washington, DC: Brookings, 2013), <a href="http://www.brookings.edu/~/media/Research/Files/Papers/2013/09/09-parenting-gap-social-mobility-wellbeing-reeves/09-parenting-gap-social-mobility-wellbeing-reeves.pdf?la=en.">http://www.brookings.edu/~/media/Research/Files/Papers/2013/09/09-parenting-gap-social-mobility-wellbeing-reeves/09-parenting-gap-social-mobility-wellbeing-reeves.pdf?la=en.</a>
- 98 Claude Goldenberg, Successful School Change: Creating Settings to Improve Teaching and Learning (New York: Teacher College Press, Columbia University, 2004); Francisco Rios, "Home-School-Community Collaborations in Uncertain Times," in Home-School Connections in a Multicultural Society: Learning from and with Culturally and Linguistically Diverse Families, ed. Maria Luiza Dantas and Patrick C. Manyak (New York: Routledge, 2010), 265–79; cf. Conor P. Williams, "Focusing on Latino Parents' Strengths," EdCentral (blog), New America, July 2, 2014, <a href="http://www.edcentral.org/focusing-latino-parents-strengths/">http://www.edcentral.org/focusing-latino-parents-strengths/</a>.
- <sup>99</sup> Padres Unidos Meeting, Earl Boyles Elementary, April 14, 2015.

- <sup>100</sup> Cf. Multnomah County Department of County Human Services, "SUN Service System" (Portland: Multnomah County Department of County Human Services, 2015), <a href="https://multco.us/sun">https://multco.us/sun</a>.
- <sup>101</sup> Padres Unidos Meeting, Earl Boyles Elementary, April 14, 2015.
- <sup>102</sup> Ericka Guynes, interview with authors, April 14, 2015.
- <sup>103</sup> Kelly Devlin, e-mail with Conor P. Williams, February 13, 2015; Ericka Guynes, interview with authors, April 14, 2015; Maria Adams, and Andreina Velasco, phone interview with Conor P. Williams, January 23, 2015; School site visit, Earl Boyles Elementary, April 14, 2015.
- <sup>104</sup> Katia Riddle, "Building Bridges: How Earl Boyles Elementary School Brought a Publicly Funded Preschool into Its Halls," in *Baby Steps Into a Big World: How Pre-K Started at Earl Boyles Elementary* (Portland: Children's Institute, 2013), 5.
- <sup>105</sup> Swati Adarkar, interview with Conor P. Williams, April 15, 2015.
- <sup>106</sup> Swati Adarkar, *Baby Steps Into a Big World: How Pre-K Started at Earl Boyles Elementary* (Portland: Children's Institute, 2013), 3.
- $^{\rm 107}$  Andreina Velasco, interview with authors, April 14, 2015.
- 108 Howard S. Bloom and Christina Weiland, Quantifying Variation in Head Start Effects on Young Children's Cognitive and Socio-Emotional Skills Using Data from the National Head Start Impact Study (New York: MDRC, March 2015), <a href="http://www.mdrc.org/sites/default/files/">http://www.mdrc.org/sites/default/files/</a> quantifying variation in head start.pdf; Ellen Peisner-Feinberg, Jennifer Schaaf, and Dore LaForett, Children's Growth and Classroom Experiences in Georgia's PreK Program Findings from the 2011–2012 Evaluation Study (Chapel Hill: University of North Carolina at Chapel Hill, 2013); Francisco Palermo, Ariana M. Mikulski, Richard A. Fabes, Laura D. Hanish, Carol Lynn Margin, and Lauren E. Stargel, "English Exposure in the Home and Classroom: Predictions to Spanish-Speaking Preschoolers' English Vocabulary Skills," Applied Psycholinguistics 35, no. 6 (November 2014): 1163-87, http://journals.cambridge. org/action/displayAbstract?fromPage=online& aid=9370950&fileId=S0142716412000732; Barbara Jackson, Early Childhood Education in Nebraska Public School Districts and Educational Service Units: 2010–2011 State Report (Lincoln: Nebraska Department of Education

Office of Early Childhood, 2012); Michael A. Gottfried and Hui Yon Kim, "Improving School Readiness: Formal Versus Informal Pre-Kindergarten and Children in Immigrant Families," White Paper, University of California Center Sacramento, February 2015; Suzanne Gamboa, "Are English Learners Neglected in Early Education?" NBC News, February 12, 2015, http://www. nbcnews.com/news/latino/are-english-learnersneglected-early-education-n304486; Ellen Bialystok and Kenji Hakuta, In Other Words: The Science and Psychology of Second Language Acquisition (New York: Basic Books, 1994); Tom A. Schweizer, Jenna Ware, Corinne E. Fischer, Fergus I.M. Craik, and Ellen Bialystok, "Bilingualism as a Contributor to Cognitive Reserve: Evidence From Brain Atrophy in Alzheimer's Disease," Cortex 48, no. 8 (September 2012): 991–996; Ellen Bialystok, Kathleen F. Peets, and Sylvain Moreno, "Producing Bilinguals through Immersion Education: Development of Metalinguistic Awareness," Applied Psycholinguistics, 35 (2014): 177-191; Conor P. Williams, "Who Gets 'The Bilingual Advantage?' And When?" EdCentral (blog), New America, February 19, 2015, http://www.edcentral. org/gets-bilingual-advantage/.

- <sup>109</sup> Diane Rodríguez, Angela Carrasquillo, and Kyung Soon Lee, *The Bilingual Advantage: Promoting Academic Development, Biliteracy, and Native Language in the Classroom* (New York: Teachers College Press, 2014), 9.
- <sup>110</sup> Virginia Buysse, Ellen Peisner-Feinberg, Mariela Páez, Carol Scheffner Hammer, and Meagan Knowles, "Effects of Early Education Programs and Practices on the Development and Learning of Dual Language Learners: A Review of the Literature," *Early Childhood Research Quarterly* 29, no. 4 (2014): 765–85; Carol Scheffner Hammer, Erika Hoff, Yuuko Uchikoshi, Cristina Gillanders, Dina Castro, and Lia E. Sandilos, "The Language and Literacy Development of Young Dual Language Learners: A Critical Review," *Early Childhood Research Quarterly* 29, no. 4 (2014): 715–33.
- "For more on early numeracy and long-term academic success, see Russell Gersten, Nancy C. Jordan, and Jonathan R. Flojo, "Early Identification and Interventions for Students with Mathematics Difficulties," *Journal of Learning Disabilities* 38, no. 4 (July–August 2005): 293–304, <a href="http://www.ncsip.org/mathematics/documents/earlyidentificationandinterventionsforstudents/earlyidentificationandinterventionsforstudentswithmathematicsdifficulties.pdf">http://www.ncsip.org/mathematics/documents/earlyidentificationandinterventionsforstudentswithmathematicsdifficulties.pdf</a>.
- <sup>112</sup> Howard S. Bloom and Christina Weiland, *Quantifying Variation in Head Start Effects on Young Children's Cognitive and Socio-Emotional Skills Using Data from*

- the National Head Start Impact Study (New York: MDRC, March 2015), <a href="http://www.mdrc.org/sites/default/files/quantifying-variation-in-head-start.pdf">http://www.mdrc.org/sites/default/files/quantifying-variation-in-head-start.pdf</a>.
- <sup>113</sup> Howard S. Bloom and Christina Weiland, *Quantifying Variation in Head Start Effects on Young Children's Cognitive and Socio-Emotional Skills Using Data from the National Head Start Impact Study* (New York: MDRC, March 2015), 20, <a href="http://www.mdrc.org/sites/default/files/quantifying variation in head start.pdf">http://www.mdrc.org/sites/default/files/quantifying variation in head start.pdf</a>; Conor P. Williams, "Head Start Works Particularly Well for Dual Language Learners," *EdCentral* (blog), New America, April 3, 2015, <a href="http://www.edcentral.org/headstartdlls/">http://www.edcentral.org/headstartdlls/</a>.
- <sup>114</sup> Italics in original. Anita Pandey, "What Is the Role of Oral Language in First and Second Language Acquisition in the Early Years?" in *Young Dual Language Learners*, ed. Karen N. Nemeth (Philadelphia: Caslon Publishing, 2014), 67.
- <sup>115</sup> Anita Pandey, "What Is the Role of Oral Language in First and Second Language Acquisition in the Early Years?" in *Young Dual Language Learners*, ed. Karen N. Nemeth (Philadelphia: Caslon Publishing, 2014), 68.
- <sup>116</sup> Arya Ansari and Michael López, *Preparing Low-Income Latino Children for Kindergarten and Beyond: How Children in Miami's Publicly-Funded Preschool Programs Fare* (Bethesda: National Research Center on Hispanic Children and Families, September 2015), 2.
- <sup>117</sup> Beth L. Green, Leslie Munson, Risa Proehl, Peggy Nygren, Janet Walker, and David Allen, *Earl Boyles Needs Assessment: Final Report* (Portland: Portland State University, 2011).
- <sup>118</sup> Beth L. Green, Leslie Munson, Risa Proehl, Peggy Nygren, Janet Walker, and David Allen, *Earl Boyles Needs Assessment: Final Report* (Portland: Portland State University, 2011), 4–5; School site visit, Earl Boyles Elementary, April 14, 2015.
- <sup>119</sup> Beth L. Green, Leslie Munson, Risa Proehl, Peggy Nygren, Janet Walker, and David Allen, *Earl Boyles Needs Assessment: Final Report* (Portland: Portland State University, 2011), 9.
- <sup>120</sup> Beth L. Green, Leslie Munson, Risa Proehl, Peggy Nygren, Janet Walker, and David Allen, *Earl Boyles Needs Assessment: Final Report* (Portland: Portland State University, 2011), 7.
- 121 Beth L. Green, Leslie Munson, Risa Proehl, Peggy

- Nygren, Janet Walker, and David Allen, *Earl Boyles Needs Assessment: Final Report* (Portland: Portland State University, 2011), 7 and 9.
- <sup>122</sup> Andreina Velasco, e-mail with Conor P. Williams, September 6, 2015.
- <sup>123</sup> Beth L. Green, Leslie Munson, Risa Proehl, Peggy Nygren, Janet Walker, and David Allen, *Earl Boyles Needs Assessment: Final Report* (Portland: Portland State University, 2011); School site visit, Earl Boyles Elementary, April 14, 2015; Katia Riddle, "Building Bridges: How Earl Boyles Elementary School Brought a Publicly Funded Preschool into Its Halls," in *Baby Steps Into a Big World: How Pre-K Started at Earl Boyles Elementary* (Portland: Children's Institute, 2013).
- <sup>124</sup> Head Start Program Performance Standards (Washington, DC: Federal Department of Health and Human Services, 2015), <a href="http://eclkc.ohs.acf.hhs.gov/hslc/standards/hspps/45-cfr-chapter-xiii">http://eclkc.ohs.acf.hhs.gov/hslc/standards/hspps/45-cfr-chapter-xiii</a>.
- <sup>125</sup> Katia Riddle, "Building Bridges: How Earl Boyles Elementary School Brought a Publicly Funded Preschool into Its Halls," in *Baby Steps Into a Big World: How Pre-K Started at Earl Boyles Elementary* (Portland: Children's Institute, 2013), 6–7.
- <sup>126</sup> Katia Riddle, "Building Bridges: How Earl Boyles Elementary School Brought a Publicly Funded Preschool into Its Halls," in *Baby Steps Into a Big World: How Pre-K Started at Earl Boyles Elementary* (Portland: Children's Institute, 2013); School site visit, Earl Boyles Elementary, April 14, 2015.
- <sup>127</sup> Beth L. Green, Leslie Munson, Risa Proehl, Peggy Nygren, Janet Walker, and David Allen, *Earl Boyles Needs Assessment: Final Report* (Portland: Portland State University, 2011).
- <sup>128</sup> Katia Riddle, "Building Bridges: How Earl Boyles Elementary School Brought a Publicly Funded Preschool into Its Halls," in *Baby Steps Into a Big World: How Pre-K Started at Earl Boyles Elementary* (Portland: Children's Institute, 2013).
- <sup>129</sup> David Douglas School District, *David Douglas School District Grant Project, Project Title: Earl Boyles Early Learning Technology Integration Project* (Portland: Mount Hood Cable Regulatory Commission, 2014), 2, <a href="http://www.mhcrc.org/wp-content/uploads/2015/01/DDSD-Earl-Boyles-Project-Plan-Final.pdf">http://www.mhcrc.org/wp-content/uploads/2015/01/DDSD-Earl-Boyles-Project-Plan-Final.pdf</a>.

- <sup>130</sup> James Mayer, "David Douglas School District Bond Measure Passes," *Oregonian*, May 15, 2015, <a href="http://www.oregonlive.com/portland/index.ssf/2012/05/daviddouglas school district 2.html">http://www.oregonlive.com/portland/index.ssf/2012/05/daviddouglas school district 2.html</a>; Beth Slovic, "See the New \$7 Million Center for Early Learning at SE Portland's Earl Boyles Elementary," *Oregonian*, September 10, 2014, <a href="http://www.oregonlive.com/portland/index.ssf/2014/09/see">http://www.oregonlive.com/portland/index.ssf/2014/09/see</a> the new 7 million center f.html; Katia Riddle and Merina Merrill, "Changing Destiny," in *Leading the Way: Why Four Oregon Superintendents Embraced Early Learning* (Portland: Children's Institute, 2014), 14–17; School site visit, Earl Boyles, April 14, 2015; Andreina Velasco, e-mail with Conor P. Williams, September 6, 2015.
- <sup>131</sup> David Douglas School District, *David Douglas School District Grant Project, Project Title: Earl Boyles Early Learning Technology Integration Project* (Portland: Mount Hood Cable Regulatory Commission, 2014), 2, <a href="http://www.mhcrc.org/wp-content/uploads/2015/01/DDSD-Earl-Boyles-Project-Plan-Final.pdf">http://www.mhcrc.org/wp-content/uploads/2015/01/DDSD-Earl-Boyles-Project-Plan-Final.pdf</a>.
- <sup>132</sup> David Douglas School District, *David Douglas School District Grant Project, Project Title: Earl Boyles Early Learning Technology Integration Project* (Portland: Mount Hood Cable Regulatory Commission, 2014), <a href="http://www.mhcrc.org/wp-content/uploads/2015/o1/DDSD-Earl-Boyles-Project-Plan-Final.pdf">http://www.mhcrc.org/wp-content/uploads/2015/o1/DDSD-Earl-Boyles-Project-Plan-Final.pdf</a>
- <sup>133</sup> School site visit, Earl Boyles Elementary, April 14, 2015.
- <sup>134</sup> School site visit, Earl Boyles Elementary, April 14, 2015.
- <sup>135</sup> School site visit, Earl Boyles Elementary, April 14, 2015.
- <sup>136</sup> School site visit, Earl Boyles Elementary, April 14, 2015; Katia Riddle, "Building Bridges: How Earl Boyles Elementary School Brought a Publicly Funded Preschool into Its Halls," in *Baby Steps Into a Big World: How Pre-K Started at Earl Boyles Elementary* (Portland: Children's Institute, 2013), 6–8.
- <sup>137</sup> Beth Slovic, "See the New \$7 Million Center for Early Learning at SE Portland's Earl Boyles Elementary," September 10, 2014, *Oregonian*, <a href="http://www.oregonlive.com/portland/index.ssf/2014/09/see">http://www.oregonlive.com/portland/index.ssf/2014/09/see</a> the new 7 million center f.html.
- <sup>138</sup> School site visit, Earl Boyles Elementary, April 14, 2015; Andreina Velasco, e-mail with Conor P. Williams, September 6, 2015.
- 139 Maria Adams and Ericka Guynes, interview with

authors, April 14, 2015.

- Maria Adams and Ericka Guynes, interview with authors, April 14, 2015; Marina Merrill, "Earl Boyles Kindergartners Shine on Oregon Kindergarten Assessment" *Children's Institute* (blog), April 7, 2015, <a href="http://www.childinst.org/news/blog/649-earl-boyles-kindergartners-shine-on-oregon-kindergarten-assessment">http://www.childinst.org/news/blog/649-earl-boyles-kindergartners-shine-on-oregon-kindergarten-assessment</a>.
- Metropolitan Family Service, "Community Schools," <a href="http://www.metfamily.org/what-we-do/community-schools/">http://www.metfamily.org/what-we-do/community-schools/</a>; for some background on "dual-generation" or "two-generation" strategies for supporting children and families, see "The Two-Generation Approach," <a href="https://schools.ncb/schools.ncb/">Ascend (Washington, DC: The Aspen Institute)</a>, <a href="https://schools.ncb/http://schools.ncb/schools.ncb/">http://schools.ncb/s
- <sup>142</sup> "SUN Community School Profiles 2015: Earl Boyles Elementary School" (Portland: Multnomah County Department of County Human Services, 2015), <a href="https://multco.us/file/10061/download">https://multco.us/file/10061/download</a>.
- <sup>143</sup> School site visit, Earl Boyles Elementary, April 14, 2015.
- <sup>144</sup> School site visit, Earl Boyles Elementary, April 14, 2015.
- <sup>145</sup> Betty Azumi and Dara P. Wilson, *Community Health and Key Informant Surveys: Findings and Recommendations* (Portland: Portland State University, 2014), 2.
- <sup>146</sup> Betty Azumi and Dara P. Wilson, *Community Health and Key Informant Surveys: Findings and Recommendations* (Portland: Portland State University, 2014), 12 and 17.

- <sup>147</sup> "Early Works Coordinating Committee Meeting Notes, Thursday, December 16, 2014."
- <sup>148</sup> Swati Adarkar, interview with Conor P. Williams, April 15, 2015.
- <sup>149</sup> Carola Suárez-Orozco, Marcelo M. Suárez-Orozco, and Irina Todorova, *Learning a New Land : Immigrant Students in American Society* (Cambridge, MA: Harvard University Press, 2008), 75–8; Faye Ong, John McLean, and Cecelia Fisher-Dahms, eds., *California's Best Practices for Young Dual Language Learners: Research Overview Papers*, (Sacramento: California Department of Education Press, 2013), 132–36, <a href="http://www.cde.ca.gov/sp/cd/ce/documents/dllresearchpapers.pdf">http://www.cde.ca.gov/sp/cd/ce/documents/dllresearchpapers.pdf</a>; Vikki S. Katz, *Kids in the Middle: How Children of Immigrants Negotiate Community Interactions for Their Families* (New Brunswick, NJ: Rutgers University Press, 2014), 105–7.
- <sup>150</sup> Swati Adarkar, interview with Conor P. Williams, April 15, 2015.
- <sup>151</sup> Maria Adams, e-mail with Conor P. Williams, September 10, 2015.
- <sup>152</sup> School site visit, Ventura Park Elementary, April 16, 2015.
- <sup>153</sup> Katia Riddle, "Earl Boyles Wins Support from Multnomah County," *Children's Institute* (blog), June 22, 2015, <a href="http://www.childinst.org/news/blog/668-earl-boyles-elementary-wins-support-from-multnomah-county">http://www.childinst.org/news/blog/668-earl-boyles-elementary-wins-support-from-multnomah-county</a>.
- <sup>154</sup> "The Tree of Learning" (Portland: Earl Boyles Elementary, 2014).





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