

**From Phonics to Fluency: Mapping Early Literacy in Mountain View Whisman School  
District**

Michalyn Easter-Thomas, Benjamin M. Gies, Dominick Sanders

Vanderbilt University

Peabody College

April 15, 2024

## Table of Contents

About the Authors.....	2
Acknowledgments.....	3
Abstract.....	3
Abbreviation & Definitions.....	4
Introduction.....	5
Literature Review.....	6
“Conventional Wisdom:” The Whole Language Literacy Approach.....	6
The Reading Wars.....	7
The Science of Reading.....	7
The Science of Reading takes Root.....	10
Parent Involvement and Culturally Relevant Instruction.....	10
Conclusion.....	11
Program Theory.....	11
Logic Model.....	12
Research Questions.....	13
Methods.....	14
Data Subsection.....	19
Limitations.....	22
Research Findings.....	23
Discussion.....	39
Recommendations.....	40
Continued Research.....	43
Conclusion.....	44
References.....	45
Appendix.....	49

## About the Authors

### Michalyn Easter-Thomas

Michalyn Easter-Thomas is a lifelong educator and community advocate that works to provide equitable success opportunities for youth in Memphis, Tennessee. As a former teacher, instructional coach, and now Memphis City Councilwoman, Michalyn understands that access is the gamechanger for those whom she serves. In the future, she looks to continue her advocacy for youth and community in Memphis while leading a national consulting business.

### Benjamin M. Gies

Benjamin Gies is a James Madison Memorial Fellow, a graduate of Bellarmine University and the University of Louisville, and at 24 years of age, became the youngest citizen to serve on the Jefferson County Board of Education in Louisville, Kentucky. He currently serves as the Director of Government Affairs for the Prichard Committee, a Kentucky-based education advocacy group. Ben led the charge to secure a record amount of federal investment for Kentucky's early learning sector and successfully moved several key early childhood initiatives through the Kentucky General Assembly and in local communities throughout the state. Benjamin is recognized as a champion in advocacy by numerous state and national partners.

### Dominick Sanders

Dominick Sanders is a c-suite trailblazer and passionate advocate for breaking down barriers in Science, Technology, Engineering, and Mathematics (STEM) education. With a multifaceted career spanning teaching, policy development, workforce development, and program implementation, he has demonstrated the importance of diverse perspectives and role models in shaping the future of education and technology. His ultimate goal is to work in philanthropy, where he can continue to advocate for equity and inclusion in education. Specifically, he hopes to work towards ensuring that BIPOC communities have the support and resources they need to succeed in STEM fields.

## **Acknowledgments**

The research team extends a hearty note of thanks to the faculty at Vanderbilt University Peabody College for their guidance and mentorship. Additionally, the team thanks Mountain View Whisman School Superintendent Dr. Ayinde Rudolph and his team for their candor, hospitality, and thoughtfulness. We also must recognize the support, friendship, and camaraderie of the full 2024 Vanderbilt Peabody doctoral cohort. Finally, we each would be remiss not to also recognize each of our families and friends who shepherded us on this journey.

## **Abstract**

Mountain View Whisman School District (MVWSD) noted a decline in early literacy achievement for students in the aftermath of the Covid-19 pandemic, especially among students of color. This study explores the initial stage of the district's response to declining achievement in early literacy; MVWSD's pilot of the science of reading-based Orton–Gillingham curriculum in Tier 2 intervention classrooms. Using a mixed-methods approach, the research team examined achievement data, conducted surveys, and observed classrooms to assess the implementation of the science of reading curriculum. Researchers also investigated the role of parental involvement in literacy practices, and the extent to which literacy practices are culturally relevant.

## Abbreviation & Definitions

### Abbreviations

*OG*- Orton–Gillingham

*MVWSD*- Mountain View Whisman School District

*NAEP*- National Assessment of Educational Progress

### Definitions

*The Science of Reading*- Research from education, cognitive psychology, developmental psychology, and neuroscience. It focuses on how individuals learn to read and the most effective methods for reading teaching.

*Culturally Relevant Teaching* - An approach that addresses all facets of student achievement and encourages students to maintain their cultural identities.

*Family Engagement*- The intentional involvement of a student’s family in their academic aptitude.

*Orton-Gillingham* - A highly structured approach that breaks reading and spelling down into smaller skills involving letters and sounds and then builds on these skills over time.

*Tier 1 Classrooms* - General education classrooms that provide education to students of all achievement levels.

*Tier 2 Classrooms* - Specialized instruction classrooms that provide education to students in need of additional academic support.

## Introduction

Mountain View Whisman School District (MVWSD) is a small K-8 district located in the heart of Silicon Valley in Mountain View, California. The community is a twenty minute drive from the headquarters of Apple, Meta, and Stanford University and is home to the global corporate headquarters of Google. Students in MVWSD, even with the learning loss incurred by the Covid-19 pandemic, fared better than 20% of their peers across the state of California in reading on the Smarter Balanced state assessment. Nearly 70% of all MVWSD met or exceeded state standards in reading, while only about 50% of all students performed the same across California (California Department of Education, 2022). However, gaps in reading achievement fell among all groups and deeply widened in the district among White, Asian, and Black and Latino populations. Mountain View, California fits neatly into national trends aligned to declining literacy rates, gaps in achievement among student populations, the Covid Slide, and shifting best practices in literacy education.

MVWSD is currently reevaluating its early literacy practices in response to the district's declining literacy scores. Four elementary schools, Monta Loma, Castro, Theuerkauf, and Mistral, were selected to pilot the implementation of the Orton-Gillingham reading curriculum, a research-based approach to literacy instruction rooted in the science of reading, in-Tier 2 reading intervention classrooms led by reading interventionists. Small groups of students, who were identified using a diagnostic screener exam, are provided additional reading instruction from reading interventionists using the Orton-Gillingham curriculum when removed from general instruction (Tier 1) classrooms. Students in Tier 1 classrooms continue to receive general literacy instruction using a Balanced Literacy curriculum called Benchmark, an approach to literacy education largely rooted in Whole Language instruction. MVWSD is piloting the Orton-Gillingham approach in its Tier 2 classrooms in Monta Loma, Castro, Theuerkauf, and Mistral Elementary Schools and is considering a district-wide adoption of the Orton-Gillingham curriculum across all tiers of literacy instruction.

The purpose of this study is to complete an initial implementation evaluation of the Orton-Gillingham curriculum in MVWSD and recommend best practices before district-wide implementation. We start by reviewing existing literature related to science based reading, teacher professional learning, the importance of culturally relevant teaching, and the role of family engagement. After discussing the problem of declining early literacy achievement in

MVWSD, we evaluate their theory of change. Our research methods and findings direct our recommendations to MVWSD on how to improve their practice.

### **Literature Review**

Early literacy instruction is undergoing a critical shift in policy and practice. The National Assessment of Educational Progress (NAEP) recorded the lowest scores in reading in decades in June 2023. The decline in reading scores followed decades of flatlined progress in reading scores exacerbated by learning loss caused by the Covid-19 pandemic. Scores for students of color and students with a low socio-economic status paint an even bleaker picture of early literacy in the United States with a 42-point gap among white and non-white students (NAEP, 2023). Only about 35% of all children in the United States can read proficiently or better (NAEP, 2023). The downward trend in American literacy sparked a re-evaluation of literacy practices.

#### *“Conventional Wisdom.” The Whole Language Literacy Approach*

America’s literacy woes are rooted deep in the history of American education. In the mid-nineteenth century early educational leaders such as Horace Mann championed the “whole language” approach to literacy education (James S. Kim, 2008). The whole language approach prioritized the memorization of words and their meanings in place of teaching children to decode letters. Proponents of the whole language approach argued that learning to read occurred naturally and that students honed phonemic awareness through reading and writing. The whole language approach to literacy instruction dominated American classrooms into the latter part of the twentieth century. The “look-say” method, spurred by the *Dick and Jane* children’s books commonly found in schools in the middle part of the twentieth century, popularized the whole language approach for generations of children in American classrooms (P. David Pearson, 2016).

Researchers began to question the efficacy of the whole language approach by the 1980s noting the lack of clear evidence for the approach (Steven Stahl and Patricia Miller, 1989). Educational researchers noted a fierce adherence to the whole language approach. According to educational researchers Jerome Harste and Kenneth Goodman (1990), the whole language approach “was a generating knowledge base – passed from teacher to teacher in-person contacts,

in teacher support groups, and in local conferences.” Despite research noting the efficacy of a phonics-based approach to literacy, the whole language approach remained entrenched in state policy, school district practices, and in the conventional wisdom of primary educators.

### *The Reading Wars*

Despite the popularity of the whole language approach to literacy instruction, educational research pointed to the importance of decoding letters and sounds in literacy instruction. The phonics-based approach to literacy instruction followed a “bottom-up” approach by building an understanding of letters and sounds prior to an understanding of words and their meanings. The phonics-based approach placed an emphasis on a skills-based approach. Students learned letter sounds and letter blends before moving to comprehend word meanings. Although the phonics-based approach existed even prior to Mann’s assertion of the whole language approach in the nineteenth century (Kim, 2008), the acceptance of the phonics-based approach remained in decline until Rudolf Flesch’s seminal publication, *Why Johnny Can’t Read and What You Can Do About It* (1955). Flesch posited that the lack of phonics instruction in schools prevented students from learning to read, noting that, “that average American third grader [remained] unable to decipher 90% of his own speaking and listening vocabulary” (1955). Flesch’s *Why Johnny Can’t Read* fired the first shot in the “reading wars,” a term used to describe the debate between whole language and phonics-based reading instruction.

### *The Science of Reading*

A new term, “the science of reading,” emerged in the decades following Flesch’s *Why Johnny Can’t Read*. The “science of reading” combined the work of educational researchers, psychologists, neuroscientists, and literacy experts. In her seminal text, *Learning to Read: The Great Debate* (1967), Jeanne Chall concluded that phonics instruction proved most effective at teaching children how to read. Chall’s work concluded that children must first learn to read *before* reading to learn. Further developments by Phillip Gough and William Tunmer (1986) merged decoding and comprehension to forge the “Simple View” of reading instruction. Gough and Tunmer theorized that reading comprehension is the product of decoding words and language comprehension. Their equation, *Decoding x Language Comprehension = Reading Comprehension*, posited that one’s understanding of phonology paired with an understanding of



words and their meanings produced reading comprehension. Building upon this understanding, Hollis Scarborough (2001) developed the “Reading Rope,” a visual representation that showed the intertwined skills needed for reading mastery.

A new approach to literacy instruction emerged in California in the 1990s through the adoption of the “Balanced Literacy” approach (Marlene Asselin, 1999). The approach blended parts of the whole language approach with the phonics-based science of reading. Irene Fountas and Gay Pinnell (1996) posited that an infusion of skill-based and meaning-based instruction rooted in both phonics-based instruction and whole language approaches best served students. While the balanced literacy approach gained large-scale support in the 1990s and remains strong in the 2020s (Education Week, 2020), the approach varies widely and is often inconsistent from teacher to teacher. Despite these advancements in research, a reliance on whole language instruction and inconsistency rooted in the balanced literacy approach continued well into the 1990s and beyond.

The landscape for literacy instruction began to shift after the National Reading Panel released its findings in 2000. The National Reading Panel, convened by the United States Congress in 1997, evaluated more than 100,000 studies on how children learn to read and conducted public panels to discuss reading strategies among educators and communities across the nation. The 14-member panel, led by the National Institute of Child Health and Human Development (NICHD), determined the most effective and evidence-based methods for literacy instruction. The panel emphasized the importance of phonemic awareness, phonics, fluency, guided oral reading, teaching vocabulary, and reading comprehension (NICHD, 2000). By September 2001 the George W. Bush Administration instituted the “Putting Reading First” initiative that established reading academies across the nation. The reading academies disseminated research-based approaches to early literacy noted by the National Reading Panel (White House Press Office, September 2001). Additionally, the creation of the Institute of Educational Sciences cemented the need for policy to flow from science-based approaches to education (IES, 2002).

Flowing from an emphasis on science-based approaches to education policy, the Structured Literacy approach (2016) wove together science of reading principles such as

phonology, morphology, syntax, semantics, and sound-symbol association to produce an approach to literacy instruction that is:

- Explicit

Reading concepts are directly taught and practiced.

- Systematic

Students are taught how to read with an emphasis on phonemic understanding before reading to learn. Students learn skills that build upon one another, ultimately resulting in student mastery of reading.

- Cumulative

All information is built upon earlier knowledge.

- Diagnostic

Student strengths and weaknesses are identified and responded to using differentiated instruction.

The Structured Literacy approach, grounded in the science of reading, is taught using several curricular approaches, with the most notable being the Orton-Gillingham approach. The Orton-Gillingham approach breaks spelling and reading down into smaller letters and sounds. Skills are built over time using a multisensory approach that infuses seeing, saying, sounding out, and writing letters to decode and encode words (Orton-Gillingham, 2023). The approach builds phonemic awareness through a process that involves sight, hearing, touch, and movement. Orton-Gillingham employs a bottom-up approach to literacy progressing from sound and symbol relationships to spelling and comprehension. Skills build upon one another through a system of practice and review focused on individual student needs through small groups and differentiation of instruction. Students gain reading mastery by building phonological awareness before learning letter-sound relationships in words from phonics instruction. Skills learned from phonological

awareness and phonics instruction compound to produce reading fluency, the ability to read with speed and accuracy. Students then hone vocabulary building skills before seeking to understand the meaning of texts via reading comprehension (Ibid.).

### *The Science of Reading takes Root*

The science of reading began to take root in policy in 2019 in the state of Mississippi. From 2013 to 2019, Mississippi passed a series of laws that overhauled the state's approach to reading instruction and the preparation of Mississippi's reading teachers. The legislation streamlined research-based approaches to literacy instruction across the state's schools with a focus on the science of reading. Mississippi saw its reading scores improve in the 2019 National Assessment of Educational Progress (NAEP) scores, a development that bucked the national trend in declining reading scores (Education Week, 2022). The "Mississippi Model" expanded its national reach following a sharp decline in literacy scores brought on by decades of stagnation and made worse by learning loss caused by the Covid-19 pandemic. More than 30 states replicated the Mississippi Model mandating research-based approaches to literacy rooted in the science of reading (Ibid). Momentum continues to build in state legislatures across the United States with California becoming the most recent state to consider science of reading legislation in its 2024 legislative session (*Press Democrat*, 2024). The Mississippi Model, and the increased reading scores attributed to it, remains a new policy development in the science of reading and points to a new era for literacy instruction across the United States.

### *Parent Involvement and Culturally Relevant Instruction*

Strong parent engagement and culturally relevant instruction aid in the development of strong readers when paired with a curriculum rooted in the science of reading. Research shows that parent engagement increases educational outcomes in language skills, comprehension, and achievement (Gest, Freeman, Domitrovich & Welsh, 2004). Parental involvement in their child's early reading habits is found to be the most important determinant of language and emergent literacy (Bus, van Ijzendoorn & Pellegrini, 1995). Strong literacy skills are amplified when children have access to materials that align with a family's cultural background (Tanya Christ, 2020). Reading comprehension improves as students can incorporate their cultural knowledge and experiences. Solid literacy skills are built in school and at home. Early literacy outcomes

improve when children and parents of all cultural backgrounds are included in science-based reading instruction (Ibid.).

### *Conclusion*

Early literacy instruction is undergoing a critical shift in policy and practice. Recent developments in research and policy point toward stronger educational outcomes in literacy when reading instruction is rooted in the science of reading. Efforts are bolstered by literacy practices that engage parents and are culturally relevant. Gains in reading scores in Mississippi and early signs of improvement in literacy among the 30 other states that have implemented research-based science of reading approaches point toward a promising new era of literacy instruction across the United States.

## **Program Theory**

### *Program*

Recent shifts in early literacy curriculum and instruction place an emphasis on learning to read so that students may read to learn. While students encounter difficulty in understanding intricate texts, particularly those that contain tricky vocabulary and complex content that hinder their ability to acquire knowledge in various subjects and build their critical-thinking skills, students best glean literacy proficiency from the bottom up. Students grow in literacy proficiency by first decoding letters and sounds in gaining phonemic awareness and an understanding of phonics. Literacy instruction rooted in the science of reading builds the skills necessary for early literacy proficiency and later growth in reading comprehension and vocabulary development.

### *Underlying Assumptions*

The National Reading Panel (2000) found that providing direct teaching in phonemic awareness, phonics, fluency, vocabulary, and comprehension skills leads to better reading results. The Orton-Gillingham method, which emphasizes the study of word parts and word origins, equips students with the necessary skills to decipher foreign terms and enhance their vocabulary (Moats, 2009). According to Shanahan (2006), being exposed to complicated texts that contain a wide range of words helps in the development of understanding and critical thinking abilities.

The Orton-Gillingham Approach, also known as OG, is a method used in literacy

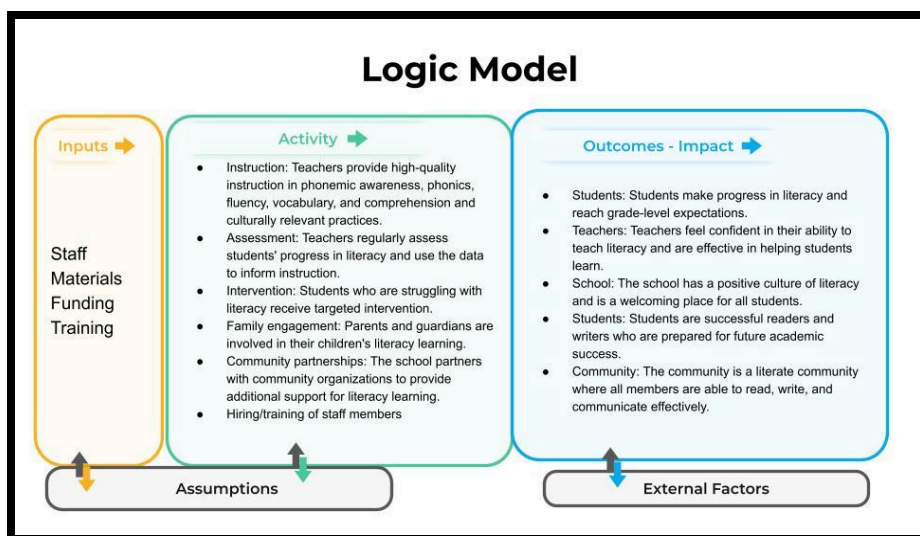
education. This method is a well-organized and engaging strategy that focuses on pupils who face difficulties in reading, including those with dyslexia. Created by Samuel Orton and Anna Gillingham, this method deconstructs the skills of reading and spelling into smaller, more easily handled elements. OG stands out because of its distinctive qualities. OG prioritizes explicit and direct instruction, focusing on teaching phonics in a simple and straightforward manner. This approach ensures that students understand the connection between letters and sounds. This provides students with the necessary skills to decode words that are unfamiliar, which is crucial for pronouncing them correctly. The skills are delivered in a sequential and systematic manner, meaning they are presented in a set order and built upon each other as students advance. This guarantees the establishment of a solid base prior to progressing to more advanced concepts.

### *Multisensory Learning*

The Orton-Gillingham method integrates several senses (such as sight, hearing, and movement) to accommodate diverse learning preferences. Students have the option to visually see a letter, articulate its phonetic sound, transcribe it, or employ manipulatives to enhance their understanding.

### **Logic Model**

If Mountain View Whisman School District implements science of reading-based Orton-Gillingham curriculum with fidelity with parental engagement and culturally relevant practices across all instructional levels then achievement in early literacy is likely to improve.



*Figure 1: Logic Model Table*

Targeting literacy gaps in early childhood sets the foundation for proficient reading, writing, and critical thinking in students' younger years. Setting this foundation allows for a stronger academic effort by students throughout elementary schooling. Students will benefit from the program if all stakeholders are included, such as: parents, families, staff, and teachers. Parents will learn how to be involved in their child's developing literacy skills. Teachers will learn how to actively engage parents. Students will succeed with support at school and at home.

Building structures and supports necessary to build foundational literacy skills allows teachers, parents, and students to see their role in the emerging literacy of all early readers. It sets an expectation for instructional providers on how to incorporate literacy supports so that all students benefit from the targeted approaches. Students will build on these approaches themselves, and are more willing to hold on to these promoted practices all throughout their matriculation through the district. Students will have expectations of parental and family involvement, and may bring these practices home for all to benefit.

### **Research Questions**

The 2022 Smarter Balanced state assessment data communicated a strong need to intervene on behalf of students wrestling with the impact of declining early literacy scores, learning loss caused by pandemic-era school closures, and more long-standing inequities among student groups in the Mountain View, California community. In response, MVWSD is piloting

the Orton-Gillingham approach in its Tier 2 classrooms in Monta Loma, Castro, Theuerkauf, and Mistral Elementary Schools, and is also considering adopting the Orton-Gillingham curriculum across all tiers of instruction district-wide.

We explore recommendations through the following research questions to grow early literacy and guide MVWSD in their implementation of Orton-Gillingham curriculum:

1. To what extent is the science of reading curriculum implemented with fidelity?
2. What is the role of parents in reading instruction?
3. To what extent are literacy practices culturally relevant?

### **Methods**

We conducted a mixed method study that used both qualitative and quantitative methods to gain insights into the science of reading-based Orton Gillingham curriculum in MVWSD. Our work included an in-depth review of internal literature, live observations of classroom instruction and pull-out interventions, interviews, and a survey disseminated to K-3 teachers and parents of Mistral, Castro, Monta Loma, and Theuerkauf Elementary schools.

The qualitative component of our study used observations and interview data to provide specific details about the experiences of the pilot program in Tier 2 intervention classrooms. We observed both Tier 1 general education and Tier 2 intervention classrooms to better understand implementation of science of reading-based Orton-Gillingham curriculum. The research team used the quantitative element (i.e., the survey) to collect data from a larger number of participants. This allowed us to generalize our findings with greater validity than we could have done with interviews alone.

To gain an in-depth understanding of individual experiences with the science of reading-based Orton-Gillingham curriculum, we used grounded theory coding, as described by Charmaz (2014). We used inductive analysis to uncover themes and concepts directly from the interview data. While grounded theory emphasizes building knowledge from the ground up, we used the established core components of the science of reading as a guiding framework with deductive coding specifically relating to our research questions.

We analyzed the transcripts of the interviews to search for themes and overall insights of the interviewees. After each interview, we identified emerging patterns and discussed common trends and patterns that we noticed. We collaborated to create categories to code the interviews

based on our discussions. Next, we used the codes to categorize the interviews and organized the data to find trends using index coding.

### *Document Analysis*

When we first met with the client, our first purpose was to gain an understanding of the scope of the work that was specified in the request for proposal (RFP). During the course of the conversation, we were able to get a full grasp of the project's scope, as well as crucial background information about the organization and specific project inquiries. The initial meetings that were held provided us with direction regarding our approach to the project, which included the literature study, quantitative analysis, and qualitative analytical analysis. In addition to the survey analysis and the school's Smarter Balanced summative testing scores, the call supplied us with vital instructional information. This information included the school's vision, district plan, strategic plan for the years 2020-2034, and survey analysis. The following step for us was to spend a few days reading, evaluating, and communicating with one another about the material. Through the use of this method, we formulated our guiding questions and narrowed down the subject matter for our interviews effectively.

### *Observations*

We incorporated live classroom observations into our research methods as we deemed it critical to view and assess MVWSD's implementation of the OG curriculum. These observations allowed us to witness the program theory in action, and evaluate the fidelity of its piloted implementation in Tier 2 classrooms. Observations occurred in three Tier 1 general education classrooms where Benchmark curriculum is still in use as well as in six Tier 2 intervention sessions where Orton-Gillingham is being piloted for grades Kindergarten to 3rd grade. This method allowed the research team to compare differences among the two approaches. All were aligned with the regular schedule so we could observe students and teachers in their traditional teaching context. Each classroom observation lasted at least 30 minutes, and teachers taught according to their lesson plan. General education classrooms were observed during the timeframe dedicated to reading instruction. Tier 2 intervention sessions were observed while implementing the OG curriculum with the targeted group of students. To ensure we captured teacher and student conversations, we recorded each observation session and created a text



transcription. We completed all observations utilizing a classroom observation form, which allowed us to look for specifically identified characteristics that would support our research question. The classroom observation form is included in Appendix A.

### *Interviews*

Another essential component of our research were live interviews with specific individuals within MVWSD. These individuals were identified by the MVWSD district leadership as integral to the implementation of the OG curriculum. Before conducting interviews, we reviewed the list of prospective interviewees to determine their alignment to research questions. We conducted in person interviews with the following staff members: Director of Literacy, Multi-tiered Student Support Coordinator, classroom-based Instructional Coaches, general education teachers, and literacy intervention teams from each elementary school. In total, there were 13 staff members that participated in the interviews over the course of two days. We deemed this as more than satisfactory for participation, as we met with the required representation from all four elementary schools included in our study. All interviews were aligned to the project's interview protocol. The interview protocol prioritized questions about gaps in literacy and the efforts by MVWSD to mitigate those gaps in specific student groups. Utilizing the same interview protocol allowed us to maintain continuity within our interviews, and compare answers effectively. The interview protocol included open-ended questions in the following category sections:

- Identifying gaps and challenges in Orton-Gillingham pilot implementation
- Understanding the Covid slide and inequities
- Strategies for addressing gaps and inequities
- Building structure and supports for Orton-Gillingham full implementation
- Collaboration and community engagement
- Assessment and progress monitoring
- Professional development and support for teachers
- Culturally relevant teaching practices
- Incorporating culturally relevant texts
- Creating culturally inclusive classroom environment

- Engaging families and communities in culturally relevant practices

These sections align to our research questions and allow for interviewees to give comprehensible answers that directly impact our research. To ensure we captured all relevant information, we utilized a recording program that transcribed all interviews. These transcriptions allowed us to determine overarching themes and withdraw important quotes from participants. Interview protocol is included in Appendix B.

### *Surveys*

The research team distributed two surveys: the first was directed toward the elementary school teachers at Mistral, Castro, Monta Loma, and Theuerkauf Elementary Schools, and the second was directed toward the parents of those students. The respondents were given a period of six weeks to complete each survey. The collection strategy endeavored to promote these surveys in addition to our site visit, and then to conclude the survey one week after the visit ended. In collaboration with the client, we sent an initial email to both groups in order to solicit participation, and we followed up with them every two weeks. The purpose of the surveys aimed to gather information on their perspectives of teachers regarding how their instruction fit with the science of reading, as well as to determine the extent to which the appropriate communication regarding the literacy approach was being communicated to the parents, and the extent to which the literacy teaching was meeting the expectations of the parents. Survey questions are outlined in Appendix C.

Figure 2: Research Questions and Data Sources, Collection Methods, Analyses

Research Question 1: Science Of Reading Curriculum Implemented With Fidelity		
Data Source	Data Collection	Data Analysis
Teacher Surveys Parent Surveys Session Observations Smarter Balanced Summative Assessments Local Control and	Survey Responses Interview Responses Minute notes	Transcribe, categorize, and code interview responses.  Analyzing student educational achievement.

Accountability Plan Survey Analysis		Analyzing student educational achievement.
Research Question 2: Role Of Parents In Reading Instruction		
Data Source	Data Collection	Data Analysis
Teacher Surveys Parent Surveys Session Observations Smarter Balanced Summative Assessments	Survey Responses Interview Responses	Transcribe, categorize, and code interview responses.
Research Question 3: Culturally Relevant Literacy Practices		
Data Source	Data Collection	Data Analysis
Teacher Surveys Parent Surveys Session Observations	Survey Responses Interview Responses Minute-by-minute notes	Transcribe, categorize, and code interview responses.

## Data Subsection

### *Staff Interviews*

We conducted a total of 13 interviews with staff members from the 4 target elementary schools in MVWSD. We had the highest interview samples from the literacy intervention teams 61%, and these were the individuals directly implementing the OG curriculum with students. There is only one staff member in the position of Director of Literacy and one staff member in the position of Multi-tiered Student Support Coordinator. See Table 1 below for a breakdown of interview participation by position in MVWSD in relation to the total percentage of interviews.

Table 1: Representativeness of Interview Participants by Position

Position	Number of Participants Interviewed	Percentage of Total Interviews ( N =13)
Director of Literacy	1	8.%
Multi-tiered student support coordinator	1	8%
Instructional coaches	2	15%
General education teacher	1	8%
Literacy intervention teams	8	61%

### *Teacher Survey Data*

The survey was conducted among the general education teachers of four specified schools, who teach children from Kindergarten to Grade 3. There are a total of 30 teachers in these schools in our targeted area. Out of these, 12 teachers responded to the survey, which accounts for 40% of all teachers in the four schools. Only six teachers completed the survey, resulting in a total completion rate of 20%. Some questions were left blank at random. Despite the low response rate, we were able to receive at least one survey from a teacher in each of our target grade levels. Table 2 displays the number of participating teachers and their respective school locations. The survey responses indicate the perceptions of the participants regarding the early learning and literacy strategies employed in MVWSD.

Table 2: Representativeness of Survey Participants by School

School Name	Number of Participants Surveyed	Percentage of Total Surveys ( N =12)	Complete Surveys (N = 6)	Grade Level Of Completed Survey (N = 6)	Percentage of Total Surveys Completed (N = 6)
Mistral	2	17%	1	Kindergarten	16%
Castro	2	17%	1	2nd	16%
Monta Loma	7	58%	3	2nd, Kindergarten, 1st	50%
Theuerkauf	1	8%	1	3rd	16%

### *Parent Survey Data*

The survey received 51 responses, representing 2% of eligible participants from the four designated schools<sup>[1]</sup>. Table 3 displays the number of parents involved in the survey, their

corresponding school locations, and their children's grade levels. The survey findings show parents' perceptions of the early learning and literacy techniques and communications in MVWSD. When examining Table 3, it is clear that additional schools are included apart from the main target schools. This occurrence can be attributed to parents having children enrolled in multiple schools.

Table 3: Representativeness of Parent Survey Participants by School.

School Name	Number of Participants Surveyed	Percentage of Total Surveys ( N = 51)
Theuerkauf	13	25%
Stevenson	1	2%
Monta Loma	13	25%
Mariano Castro	8	16%
Vargas	1	2%
Mistral	14	27%
Landels	1	2%

Table 4: Breakdown by Grade Level

Grade Of Students	Number of Students	Percentage
Kindergarten	8	14.8%
1st	8	14.8%%
2nd	10	18.5%
3rd	10	18.5%

4th	11	20.37%
5th	3	5.8%

## **Limitations**

### *Sample Size*

We gathered 51 responses for the parent survey and 12 responses for the teacher survey. Some participants selectively completed questionnaires by either skipping questions or only responding to those that they felt comfortable with. Both surveys having this characteristic resulted in a reduced sample size, which posed a restriction for the study. Small data sets in research studies might pose a risk to both internal and external validity. MVWSD also conducts numerous surveys for personnel, and we think that survey fatigue contributed to the low response rate.

We interviewed 13 staff members, representing less than 20% of district officials and 15% of teachers at the focus schools for our study. Through the interviews, we identified useful trends in the implementation and perception of the pilot program. However, these results may not fully reflect the staff's overall assessment of the program. A limited sample size restricts our ability to identify further trends that could facilitate their implementation. Furthermore, our study was constrained by the fact that we could only interview a single general education instructor, which also serves as a constraint.

### *Limited Scope*

Our data is limited in scope since the district implemented major modifications to address declining early literacy rates. This year served as a trial period for the district, aiming to improve reading test performance for underrepresented populations in Tier 2 intervention classrooms. With the recent hiring of a literacy team this year to help address the issue, it is still early in the program, and the data is limited, which may affect perceptions of the effectiveness of the pilot program elements.

### *Time Constraints*

One limitation experienced was the time constraint when conducting research. With only 2 months to conduct online surveys and 2 days to physically interview individuals and observe classrooms, we suggest a future study to better analyze change over time with the use of the OG curriculum. Change over time may be better determined with an entire school year. This suggested time frame can increase depth and comprehension of the research subject.

### *Participant's Biases*

A substantial component of our research was based on interview and survey data that documented participants' views on the effectiveness of the program. Although we found consistent themes in participants' views on the program's effectiveness, the data is subjective. Utilizing objective measurements like assessment data for students in the pilot program, comparison data of underrepresented students in the pilot versus those not in the pilot over time, and student achievement data post-exit from the pullout group would enhance the generalizability of our findings.

## **Research Findings**

### *Introduction*

The Covid-19 pandemic had a significant impact on Mountain View Whisman School District's (MVWSD) early literacy outcomes, as students experienced disruptions to their education and limited access to in-person learning opportunities. The pandemic exacerbated existing inequities among special populations of students, including students who are economically disadvantaged, English Language Learners (EL), and students of color. MVWSD dropped 4.9 percentage points in early literacy on the 2022 Smarter Balanced assessments (California Department of Education, 2022). Drops in early literacy were felt most acutely by MVWSD's Black, Latino, Filipino, and Native Hawaiian/Pacific Islander populations: 61% of Filipino, 50% of Black, 38% of Latino, and 20% of Native Hawaiian/Pacific Islander students



met or exceeded ELA standards on the 2022 state assessment (California Department of Education, 2022).

MVWSD is in a moment of transition in the district's approach to literacy. The 2022 Smarter Balanced data communicated a strong need to intervene on behalf of all students wrestling with the impact of the Covid Slide in early literacy, learning loss caused by pandemic-era school closures, varied approaches to early literacy, and more long-standing inequities among student groups in the Mountain View, California community. In response, MVWSD piloted science of reading-based Orton-Gillingham instruction in Tier 2 classrooms with plans to expand the curriculum across all tiers of instruction.

The following findings distill the extent to which MVWSD implemented the Orton-Gillingham curriculum and the perspectives of teachers and parents:

**Finding 1. Orton-Gillingham Curriculum is implemented with fidelity in Tier 2 classrooms.**

***Data***

Students in Tier 2 classrooms experience improved early reading skills and abilities due to exposure to the Orton-Gillingham curriculum. The figure below illustrates the iReady statistics data for the four specific schools from the most recent two exam administrations. The data is categorized into phonological awareness, phonics, and high-frequency words for kindergarten, first-grade, and second-grade students. Student growth in phonological awareness, phonics, and high-frequency words demonstrate fidelity to OG curriculum.

## Reading Intervention iReady Data (CA, MI, ML, TH)

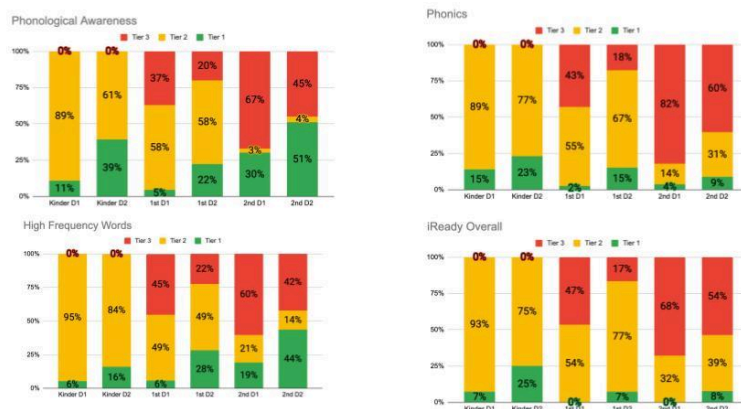


Figure 1: iReady data from the past two administrations at focus schools.

### ***Observation Data***

Observations in Tier 2 classrooms noted fidelity to Orton-Gillingham curriculum. Aligned to the principles of Structured Literacy, observed classrooms implemented Orton Gillingham curriculum that is:

- Explicit

Small groups of approximately 5-7 students are identified using reading assessment data from iReady reading exams. Students are targeted for intervention literacy instruction and pulled from general education classrooms for daily practice.

- Systematic

Literacy instruction is taught from the bottom up by developing phonemic awareness, and understanding of phonics, and vocabulary development before more complex instruction occurs in the reading of full texts and monitoring for reading comprehension.

- Cumulative

Literacy instruction builds upon earlier knowledge. Students develop phonemic awareness before assigning letter sounds to their corresponding letters. Letters are then

contextualized in sight words. Meaning is then developed by assigning symbols such as in-classroom manipulatives that correspond to sight words. Knowledge is constructed from the bottom up before it is applied to full words and sentences.

For example, we observed students learning letter sounds, transcribing the sounds in written form to their corresponding letters, then applying words to a physical symbol of the words meaning. Teachers first instructed students to “sound out” the letter “C” before writing the letter “C” in sand, and finally by selecting objects that corresponded to the letter “C.” Students build their knowledge of phonetic awareness before honing phonics and transcribing their knowledge to vocabulary.

- Diagnostic

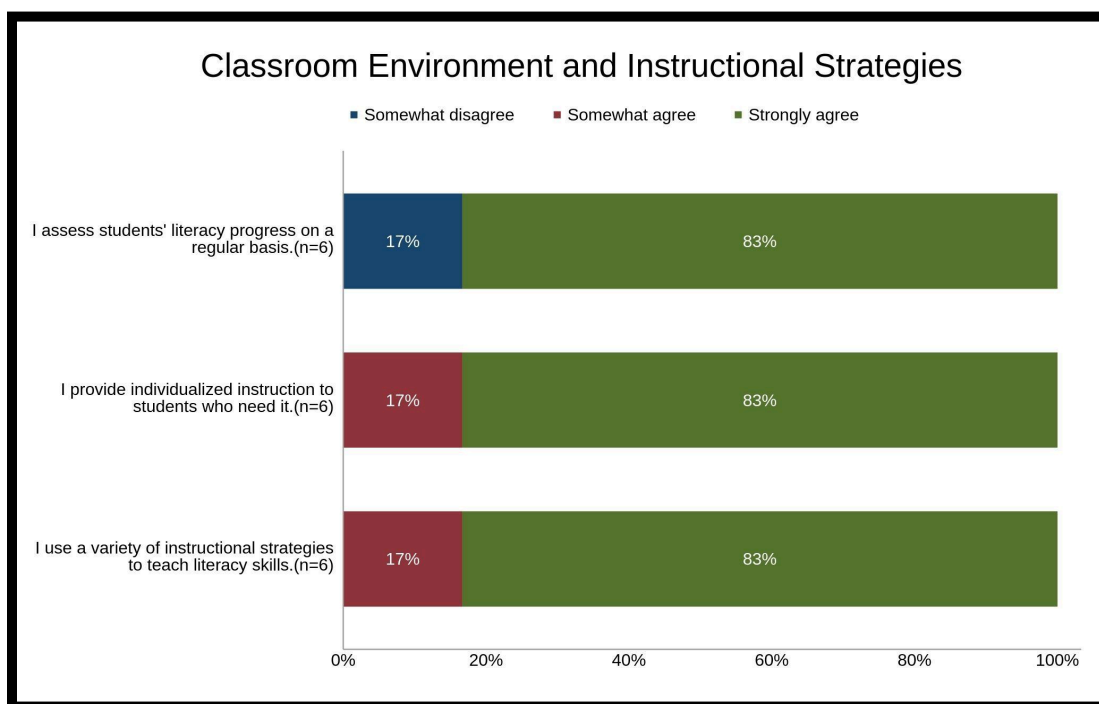
Student strengths and weaknesses are identified and responded to using differentiated instruction. Individual student needs are identified using iReady diagnostic screener exams, and we were given an introduction to this assessment by the school district. Tier 2 student groups are constructed using diagnostic data and individual student literacy needs are attended to using data gleaned by iReady exams at three periods throughout the academic school year. Student progress is monitored using the exams and tailored to meet individual student needs. Students who grow to proficiency are ultimately removed from Tier 2 instruction. This process was outlined in an explicative email from the Director of Literacy.

Tier 2 intervention classrooms exercised fidelity to the Orton-Gillingham curriculum by providing literacy instruction that is explicit, systematic, cumulative, and diagnostic. Furthermore, literacy instruction exemplified Orton-Gillingham approaches to learning by providing quality, tailored student learning that utilized tactile and engaging classroom strategies. Strategies such as the use of classroom manipulatives, small group instruction, and the use of continuous practice of letter recognition by writing in sand, rather than traditional pencil and paper, and the use of mirrors used by students to monitor mouth movements aligned to letter sounds proved enriching, impactful, and fun to Tier 2 students.

## **Finding 2. General education instruction has a low implementation of Orton-Gillingham literacy instruction.**

### *Survey Data*

In figure 2, it is evident that most teachers strongly agree that they assess student's literacy progress and provide individualized instruction to students who need it. This is good practice in the general instruction classrooms, but it does not explicitly include the strategies embedded within the OG curriculum.



*Figure 2: Learning and Instruction in the Classroom*

### *Interview Data*

#### *Observed Gaps and Issues in OG Curriculum Implementation*

Currently, low-performing students are pulled from Tier 1 classrooms to receive reading intervention instruction using the science of reading-based Orton-Gillingham curriculum in scheduled intervention blocks. The purpose of creating a new schedule was to not interfere with

core instruction in general education classrooms, but it was also intended as an opportunity to receive double the amount of instruction. The Director of Literacy said “Even the kids that we weren't seeing, were going to be seen with their classroom teacher and it would be like a second chance teaching for everybody.” However, many general education teachers are not implementing the OG curriculum, thus students are not receiving double the amount of aligned literacy instruction as intended. One reading interventionist said in an interview that “There's other classrooms where they're just following the district curriculum, and so what I'm teaching is a little bit like offset from what they're teaching.”

Students miss important core instruction in the general education classroom when being pulled out for intervention blocks. This core instruction may include math, science, or tier 1 literacy teaching. A general education teacher said that the students were “missing so much core instruction that I'm just not able to address correctly, because they see them four days a week for 45 minutes after transition time. And it's still not enough. It's working well but I think it truly is a whole group instruction type.” Any deviance from the structured schedule may inhibit a child's learning, and missed core instruction is a schedule issue as well as a teaching issue. Although students may be missing some core instruction, initial data shows that students who receive the supplemental instruction have shown growth in reading scores on iReady diagnostic exams. Additionally, Tier 1 kindergarten classrooms who choose to implement the Orton-Gillingham curriculum see students retain literacy skills more so than classrooms sticking with the Benchmark curriculum (MVWSD, 2023). Even with the acknowledgement of the opportunity to implement the OG curriculum to increase growth, the general education teachers are not utilizing the science of reading for literacy instruction.

### ***Observation Data***

#### *Literacy Instruction in the General Education Classroom*

In an observed general education classroom at one focus school, students were engaged in literacy instruction that instructed them to write the name of the image on the worksheet. This activity was engaging for all students, and exhibited collaborative strategies for peer review, but was not aligned to the science of reading. The literacy activity was not an identified OG strategy. Instant and individual feedback was given to students during whole group discussion,

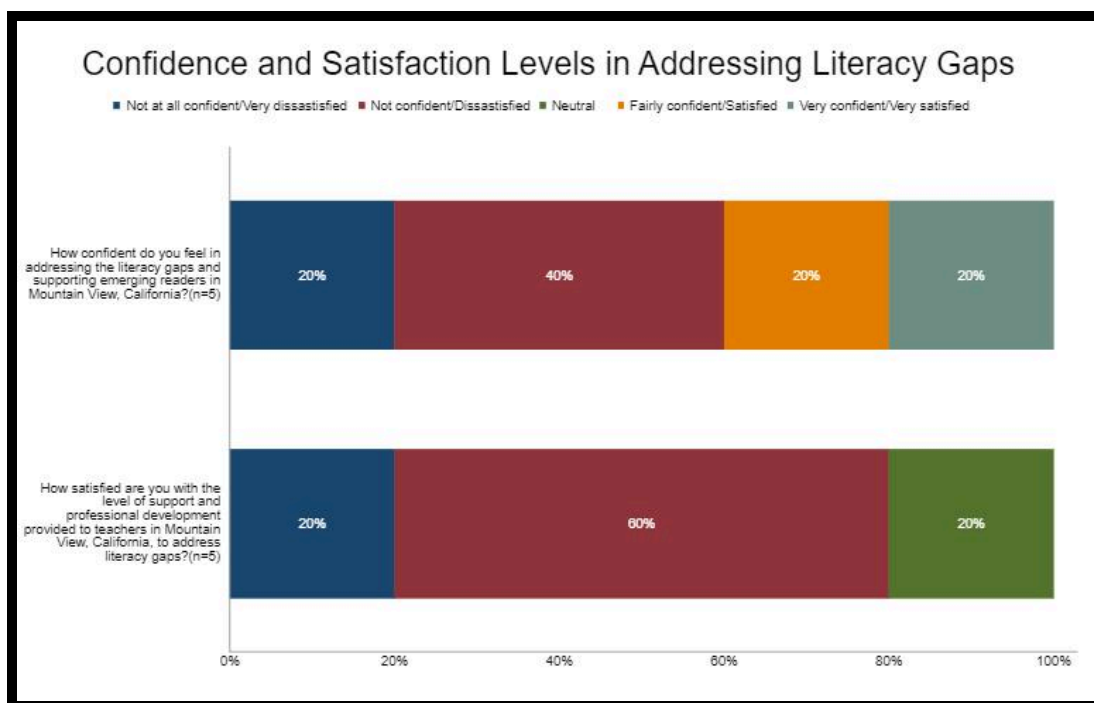
and all students practiced pronunciation in English and Spanish languages after the image was described out loud. The general education classroom teacher noted how small group intervention is difficult to administer during the school day, and that the traditional methods of teaching reading worked for the students.

A second general education classroom in one of the focus schools had a separate group isolated from the general students for a literacy lesson, and those students were already included in Tier 2 reading intervention pullouts. The teacher scaffolded the steps on the worksheet by modeling the path to finding the correct answer, and then students were asked to complete the task. Students were offered incentives for focus and completion by the teacher. There is acknowledgement of student need, which is highlighted by the teacher's focus on those particular students. No OG curriculum methods were utilized, and the teacher was following the Benchmark curriculum still implemented by general education teachers.

**Finding 3. Current district structures do not support the integration of the Orton-Gillingham curriculum between general education and Tier 2 instruction.**

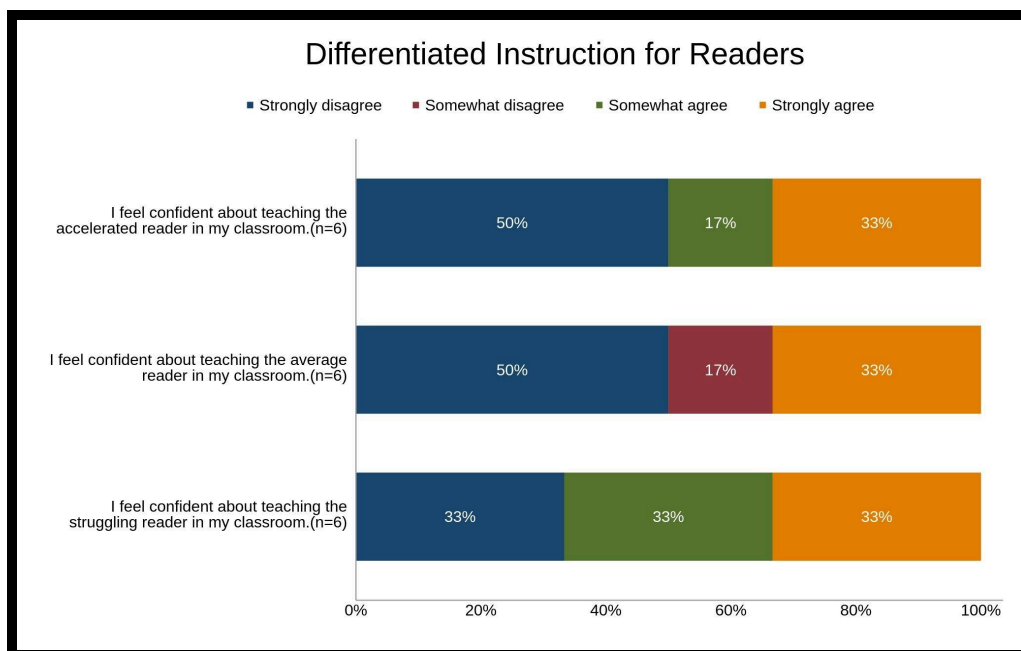
***Survey Data***

Shown in our survey data results, most teachers are likely to provide strategic planning for reading in content areas and provide classroom environments and instructional strategies to improve literacy, despite the general dissatisfaction or loss of confidence in addressing literacy gaps. This particular question highlights the feeling of teachers around current literacy efforts and their likelihood to plan for improvement. There may be an opportunity for general education classrooms and reading interventionists to plan strategically for the success of students. More survey data reveals that the current interventions that teachers are likely to agree to include are the availability of reading materials and library support, though they are not likely to provide vocabulary instruction on their own. This particular question reasserts the hesitation of teachers to implement new literacy instruction within their classrooms. However, most teachers are not confident in the school's professional development around vocabulary instruction, intervention, and support plans. See figures 3 and 4 below.



*Figure 3: Teacher Confidence in Addressing Literacy Gaps.*

In most cases, teachers are more likely to strongly disagree on differentiated instruction strategies for readers. Most surveyed teachers responded that they do not feel comfortable teaching the average reader in their classroom, nor do they feel like they have adequate tools to do so. The information presented in figure 4 provides a detailed breakdown of teacher prescription in regards to differentiated instruction for readers.



*Figure 4: Teacher Perception of Differentiation Instruction for Readers.*

### ***Interview Data***

#### ***Inconsistent Opportunities***

District structures do not specifically encourage general education teachers to professionally interact with reading interventionists in a manner that influences instruction for targeted students. When asked about the meeting of general education and Tier 2 teachers, a reading interventionist said “We meet with them from time to time. We have a set day where we can join their collaborations once a month, but unfortunately at the school they're also accepting that I really just like, pop in.” This illustrates the inconsistency and non-prioritization of collaborative learning communities around literacy intervention. Reading interventionists are not expected to interact continuously with general education teachers and do not have consistent opportunities to share data, review strategies, or align approaches.

Teachers also do not have the opportunity to observe one another implementing literacy curriculum. Many Tier 1 teachers lack the opportunity to see the Orton-Gillingham approach in



action with targeted students. This may contribute to the difference in literacy instruction results. A district instructional coach said, “There are gaps that need to be addressed in the general curriculum for the balanced approach to reading, but moving to a structured literacy approach in general education classrooms will be difficult. General education classes are behind the intervention team, and are not meeting the needs of all learners, so some are depending on Tier 2 intervention instruction.”

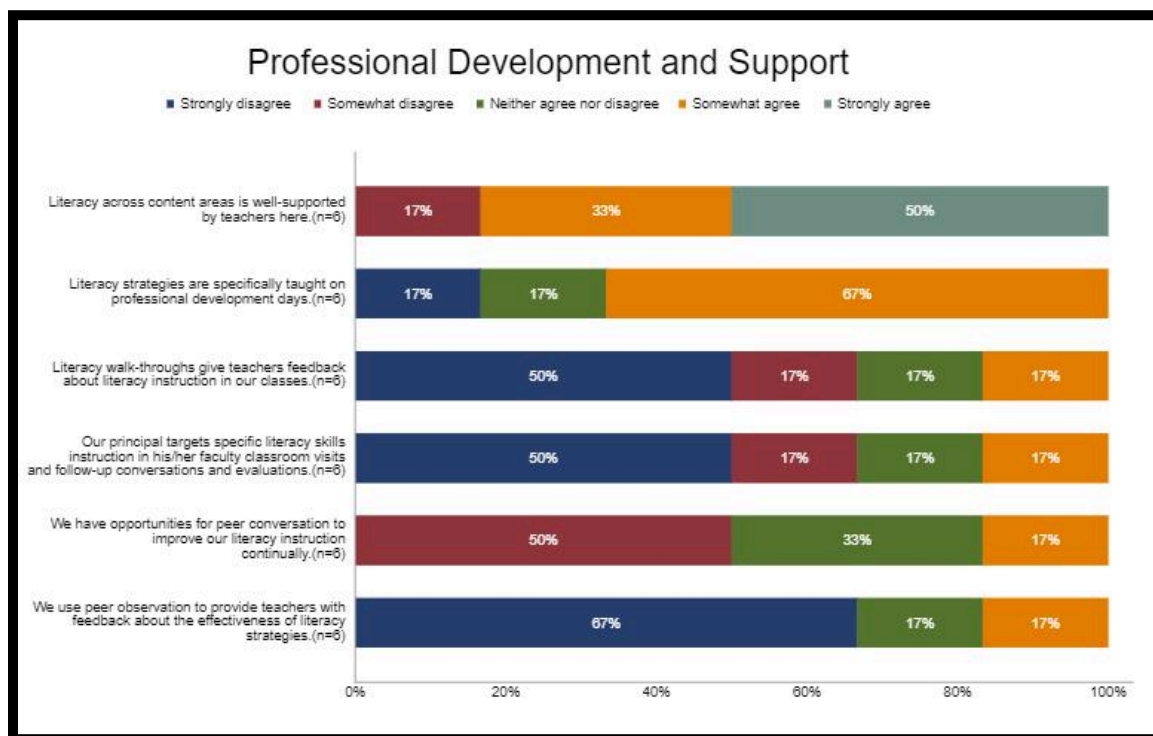
**Finding 4. Teachers are dissatisfied with current tools to teach literacy curriculum in their classrooms.**

*Survey Data*

*District Support*

Currently, the Balanced Literacy approach is being widely adopted by teachers working in Tier 1 classrooms in the MVWSD. When we finished collecting the teacher survey data, we found that the most significant differences were in regard to professional development and district support. Data showed that 67% of teachers are likely to disagree with the statement that the administration offers instructions and feedback that are guided by data analysis. Additionally, with regard to professional development and support from faculty and principals, 67% percent of teachers disagree on the level of support from admin, such as targeted specific literacy skill instruction in classroom visits and follow-up conversations and evaluations. These are some of the needs requested by teachers in order to assist them teach literacy aligned to the science of reading. Professional development is a key district support that teachers require. The information presented in figure 5 provides a detailed breakdown of the professional development

and support offered to teachers.



*Figure 5: Teacher Professional Development and Support*

## ***Interview Data***

### *Teacher attitudes toward curriculum change*

District reading interventionists noted that teachers may be reluctant to implement the new reading instruction method, and they may feel challenged as the approach to literacy instruction is shifting to the science of reading. The district multi-tiered support coordinator said:

“ I believe and say there will probably be continued criticism, but I think at the end of the day, we have a team of people who will show up for kids and so I don't anticipate pushback. And I think the good thing is we regularly get feedback from the principals based on the feedback they get from their staff. And so we modify pieces and adapt pieces, and I think that that helps with buy in. So I definitely

don't anticipate pushback, but just constructive feedback and criticism which I'm okay with.”

This quote anticipates pushback, but one district reading interventionist is more hopeful for the future rollout. The reading interventionist thinks that teachers will be “grateful” and “see the fruit” in the teaching mainly because “the curriculum is already there.” The stark difference between these two views seems to point at the need to highlight result-oriented actions and real examples of outcomes for students.

There may be hope for a smooth transition into the OG curriculum. One general education teacher noted their proclivity toward Orton Gillingham curriculum when presented with greater information and training. They shared that they were “trained in both, and the school principal gave the autonomy to choose which method, and I chose Orton-Gillingham.” Although there are assumptive views on if teachers will be apprehensive toward implementation of the Orton-Gillingham curriculum in general education classrooms, this quote demonstrates a willingness to pivot toward science of reading-based instruction if educators are given the knowledge and training to do so. The Director of Literacy also noted that principals had control of the curriculum introduction. The Director stated “Right now, the principals are really responsible for the rollout, the communication, which then ultimately affects the perception of these things at the site level. So we've been working with the principals heavily on trying to get some alignment and give them the support that they need. And so right now, we do see some differences at the site level.”

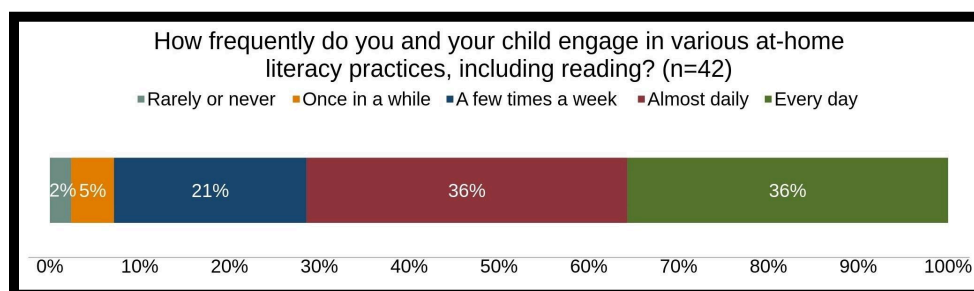
**Finding 5. Parents are familiar with literacy strategies but would like to participate in more school-led literacy activities and workshops.**

### ***Survey Data***

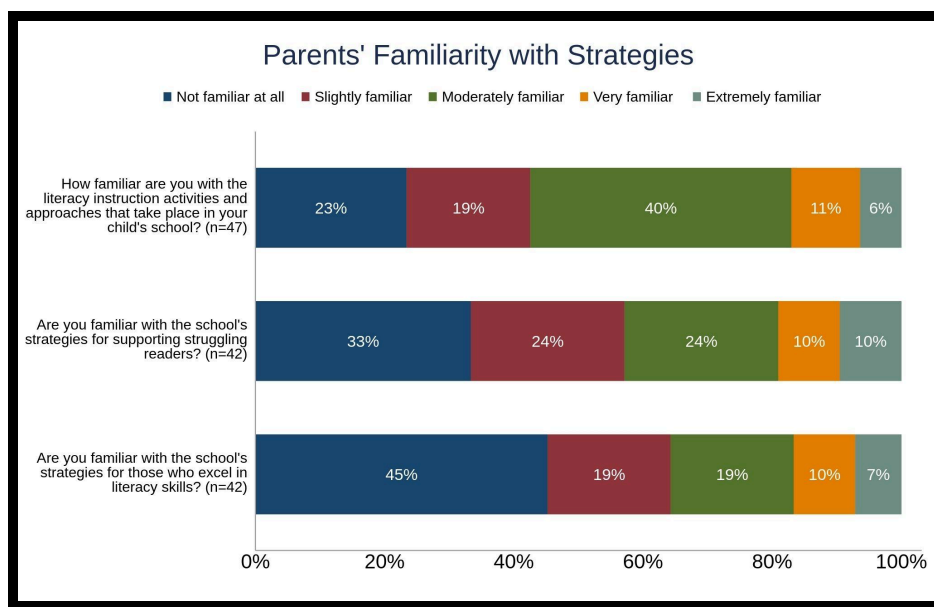
Currently, more than half of parents are satisfied with the level of communication with the school regarding literacy instruction (54%). Therefore, more engagement in communication is encouraged to increase the satisfaction rate. Almost all parents rate literacy instruction as very important for their child’s academic success (76%). Most parents are at least confident about

their child's literacy instruction at school (65%). More than half of parents are aware of the strategies or activities used in the classroom to promote reading and writing (68%) and feel adequately informed about their child's progress in literacy (69%). Parent engagement in literacy is a key strategy for science-based reading. (80%) of parents would like to have more opportunities to participate in literacy-related activities or workshops at their child's school. The survey included an option for parents to leave comments, and one parent mentioned that they were unaware of the things they could do at home to support their child's literacy skills and would be interested in attending a workshop.

The results of our survey also showed that parents are carrying out activities at home. In addition, there is a moderate level of consensus that they are aware of what is taking place in general classrooms. Parents wish to be more understanding regarding what is occurring for those who are successful or those who are struggling with reading. Those findings are represented in figures 6 and 7.



*Figure 6: Parent Literacy Frequency at Home*



*Figure 7: Parent Familiarity with Strategies*

### ***Interview Data***

#### *School Direct Outreach*

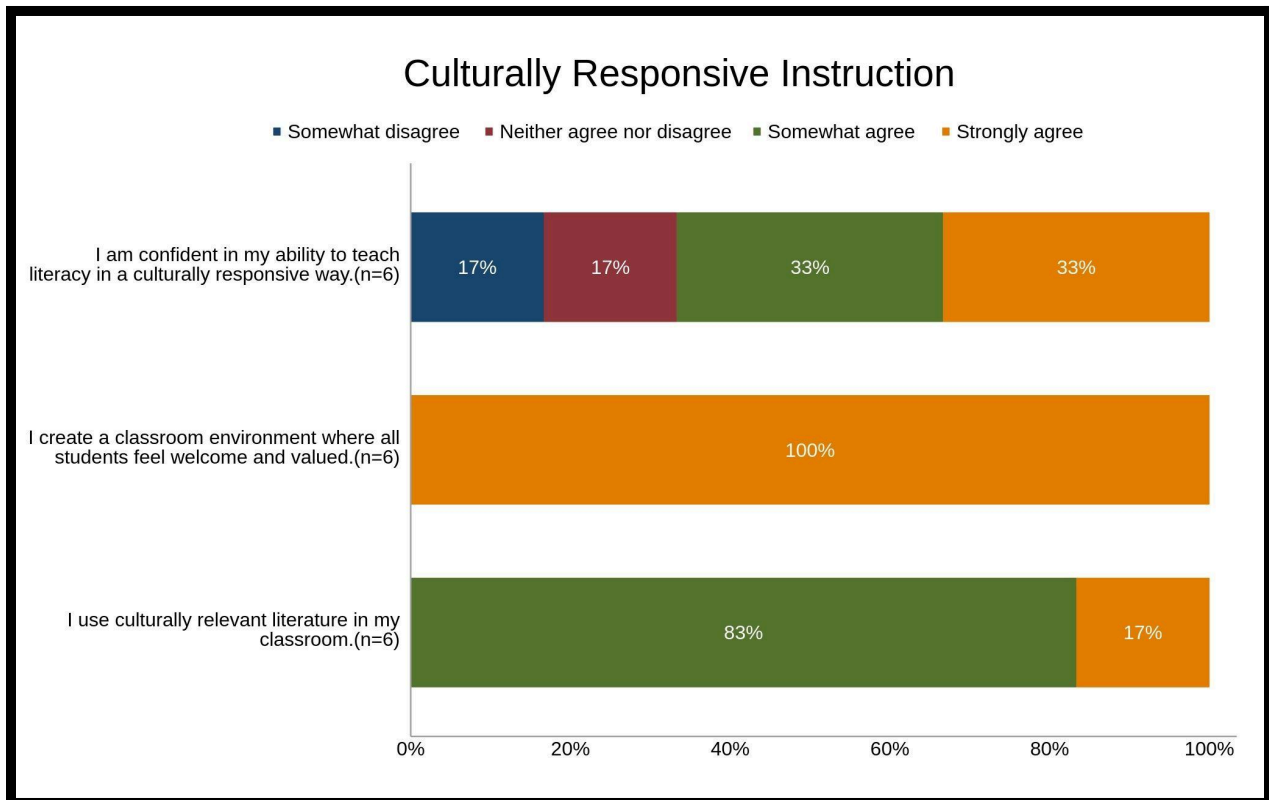
In interviews with reading interventionists and district leaders, we discovered that not all of the piloted schools have planned engagement activities for parents. One interventionist said “I haven't gotten much parent involvement in school...But with the rollout this year, we're piloting at one of the schools, not my school, a parent night, once a month. They come, they get books not necessarily OG books, ... having some food, and then strategies for parents to use at home and games.” This quote shows that there is inconsistency among the pilot schools for intentional parent and family engagement. We are unsure of the reasoning behind only one of the four pilot schools hosting a family literacy night.

**Finding 6. Parents and teachers agree that culturally relevant practices are incorporated into literacy instruction in the early grades.**

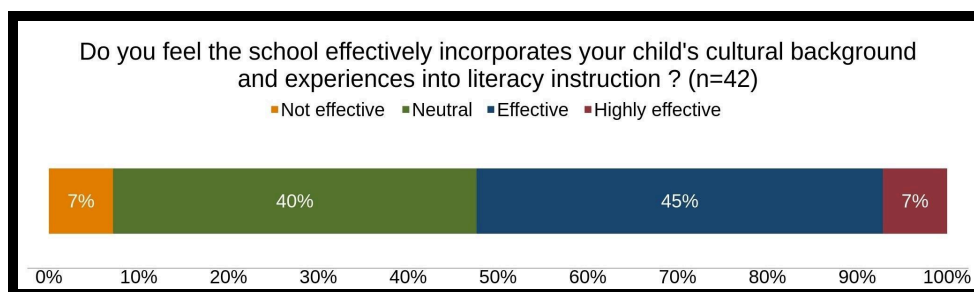
### ***Survey Data***

Given the diversity of the student population and the need to close gaps in literacy outcomes among student groups, culturally relevant practices are also key to increasing parent

participation and student growth. The data reveals that all teachers believe that they “create a classroom where all students feel welcomed and valued.” Additionally, most teachers are likely to provide culturally responsive instruction in their classrooms. Most parents “feel that their child's cultural background and experiences are brought into literacy instruction.” See Figures 8 & 9 below.



*Figure 8: Teachers Teaching Confidence through Culturally Responsive Instruction*



*Figure 9: Parent Confidence of Culturally Responsive Instruction*

### ***Interview Data***

#### *Multicultural and multilingual*

In our interviews with reading interventionists, it was communicated that culture was acknowledged and included in daily lessons. A general education teacher noted that when students enter kindergarten they are taught words in Spanish and English “just to recognize the word when they see it.” Knowing that some students are starting school without the English language at home helps teachers plan appropriate engagement and scaffolding. One reading interventionist plans for cultural norms and different languages in the classroom. The interventionist said:

“I’ll bring out an item. And they’ll say, like, Oh, I do that in Spanish, but I kind of think what is it in English, so we’re able to connect our cultures together. ... I guess it’s not totally culturally-linked in the reaching activities that we’re doing. But there are chances that we get to talk about each other’s cultures.”

Teachers noted the importance of making learning meaningful to the students, and “background knowledge” helps make that happen.

#### *Perceived gaps*

When asked about gaps in culturally relevant strategies, all teachers responded with comments about socioeconomic status. One reading interventionist said that the more affluent schools have students that “come to school with more background knowledge” because of “less field trips” for example, and another teacher noted that some students whose families are “below

the poverty level” come to school with “experiences that don’t match the texts.” These are gaps, but they are not caused by the school district. However, the school district can be influential in the implementation of culturally relevant strategies that make learning equitable for all students.

### ***Observation Data***

Within our observations, we noted classroom libraries and book corners that held books of various topics, characters, and reading levels. The books displayed reflected the makeup of the classrooms, and some even included languages outside of English. This aligns to culturally relevant teaching strategies, and proves helpful for student engagement and comprehension of material. Teachers did not rely on just books to show their acknowledgement of student background. One observed reading interventionist took time to discuss alternative names to literacy manipulative objects in order to help student recognition of the object. In this particular classroom, the teacher showed a measuring cup as the sound “cu” was the focus of the activity, and one student identified the item as a scoop. The teacher took the time to understand the reason behind the alternative identification by the student, affirmed his word usage, and presented “measuring cup” as another word for the object. The student seemed to feel validated and understood, and the teacher seemed to be satisfied with the activity. Ensuring the understanding of how students arrive at learning helps provide variance in the approach to instruction.

### **Discussion**

To analyze the effectiveness of Mountain View Whisman School District’s piloted adoption of the science of reading based Orton-Gillingham curriculum in Tier 2 intervention classrooms, we assessed the fidelity of the curriculum’s implementation, and the role of parents and culturally relevant literacy practices. After our research, we focused on outlining efficient practices and efforts that may guide MVWSD, and other similar school districts, to amend declines in early literacy through science of reading based curriculum approaches.

Through our analysis of collected data, we identified key findings that illuminated the future needs for MVWSD to become more effective in literacy instruction. First, we learned that the OG curriculum is not being implemented outside of Tier 2 classrooms. Tier 1 classrooms are utilizing a different curriculum with students, and it has shown to not sustain the needed



advancement for targeted learners. General education teachers attested to needing Tier 2 intervention for special populations of students in order to bridge the literacy gap amongst students within their classrooms. With differing curricula for students, teachers attest that students in Tier 2 classrooms are hindered from the full impact of the OG curriculum. Teachers attest to the need to reinforce OG curriculum throughout the school day as opposed to only during scheduled pullouts in Tier 2 intervention classrooms.

Secondly, not only do general education Tier 1 teachers not implement the OG curriculum in their classrooms, but they also have limited interaction with reading intervention specialists that administer the curriculum to a special population of their students. Reading interventionists spoke of their desire to establish meetings with general education teachers to discuss the progress of shared students and best practices to ensure their success. School leadership does not require collaboration in this manner, and teachers are not creating the opportunity for collaboration on their own. Most surveyed teachers responded that they do not feel comfortable teaching the average reader in their classroom, nor do they feel like they have adequate tools to do so. Interaction, structured meetings, and formal and informal observations were all suggested as desired implementation strategies by teachers to increase achievement in early literacy.

Although teacher engagement in the adoption of the OG curriculum is irregular at the four elementary schools of study, the engagement of families in this implementation is present and they claim satisfaction. Parents are aware of the literacy instruction and teaching strategies that impact their child's learning. However, parents would like to be more involved in school-led literacy activities and workshops. Workshops such as family literacy nights that teach families easy tips and tricks to help promote the science of reading based literacy at home had parents confident in the new adoption of the OG curriculum. Through interviews, we learned that teachers were excited about the opportunity to engage with families after school, and also wanted more activities for families. Aside from family engagement, parents and teachers note that culturally relevant practices are used to help literacy instruction in the early grades. Practices observed include: teaching in multiple languages, visual representations of multiple cultures posted around the school, and classroom libraries that have books representing different backgrounds.

## **Recommendations**

Mountain View Whisman School District is in a moment of transition in the district's approach to literacy. To provide a smooth transition to literacy instruction grounded in the science of reading, MVWSD officials should provide for a uniform adoption of the science of reading-based Orton-Gillingham curriculum across all tiers of instruction, inclusive of teacher involvement, parent engagement, and culturally relevant practices. To accomplish these aims, the following actions are recommended:

### **1. Embrace the Science of Reading:**

MVWSD should fully embrace the science of reading approach for its proven effectiveness in improving foundational literacy skills. The district should implement a science of reading-based Orton-Gillingham curriculum in all literacy instruction in order to be aligned across grades. The Orton-Gillingham approach leads to stronger phonemic awareness, decoding, fluency, comprehension, and vocabulary development. Many districts across the country have seen great success with science of reading programs, boosting student confidence and motivation as readers. MVWSD can leverage these success stories as it plans for a district-wide implementation of the Orton-Gillingham curriculum, a program firmly rooted in science of reading principles.

### **2. Cultivate Culturally Relevant Instruction:**

Culturally relevant teaching practices are crucial for a diverse student body like MVWSD. Integrating these practices within the science of reading framework can significantly enhance student engagement and achievement. Teachers can incorporate culturally diverse reading materials that reflect students' backgrounds and experiences. Building partnerships with families from different cultural backgrounds is also essential. This collaborative approach fosters a sense of belonging and empowers families to support their children's literacy development at home.

### **3. Empower Parents as Partners:**

Effective literacy programs require a strong partnership between educators and parents. To enable parents to participate in their children's reading education actively, MVWSD should offer frequent workshops and resources that explain the science of reading concepts and their

practical application at home. This will help parents gain a better understanding of their child's literacy progress and how they can support their learning. Enhanced communication between educators and parents can create a collaborative environment that promotes student success by ensuring everyone is well-informed. The district should explore innovative strategies to involve parents in the process and foster better communication channels to enhance the overall literacy initiative.

#### **4. Equip Educators with Professional Development in Orton-Gillingham:**

To ensure the successful implementation of the Orton-Gillingham curriculum, which is a key component of the science of reading method, MVWSD should provide professional development for all instructors. As mentioned earlier, teachers are looking for support in helping struggling and average readers. Comprehensive training will equip educators with the necessary knowledge and skills to deliver effective science of reading-based Orton-Gillingham instruction. The training should cover the theoretical basis of the science of reading, which will establish a solid foundation for understanding the program's methodology. Teachers will learn the Orton-Gillingham method, which includes multi-sensory strategies, clear instruction, and step-by-step progression. Upon completing this training, teachers will have the confidence to implement this structured literacy program effectively and promote the development of strong fundamental reading skills in all students.

#### **5. Examine the Creation of a Revised School Schedule:**

Missing critical core instruction should not be a concern for students who are receiving Tier 2 instruction during pull outs throughout the school day. The recommendation is to examine the establishment of a universal literacy block in all classrooms across the MVWSD. In this revised school schedule, teachers can plan for direct implementation of the OG curriculum in tandem with fellow teachers so that all students receive the benefit of learning literacy through the science of reading practices. With the nuances of each individual school evident to district leaders, this recommendation will need to be examined in order to ensure logistical possibility.

This adjustment will also provide consistency for teachers and students alike, while making it easier for district leaders to conduct assessment and observations to ensure efficiency of implementation.

## **6. Establish Professional Learning Communities:**

To ensure that students are receiving the best possible education, it's important for general education teachers and reading intervention specialists to have regular, structured meetings throughout the school year. During these meetings, they can discuss students they work with, share strategies for implementing an Orton-Gillingham (OG) curriculum, and analyze data to inform their actions.

By aligning their efforts, teachers can make a positive impact on their students' literacy scores. As the OG curriculum implementation spreads from Tier 2 classrooms to Tier 1 classrooms, students will benefit from a consistent approach to teaching. Collaboration among teachers is crucial to ensure that they are aligned with each other in terms of teaching practices and curriculum standards. By proactively collaborating and reflecting on their teaching practices, educators can guarantee that they are fulfilling curriculum objectives and providing students with an excellent education.

## **7. Ensure Sustainability and Long-Term Impact:**

The effectiveness of MVWSD's new literacy program relies on its ability to be sustained over time and its lasting impact. To ensure that the program is effective, the district should establish continuous program monitoring and evaluation techniques that help monitor student growth and evaluate the program's effectiveness. Collecting data through assessments and surveys can provide valuable insights for improvement. It is essential to provide ongoing professional development for teachers to maintain the science of reading approach and meet the changing requirements of diverse learners. It is also recommended that the school district continue adequate funding for the implementation of the OG curriculum with students as well as the engagement of parents. By exploring adequate funding and responsible technology tools, we can increase parent participation and enrich classroom learning, thus ensuring the program's long-term impact.

### **Continued Research**

After our research, we recommend continued research in two additional domains. First, research should continue on the comprehension of complex literacy texts by students who were taught the Orton-Gillingham curriculum in early grades. The reading and comprehension of complex literacy texts in upper grade levels would help further assess the success of OG's adoption along with suggested recommendations. Also, the recorded time it takes for these students to read and comprehend the text selection versus students that did not have OG curriculum in Tier 2 classrooms would help identify efficacy points in the curriculum. Recorded time is integral for consideration as standardized assessments have time constraints.

It would also be beneficial to conduct research on the social and emotional status of students included, and not included, in Tier 2 classroom pullouts for reading intervention. Although the focus is academic success, the emotional impact on students who are separated from the classrooms should also be further investigated by intentional research. This research should happen simultaneously with determining the academic impact of the OG curriculum implementation.

### **Conclusion**

Mountain View Whisman School District took an appropriate first step in addressing decreasing student achievement in early literacy. The district witnessed an improvement in reading among Tier 2 students with the adoption of the science of reading-based Orton-Gillingham curriculum in intervention classrooms. The district must now fully embrace the science of reading across all tiers of classroom instruction to accelerate growth in student literacy. A full scale implementation of the Orton-Gillingham curriculum will require significant investment in professional development for MVWSD educators to ensure instructional fidelity as well as mandated collaboration amongst general education teachers and reading interventionists. Moreover, growth in reading achievement for students can be accelerated by empowering parents with at-home reading strategies that are aligned with science of reading principles. Additionally, approaches to literacy and parent engagement should be culturally relevant to the diverse student population of Mountain View. Lastly, continuous program monitoring of the full implementation of the Orton-Gillingham curriculum will provide continued fidelity and growth in the early

literacy skills of Mountain View Whisman School District students. Implementing these suggestions will help the replicability and sustainability of MVWSD's implementation of science based literacy curriculum.

## References

- Asselin, M. (1999). Balanced Literacy. *Teacher Librarian*, 27(1), 69.  
<https://link.gale.com/apps/doc/A55907528/AONE?u=anon~9baa25b9&sid=googleScholar&xid=8312fd49>
- Bus, A. G., van IJzendoorn, M. H., & Pellegrini, A. D. (1995). Joint book reading makes for success in learning to read: A meta-analysis on intergenerational transmission of literacy. *Review of Educational Research*, 65(1), 1–21.
- California Department of Education. (2022). <https://caaspp-elpac.ets.org/caaspp/>
- Cathay Baur, MVWSD Chief Academic Officer, personal communication, November 2023.
- C.S. Nelson. (2000). “From Neurons to Neighborhoods”  
[http://www.nap.edu/openbook.php?record\\_id=9824](http://www.nap.edu/openbook.php?record_id=9824)
- Chall, J.S. (1967). *Learning to read: The great debate*. New York: McGraw-Hill.
- Education Week. (2020). [States to Schools: Teach Reading the Right Way \(edweek.org\)](https://www.edweek.org/states-to-schools-teach-reading-the-right-way)
- Education Week. (2022). [Which States Have Passed 'Science of Reading' Laws? What's in Them? \(edweek.org\)](https://www.edweek.org/which-states-have-passed-science-of-reading-laws-what-s-in-them)
- Flesch, R. (1955). *Why Johnny Can't Read*. New York: Harper Collins.
- Fountas, I. C., & Pinnell, G. S. (1996). *Guided reading: Good first teaching for all children*. Heinemann.
- Gest, S. D., Freeman, N. R., Domitrovich, C. E., & Welsh, J. A. (2004). Shared book reading and children's language comprehension skills: the moderating role of parental discipline practices. *Early Childhood Research Quarterly*, 19(2), 319–336.
- Goodman, K. S. (1997). The reading process. In *Encyclopedia of Language and Education: Literacy* (pp. 1-7). Dordrecht: Springer Netherlands.

Gough, P. B., & Tunmer, W. E. (1986). Decoding, Reading, and Reading Disability. *Remedial and Special Education*, 7(1), 6-10. <https://doi.org/10.1177/074193258600700104>

Hart, B. & Risley, T.R. “The Early Catastrophe: The 30 Million Word Gap by Age 3” (2003, spring). *American Educator*, pp.4-9.

<http://www.aft.org/sites/default/files/periodicals/TheEarlyCatastrophe.pdf>

Harste, J. (1990). Jerry Harste Speaks on Reading and Writing. *The Reading Teacher*, 43(4), 316–318. <http://www.jstor.org/stable/20200372>

Harste, J. (2012). Reading-writing connection. *The encyclopedia of applied linguistics*.

Hoover, W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing: An Interdisciplinary Journal*, 2(2), 127–160. <https://doi.org/10.1007/BF0040179>

Institute of Education Sciences. (2002). [Institute of Education Sciences](#)

James Kim and Thomas White. (2011). Solving the Problem of Summer Reading Loss. [https://scholar.harvard.edu/files/jameskim/files/prof\\_pub-pdk-white-2011-summer\\_loss.pdf](https://scholar.harvard.edu/files/jameskim/files/prof_pub-pdk-white-2011-summer_loss.pdf)

Jessica B. Heppen, Nicholas Sorensen, Elaine Allensworth, Kirk Walters, Jordan Rickles, Suzanne Stachel Taylor & Valerie Michelman. (2017). The Struggle to Pass Algebra: Online vs. Face-to-Face Credit Recovery for At-Risk Urban Students, *Journal of Research on Educational Effectiveness*, 10:2, 272-296.

Kim JS. Research and the reading wars. In: Hess FM *When Research Matters: How Scholarship Influences Education Policy*. Cambridge, MA: Harvard Education Press ; 2008. pp. 89-111.

National Assessment for Educational Progress. (2023). [NAEP Reading: State Achievement-Level Results \(nationsreportcard.gov\)](#)

National Institute of Child Health and Human Development. (2000). [National Reading Panel \(Historical/For Reference Only\) | NICHD - Eunice Kennedy Shriver National Institute of Child Health and Human Development \(nih.gov\)](#)



National Reading Panel. (2000). Teaching Children to Read: An Evidence Based Assessment of the Scientific Research Literature on Reading and its Implications for Reading Instruction. [report.pdf \(nih.gov\)](#)

Orton Gillinham. (2023). [Orton-Gillingham | Orton-Gillingham and So Much More](#)

Pearson, P. D., & Hamm, D. N. (2005). The Assessment of Reading Comprehension: A Review of Practices-Past, Present, and Future. In S. G. Paris & S. A. Stahl (Eds.), *Children's reading comprehension and assessment* (pp. 13–69). Lawrence Erlbaum Associates Publishers.

P. David Pearson The Reading Wars, Educational Policy 18, no.11 (Jul 2016): 216–252.  
<https://doi.org/10.1177/0895904803260041>

Press Democrat. (2024). [Why California might mandate the ‘science of reading’ in all schools \(pressdemocrat.com\)](#)

Scarborough, H. S. (2001). Connecting early language and literacy to later reading (dis)abilities: Evidence, theory, and practice. In S. Neuman & D. Dickinson (Eds.), *Handbook for research in early literacy*. New York: Guilford Press.

Stahl, S.A., & Miller, P.D. (1989). Whole Language and Language Experience Approaches for Beginning Reading: A Quantitative Research Synthesis. *Review of Educational Research*, 59, 116 - 87.

Tanya Christ, Ming Ming Chiu, Stephanie Rider, Deborah Kitson, Katherine Hanser, Elizabeth McConnell, Renae Dipzinski & Heather Mayernik (2018) Cultural relevance and informal reading inventory performance: African-American primary and middle school students, *Literacy Research and Instruction*, 57:2, 117-134, DOI: [10.1080/19388071.2018.1424274](https://doi.org/10.1080/19388071.2018.1424274)

White House Press Office. (2001). [President Bush - Putting Reading First \(archives.gov\)](#)

Zoe Morgan, Angela Swartz, and Leah Worthington. (2022). Mountain View Whisman sees standardized test scores drop, mirroring county and state trends. *Mountain View Voice*.  
<https://www.mv-voice.com/news/2022/11/04/mountain-view-whisman-sees-standardized-test-scores-drop-mirroring-county-and-state-trends>

## Appendix

*Appendix A: Observation Form*

### Research Classroom Observation Form

Instructor: \_\_\_\_\_

Class/School \_\_\_\_\_

Observer: \_\_\_\_\_

Date and Time \_\_\_\_\_

Observed Section	Description/Comments
<p><b>1. Classroom Environment</b> (classroom setup as it relates to the literacy experience; any other physical aspects)</p>	
<p><b>2. Instruction</b> (evidence of early literacy instruction)</p>	
<p><b>3. Teacher Engagement</b> (holds interest of students; is respectful, fair, and impartial; provides feedback, encourages participation; interacts with students, shows enthusiasm)</p>	

Observed Section	Description/Comments
<p><b>4. Teaching Methods</b>            (uses relevant teaching methods, aids, materials, techniques, and technology; includes variety, balance, imagination, group involvement; uses examples that are simple, clear, precise, and appropriate; stays focused on and meets stated objectives)</p>	
<p><b>5. Cultural Relevancy</b>            (evidence of connection to special populations)</p>	

**Strengths observed:**

**Suggestions for improvement:**

**Overall impression of teaching effectiveness as it relates to literacy:**

**Student observations:**

*Appendix B: Observation Notes*

Instructor: Reading Interventionist

Class/School: Kinder/Monta Loma

Date and Time: November 27, 2023; 9:20AM-10:10AM

<b>Observed Section</b>	<b>Description/Comments</b>
<b>Classroom Environment</b> (classroom setup as it relates to the literacy experience; any other physical aspects)	<ul style="list-style-type: none"> <li>- Word walls and alphabet letters present</li> <li>- Literacy manipulatives and multi-modalities for literacy instruction</li> <li>- Walls have progress trackers and praise for students</li> </ul>
<b>Instruction</b> (evidence of early literacy instruction)	<ul style="list-style-type: none"> <li>- Small group letter pronunciations</li> <li>- Item recognition and letter matching</li> <li>- Flash card recognition practice</li> <li>- Whole group discussion</li> </ul>
<b>Teacher Engagement</b> (holds interest of students; is respectful, fair, and impartial; provides feedback, encourages participation; interacts with students, shows enthusiasm)	<ul style="list-style-type: none"> <li>- Spanish and English languages utilized</li> <li>- Listens to all students commentary and questions</li> <li>- Energy and enthusiasm shown with instruction</li> <li>- Sitting close proximity to students</li> </ul>
<b>Teaching Methods</b> (uses relevant teaching methods, aids, materials, techniques, and technology; includes variety, balance, imagination, group involvement; uses examples that are simple, clear, precise, and appropriate; stays focused on and meets stated objectives)	<ul style="list-style-type: none"> <li>- Flashcards</li> <li>- Alphabet item manipulatives</li> <li>- Video clips</li> <li>- Small groups</li> <li>- Consistent individual feedback and recognition</li> <li>- Sensory activities</li> <li>- Songs</li> <li>- Teacher modeling</li> </ul>

<b>Cultural Relevancy</b> (evidence of connection to special populations)	<ul style="list-style-type: none"> <li>- Spanish translation of words utilized in manipulative</li> </ul>
--	---

<b>Strengths observed</b>	<ul style="list-style-type: none"> <li>- Clear and repeated instructions</li> </ul>
<b>Suggestions for improvement</b>	<ul style="list-style-type: none"> <li>- Review daily agenda for student comprehension of goals</li> </ul>
<b>Overall impression of teaching effectiveness as it relates to literacy</b>	<ul style="list-style-type: none"> <li>- Repetition and relevant to student's lives</li> </ul>
<b>Student observations</b>	<ul style="list-style-type: none"> <li>- All students were engaged and participatory</li> <li>- 1 student asked for clarity on instructions</li> </ul>

*Appendix C: Observation Notes*

Instructor: Reading Interventionist

Class/School: 2nd Grade/Theuerkauf

Date and Time: November 27, 2023; 10:50 am-11:25 am

<b>Observed Section</b>	<b>Description/Comments</b>
<b>Classroom Environment</b> (classroom setup as it relates to the literacy experience; any other physical aspects)	<ul style="list-style-type: none"> <li>- Intervention area separated from main classroom to establish separate groups</li> <li>- Letter formation posters</li> <li>- "Red" word process on wall posters</li> </ul>
<b>Instruction</b> (evidence of early literacy instruction)	<ul style="list-style-type: none"> <li>- Routine established at beginning of lesson</li> <li>- Adherence to fluency charts</li> <li>- Word writing practice</li> </ul>
<b>Teacher Engagement</b> (holds interest of students; is respectful, fair, and impartial;	<ul style="list-style-type: none"> <li>- Direct teacher instruction</li> <li>- Deliberate engagement of all students</li> <li>- Review and feedback given to all students during writing</li> </ul>

provides feedback, encourages participation; interacts with students, shows enthusiasm)	practice
<b>Teaching Methods</b> (uses relevant teaching methods, aids, materials, techniques, and technology; includes variety, balance, imagination, group involvement; uses examples that are simple, clear, precise, and appropriate; stays focused on and meets stated objectives)	<ul style="list-style-type: none"> <li>- Physical movement to sound out and breakdown words</li> <li>- Oral recitation techniques</li> <li>- Task redirection for students that get off task</li> <li>- Whole group discussion</li> <li>- Flash cards review activity</li> <li>- Use of white board to model writing</li> <li>- Use of timer to stay on task</li> <li>- Practice device for word pronunciation</li> </ul>
<b>Cultural Relevancy</b> (evidence of connection to special populations)	None particularly observed

<b>Strengths observed</b>	<ul style="list-style-type: none"> <li>- Teacher knew all students, their names, ad some interests to engage them.</li> </ul>
<b>Suggestions for improvement</b>	<ul style="list-style-type: none"> <li>- Separate room outside of general education classroom</li> <li>- Not to praise students for being “smart,” but for the specific action they have attempted, completed, or revised.</li> </ul>
<b>Overall impression of teaching effectiveness as it relates to literacy</b>	<ul style="list-style-type: none"> <li>- There is evidence of routine and schedule that helps align student expectations to teacher curricular goals. Students expect a timed flow of literacy instruction.</li> </ul>
<b>Student observations</b>	<ul style="list-style-type: none"> <li>- One student pointed out another student’s lack of engagement</li> <li>- Students spoke in Spanish and English</li> </ul>

	<ul style="list-style-type: none"> <li>- 2 students seemed upset during one activity when words on the worksheet were not called out in the same order as they had been memorized</li> </ul>
--	--

*Appendix D: Observation Notes*

Class/School: General Ed Class/ Theuerkauf

Date and Time: November 28, 2023; 8:15 AM-9:00 AM

<b>Observed Section</b>	<b>Description/Comments</b>
<b>Classroom Environment</b> (classroom setup as it relates to the literacy experience; any other physical aspects)	<ul style="list-style-type: none"> <li>- Book nooks and book corners holds a classroom library</li> <li>- Student seating facing each other</li> <li>- Daily agenda displayed on board with aligned standards</li> <li>- Literacy rules and word wall posted</li> <li>- Classical music playing in background</li> </ul>
<b>Instruction</b> (evidence of early literacy instruction)	<ul style="list-style-type: none"> <li>- Small group literacy instruction in general education classroom</li> <li>- Pulled out focus reading intervention group</li> </ul>
<b>Teacher Engagement</b> (holds interest of students; is respectful, fair, and impartial; provides feedback, encourages participation; interacts with students, shows enthusiasm)	<ul style="list-style-type: none"> <li>- Personable feedback to individual students; positive and helpful</li> <li>- Prizes and incentives used for attentiveness and correct answers for literacy lesson</li> </ul>
<b>Teaching Methods</b> (uses relevant teaching methods, aids, materials, techniques, and technology; includes variety, balance,	<ul style="list-style-type: none"> <li>- Students are working independently on Clever using laptops</li> <li>- Worksheets and packets are utilized for practice of words</li> <li>- Scaffolding through teacher and peer modeling</li> </ul>



imagination, group involvement; uses examples that are simple, clear, precise, and appropriate; stays focused on and meets stated objectives)	
<b>Cultural Relevancy</b> (evidence of connection to special populations)	<ul style="list-style-type: none"> <li>- Diversity in class library</li> <li>- Use of physical movement to pronounce and explain words</li> </ul>

<b>Strengths observed</b>	<ul style="list-style-type: none"> <li>- Class management; no interruptions</li> <li>- -student adherence to established routines</li> </ul>
<b>Suggestions for improvement</b>	<ul style="list-style-type: none"> <li>- Use of OG curriculum with RTI students and entire class</li> </ul>
<b>Overall impression of teaching effectiveness as it relates to literacy</b>	<ul style="list-style-type: none"> <li>- Contraction and possessive reading elements discussed in small group.</li> </ul>
<b>Student observations</b>	<ul style="list-style-type: none"> <li>- Students in small group were modeling for their peers and building on one another unprovoked</li> <li>- Students working independently asked clarification of directions and requested teacher feedback</li> </ul>

*Appendix E: Observation Notes*

Class/School: General Ed Class/ 1st Grade/Mistral

Date and Time: November 28, 2023; 9:05AM-9:55AM

<b>Observed Section</b>	<b>Description/Comments</b>
<b>Classroom Environment</b> (classroom setup as it relates to	<ul style="list-style-type: none"> <li>- Reading corners</li> <li>- Word walls, alphabets, focus vocabulary on walls</li> </ul>

the literacy experience; any other physical aspects)	<ul style="list-style-type: none"> <li>- 3 adults in classroom</li> </ul>
<b>Instruction</b> (evidence of early literacy instruction)	<ul style="list-style-type: none"> <li>- Interactive board use for student writing words</li> <li>- Worksheet with word and aligning image focus</li> <li>- 1:1 with one Spanish speaking student</li> </ul>
<b>Teacher Engagement</b> (holds interest of students; is respectful, fair, and impartial; provides feedback, encourages participation; interacts with students, shows enthusiasm)	<ul style="list-style-type: none"> <li>- Requesting student eye contact to gain and keep attention</li> <li>- Gives students individual praise and feedback</li> <li>- Asks students to give their peers positive feedback</li> <li>- Teacher aides involved in lesson and feedback to students</li> </ul>
<b>Teaching Methods</b> (uses relevant teaching methods, aids, materials, techniques, and technology; includes variety, balance, imagination, group involvement; uses examples that are simple, clear, precise, and appropriate; stays focused on and meets stated objectives)	<ul style="list-style-type: none"> <li>- Whole group activity with smartboard and individual worksheets</li> <li>- Individual student presentation of learning to peers for review</li> </ul>
<b>Cultural Relevancy</b> (evidence of connection to special populations)	<ul style="list-style-type: none"> <li>- Dual immersion school; Spanish and English languages spoken</li> </ul>

<b>Strengths observed</b>	<ul style="list-style-type: none"> <li>- Established routines that assisted the flow of the lesson</li> <li>- Teacher aides were aligned with objectives</li> </ul>
<b>Suggestions for improvement</b>	<ul style="list-style-type: none"> <li>- Possible addition of sounding out words</li> </ul>

<b>Overall impression of teaching effectiveness as it relates to literacy</b>	<ul style="list-style-type: none"> <li>- Vocabulary building through literacy activity using words and images</li> </ul>
<b>Student observations</b>	<ul style="list-style-type: none"> <li>- All students participated and were engaged in activity</li> </ul>

*Appendix F: Observation Notes*

Instructor: Rosas

Class/School: Reading Intervention/1st Grade/ Mistral

Date and Time: November 28, 2023: 9:30AM-9:55AM

<b>Observed Section</b>	<b>Description/Comments</b>
<b>Classroom Environment</b> (classroom setup as it relates to the literacy experience; any other physical aspects)	<ul style="list-style-type: none"> <li>- Classroom library</li> <li>- Visual maps of sounding out words</li> </ul>
<b>Instruction</b> (evidence of early literacy instruction)	<ul style="list-style-type: none"> <li>- Consonants and vowels</li> <li>- Focus on the letter "Z" with made up words to teach skill "Zucks"</li> <li>- -multisensory</li> </ul>
<b>Teacher Engagement</b> (holds interest of students; is respectful, fair, and impartial; provides feedback, encourages participation; interacts with students, shows enthusiasm)	<ul style="list-style-type: none"> <li>- Full engagement of all students with teacher</li> <li>- Teacher brings attention to mouth pronunciation and the movement of the tongue and lips</li> <li>- Offers feedback and correction on writing to each individual student</li> <li>- Practice in whole group of sounding out words</li> </ul>
<b>Teaching Methods</b> (uses relevant teaching methods, aids, materials,	<ul style="list-style-type: none"> <li>- Individual worksheets on clipboards for students</li> <li>- Visual reviews using worksheets and flashcards to invoke student answers in whole group</li> </ul>

techniques, and technology; includes variety, balance, imagination, group involvement; uses examples that are simple, clear, precise, and appropriate; stays focused on and meets stated objectives)	<ul style="list-style-type: none"> <li>- Hand claps to motion sounding out words and syllables</li> <li>- Teacher models sounding out of words for students</li> </ul>
<b>Cultural Relevancy</b> (evidence of connection to special populations)	<ul style="list-style-type: none"> <li>- Book corner is themed focused and has apparent diversity of characters and subjects</li> </ul>

<b>Strengths observed</b>	<ul style="list-style-type: none"> <li>- Accordance to timed agenda and preparation of materials for all students</li> </ul>
<b>Suggestions for improvement</b>	<ul style="list-style-type: none"> <li>- Including more real world examples during lesson activities</li> </ul>
<b>Overall impression of teaching effectiveness as it relates to literacy</b>	<ul style="list-style-type: none"> <li>- Multi sensory and multi step activities align to OG curriculum lesson</li> </ul>
<b>Student observations</b>	<ul style="list-style-type: none"> <li>- All students participated and engaged with other students</li> <li>- 1 student using sign language along with writing</li> </ul>

*Appendix G: Observation Notes*

Instructor: Reading Interventionist

Class/School: 1st Grade/ Castro

Date and Time: November 28, 2023; 10:35 AM-11:25AM

<b>Observed Section</b>	<b>Description/Comments</b>
-------------------------	-----------------------------

<p><b>Classroom Environment</b> (classroom setup as it relates to the literacy experience; any other physical aspects)</p>	<ul style="list-style-type: none"> <li>- Established and identified reading area</li> <li>- Walls have posters with encouragement and educational reminders as well as word ending sounds and beginning sounds</li> </ul>
<p><b>Instruction</b> (evidence of early literacy instruction)</p>	<ul style="list-style-type: none"> <li>- SPIRE intervention</li> <li>- Scaffolded writing practice “I do, you do.”</li> </ul>
<p><b>Teacher Engagement</b> (holds interest of students; is respectful, fair, and impartial; provides feedback, encourages participation; interacts with students, shows enthusiasm)</p>	<ul style="list-style-type: none"> <li>- Use of timer to keep track of lesson advancement</li> <li>- Engaging every student by name, and providing individual feedback on answers about word starters</li> </ul>
<p><b>Teaching Methods</b> (uses relevant teaching methods, aids, materials, techniques, and technology; includes variety, balance, imagination, group involvement; uses examples that are simple, clear, precise, and appropriate; stays focused on and meets stated objectives)</p>	<ul style="list-style-type: none"> <li>- Students sit in a circle for lesson</li> <li>- Repetition of words and phrases</li> <li>- “Chopping it up” using arm and hand movements to breakdown words</li> <li>- “Dap it out” to practice syllables</li> <li>- Practice with writing</li> <li>- Emphasis on hand and lip movements when sounding out words</li> </ul>
<p><b>Cultural Relevancy</b> (evidence of connection to special populations)</p>	<p>None observed</p>
<p><b>Strengths observed</b></p>	<ul style="list-style-type: none"> <li>- Taking the time to mouth words with students to emphasis</li> </ul>

	importance of pronunciation as well as reading
<b>Suggestions for improvement</b>	- More incorporated time for feedback to students from teacher and each other
<b>Overall impression of teaching effectiveness as it relates to literacy</b>	
<b>Student observations</b>	- 2 newcomer students on laptop for entry exam - 1 student requested teacher assistance

*Appendix H: Observation Notes*

Instructor: General Education (Tier 1) Classroom

Class/School: Monta Loma

Date and Time: November 28, 2023; 8:15 am-8:45 am

<b>Observed Section</b>	<b>Description/Comments</b>
<b>Classroom Environment</b> (classroom setup as it relates to the literacy experience; any other physical aspects)	-Sight words on wall - Student writing samples displayed
<b>Instruction</b> (evidence of early literacy instruction)	- Sentence Structure - Sight Words - Vocabulary Development
<b>Teacher Engagement</b> (holds interest of students; is respectful, fair, and impartial; provides feedback, encourages participation; interacts with students, shows enthusiasm)	- Small groups of students and whole classroom engagement - Provides real time feedback to students - Some focus on phonics, but mostly sight word and context clue directed reading instruction.

<p><b>Teaching Methods</b> (uses relevant teaching methods, aids, materials, techniques, and technology; includes variety, balance, imagination, group involvement; uses examples that are simple, clear, precise, and appropriate; stays focused on and meets stated objectives)</p>	<ul style="list-style-type: none"> <li>- Benchmark Curriculum</li> <li>- Sight word based</li> <li>- Sentence structure understanding based upon contextual clues</li> <li>- Students add words that are not in sentence, denoting reliance on context in place of word recognition.</li> </ul>
<p><b>Cultural Relevancy</b> (evidence of connection to special populations)</p>	<ul style="list-style-type: none"> <li>- Books present representative of diverse cultures</li> </ul>

<p><b>Strengths observed</b></p>	<ul style="list-style-type: none"> <li>- Clear and repeated instructions</li> </ul>
<p><b>Suggestions for improvement</b></p>	<ul style="list-style-type: none"> <li>- Review daily agenda for student comprehension of goals</li> </ul>
<p><b>Overall impression of teaching effectiveness as it relates to literacy</b></p>	<ul style="list-style-type: none"> <li>- Repetition and relevant to student's lives</li> </ul>
<p><b>Student observations</b></p>	<ul style="list-style-type: none"> <li>- All students were engaged and participatory</li> </ul>

*Appendix I: Observation Notes*

Instructor: Tier 2 Reading Intervention

Class/School: Monta Loma

Date and Time: November 27, 2023; 9:20 am-10:00 am

Observed Section	Description/Comments
------------------	----------------------

<p><b>Classroom Environment</b> (classroom setup as it relates to the literacy experience; any other physical aspects)</p>	<ul style="list-style-type: none"> <li>- Manipulatives present</li> <li>- Sand trays for writing</li> <li>- Carpet on floor for informal, small group instruction.</li> <li>- Student reading goals and progress displayed on walls.</li> </ul>
<p><b>Instruction</b> (evidence of early literacy instruction)</p>	<ul style="list-style-type: none"> <li>- Strong phonics-based instruction</li> <li>- Kinesthetic: Mirrors used to show students mouth movements while sounding out letters and words.</li> <li>- Cumulative: Letter to Word to Spelling to Writing</li> <li>- Bottom-up approaches</li> <li>- Small group instruction.</li> </ul>
<p><b>Teacher Engagement</b> (holds interest of students; is respectful, fair, and impartial; provides feedback, encourages participation; interacts with students, shows enthusiasm)</p>	<ul style="list-style-type: none"> <li>- Positive praise given.</li> <li>- Direct feedback.</li> <li>- Differentiated instruction based on student needs.</li> </ul>
<p><b>Teaching Methods</b> (uses relevant teaching methods, aids, materials, techniques, and technology; includes variety, balance, imagination, group involvement; uses examples that are simple, clear, precise, and appropriate; stays focused on and meets stated objectives)</p>	<ul style="list-style-type: none"> <li>- Manipulatives present.</li> <li>- Mirrors for student use.</li> <li>- Sand trays for writing.</li> <li>-</li> </ul>
<p><b>Cultural Relevancy</b></p>	<ul style="list-style-type: none"> <li>- Spanish translation used for letter recognition activity.</li> </ul>



(evidence of connection to special populations)	
<b>Strengths observed</b>	- Clear and repeated instructions
<b>Suggestions for improvement</b>	
<b>Overall impression of teaching effectiveness as it relates to literacy</b>	- Repetition and relevant to student's lives
<b>Student observations</b>	- All students were engaged and participatory - Students enjoyed small groups and use of manipulatives (small toys, mirrors, sand trays).

*Appendix J: Observation Notes*

Instructor: Tier 2 Reading Intervention

Class/School: Theuerkauf

Date and Time: November 27, 2023; 11:00 am-11:30 am

<b>Observed Section</b>	<b>Description/Comments</b>
<b>Classroom Environment</b> (classroom setup as it relates to the literacy experience; any other physical aspects)	- Clean, well-organized - Tactile and technology resources displayed in room
<b>Instruction</b> (evidence of early literacy instruction)	- Phonics-based - Music-based - Small group - Tactile/kinesthetic use of sand and manipulatives - Small group (no more than 5 students)

	<ul style="list-style-type: none"> <li>- Use of technology (tablets. etc.)</li> <li>- Putting sounds together to build understanding.</li> <li>- Fast-paced, stackable lesson. Small nuggets of learning build upon itself.</li> <li>- Individualized instruction.</li> </ul>
<p><b>Teacher Engagement</b> (holds interest of students; is respectful, fair, and impartial; provides feedback, encourages participation; interacts with students, shows enthusiasm)</p>	<ul style="list-style-type: none"> <li>- Firm, but respectful.</li> <li>- Structured.</li> <li>- Well-managed.</li> </ul>
<p><b>Teaching Methods</b> (uses relevant teaching methods, aids, materials, techniques, and technology; includes variety, balance, imagination, group involvement; uses examples that are simple, clear, precise, and appropriate; stays focused on and meets stated objectives)</p>	<ul style="list-style-type: none"> <li>- Lesson moves quickly from phonemic sounds to word creation to sight word recognition.</li> <li>- Uses a number of strategies that capture attention of students. Examples include: call and response, music, small toys, technology, sand.</li> </ul>
<p><b>Cultural Relevancy</b> (evidence of connection to special populations)</p>	<ul style="list-style-type: none"> <li>- Students recognize small toys in the first language, Spanish.</li> <li>- For example, a “toy” piece of bacon is recognized as “carne,” Spanish for “meat.”</li> <li>- Teacher pivots to use of “carne” in a mini-lesson designed to build phonemic sound recognition, then letter recognition, then vocabulary word recognition.</li> </ul>
<p><b>Strengths observed</b></p>	<ul style="list-style-type: none"> <li>- Clear and repeated instructions</li> </ul>

<b>Suggestions for improvement</b>	
<b>Overall impression of teaching effectiveness as it relates to literacy</b>	<ul style="list-style-type: none"> <li>- Repetition and relevant to student's lives</li> <li>- Strong adherence to Orton Gillingham principles and teaching methods</li> </ul>
<b>Student observations</b>	<ul style="list-style-type: none"> <li>- All students were engaged and participatory</li> <li>- Students had FUN!</li> </ul>

*Appendix K: Interview Protocol*



# VANDERBILT UNIVERSITY

## **Introduction**

*Thank you for joining us today. We are here to discuss how we can address the gaps in literacy that students face due to the COVID-19 slide and the longstanding inequities in Mountain View, California. Your insights and expertise are valuable in this discussion.*

*To start, tell me about your role in the MVWSD (if conducting multiple interviews)*

- *How long have you been in this role? In the district?*

## **Identifying Gaps and Challenges**

- *What factors do you believe contribute to these gaps? Have you noticed any patterns or disparities related to student demographics, socioeconomic status, or other factors?*

**Understanding the Covid Slide and Inequities**

- a. *What are the specific challenges students face due to the pandemic and resulting inequities?*
- C. *Could you share some examples of how long-standing inequities have impacted literacy outcomes in Mountain View?*

**Strategies for Addressing Gaps and Inequities**

- a. *What approaches or strategies are currently being used to address literacy gaps and inequities?*
- b. *Can you share any successful interventions or programs that improved literacy outcomes?*

**Building Structures and Supports**

- a. *How important are establishing structures and supports to address literacy gaps effectively?*
- b. *Are there any plans or initiatives to strengthen these structures within the district?*

**Collaboration and Community Engagement**

- a. *What role does collaboration and community engagement play in addressing literacy gaps and inequities?*
- b. *Can you provide examples of successful collaborations that positively impacted literacy outcomes?*

**Assessment and Progress Monitoring**

- a. *How does the district assess and monitor students' literacy progress?*
- b. *How is this information used to inform instructional decisions and interventions?*

**Professional Development and Support for Teachers**

- *What professional development opportunities are provided to teachers to support their literacy instruction?*
- *Are there any specific training or resources available to help teachers address gaps and promote equity in literacy education?*

**Culturally Relevant Teaching Practices**

- a. *How does the district define culturally relevant teaching practices in literacy instruction?*

*b. In what ways can culturally relevant teaching practices help address literacy gaps and promote equity?*

**Incorporating Culturally Relevant Texts**

*a. How does the district ensure culturally relevant texts are integrated into the literacy curriculum?*

*b. What criteria are used when selecting culturally relevant texts for classroom use?*

**Creating a Culturally Inclusive Classroom Environment**

*a. How does the district foster a culturally inclusive classroom environment that celebrates students' diverse backgrounds?*

*b. What strategies promote student voice and agency within the literacy curriculum?*

**Addressing Stereotypes and Biases in Literacy Instruction**

*a. How does the district address stereotypes and biases in literacy materials or instructional practices?*

*b. Can you share any examples of how addressing stereotypes and biases positively influenced literacy outcomes?*

**Engaging Families and Communities in Culturally Relevant Practices**

*a. How does the district involve families and communities in supporting culturally relevant teaching practices in literacy instruction?*

*b. Have you observed any positive impacts on student motivation and literacy skills through family and community engagement?*

**Conclusion**

*Is there anything else you would like to add or any additional insights you would like to share regarding literacy improvement in our district?*

*Appendix L: Evaluation Matrix*

Questions	Indicators	Data Source	Collection	Analysis
-----------	------------	-------------	------------	----------

<p>To what extent is the science of reading curriculum implemented with fidelity? Additionally, what is the role of parents in reading instruction?</p>	<ul style="list-style-type: none"> <li>• All teachers receive comprehensive training in the science of reading curriculum.</li> <li>• Teachers demonstrate a deep understanding of the core components of the curriculum (phonemic awareness, phonics, fluency, vocabulary, and comprehension).</li> <li>• Lesson plans explicitly target all components of the curriculum.</li> <li>• Instructional materials (decodable readers, manipulatives, etc.) align with the curriculum.</li> <li>• Data shows consistent progress in students' reading skills.</li> </ul>	<p>Existing Test Scores and Achievement Scores on Reading</p> <p>Current literacy curriculum</p> <p>Teacher curriculum implementation (including time spent)</p> <p>Student curriculum engagement</p> <p>Achievement/grades of students who are newcomers versus students who have been in MVWSD</p> <p>Observations</p>	<p>Data Request from MVWSD &amp; review</p> <p>Perception Surveys to teachers, parents</p> <p>1:1 Interviews with students receiving programs and not, teachers implementing and not, literacy coaches, school leaders</p> <p>Class/School observation data of all classes, data meetings, literacy coach meetings</p>	<p>Qualtrics-likert scale.</p> <p>Uncover trends in responses</p>
<p>To what extent are literacy practices</p>	<p>Indications of culturally relevant practices:</p> <ul style="list-style-type: none"> <li>• The curriculum and materials reflect the</li> </ul>	<p>Demographic data</p> <p>Student</p>	<p>Data Collection</p> <p>Observations</p>	

culturally relevant?	<p>diverse backgrounds and experiences of students.</p> <ul style="list-style-type: none"> <li>● Instruction incorporates texts and activities that celebrate students' cultures and languages.</li> <li>● Teachers demonstrate sensitivity to the cultural contexts in which students develop literacy skills.</li> <li>● Students see themselves and their communities represented in the learning environment.</li> </ul> <p>Indications of needing improvement:</p> <ul style="list-style-type: none"> <li>○ Curriculum and materials lack diversity or fail to represent the student population.</li> <li>○ Instruction focuses primarily on dominant culture, neglecting the value of students' backgrounds.</li> <li>○ Teachers</li> </ul>	<p>Achievement Data</p> <p>PD Opportunities</p>	Interviews	
----------------------	---	---	------------	--

	<p>struggle to connect literacy learning to students' cultural experiences.</p> <ul style="list-style-type: none"> <li>○ Students feel their cultures and languages are not valued in the classroom.</li> </ul>			
--	---	--	--	--

*Appendix M: Teacher Survey*

Dear Educators,

Welcome to our literacy instruction survey! Your valuable input is essential in helping us understand and improve the effectiveness of literacy education in Mountain View, California.

Please rate each statement below on a scale of 1 to 5, indicating your level of agreement:

1 - Strongly Disagree 2 - Disagree 3 - Neutral 4 - Agree 5 - Strongly Agree

Thank you for your participation and dedication to our student's success.

**1. Classroom Environment and Instructional Strategies:**

- I create a print-rich classroom environment.
- I provide opportunities for students to engage in shared reading and writing.
- I use a variety of instructional strategies to teach literacy skills.
- I provide explicit instruction in phonemic awareness and phonics.
- I assess students' literacy progress on a regular basis.
- I provide individualized instruction to students who need it.

**2. Culturally Responsive Instruction:**



- I collaborate with parents and guardians to support students' literacy learning.
- I am confident in my ability to teach literacy in a culturally responsive way.
- I use culturally relevant literature in my classroom.
- I incorporate students' cultures and experiences into my literacy instruction.
- I encourage students to use their own languages and dialects in their writing.
- I create a classroom environment where all students feel welcome and valued.

### **3. Strategic Planning for Reading in Content Areas:**

- Our school has a strategic plan for teaching reading in the content area.
- My team has and uses a strategic plan for teaching reading in the content area.
- I have and use a strategic plan for teaching reading in the content area.

### **4. Differentiated Instruction for Readers:**

- I feel confident about teaching the average reader in my classroom.
- I feel confident about teaching the struggling reader in my classroom.
- I feel confident about teaching the accelerated reader in my classroom.
- I have a repertoire of before, during, and after literacy strategies that I use in my content area.

### **5. Reading Materials and Library Support:**

- I provide regularly scheduled time for Sustained Silent Reading in my classroom.
- A library (classroom or school) is easily accessible and available for students.
- I code books in my classroom (by reading difficulty) for students.
- I provide books of varied difficulty for students to use in their assignments.
- My students know how to choose books at appropriate levels for their individual reading.

### **6. Vocabulary Instruction:**

- Our school has a strategic plan for teaching and reinforcing vocabulary in content areas.
- My team has and uses a strategic plan for teaching and reinforcing vocabulary in content areas.
- I teach the vocabulary of my content area in a meaningful context.

### **7. Data-Informed Instruction and Feedback:**

- I use informal (formative) data to understand student literacy instructional needs better.
- I know the reading capability of every student I teach.

- As a faculty, we use formal (summative) data for discussions about curriculum and instruction.

### **8. Professional Development and Support:**

- Literacy across content areas is well-supported by teachers here.
- We have opportunities for peer conversation to improve our literacy instruction continually.
- We use peer observation to provide teachers with feedback about the effectiveness of literacy strategies.
- Literacy walk-throughs give teachers feedback about literacy instruction in our classes.
- Our principal targets specific literacy skills instruction in his/her faculty classroom visits and follow-up conversations and evaluations.
- Literacy strategies are specifically taught on professional development days.

### **9. Intervention and Support Plans:**

- Visual supports (on classroom walls) are available to students relating to literacy.
- We have a plan for intervention for all students who are not at grade level.
- We have a plan for support for students who exceed the grade level in ability.

### **10. Confidence and Satisfaction Levels in Addressing Literacy Gaps:**

- How confident do you feel in addressing the literacy gaps and supporting emerging readers in Mountain View, California?
- How satisfied are you with the level of support and professional development provided to teachers in Mountain View, California, to address literacy gaps?

### *Appendix F: Parent Survey*

Dear Parents and Guardians,

We value your perspective and involvement in our student's education. As part of our commitment to enhancing literacy instruction and support, we kindly request your participation in this brief survey. Your insights will help us better understand how we can improve our literacy programs and ensure your student's success.

Please take a few minutes to answer the following questions. Your responses will remain anonymous, and the aggregated data will be used for analysis only. There are a total of 11 questions.

1. How confident do you feel about your child's literacy instruction at school?

- 1 (Not at all confident)
- 2 (Slightly confident)
- 3 (Neutral)
- 4 (Confident)
- 5 (Very confident)

2. Are you aware of any strategies or activities used in the classroom to promote reading and writing skills? Y/N

3. How familiar are you with the literacy instruction activities and approaches that take place in your child's classroom?

- 1 Not at all familiar
- 2 Slightly familiar
- 3 Somewhat familiar
- 4 Moderately familiar
- 5 Very familiar

4. Do you feel the school effectively incorporates your child's cultural background and experiences into literacy instruction?

- 1 (Not effective)
- 2 (Slightly effective)
- 3 (Neutral)
- 4 (Effective)
- 5 (Highly effective)

5. How frequently do you and your child engage in various at-home literacy practices, including reading, writing, sound exploration, and wordplay activities together??

- 1 (Rarely or never)
- 2 (Once in a while)
- 3 (A few times a week)
- 4 (Almost daily)
- 5 (Every day)

6. Are you familiar with the school's strategies for supporting struggling readers? and those who excel in literacy skills?

- 1 (Not familiar at all)
- 2 (Slightly familiar)
- 3 (Somewhat familiar)
- 4 (Quite familiar)
- 5 (Very familiar)

7. Are you familiar with the school's strategies for those who excel in literacy skills?

- 1 (Not familiar at all)
- 2 (Slightly familiar)
- 3 (Somewhat familiar)
- 4 (Quite familiar)
- 5 (Very familiar)

8. Do you feel adequately informed about your child's progress in literacy? If not, what additional information would you like to receive? Y/N

9. How satisfied are you with the level of communication between the school and parents regarding literacy instruction?

- 1 (Very dissatisfied)
- 2 (Dissatisfied)
- 3 (Neutral)
- 4 (Satisfied)
- 5 (Very satisfied)

10. Would you like to see more opportunities for parents to be involved in literacy-related activities or workshops at the school? Y/N

11. Overall, how would you rate the importance of literacy instruction for your child's academic success?

- 1 (Not important)
- 2 (Slightly important)

- 3 (Moderately important)
- 4 (Important)
- 5 (Very important)

Thank you for your valuable time and contribution to our efforts to provide our students with the best possible literacy education. Your feedback is valuable to us.

*Appendix N: Interview Coding Matrix*

Constructs	Themes	Key Quotes
<b>Early Literacy in the School District</b>	Viewpoints of former literacy curriculum	<b>S1:</b> So this early literacy initiative is fairly new in our school district, like the system year one, and it's in response to looking at data that shows that our students are not meeting proficiency standards, especially like as they go into the upper grades. They don't do well at certain school sites...And so looking at the data and thinking about root causes, like early literacy is definitely a place to start to support kids and so that is what our aim is. In the past, our district has been focused on lots of different initiatives. I think in the last few years, it's really been focused on supporting English language learners. And as we think about that, part of supporting English language learners is also supporting literacy development.
	Origin of new literacy curriculum adoption	<b>S2:</b> I attribute that to the superintendent and he challenged us a couple of years ago, to be clear about students needs with dyslexia. And starting that conversation and helping to educate the board really came this kind of like, bigger idea of, it's not just good for kids who have dyslexia, this is good for all kids. And this really came from him and his desire to do what's right for all kids and also acknowledge what science and research says, rather than what we think just feels right.

	Student selection	<p><b>S2:</b> We use iReady. Obviously, we also use the state test as part of it, and then we universally screened students with the iReady dyslexia screener as well. This year. We are screening two times. Last year we screened once...We're trying to get ahead of the state law. So getting everybody acclimated to that now rather than later.</p>
	Perceptions of OG curriculum implementation	<p><b>S6:</b> I think that OG in general, or scientific reading allows them to set that strong foundation for reading. And then it allows them to just progress and build off of it and apply it into their next grades.</p> <p><b>S1:</b> So our pullout intervention really couldn't interfere with core instruction. So when we made a master schedule over the summer, we made it so each k, one, and two had an intervention block. So even the kids that we weren't seeing, were going to be seen with their classroom teacher and it would be like a second chance teaching for everybody.</p> <p><b>S1:</b> Another thing that we wanted to happen this year, was to really support our school leadership to understand shifts in literacy instruction so we are all in alignment across the school district and how we approach literacy.</p> <p><b>S7:</b> So what I find about the approach that we're doing this year with the Orton Gillingham is that it does have that kinesthetic that tactile component to it and there is a lot of repetition, which I think it's one of the most important things ... So I feel like the kinesthetic piece is just really crucial for the retention,</p>

		right? It just gives them that extra layer. And you know, they're still going to need a lot of repetition.
	Perceptions of curriculum impact on students	<p><b>S8:</b> There are students who are not quite reading at grade level, I will say a lot of them might not be at grade level yet...But with that, I've seen a lot of growth in just how many letters sounds kids know, but also kids who are just struggling to remember the ordering when they're segmenting the words...because they weren't quite recognizing the the ordering. Now they're actually starting to go letter by letter sound by sound, and then their phonological awareness has also increased as well.</p> <p><b>S7:</b> But the other thing that I think is key about the program is that it builds upon itself in a way that they get that confidence. And often it's a lot of that where they're, you know, in class, they're farther behind than maybe some other peers so they are feeling so lost... So I think this gives them the opportunity to be confident, and oh, I can do this. And once they get that like oh I can do this, and I'm maybe not where my peers are. But I have this that is the key building block for them getting motivated.</p> <p><b>S6:</b> I'm also noticing that kids who weren't able to segment and during my initial assessment at the beginning of the school year, they're now able to break a word...they can actually hear the individual sounds. My second graders are really good at listening to the beginning sound...So their phonological awareness, and just being able to isolate and manipulate the sounds have increased a lot.</p>
	Observed gaps	<b>S5:</b> Sometimes teachers have to make a choice like, how long

	and issues	<p>they can spend on the literacy block. And so with best intentions, sometimes folks focus tons of time on word recognition, which is great, but at the expense of kind of the building background part.</p> <p><b>S13:</b> We have shortened the routines to fit our blocks and they are not getting all the repetition they should be. We've had to cut out some components of the program a bit. Yeah, we've cut out some comprehension stuff, more the writing piece that are key that we are not doing, so we are strictly doing pretty much phonemic awareness letter sounds blending and then dictation activities that go with that, and decodable readers.</p> <p><b>S5:</b>They are missing so much core instruction that I'm just not able to address right, because they see them four days a week for 45 minutes after transition time. And it's it's still not enough. It's working well but I think it truly is a whole group instruction type.</p> <p><b>S12:</b> There's other classrooms where they're just doing following the district curriculum, and so what I'm teaching is a little bit like offset from what they're teaching, but it's shouldn't be too different.</p> <p><b>S11:</b> Where the teacher was doing the same program, as I was doing, they're getting double exposure. So they're really be able to pick up like the words way faster. So those kids, they were at</p>
--	------------	---



		<p>the single was like kindergarteners, but now they're like progressing at the same level as maybe some of their second grade like, like students. Yeah, so not quite like grade level yet, but they're starting to level out a little bit more.</p> <p><b>S5:</b> Because as a gen ed teacher, you have so much going on. You have reading, you have math, behaviors, you have lunch, you have everything...But for me, I'm just focused on like the sequence of our phonics and phonological awareness.</p> <p><b>S8:</b> The biggest gap would probably be to do it with fidelity, at this time, because of our schedules. And I was trying to figure out how many kids we should have and how often would you see them? I do see the kids for less time, which means I don't get to go through certain routines.</p> <p><b>S1:</b> We're going to move our curriculum to a structured literacy approach. So that gap exists because right now the intervention team is already following a structured literacy instructional curriculum. So that means our curriculum is behind where our intervention is, right. So we're working on addressing that with a structured literacy approach next school year, which will shore up those gaps. But that means in the meantime, we have some students who we're relying heavily on tier two interventions, because the curriculum is not necessarily meeting all students needs right now.</p>
	Growth	<p><b>S3:</b> There's the district assessments. And then then there are mid cycle assessments. So in the middle of the trimester, we'll</p>

	analysis	do a formal assessment. I say like in quotations formal because it's not directly from the district. And it's something we chose as a team that we're going to use this to decide whether we're going to exit or enter kids. So we do that the middle of the cycle, and then we'll do one whereas the end to decide, and then we'll have created goals at the beginning of each cycle to decide whether if they're meeting goals.
<b>Parent Engagement</b>	Outreach by district	<p><b>S1:</b> ... We started talking to the board about reading instruction, reading dyslexia, science of reading, last school year. And then you know, the community has been right there with us holding us to the fire making sure that we dot all of our i's and cross our T's which is good. And so along with that comes a more thought out process, you know, better communication to the community.</p> <p><b>S1:</b> We also have community members on the curriculum adoption committee so that they can be a part of this with us... But the thing is, I will say there's there's a gap though, because the majority of the people who are joining the board meetings are affluent families and so, Director is working on outreach to community members who may not show up in those kinds of forums, literacy nights at schools, to make sure that we get the voices from all participants.</p>
	Outreach by school	<b>S2:</b> At one of the four schools and so we actually invited all of the families of the first and second grade students to a once a month family reading club. What happens is we do a gathering, right? So like, you know, be in community with other families and kids and eat some pizza and have a lot of fun. And then so after that, then we do like a 15 to 20 minute lesson for the

		<p>families more about how to support literacy, right? And then we practice that with the kids and their parents practice together. And at the end, the kids get a pack of decodable readers that have like a QR code that you scan that has in Spanish and English.</p> <p><b>S5:</b> I haven't gotten much parent involvement in school...But with the rollout this year, we're piloting at one of the schools not my school, a parent night, once a month. They come, they get books not necessarily OG books, it's some something else... having some food, and then strategies for parents to use at home and games.</p>
	Outreach by teachers	<p><b>S9:</b> I actually don't communicate with the parents very often. I could, it's just that they never reach out to me. But we do have a monthly family night. And that's when we get to teach them like the reading games, like just a bit of science of reading. And it's some things practical things you can do at home. And so that's the time I get to talk to parents a little bit.</p>
	Perceived gaps in outreach	<p><b>S10:</b> I think we're in a different spot where we don't have a lot of interactions with parents. So that feels very different in this role, as opposed to being a gen ed teacher. We reached out to families to introduce ourselves and let them know that we're working with their child and things like that. But we don't have a lot of communication with parents and our school site doesn't have family night. I'm not sure what family reading nights you're talking about. I know there's ones that they offer. Our school site in particular doesn't have those.</p>
<b>Teacher</b>	Teacher	<p><b>S1:</b> And so to make that successful, we want to make sure that</p>

<p><b>Engagement</b></p>	<p>participation in curriculum rollout</p>	<p>teachers understand the shift before using new curricula because you can get new curriculum and still teach an old ways, right? And then that undermines the whole thing. So we want people to understand the why this year, so that next year is successful.</p> <p><b>S4:</b> I don't know if we use the word buy in so much because I think part of it is like a lot of the work we do here is around like professional development also like behavior shaping, right? ... Whether you buy in at the beginning or not is like I can't make you buy it but we can support with development and then the reinforcement of like, okay, this is working.</p> <p><b>S8:</b> We meet with them. From time to time. We have a set day where we can join their collaborations once a month, but unfortunately at the school they're also accepting that I really just like, pop in.</p>
	<p>Teacher's views of curriculum change</p>	<p><b>S3:</b> Teachers so far, they've been really excited to do the learning. They haven't been asked to do yet so much of the changing, and that's like in the spring, so I think when the actual work happens of leading the PD for teachers it will be different. With the four school sites for the early literacy, we have started to do some professional development directly with the teachers. And that was the first time some of those principals actually experienced that cognitive dissonance for some teachers.</p> <p><b>S2:</b> And they've got to be good at it. They've got to want to be good at it. Because we presented some to the teachers that</p>

		<p>were receiving services from us, and there was one or two little holdouts that were poking, "show me the science." Well, we have brain based research now with the scans, the brain scan, so there is science now, it's not just another approach, right? But how can you want to or not want to learn?</p> <p><b>S10:</b> There's some teachers that are either very ready for it or not quite because it is a shift to how we teach. And it's an addition, it's not quite an additional, but with a curriculum already there. And then another program, you have to kind of balance which pacing do I follow. But I think that I assume that teachers will be very grateful, and they'll see the fruit of it.</p> <p><b>S5:</b> So I started teaching three years ago, and one of the teachers is also a reading intervention teacher. She was my coach, when I first started, and she was already well into Orton Gillingham and the science of reading. So when I was learning, just like the curriculum, like what should I do, she just showed me Orton Gillingham. And she introduced it to me. And it just made so much sense to me. So I think it's lucky because science of reading is like actually taking off right now. And I didn't have to change my mindset... It's the foundational skills. And so I'm very thankful for her. But yeah, I learned very early on, and then I saw that I can definitely see the value.</p> <p><b>S4:</b> I believe and say there will probably be continued criticism, but I think at the end of the day, we we have a team of people who will show up for kids and so I don't anticipate pushback.</p>
--	--	---

		<p>And I think the good thing is we regularly get feedback from the principals based on the feedback they get from their staff. And so we modify pieces and adapt pieces, and I think that that helps with buy in. So I definitely don't anticipate pushback, But just constructive feedback and criticism which I'm okay.</p>
	<p>School leadership role in curriculum rollout</p>	<p><b>S1:</b> The first hurdle is for leaders to understand where their sites are at so they can be supported for their staff and then the next thing is like, okay, educate or provide professional development learning for teachers. So we're on the same page, and then shift over.</p> <p><b>S3:</b> Right now, the principals are really responsible for the rollout, the communication, which then ultimately affects the perception of these things at the site level. So we've been working with the principals heavily on trying to get some alignment and give them the support that they need. And so right now, we do see some differences at the site level.</p> <p><b>S2:</b> I think a lot of things it just takes time to acclimate to. I think on our end if there is the perception that some of these things are roadblocks, we have to make sure that we give the people the fruits of their labor, tell them how this really benefits them and benefits kids first and foremost, so that people are more bought in and stay the course. And so that means that we at the district office, have to do a good job with working with the principals so that everybody's aligned and doing it the same way and not making thresholds higher at one side versus another. And making sure that we have consistent ways of supporting kids so that teachers and staff see the benefits and the</p>

		<p>outcomes for kids.</p> <p><b>S4:</b> We have some success at some sites more than others. The principals are really responsible for the rollout, the communication, which then ultimately affects the perception of these things at the site level. So we've been working with the principals heavily on trying to get some alignment and give them the support that they need. And so right now, we do see some differences at the site level.</p> <p><b>S3:</b> There are gaps that need to be addressed in the general curriculum for the balanced approach to reading, but moving to a structured literacy approach in general education classrooms will be difficult. General education classes are behind the intervention team, and are not meeting the needs of all learners, so some are depending on Tier 2 intervention instruction.</p>
<p><b>Culturally Relevant Literacy Engagement</b></p>	<p>Multicultural and multilingual examples</p>	<p><b>S5:</b> First couple of weeks of kindergarten are looking at texts that are predictable readers for kids, and so they're taught words in Spanish. Just the whole word just to recognize the whole word. And to repeat the words as they read. And that's it.</p> <p><b>S6:</b> And so when we talk about being culturally responsive, it's really with the language comprehension part. But we don't tackle that in our intervention part.</p> <p><b>S7:</b> I'll bring out an item. And they'll say, like, Oh, I do that in Spanish, but I kind of think what is it in English, so we're able to</p>

		<p>like, put, like, connect like our cultures together. ... I guess it's not totally like the most like, culturally like reaching activities that we're doing. But there are chances that we get to talk about each other cultures.</p> <p><b>S8:</b> I think it's always nice to be able to take in the background knowledge. So what they do now and relate it to something that's new, and that actually makes the learning more meaningful to them.</p>
	Perceived gaps	<p><b>S9:</b> I think some of the gap comes from language comprehension. So we have students at all of our school sites who come to school with different experiences before coming into school. I think that at some of our more affluent schools there are definitely kids who still need systematic phonics instruction. However, they have a lot of language comprehension or a lot of background knowledge that matches like traditional school knowledge. So they've been able to kind of fake it through the early grades, especially for some of those sites that are more affluent, they rely more on like a workshop model or guided reading. And so kids with a lot of knowledge in that way, can get through these early books because they can read the picture.</p> <p><b>S10:</b> And so I think that lack of structured literacy early for all kids is an opportunity or a gap, right that that appears later in all of our schools. I think that in some of our less affluent schools, there's that there's also sometimes the oral language development is not the same that matches kind of what school is like, right, so the topics that are discussed at home are not the</p>



		<p>same topics discussed, like in a traditional school setting. So some of those experiences don't match the texts. And so if we don't explicitly teach some things, there's a lot of assumptions.</p> <p><b>S13:</b> But then you get to texts that you need more background for, and because there's less science at some of our less affluent schools, or there's less field trips or less things like that, than that base knowledge that some students have at the more affluent schools then it's unequalled when you get to like the grades in which you need to draw on that knowledge.</p> <p><b>S3:</b> Our district is pretty diverse, like in terms of economics, and things like that. And so Castro is our only title one school in this district. So Castro has the majority of students whose families live below the poverty level. That has our highest number of students who are experiencing homelessness. It has our largest number of English language learners.</p>
--	--	---

*Appendix O: Interview Description*

Position	Staff Number
Director of literacy	S1
Multi-tiered student support coordinator	S2
Instructional coach	S3
Instructional coach	S4
General education teacher	S5

Literacy intervention teacher	S6
Literacy intervention teacher	S7
Literacy intervention teacher	S8
Literacy intervention teacher	S9
Literacy intervention teacher	S10
Literacy intervention teacher	S11
Literacy intervention teacher	S12
Literacy intervention teacher	S13