Meeting the Moment:
Lessons on Instructional Materials for Multilingual Learners in California Middle Grades

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Executive Summary

On nearly every academic success metric, California’s multilingual learners (MLLs) lag far behind their English-only peers. Although California sought to remedy this situation with sweeping policy changes over the last ten years, including the adoptions of English Language Arts/English Language Development standards in 2012, a tiered list of standards-aligned curricula in 2015, and a first-of-its-kind comprehensive framework for aligning and bolstering instruction for MLLs, achievement gaps between these students and their English-only peers have persisted. Early analyses document that the COVID-19 pandemic’s onset and subsequent transitions between distance and in-person learning have widened these gaps. Research shows that the quality of instructional materials, including the integration of language supports and the relevance of content to students’ lives, influence this disparity, but few investigations have so far explored educators’ uses of, challenges with, and benefits from instructional materials during this period. Such learnings can inform curriculum publishers’ future iteration of materials and state policymakers’ recommended lists of curricula to strengthen support for these prioritized students.

Accordingly, we answer in this report:

• How did middle-grades teachers and education leaders utilize instructional materials throughout shifting learning contexts to meet MLLs’ needs?
• Based on conclusions to the previous question, how can publishers of instructional materials and statewide policymakers better support middle-grades educators to ensure MLLs’ access to high-quality instructional materials?

To answer these questions, we leverage qualitative data collected from semistructured interviews and focus groups with thirty-nine middle-grades English language arts (ELA), English language development (ELD), and mathematics teachers and key site and central office leaders in three public school networks. We find that:

• Whether used during distance or in-person learning, the sequencing and scope of comprehensive instructional materials can paradoxically exacerbate constraints on teachers’ time. Even though many educators cherish their materials, when compounded with compacted site schedules their pacing can especially overwhelm ELD teachers’ planning and instruction.
• Without robust training on using instructional materials to engage MLLs in independent learning, teachers often personally translate – and long for accurate translations of – core and supplemental instructional materials that can serve students at all levels of English language proficiency.
• Both ELA and math teachers highlight MLLs’ pressing challenges with academic language. Combined practices and techniques like sentence frames and other scaffolds can especially, but
not exclusively, support MLLs’ literacy and English language development.

- Teachers familiarized themselves and their students with beneficial products during distance learning. Upon returning to the classroom, providers limited their access to some of it.
- Educators want instructional materials that are culturally relevant and age- and grade-appropriate for their MLLs.

Information from on-the-ground practitioners gains other educators, publishers of instructional materials, state policymakers, and other relevant stakeholders a better understanding of how the implementation of instructional materials for MLLs looked during this tumultuous time. Our conversations helped uncover supports and concerns using instructional materials previously unaddressed in early pandemic literature.

Based on these findings, we recommend several action items for publishers and policymakers to consider for future materials and policies intended to support middle-grades MLLs.

We encourage publishers of instructional materials to:

- Include tips about how to scope and sequence the work for diverse schooling schedules;
- Preload materials with high-quality translations and translanguaging opportunities in students’ non-English languages;
- Incorporate resources for English language vocabulary development;
- Sustain students’ and teachers’ access to virtual supports and products, and regularly update the content they access through it;
- Deliver ongoing, role-differentiated training that encourages educators to use language development resources and other techniques that reach MLLs at all levels of English proficiency; and
- Center cultural relevance, age and grade appropriateness, and language development.

Related, state policymakers must:

- Set clear, high expectations for rigorous integrated ELD instruction;
- Urgently adopt revised curriculum frameworks and subsequent state-adopted lists of instructional materials that include language supports and guidance for culturally responsive and relevant teaching;
- Regularly update the frameworks and lists in the spirit of statutorily-recommended timelines; and
- Make available MLL-focused review criteria to inform instructional materials’ adoption processes.
# Table of Contents

Executive Summary ................................................................. 2

Introduction ........................................................................ 6

Background ........................................................................... 9
  California’s Multilingual Learner Policy Context ................. 9
  Instructional Materials to Teach Multilingual Learners ....... 10

Data Collection & Methods ...................................................... 11

Findings .................................................................................. 15
  Whether used during distance or in-person learning, the scope and sequence of
  comprehensive instructional materials can paradoxically exacerbate constraints on
  teachers’ time. Even though many educators cherish their materials, when compounded
  with compacted site schedules their pacing can especially overwhelm ELD teachers’
  planning and instruction.

  Without robust training on using instructional materials to engage MLLs in independent
  learning, teachers often personally translate – and long for accurate translations of –
  core and supplemental instructional materials that can serve students at all levels of
  English language proficiency.

  Both ELA and math teachers highlighted MLLs’ pressing challenges with academic
  language. Combined practices and techniques like sentence frames and other scaffolds
  can especially, but not exclusively, support MLLs’ literacy and English language
  development.

  Teachers familiarized themselves and their students with beneficial products during
  distance learning. Upon returning to the classroom, providers limited their access to
  some of it.

  Educators want instructional materials that are culturally relevant and age- and grade-
  appropriate for their MLLs.

Discussion ............................................................................... 24

Recommendations ................................................................... 25
  Publishers of Instructional Materials ................................. 26
  State Policymakers ......................................................... 27
<table>
<thead>
<tr>
<th>Appendix A: Cited Instructional Materials</th>
<th>28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Instructional Materials</td>
<td>278</td>
</tr>
<tr>
<td>Supplemental Instructional Materials</td>
<td>28</td>
</tr>
<tr>
<td>Appendix B: Teacher Protocol</td>
<td>29</td>
</tr>
<tr>
<td>Appendix C: Site/Network Leader Protocol</td>
<td>31</td>
</tr>
<tr>
<td>Appendix D: High-Quality Assignments for English Learners Rubric: English Language Arts</td>
<td>33</td>
</tr>
<tr>
<td>Appendix E: High-Quality Assignments for English Learners Rubric: Mathematics</td>
<td>40</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>46</td>
</tr>
<tr>
<td>About the Authors</td>
<td>47</td>
</tr>
<tr>
<td>About Pivot Learning</td>
<td>47</td>
</tr>
<tr>
<td>References</td>
<td>48</td>
</tr>
</tbody>
</table>
Introduction

One quarter of the nation’s more than five million multilingual learners\(^1\) (hereafter, MLLs) live in California (Bialik et al., 2018). On nearly every academic success metric, the state’s MLLs lag far behind native English speakers (California Department of Education, n.d.-c). Compared to their English-only peers, MLLs on average met California’s English language arts (ELA) and mathematics standards at a fourth and third their rate, respectively (Santibañez & Umansky, 2018). Analyses of the 2020-21 and 2021-22 summative assessments reveal the COVID-19 pandemic has greatly exacerbated these students’ collective achievement (Fensterwald & Willis, 2021; Pier et al., 2021) and their progress in achieving proficiency in English (Villegas & Garcia, 2022). What explains these patterns?

Social scientists have long identified processes that shape MLLs’ learning trajectories, including (in)access to family socioeconomic resources (Crosnoe & Turley, 2011), local state’s reclassification criteria for English Fluent Proficient designation (Cimpian et al., 2017; Kim & Herman, 2009), and the financial investments (or lack thereof) in their schools (Sugarman, 2021). More recently, a burgeoning literature reveals how the quality of students’ education is shaped by their educators’ instructional materials. For instance, instructional materials reveal educators’ expectations for, and often ceiling to, students’ academic achievement inside classrooms (Brookins Santelises & Dabrowski, 2015; TNTP, 2018). As levers for equity, instructional materials can signal teachers’ preparedness to modify content and lessons for diverse audiences (Grant, 1994; Grossman & Thompson, 2008), tell us whether schools are offering the scaffolds and supports that MLLs need to access the content (Schall-Leckrone, 2018), and reveal whether our highest-need learners are receiving equitable opportunities to learn (Callahan, 2005; TNTP, 2018).

Targeted spending on instructional materials can also be an efficacious use of education funding. At a fraction of the cost, school districts’ investments in higher-quality curriculum can substantially improve their program offerings (Boser et al., 2015; Koedel & Polikoff, 2017). Adopting and implementing higher-quality instructional materials can rival the impacts of long-known factors that shape student outcomes like increasing teacher effectiveness (Chingos & Whitehurst, 2012) and reducing class sizes (Boser et al., 2015).

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\(^1\) Many organizations use similar terminology to encompass different student groups. For example, the California Department of Education defines “multilingual learners” as “all students who are engaged in developing two or more languages,” including traditional English learners alongside English-only students who are learning a second language (2020:34). Pivot Learning has opted for “multilingual learners” to emphasize the unique and long-term assets that those students who learn English after learning another or multiple languages bring with them to their education.
Despite these sizable financial and achievement impacts, no educational institution collects systematic data on the adoption and use of instructional materials. What nationally representative research exists paints a lackluster picture. In one survey, analysts found that teachers in middle school, more than in elementary and high school, reported using high-quality instructional materials in ELA and math (Kaufman et al., 2020). Even then, only one in four and one in three of these teachers reported using such materials, respectively. Analyses of student assignments are even more bleak: more often than not, assignments are below grade level, especially ones given to historically marginalized students (Brookins Santelises & Dabrowski, 2015; Dysarz, 2018; TNTP, 2018, 2022). Thus, high-quality instructional materials matter a great deal to shrink the opportunity gap and promote all students’ academic success.

California’s groundbreaking approach to MLL instruction—including first-of-its-kind English language development (ELD) standards, an aligned list of recommended curricula for districts to adopt, and an overarching framework to ensure all aspects of schooling meet these students’ needs—sought to reduce opportunity gaps by transforming their students’ educational experiences. Early evidence, however, found limited impacts of these innovations on curricular and programmatic planning (Lavadenz et al., 2018; Olsen et al., 2016). Moreover, California schools’ response to the COVID-19 pandemic reveals a mixed picture for MLLs’ learning and the instructional materials used to teach them (Lavadenz et al., 2022; Reed et al., 2022; Williams & Buenrostro, 2021).

Although recent survey research has begun describing teachers’ views about their instructional materials for MLLs (e.g., Burr et al., 2020; Zahner et al., 2022), little research to date has explored educators’ uses of, challenges with, and benefits from instructional materials to serve MLLs throughout transitions between distance and in-person learning. To fill these gaps in the literature and make recommendations to publishers of instructional materials and state policymakers, we answer in this report:

- How did middle-grades teachers and education leaders utilize instructional materials throughout shifting learning contexts to meet MLLs’ needs?
  - What (unique) ways did/do educators report instructional materials supporting MLLs throughout distance and in-person learning?
  - What (unique) challenges using instructional materials did/do educators experience teaching MLLs during distance and in-person learning?
  - How do these patterns vary by subject, and how are they similar?
- Based on conclusions to the above questions, how can materials’ publishers and statewide policymakers better support middle-grades educators to ensure MLLs’ access to high-quality instructional materials?

Based on interviews and focus groups with thirty-nine middle-grades English language arts (ELA), English language development (ELD), and mathematics teachers and key site and central office leaders in three public school networks, we find that:
Whether used during distance or in-person learning, the sequencing and scope of comprehensive instructional materials can paradoxically exacerbate constraints on teachers’ time. Even though many educators cherish their materials, when compounded with compacted site schedules their pacing can especially overwhelm ELD teachers’ planning and instruction.

Without robust training on using instructional materials to engage MLLs in independent learning, teachers often personally translate – and long for accurate translations of – core and supplemental instructional materials that can serve students at all levels of English language proficiency.

Both ELA and math teachers highlight MLLs’ pressing challenges with academic language. Combined practices and techniques like sentence frames and other scaffolds can especially, but not exclusively, support MLLs’ literacy and English language development.

Teachers familiarized themselves and their students with beneficial products during distance learning. Upon returning to the classroom, providers limited their access to some of it.

Educators want instructional materials that are culturally relevant and age- and grade-appropriate for their MLLs.

We conclude with several recommendations for publishers of instructional materials and state policymakers to consider as they refine their offerings and develop policy to meet the moment for California’s middle-grades MLLs, including:

For publishers of instructional materials:

- Include tips about how to scope and sequence the work for diverse schooling schedules;
- Preload materials with high-quality translations and translanguaging opportunities in students’ non-English languages;
- Incorporate resources for English language vocabulary development;
- Sustain students’ and teachers’ access to virtual supports and products, and regularly update the content they access through it;
- Deliver ongoing, role-differentiated training that encourages educators to use language development resources and other techniques that reach MLLs at all levels of English proficiency; and
- Center cultural relevance, age and grade appropriateness, and language development.

For state policymakers:

- Set clear, high expectations for rigorous integrated ELD instruction;
- Urgently adopt revised curriculum frameworks and subsequent state-adopted lists of instructional materials that include language supports and guidance for culturally responsive...
and relevant teaching;

- Regularly update the frameworks and lists in the spirit of statutorily-recommended timelines; and
- Make available MLL-focused review criteria to inform instructional materials’ adoption processes.

## Background

### California’s Multilingual Learner Policy Context

California has long been a state populated with sizable shares of students whose first language is not English. More than one in four of the nation’s MLLs live in the state (Bialik et al., 2018). For the last ten years, about one in five students in California have been identified as English learners, and another one in five were redesignated as Fluent English Proficient at some point during schooling (Ed-Data, n.d.). MLLs’ prevalence has long invited important educational policy considerations, with profound and groundbreaking shifts in recent history that have opened the door for new ways of meeting these students’ unique needs.

In 1998, voters outlawed dual language instruction with Proposition 227’s approval, but they repealed these restrictions by passing Proposition 58 in 2016 (Mongeau, 2016). Proposition 58 opened the doors for a wide-range of reimagined visions of and policies for MLL education, but state policymakers and administrators had already begun expanding educational policies to guide teachers’ MLL support. After adopting the Common Core State Standards for English Language Arts (CCSS ELA) in 2010, California became the first state to adopt CCSS ELA–aligned English Language Development standards in 2012 (California Department of Education, n.d.-a). California’s State Board of Education subsequently adopted an English Language Arts/English Language Development (ELA/ELD) curricular framework to guide instructional material recommendations (California Department of Education, 2015). Although the California Department of Education did not use similar guidelines for their mathematics curricular framework, it has encouraged math educators to integrate ELD into their teaching (Lagunoff et al., 2015) by drawing on the ELA/ELD Framework (Yopp et al., 2016, p. 11).

Proposition 58 encouraged the State Board of Education to usher in another first-of-its-kind policy to support MLLs by the State Board of Education in 2017 (California Association of Bilingual Education, 2017).

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2 The State Board of Education’s list of adopted programs can be found here: [https://www.cde.ca.gov/ci/rl/im/sbeadoptedelaeldprogs.asp](https://www.cde.ca.gov/ci/rl/im/sbeadoptedelaeldprogs.asp).

2018). Founded on four guiding principles, The English Learner Roadmap provides a systematic framework for supporting California’s MLLs from early childhood education through high school graduation (California Department of Education, n.d.-b). Two principles are of particular importance. Principle #1 emphasizes the “cultural and linguistic assets” MLLs bring with them to school that educators should lift up and reinforce in their teaching. Such an approach repudiates the prior English-only sentiments that Proposition 227 proliferated and points toward matching instruction with students’ lived experiences. Secondly, Principle #2’s call for instruction that “integrate[s] language development, literacy, and content learning” points to the importance of instructional materials that match the simultaneous tasks of developing MLLs’ English language proficiency while preparing them with the necessary knowledge and skills to succeed in the twenty-first century.

Thus, integrating English language development into core content instruction has been an important transformation in California’s MLL educational policy that intends to shape how educators teach and the instructional materials they use to do it. Research exploring the alignment of instructional materials finds troubling patterns, however.

### Instructional Materials to Teach Multilingual Learners

What does the research say about instructional materials specifically designed to support MLLs and these students’ access to it? One review of effective programming for English learners (ELs) highlights the importance of integrating literacy and vocabulary instruction alongside content coursework in all subjects, including math, science, and social studies (Calderón et al., 2011). Ongoing and aligned integrated and designated ELD instruction built into instructional materials can prevent greater shares of MLLs from becoming Long-Term English Learners⁴ well into their secondary schooling (Olsen, 2010). However, one review of the literature outlined how numerous processes like tracking and undifferentiated instructional materials meant that “many ELs in California do not have equitable access to grade-level core content instruction” (Umansky, 2018, p. 17). Recent survey research finds some important differences in teachers’ beliefs about the materials they use. California’s ELA teachers report being better prepared to support ELs with their instructional materials: compared to their colleagues teaching mathematics and science, ELA teachers are more likely to agree their instructional materials will “meet the needs of English language learners,” are “culturally relevant” for these learners, and are “linguistically appropriate” for them (Burr et

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⁴ The California Department of Education defines Long-Term English Learners (LTEls) as “(1) students in grades 6 to 12 who (2) have been enrolled in a U.S. school for six or more years and (3) have remained at the same English language proficiency level for two or more consecutive prior years, or have regressed to a lower English language proficiency level, as determined by the English Language Proficiency Assessments for California.” Students in grades 6 to 9 who have scored at the “Standard Not Met” level on the prior year administration of the CAASPP-ELA can also be classified as LTEls if they also meet the definition’s first two criteria (California Department of Education, n.d.-d).
Given the importance of instructional materials to support MLLs’ language acquisition and content success, educators have tried heeding California policymakers’ requests to adapt their programming for MLLs throughout the COVID-19 pandemic. In a review of California districts’ distance learning plans, Sherrie Reed and colleagues found that many districts planned to use specific curricula for EL students, though these materials may have already been in place (2022:14-15). Similar analyses found, however, that districts often mentioned specific ELD strategies or materials to support their MLLs but infrequently differentiated their programming for the range of these students’ English proficiency (Lavadenz et al., 2022; Williams & Buenrostro, 2021). Plans for use of materials are only a part of the picture, though. To date, no research of which we are aware has explored educators’ experiences with instructional materials during distance learning and the return to in-person instruction.

Given the potential for high-quality instructional materials to support MLLs’ learning acceleration across the country’s and California’s schools, it is imperative to learn lessons from this tumultuous period to shape new materials and the policies that influence their development.

Data Collection & Methods

Building on prior research (Brookins Santelises & Dabrowski, 2015; Dysarz, 2018), this project originated as an investigation into the quality and rigor of middle-grades educators’ assignments for MLLs. After attempting to launch time-intensive data collection efforts between February 2020 and May 2022 on the topic, we realized that the burdens of participation for already burnt-out educators (Steiner et al., 2022) were immense. We therefore shifted our efforts to a project that could still explore a key concern for publishers of instructional materials and policymakers while lightening the load on participants. Because we believe in their value for educators designing assignments, we make available the rubrics we intended to use for ELA and mathematics assignment review in Appendices D and E, respectively.

In Summer 2022, we broadened our focus to instructional materials. Instructional materials are the resources and tools that educators use in their teaching; they include, but are not limited to, adopted curricula. The pandemic’s forced shifts in instructional settings opened opportunities for educators to adapt or reimagine their materials for teaching students (Reimagine and rebuild …, 2021). Moreover, recent analyses of educators’ experiences teaching MLLs often elided their use of and beliefs about instructional materials (Reed et al., 2022; Villegas & Garcia, 2022). This research aims to start filling that gap about experiences with, beliefs about, and uses of instructional materials throughout this turbulent period.

For data collection, we emailed EL/MLL and academic leads at all school districts and public school networks with at least two sites that served at least one middle grade—sixth, seventh, or eighth grade. We ultimately
recruited three public school networks with which Pivot Learning has previously collaborated to participate in this research. Included in our sample are two charter school networks—one Northern California subsidiary of the country’s largest charter management organization and a small regional network of charter schools in the Los Angeles area—and a nonprofit management organization that supports twenty of Los Angeles Unified School District’s high- and highest-need schools. Table 2 presents descriptive information about each participating organization, and brief descriptions of them can be found on page 14.

To capture the diverse views on and experiences with instructional materials across multiple networks, our original design aimed to speak with three ELA, ELD, and math teachers at two sites, along with at least one site lead per school and a network lead. Although researchers intended to speak with all participants in focus groups to encourage site-based meaning-making among educators in their unique roles (Morgan, 1996), participants’ availability dictated that we speak one on one with some teachers. Between September and November 2022, Pivot Learning hosted several semi-structured focus groups and

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5 We defined “core instructional materials” as year-long, comprehensive materials used in K-12 education. This often includes, but is not limited to, a central office’s adopted or recommended curricula.
6 We defined “supplemental instructional materials” as materials that generally focus on foundational skills development and are designed to be used alongside core programs.
one-on-one interviews with teachers, network leaders, and site administrators about their use of core⁵ and supplemental⁶ instructional materials during distance and the return to in-person learning. Protocols for focus group participants and interviewees did not vary, but we utilized different protocols in our conversations with teachers and with network and site leaders to collect specific information that each group could provide. Copies of protocols can be found in Appendices B and C. In total we spoke with thirty-nine educators across six sites in three participating networks. Although shy of the sixty-three participants we wished to learn from, we are confident we reached saturation both within and across networks, especially as we began to anticipate participants’ responses to our protocol (Glaser & Strauss, 1967). Table 1 further describes these participants. Conversations with educators lasted anywhere between twenty and forty-one minutes, with an average of thirty-four minutes.

Every conversation except one focus group was audio recorded. Researchers utilized human transcribers through Rev to then generate codeable transcriptions. Sections of transcripts were then pasted into a

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**Table 1**

*Frequency Table of Interview and Focus Group Participants*

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¹ Grade totals will vary from the total number of participants, as some teachers taught multiple grades.

² Focus groups were defined as two or more participants interviewed at one time.
Participating Network Descriptions

**Fenton Charter Public Schools**

Staff at Fenton Charter Public Schools’ flagship site universally petitioned to convert it from a conventional public school in 1993, making it one of California’s longest-running charter schools. Fenton credits its fiscal independence for helping raise one of the lowest-performing schools in the area into one of the highest-performing ones within five years of conversion (Fenton Charter Public Schools, n.d.). Over the last fifteen years, it has quintupled its number of sites to serve just over 3,000 students.

Of the three networks in this report’s sample, Fenton's schools serve the lowest share of students who were redesignated as Fluent English Proficient learners. These numbers are slightly misleading, though: since California students tend to reclassify later into their schooling (Hill et al., 2014, pp. 13-14), Fenton’s focus on primary grades means that they have fewer opportunities for student reclassification. After participating in SY 2021-22’s CalCurriculum cohort, Fenton Charter had recently adopted a new, more rigorous math curriculum before we spoke with educators from two sites in Fall 2022.

**KIPP Northern California**

KIPP Northern California (frequently, and hereafter, referred to as KIPP NorCal) includes eighteen schools that span the Alameda, San Francisco, San Joaquin, San Mateo, and Santa Clara counties. KIPP NorCal is a subsidiary of the KIPP Foundation, the nation’s largest charter management organization (White & Xu, 2022). Like other regions’ networks, KIPP NorCal prides itself on raising achievement among historically marginalized and underperforming students. Its schools regularly receive honors for its impact; its twenty-year impact report documented that all middle schools had received the California Distinguished School Award by 2012 (KIPP Northern California, 2022, p. 3).

One in three KIPP NorCal students are MLLs (KIPP Northern California, 2022, p. 4). Network leaders told us they strive to move up more than one-half of these students one language proficiency level. To make this a reality, sites have begun implementing designated ELD programming over the last two years. Complications with staffing have hampered progress, though: only two of their sites have a dedicated ELD instructor.

**Partnership for Los Angeles Schools**

Started in 2007, the Partnership for Los Angeles Schools (PLAS) is a nonprofit management organization that helps operate twenty high-needs public schools within Los Angeles Unified School District, the nation’s single largest public school system. It originated as a collaborative effort between private donors, the city of Los Angeles, and LAUSD to focus support on schools in Watts, Boyle Heights, and the greater South LA area. PLAS’s systems-change and capacity-building work ambitiously aims to double its share of students who later graduate from college over the next fifteen years.

Compared to other LAUSD schools, sites supported by PLAS served about 20% more students who are English learners and students who were redesignated as Fluent English Proficient in SY 2019-20. These figures are similarly reflected in the average share of each student group served by PLAS-supported and other LAUSD sites. Before speaking with us, PLAS began seeking more systematic ELD programming for these students.

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8 See Footnote 5.
Google Sheets file that was subdivided by protocol question. The lead researcher then iteratively coded the transcripts using both emergent codes from participants’ responses and previously deduced codes from prior literature. After several coding cycles, supporting researchers helped thematically arrange coded segments into the findings below. When participants’ responses are cited, quotes from transcripts were lightly edited for readability.

Findings

- Whether used during distance or in-person learning, the scope and sequencing of comprehensive instructional materials can paradoxically exacerbate constraints on teachers’ time. Even though many educators cherish their
materials, when compounded with compacted site schedules their pacing can especially overwhelm ELD teachers’ planning and instruction.

Across the United States, teachers say they have little control over their daily schedule (EdWeek Research Center, 2022). Even more, teachers in California reported before the pandemic they did not have enough time to cover subject content alongside ELD for their MLLs (Gándara et al., 2005). Changes during distance learning increased this feeling among many teachers as schools adjusted their schedules to meet the pandemic’s unprecedented demands. Although the return to typical teaching time lightened math and ELA teachers’ lifts, ELD instructors continue to work with instructional materials designed for longer periods than school systems typically afford them.

Many school districts and charter networks reduced synchronous instruction across all subjects during distance learning. Although intended to alleviate students’ screen time, this move often intensified demands on teachers’ planning and teaching time. At one network, math teachers reported teaching time was cut from eighty to sixty minutes, and ELA teachers explained they had thirty minutes per day to work with students. Since publishers often designed instructional materials for ninety-minute blocks, teachers reported spending more time than usual culling activities and practices from the provided lessons. Moreover, distance learning pushed teachers to further scaffold their instruction during synchronous instruction, leaving them with even less teaching time to review less material than they would in a typical school day.

Although teachers eagerly want to support MLLs, they are often overwhelmed by the sheer volume of core instructional materials they can access. For example, one of the market’s top sellers, Illustrative Math, provides mathematical language routines to help teachers increase students’ English language proficiency while learning mathematical concepts. Even though the curriculum also includes adaptations for students in special education, one math teacher at a network that uses the curriculum9 speculates “teachers would probably just gloss past them, just because it’s a lot.” Similarly in another network, a veteran ELA teacher explains how their in-house curriculum’s extensive list of additional resources could be “very daunting” for more junior colleagues to not only use, but even just access. As she explained, the curriculum “has such a large scope and sequence, and our classes are seventy minutes. And so how do you fit that in? And how do you fit [in] reading and writing? And how do you scope that out?” Thus, teachers struggle to consistently make use of core instructional materials’ ELD supports to meet MLLs’

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9 A full list of the core and supplementary instructional materials cited by research participants can be found in Appendix A.
learning needs.

These challenges were not limited to these two core subjects; in fact, structures in schools often intensified these concerns for ELD teachers. Although networks varied how much time they planned for weekly ELD instruction, in all cases class periods were significantly shorter than publishers envisioned in core instructional materials. At one site, students are pulled into ELD instruction for thirty minutes four days a week. As the teacher explains, “The lessons that we’ve been going through, they are bite size and I can technically get through them all in the amount of time that’s allotted, but it does sometimes just feel like a rushed twenty-five to thirty minutes each day rather than a bit more robust time together to practice speaking and listening and writing and reading all in one block.” Even though the adopted curriculum provides everything the teacher needed to develop her lesson, the guide was “a little overwhelming ... just because it is so detailed.” Supervisors told this ELD teacher that she should “pick and choose” what to cover in a lesson, but because she teaches back-to-back classes and she only began teaching ELD this school year, she often has little prep time and defers to the included scripts. Similarly, another site pulls out students triweekly for ELD instruction. Even though the ELD teacher appreciated the curriculum’s options to customize her teaching, she must always pare down the pacing guide’s five-times-per-week lessons by deciding what practices, activities, and objectives would be most appropriate and engaging for her students.

As one former ELD and now full-time ELA teacher summarized it, “I think there has to be somewhere in between, like a balance, where you have not too much happening, not a lot of curriculum or so much that it’s overwhelming” for both students and teachers, but enough support from instructional materials to ensure effective teaching and student learning.

- **Without robust training on how to engage MLLs in independent learning, teachers often personally translate - and long for accurate translations of - core and supplemental instructional materials that can serve students at all levels of English language proficiency.**

As explained above, California’s ELD standards encourage all content teachers to also strengthen students’ English proficiency. Several educators cited that publishers often forgo robust training on using instructional materials that could support students from falling behind academically. In turn, many teachers believed that translated instructional materials could build their MLLs’ confidence, independence, and engagement with their studies while freeing up the time teachers used to create them.

To be clear, some sets of core instructional materials include translated versions for teachers to use. For example, Illustrative Math’s Live Learn feature allows teachers to assign translated assignments and lessons for individual students that many math teachers found especially helpful for working with newcomers (see
more below). Similarly, MyMath made available translated readings and video lessons that one teacher still provided his students after his network adopted a more rigorous curriculum. Supplemental materials made available similar kinds of translations for teachers to use. In one network, several ELA teachers applaud CommonLit’s written translations that students could follow alongside audio recordings.

Figure 1 depicts the share of non-English languages spoken by the more than 1.1 million students across California whose first language is not English. Although about four in five students speak Spanish, tens of thousands of students speak several other first languages, including Arabic, Cantonese, Filipino, Mandarin, and Vietnamese.

When core instructional materials include translations, often they are limited to Spanish. Although the vast majority of California’s MLLs speak Spanish as their first language (see Figure 1), there are still significant shares of students who do not. For example, we heard from teachers with students whose home language was Bengali, Vietnamese, indigenous languages spoken throughout Latin America, or Arabic. Although some of these students had enough familiarity with English, many others did not. Several teachers express fluency in or passing familiarity with Spanish such that they could help MLLs who spoke this language, but they lamented that they could not support students who spoke another language in the same way. Moreover, platforms often restrict teachers from digitally assigning students translated versions to complete. To bypass this hurdle, some math teachers at one site printed limited copies of translated
assignments for MLLs to share but required students to write their answers in English on English-only versions.

In many cases, though, publishers do not include translations with their materials. Subsequently, teachers frequently translate materials for their students. Although the Google Translate plug-in has made this process quicker and easier, its frequent inaccuracy means that teachers must still seek help to finalize the translation. One math teacher explained that, even when they asked someone to double-check the translation, “sometimes these persons [sic] also get confused. Sometimes the translation is helpful, sometimes they are [sic] confusing.”

To solve these dilemmas, many teachers asked for curriculum publishers to include accurately translated materials for everything they provide. Teachers especially wanted publishers to include scaffolds in multiple languages. In their view, translated scaffolds would ensure MLLs at all English language acquisition levels understand the lessons and give these students the necessary building blocks to grow academically. As one ELA teacher lamented, “ML students need very specific support. I can’t give students the same sentence starter and expect that to work for all of them. The level of English acquisition and the level my MLLs are at that need the most support is what I don’t get support for as a teacher.” More specifically, teachers especially stressed the importance of translated scaffolds and other materials for newcomers, or “foreign-born students who have recently arrived in the United States” (California Department of Education, n.d.-f). Newcomers are a fast-growing population that school districts have increasingly aimed to support (Lavadenz et al., 2022). Without some of the “basics” of English, another ELA teacher lamented, “there’s really nothing that we can do [for these students]. How do we bridge the basics while also teaching the skill and also the content, and all the multilayers, one on top of the other?”

Importantly, though, some educators pinpointed their lack of training with materials – rather than the materials themselves – as an important inhibiting factor in effectively leveraging English-language resources for their MLLs. “[C]urriculum is a process of internalization and it’s usually complex,” one site lead explained. Besides adopting high-quality curricula, she continued, “there’s the other element of are they using it and who holds that accountability, who trains them, who prepares them to make sure that they understand and have internalized the design of the curriculum and the implementation and then those supports along the way.” One math teacher tacitly concurred: “When we first started using IM [Illustrative Math], that was the first time I’ve ever heard about [mathematical language routines]. And so how am I expected to do something that I don’t even know what it’s supposed to look like?” Paralleling findings from a recent national study (Wynn & Zahner, 2022), some educators long for additional publisher- and support staff-led professional development that can enhance their knowledge and use of their instructional materials.
Translated scaffolds and other materials for students at all levels and in their respective primary languages could support teachers to provide students the foundational support many of them need to develop their English language skills alongside learning academic content. Ongoing training in using those and English-language instructional materials can help educators avoid, in the above site lead’s words, “dropping the ball” on the curriculum internalization process.

- Both ELA and math teachers highlighted MLLs’ pressing challenges with academic language. Combined practices and techniques sentence frames and other scaffolds can especially, but not exclusively, support MLLs’ literacy and English language development.

Given MLLs’ language needs, ELA and math teachers consistently, if perhaps unsurprisingly, pointed to these students’ struggles with academic language. Recent national and statewide test results reveal MLLs’ English proficiency and ELA progress sharply declined throughout the pandemic (Fensterwald & Willis, 2022; Pier et al., 2021; Sahakyan & Cook, 2021). These trends exacerbate what some have called a “crisis in literacy” across student groups that educators across California are trying to address (D’Souza, 2022). Although especially acute for MLLs, teachers have integrated vocabulary and language development techniques to support all students, regardless of their level of English proficiency.

Distance learning likely worsened these trends. Even though teachers tried to encourage group work and conversation on video-conferencing platforms during synchronous instruction, they reported MLLs were especially shy to participate. Several teachers described rotating through Zoom breakout rooms only to find MLLs silently sitting in them. Upon returning to in-person instruction, one ELA teacher saw the fruits of these patterns: “A lot of times for think-pair-shares, they like[d] to show each other just their work via paper.” As seen across the country (Stavely, 2021; Sugarman & Lazarin, 2020; Villegas & Garcia, 2022), MLLs did not develop the experience in or confidence with the academic English vocabulary to readily interact with their peers during distance learning and so often continue to avoid it in the physical classroom.

In turn, many teachers described using similar specific techniques to develop MLLs’ English language usage. At one site, most math teachers described arming their students with sentence stems and frames to help them write responses to short-answer questions. To activate MLLs’ verbal English language usage, teachers also describe using discussion stems to encourage MLLs’ engagement with their peers after such limited interactions during distance learning. As one teacher explained, “[T]he discussion stems for think-pair-share specifically [are] for students to be able to not only focus on what the response is, but [also] the different strategies that they used [to arrive at their answers], and for other students to not just
agree, but try to paraphrase what other students have said to then state whether they agree or disagree and why.”

In all instances, teachers recognized the drawbacks caused by distance learning and are working to right those wrongs. As one math teacher succinctly put it, “This year I’m really trying to be proactive because I know I didn’t do as good of a job helping my students understand academic vocabulary as well as I should. I’m really trying to do that this year.” Several teachers devised ways to make vocabulary a regular part of their instruction and classrooms. One ELD teacher leveraged a strategy she learned from teaching elementary grades and built a rotating “word wall” in her classroom. She and her students add vocabulary words and the definitions relevant to their unit, then rotate terms as they move into the next one. Many math and ELA teachers required their students to keep track of new vocabulary in personal dictionaries. Others had also incorporated word banks into their exit tickets. Moreover, many teachers highlighted how they paired visuals with the written, and when possible audible, words to help develop MLLs’ English proficiency.

Importantly, teachers do not exclusively use these techniques with MLLs. Many teachers emphasized their importance for all students regardless of language proficiency. As one site coach put it, “[S]upport for English language learners, emerging bilinguals, is just plain good teaching a lot of times and all students can benefit from it.”

- **Teachers familiarized themselves and their students with beneficial products during distance learning. Upon returning to the classroom, providers limited their access to some of it.**

Language barriers are not the only inhibitors to MLLs’ learning. Research shows that California’s MLLs often come from families in poverty or with low socioeconomic status; some estimates place the share of MLLs in poverty as high as four in five students (Hill, 2012). Fewer financial resources often translates into less access to, and therefore familiarity with, technology, such as computers (Starr et al., 2022; U.S. Department of Education, 2019). Such “digital divides” between MLLs in families with low socioeconomic status and their more financially secure peers and their families ran the risk of widening the gaps in opportunities to learn during distance learning.

To make up for this disparity, many schools across California made technology accessible to students, especially MLLs with low socioeconomic status, during distance learning (Lavadenz et al., 2021; Reed et al., 2022). One teacher cited how administrators provided students with working Wi-Fi hotspots and tablets to continue schooling from home. Another site introduced math teachers to the Desmos app that encouraged collaboration and cooperative learning. ELA teachers in a third network appreciated the ease of assigning coursework offered by new online platforms; as one put it, “[Since] they were online
materials, it was easy to just be like ‘Go on CommonLit and read this article,’ versus trying to photocopy our PDFs and making sure those were accessible.”

Although teachers appreciated the opportunity for them and their students to access new technology and products, the pace and length of shutdowns forced everyone to quickly become “literate” with it. As one veteran math teacher and site math coach explained, “I think it added the extra barrier of not only are you implementing this curriculum, but you have to figure out a way to do it. And so [teachers] had to learn Desmos, which isn’t terrible. However, when you’re a newer teacher, and you’re just learning the curriculum, and now you have to learn this new platform, that’s not always a good combination.” These arrangements also created difficulties for students. As another math teacher put it, “That was challenging to have students to [sic] show their work on the computer, or it would take a significant amount of time to do it.” Similarly, ELA teachers struggled with pacing and scaffolding as students struggled to type responses. Adapting lessons for the digital classroom was also challenging. As one math teacher explained, “It took a long time just to create a lesson online. ... [W]e [would] get bundles of all these manipulatives and stuff and it’s meant to be engaging hands-on, in your face, in-person. It wasn’t meant to do [sic] online, so it was hard.” Luckily, teachers’ and students’ investments in learning unfamiliar products continue to pay dividends: math teachers at one site continue to use the Desmos app and ELA teachers at another site praise the digital supplemental materials they continue to use.

After returning to in-person instruction, however, providers of materials and site administrators have limited access to some of these technologies that especially supported MLLs. In the case of hotspots and tablets described above at one site, students have since been restricted from taking their devices home with them. Even though one of the site’s math teachers hosts after-hours study sessions twice a week online, many students no longer have access to them. Additionally, he and many of his colleagues continue to use core instructional and supplemental materials that are primarily digital. This teacher previously assigned Khan Academy and core instructional materials, including translated videos and readings that could be accessed through the curriculum’s platform, to reinforce student learning at home. Now, though, students do not have consistent access to these valuable resources. When providers of materials restrict technological access outside the classroom, they limit MLLs’ opportunities to reinforce their learning at home and place additional readjustment hurdles on these students. In turn, such restrictions may unintentionally exacerbate the learning gaps they endeavor to close.

- **Educators want instructional materials that are culturally relevant and age- and grade-appropriate for their MLLs.**

One of education’s most frequently discussed topics is culturally responsive teaching. Using instructional techniques, strategies, and materials designed with diverse classrooms in mind that reflect their students’ experiences can encourage student self-confidence and ultimately drive improved outcomes (Aronson &
Laughter, 2016). As Zaretta Hammond clarifies, this pedagogic approach “really is about helping students who have been marginalized historically reclaim their academic prowess” (Pivot Learning, 2021). Recent survey research reveals that math teachers in California believe their instructional materials are not culturally relevant for their students (Zahner et al., 2022). We find this sentiment extends to ELA and especially ELD educators as well. We further find that teachers’ conception of relevance mirrors the state’s EL Roadmap’s expectations for grade- and age-appropriate materials that match middle-grades MLLs’ expected social milestones and interests (California Department of Education, n.d-b).

According to educators, culturally relevant materials better engage MLLs in both language development and content learning. “I think there’s a lot of power in them seeing their stories in the curriculum or them seeing themselves through the curriculum and being able to connect that to who they are and where they come from,” one math teacher explained. “[W]hen it’s adapted to them, there’s more investment and they’re more into the material and they’re more willing to ask the questions and step out of their comfort zone and try.” An ELA teacher put it in similar terms: “[B]eing able to use their culture in the classroom to help bridge those gaps and to make them feel represented and not necessarily isolated, like they can tend to feel, […] has been really successful in the classroom.” Two ELD teachers in one network even explained how their more culturally relevant adaptations of the district’s adopted curriculum helps students reclassify as fluent English proficient. When teachers value and validate MLLs’ unique cultural experiences, they more warmly invite students into the classroom and encourage them to try harder and succeed more than they otherwise might.

Unsurprisingly then, educators frequently requested that curriculum publishers design their instructional materials with an eye toward cultural relevance. An ELA teacher longed for access to “more diverse texts” that students find more relatable and meet her lesson’s objectives. Similarly, a math teacher in another network proposed some ways that publishers could refine their materials: “If [students] are from specific cultural backgrounds and certain things are common for people in those cultural backgrounds, why can’t they put those notes in there too? ‘Hey, this is something that is common in this culture. You might want to connect it back to this’ or something like that.” However, California’s linguistic diversity described above also means that the absence of translated materials frequently correlates with a lack of content that represents these students’ experiences. As one ELA teacher explained, “[The network’s adopted curricula] are culturally responsive for certain cultures. They’re definitely diverse in the books that they provide, but they don’t always meet our population depending on the grade you teach.” To supplement core instruction, some teachers explained how they sought out or created their own culturally relevant texts and other materials for their non-Spanish-speaking MLLs. One teacher with several MLLs who speak Vietnamese explained how she created her own unit to make sure their unique cultural experiences were included in her instruction. By explicitly drawing cultural connections between the materials and students’ diverse experiences, publishers can help decrease the time teachers spend finding and developing materials that ensure all their students see themselves in their learning. Further, offering more variation in materials would allow these and other teachers to better tailor their instruction
for their classrooms by meeting students with specific strategies and content that can engage and excite them in their learning.

Moreover, educators did not limit their conception of cultural relevance to ethnic or linguistic backgrounds. ELD teachers were especially sensitive to finding age-appropriate materials for MLLs. Such materials could encourage students to engage more with developing their English language skills. ELD teachers frequently noted how introductory units could be interpreted as patronizing students: “I think back to Unit 1 ... called the Art of Getting Along. It’s a great intro unit but a lot of the language and activities in that specific unit are—I think my students feel very young when they practice that. It’s like ‘Excuse me, can you please help me get to the library?’ Who is it for? That might be great for newcomers but for my multilingual students who have that social language down already that can feel a little bit off-putting.” An administrator at another site similarly pointed to introductory units for students in middle grades that introduce topics geared toward earlier learners, like going on a field trip to a beach. If MLLs “feel downgraded” by the expectations that ELD materials imply of them, as another ELD teacher put it, students are more likely to disengage with their learning.

In sum, educators need instructional materials that meet MLLs where they are. This does not only mean their grade or reading level, but also their cultural background and age. If instructional materials fail to meet students on these different levels, we run the risk of allowing disengaged students to fall behind in the classroom.

**Discussion**

The COVID-19 pandemic brought innumerable challenges to education generally, and for instructing MLLs specifically (Sugarman & Lazarín, 2020; Villegas & García, 2022). Prior insufficient access to technology and minimal emphasis on their language development meant that MLLs confronted especially steep hurdles in distance learning. Not only did students have to quickly become “literate” with new technology, products, and supports, but so did their teachers.

Some concerns with instructional materials stand regardless of learning mode, although the shifts between distance and in-person learning substantially reinforced them. Paradoxically, the scope and sequencing of comprehensive instructional materials often require more time from teachers, especially designated ELD ones, to curate lessons that ensure adequate content delivery and language development. Teachers also often spend lots of time personally creating translated resources for MLLs because adopted curricula rarely come prepackaged with them. When publishers include translations, they often limit their languages to only Spanish. Similarly, educators report that these materials often lack the kind of cultural relevance and age and grade appropriateness that could effectively engage middle-grades MLLs in independent learning. Even when instructional materials meet these criteria, educators
rarely encounter robust professional learning opportunities that can deepen their knowledge and use of them.

Despite these hurdles, educators find lots to cherish in their core instructional materials. When curricula include accurately translated materials like assignments to share with students, teachers make full use of them in creative ways. Even more, some curricula come preloaded with specific language routines and other resources that can help bridge ELD with core content instruction that supports MLLs’ growth in both (Calderón et al., 2011). Teachers similarly integrate consistent techniques and tools to support language development, like sentence frames and other scaffolds, for not only MLLs, but all their students. To the extent possible, they also continue to use digital resources with their students that the pandemic required all to learn.

As one teacher reminded us, “No curriculum will solve all problems [even] if you follow it to the T. ... [It] is a tool to help teachers to help their students, but it’s not the one [sic] way.” These lessons support that sentiment by painting a complex picture of what educators think about and how they use their instructional materials to teach MLLs. California’s adoption of ELD standards and a groundbreaking systematic framework for MLL instruction may have uniquely situated local educational agencies to respond to these students’ needs, but these findings suggest that both policymakers and publishers have room to grow for better supporting students and the educators who teach them.

Recommendations

The California State Board of Education plans to publish an updated Mathematics Curriculum Framework in 2023 (California Department of Education, n.d.-e), and have indefinitely delayed publishing updated frameworks for other key subject areas like ELA/ELD. Although some districts are adopting new curricula off-cycle from these updated frameworks, many are not (CalCurriculum, 2022). Delays at both the state and local educational agency levels can continue to hold back MLLs’ access to high-quality instructional materials by continuing to learn from materials that are nearly—and, in some cases, over—a decade old. As the research shows, waiting for these revisions can lead to missing an important opportunity to accelerate learning for students who faced difficult educational odds even before the COVID-19 pandemic hit and all its cascading impacts began.

To meet this critical moment, school districts, charter management organizations, and other networks of public schools must have access to instructional materials that forefront the needs of their MLLs. It is incumbent upon publishers of materials and policymakers to similarly meet it with the urgency that California’s educational crises require.
Publishers of Instructional Materials

Based on our findings, we make the following suggestions for publishers of instructional materials to consider as they develop resources for instructors of multilingual learners:

- **Suggest ways to scope and sequence the work for diverse school days and years** by including recommended adaptations to meet different schedules. This is especially important for designated ELD classes, as sites significantly vary in their daily and weekly allotments for this instruction. Publishers might also highlight specific “power standards” or find other techniques for educators to prioritize content that ensures all students, but especially MLLs, get the instruction they need.

- **Include high-quality translated materials.** Although it would be infeasible to translate materials into the more than seventy non-English languages spoken by California’s MLLs, publishers might prepackage their materials with languages spoken by at least 1% of the student population. Materials should not be simple 1-to-1 translations of final products after they have been developed; rather, develop them in tandem with the English-language materials with guidance from the English Learner Success Forum’s criteria for high-quality translations.

- **Related, weave translanguage opportunities for students throughout materials** for MLLs to build on the linguistic assets they bring into their classrooms. The English Learner Success Forum’s example ELA and math strategies offer a wellspring of inspiration for incorporating such empowering approaches and activities into materials.

- **Incorporate resources to grow middle graders’ English language vocabulary.** Students may rank vocabulary low on their list of educational interests, so publishers should devise engaging ways for students to learn it. Even English-only students can benefit from such developments.

- **Sustain students’ access to virtual supports and products** to limit the number of new platforms and technologies they and their teachers must learn.

- **While sustaining students’ technological access,** make available regular content updates through these platforms. Learning in a digital environment means that students and teachers no longer—and should not—have to wait until the next instructional materials’ adoptions to incorporate new pedagogical techniques and content knowledge.

- **Implementing instructional materials, especially curricula, with fidelity requires provider support. Deliver ongoing training to develop educators’ familiarity with new and revised tools, content, and other resources.**

- **Center cultural relevance, age and grade appropriateness, and language development.** MLLs are one of education’s most diverse student groups (Santibañez & Umansky, 2018). Checking instructional materials against the California Curriculum Collaborative’s math curriculum review criteria and the English Learner Success Forum’s Benchmarks of Quality for ELA and science can help ensure new products are appropriate for the range of unique students who will encounter them.
State Policymakers

Curriculum publishers create their materials not only based on market demands, but also on policy requirements and contexts. In turn, state policymakers can have an influential role in shaping the kinds of content that make their way into educators’ instructional materials. In California, we encourage state legislators, administrators, and other policymakers to:

- **Set clear, high expectations for rigorous integrated ELD instruction.** California’s comprehensive ELA/ELD framework attaches few requirements for schools to provide rigorous integrated ELD instruction. Foregrounding such recommendations in future frameworks can remind educators in all content areas of its importance.

- **Urgently adopt revised curriculum frameworks and lists of instructional materials that include language supports.** Although the pandemic slowed their publication, the crisis in literacy facing California requires a renewed sense of urgency and commitment to publishing the frameworks that guide the subsequent lists of recommended curricula. School districts and county offices of education rely on these resources to guide their adoption, and delays in release keeps students from updated instructional materials.

- **Similarly, make culturally responsive and relevant teaching a guiding feature of the forthcoming frameworks.** Promoting affirmative and asset-based practices that draw on MLLs’ unique backgrounds and experiences can help learners develop the diverse twenty-first-century skills and outlooks they need for success.

- **Going forward, regularly update curriculum frameworks and lists of instructional materials in the spirit of statutorily-recommended timelines.** According to Education Code 60200, the State Board of Education should adopt revised lists of instructional materials every eight years. Current plans suggest the State Board of Education may not release new math frameworks to guide those lists until two years after expected release – a decade after the most recent adoptions – and it has offered little information about when publishers and educators might see other subjects’ guiding documents. Pinning the frameworks’ releases to the instructional materials lists’ schedule will ensure students learn from up-to-date materials for generations to come.

- **Whether or not state policymakers use them to inform the frameworks’ developments, make available MLL-focused review criteria to inform the curriculum adoption processes of and assignment creation at school districts, charter management organizations, and other public school networks.** Sharing resources like California Curriculum Collaborative’s review criteria for math curriculum and the English Learner Success Forum’s Benchmarks of Quality for ELA and science curricula with on-the-ground educators can especially help them adjudicate between different materials before the new frameworks are published.
## Appendix A: Cited Instructional Materials

The following is a list of all materials participants mentioned during our conversations, grouped according to type.

### Core Instructional Materials

<table>
<thead>
<tr>
<th>English Language Arts (ELA)</th>
<th>English Language Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>• EL Achieve</td>
<td>• Engage! K12</td>
</tr>
<tr>
<td>• EL Education</td>
<td>• English 3D</td>
</tr>
<tr>
<td>• KIPP Wheatley</td>
<td>• ReadTheory</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td>• ReadWorks</td>
</tr>
<tr>
<td>• Eureka Math</td>
<td>• Start Smart Lessons</td>
</tr>
<tr>
<td>• Illustrative Mathematics</td>
<td>• StudySync</td>
</tr>
</tbody>
</table>

### Supplemental Instructional Materials

- CommonCoreSheets.com
- CommonLit
- Desmos
- English Learner Success Forum
- Epic!
- IXL
- Kahoot!
- Khan Academy
- Learning A-Z
- LearnZillion
- Leveled Literacy Intervention
- Lexia Learning
- NewsELA
- Quizlet
- Reading A-Z
- ReadWorks
- SIPPS
- StudySync
- Teachers Pay Teachers
- Zearn
Appendix B: Teacher Protocol

RAPPORT BUILDING

1. Please share your name and what grades you teach at [District]. About what percent of the students you teach would you say are English learners? 0-25%, 25-50%, 50-75%, or 75-100%?

MLLs’ EDUCATION

First we’d like to learn a little more about teaching English learners.

2. What successes have you experienced in teaching these students?

3. What challenges have you experienced in teaching these students?

CORE MATERIALS USE

TRANSITION: Now we’d like to learn a little bit more about the core instructional materials you use for English learners. “Core instructional materials” are year-long, comprehensive materials, used in K-12 education.

4. What core instructional materials do you use for your English learners?

5. How would you describe the quality of these materials?
   a. Probes, if needed: Would you say they’re aligned to the Common Core State Standards? How about the ELD standards?
   b. What issues do you experience with them for ELs?
   c. What benefits do they offer for ELs?

7. What kinds of language supports for English learners from these materials do you use?

8. Do you use the assignments found in these core materials with English learners?
   a. IF YES: Do you think the assignments effectively assess their learning toward the state standards? How about language development? Please explain.
   b. IF NO: What other assignments do you use for them? Do you think the assignments effectively assess their learning toward the state standards? How about language development? Please explain.

9. Did you use these materials during distance learning (e.g., Spring and Fall 2020)?
   a. IF YES: What unique challenges did you face with them during distance learning? What unique benefits did they offer?
   b. IF NO: What materials did you use instead? What challenges did you face with them? How did they help meet English learners’ needs?
SUPPLEMENTAL MATERIALS USE

TRANSITION: Now we’d like to learn a little bit more about the supplemental instructional materials you use for English learners. “Supplemental instructional materials” are materials that generally focus on foundational skill development and are designed to be used alongside core programs.

10. What supplemental materials do you use to teach your English learners?
11. For what reasons do you use them?
12. What do you look for in them?
13. Describe the quality of these materials.
   a. What issues do you experience with them for ELs?
   b. What benefits do they offer for ELs?
14. Did you use any different supplemental materials during distance learning?
   a. IF YES:
      i. Describe them for me.
      ii. Do you continue to use them? For what reasons?
   b. IF NO:
      i. Did you use any of the supplemental materials we talked about above?
      ii. What issues did you encounter with them?
      iii. What benefits did they offer?

WIND DOWN

We have a few final questions for you.

15. Are there any other materials you use to support English learners that we haven’t asked about that you would like to share with us?
16. What advice would you offer curriculum publishers to improve their materials for teaching English learners?
17. Is there anything else you’d like to add?
Appendix C: Site/Network Leader Protocol

RAPPORT BUILDING

1. Please share your name and roles in your school or central office.

MLLs’ EDUCATION

First we’d like to learn a little more about the education your students who are English learners receive.

2. What are your [district’s/CMO’s/network’s] educational goals for English learners?
   a. FOR SITE LEADERS: Your school’s priorities?

3. What challenges have your district/school experienced in educating English learners?

4. What successes have your district/school experienced in educating English learners?

CORE INSTRUCTIONAL MATERIALS

TRANSITION: Now we’d like to learn a little bit more about the core instructional materials your district and schools use for English learners. “Core instructional materials” are year-long, comprehensive materials used in K-12 education.

5. What instructional materials do your middle schools use to teach English learners math and English?
   a. When did your district adopt them?
   b. How did your district choose these materials?
   c. Do these materials have specific language development supports? What are they?

6. How would you describe the quality of these materials?
   a. Would you say these materials are aligned to the Common Core State Standards? California’s ELD standards?
   b. What issues do your teams experience with them?
   c. What benefits do they offer your teams?

7. Were these the materials teachers used during distance learning (e.g., Spring and Fall 2020)?
   a. IF YES: What issues did your district/school experience with them? What benefits did they offer?
   b. IF NO: What materials did your district/school use instead? What challenges did educators face with them? What benefits did they offer?
SUPPLEMENTAL MATERIALS USE

TRANSITION: Now we’d like to learn a little bit more about the supplemental instructional materials your district and schools use for English learners. “Supplemental instructional materials” are materials that generally focus on foundational skill development and are designed to be used alongside core programs.

8. Does your district/CMO/network or school make available any supplemental materials to teachers for in-person learning?
   a. IF YES:
      i. What are they?
      ii. How would you describe their quality?
   b. IF NO:
      i. Have you ever asked site or district/CMO/network leads for these resources? Please explain what you asked for and the response you received.

9. Did your [district/CMO/network]/school make available any different supplemental materials during distance learning than you do in-person?
   a. IF YES:
      i. What were they?
      ii. How did you find them/make them available?
      iii. Do you continue to recommend them during in-person learning? For what reasons?
   b. IF NO:
      i. Did you recommend teachers use any of the supplemental materials we talked about above?
      ii. What unique issues did they create during distance-learning?
      iii. What unique benefits did they offer?

WIND DOWN

We have a few final questions for you.

10. What advice would you offer curriculum publishers to improve their materials for teaching English learners?

11. Is there anything else you’d like to add around instruction for English learners?
# Appendix D: High-Quality Assignments for English Learners Rubric: English Language Arts

For all strands, “Strong” means the evidence is present most or all of the time, or that the evidence is strong; “Moderate” means the evidence is present at least half of the time, or that the evidence is moderately strong; “Weak” means the evidence is at least minimally present but is of poor quality; and “None” means that the evidence is absent.

## 1. Alignment with the grade-level content and practice standards

<table>
<thead>
<tr>
<th>Evidence</th>
<th>3</th>
<th>2</th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>1a. Tasks focus on grade-level work as specified in ELA content and practice standards.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td>Guidance: See CCSS and California ELD standards for grade-level expectations for literacy in each grade.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td>1b. Assessments are presented in ways that are accessible to learners.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td>Guidance: “Accessible” means assessment directions and grading criteria are presented clearly and explicitly. It is clear what students are being asked to do.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
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## 2. Rigor

<table>
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<tr>
<th>Evidence</th>
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</thead>
<tbody>
<tr>
<td>2a. Tasks require learners to access complex texts. More details are in the Further Guidance section.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
</tbody>
</table>
2b. Tasks require learners to **justify their thinking**, for example by citing text-based evidence or responding to text-dependent questions.

<table>
<thead>
<tr>
<th>Strong</th>
<th>Moderate</th>
<th>Weak</th>
<th>None</th>
</tr>
</thead>
</table>

2c. Tasks require learners to **produce purposeful text-based writing**.

**Guidance:** “Purposeful” text-based writing is designed to support increased writing skills. Students should have an opportunity to build writing skills and to use writing to build their understanding about the content.

<table>
<thead>
<tr>
<th>Strong</th>
<th>Moderate</th>
<th>Weak</th>
<th>None</th>
</tr>
</thead>
</table>

2d. Tasks require learners to learn grade-level OR discipline-specific vocabulary.

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<tr>
<th>Strong</th>
<th>Moderate</th>
<th>Weak</th>
<th>None</th>
</tr>
</thead>
</table>

3. **Cognitive Demand**

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<th>Evidence</th>
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<th>0</th>
</tr>
</thead>
</table>

3a. The assignment requires high levels of cognitive demand, aligning with **Strategic Thinking (DOK 3)** OR **Research and Extended Thinking (DOK 4)** in Norman L. Webb’s Depth of Knowledge Levels.

*More details are in the Further Guidance section.*
### 4. Intentional Scaffolds and Opportunities for ELD

<table>
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<tr>
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<th>3</th>
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</thead>
<tbody>
<tr>
<td><strong>4a.</strong> Scaffolds support learners with the goal of accessing grade-level content independently.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td>Guidance: Scaffolds may be provided in English or the home language. Pay close attention to the language of the scaffolds and its appropriateness for the intended students. Example scaffolds are in the Further Guidance section.</td>
<td></td>
<td></td>
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<tr>
<td><strong>4b.</strong> Assignment helps learners to connect prior knowledge or home language skills to build understanding of new concepts.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td><strong>4c.</strong> Scaffolds support learners to pay close attention to language encountered in texts or in their own writing or speaking.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td><strong>4d.</strong> Scaffolds include structures or procedures that engage learners in metacognitive thinking, negotiating, or analyzing in collaboration with peers.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td><strong>4e.</strong> Assignment contains clear expectations for written language use.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td>Guidance: Students are guided to be strategic and purposeful in their choice of words and use of written language in order to form and demonstrate meaning.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td><strong>4f.</strong> Assignment contains opportunities for speaking.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
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</table>
### 4g. Assignment contains opportunities for listening.

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<td>_Strong</td>
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### 4h. Assignment specifies the language students should use for communication (English, home language, or student’s choice).

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<td>_Strong</td>
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## 5. Learner Autonomy and Choice

### Evidence

<table>
<thead>
<tr>
<th>Evidence</th>
<th>3</th>
<th>2</th>
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</thead>
<tbody>
<tr>
<td>5a. Assignment provides learners with ample choice in content. Content can include text, optional mini-lessons, home language, and more.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td>5b. Assignment provides learners with ample choice in product. Product refers to how students present their final thinking.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td>5c. Assignment provides learners with ample choice in process. Processes can include format of engagement or expression, or working with peers or alone.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
</tbody>
</table>
5d. Assignment prompts learners’ metacognitive thinking about 1) their engagement in the task, 2) what they learned, or 3) where they experienced difficulties.  

<table>
<thead>
<tr>
<th>_Strong</th>
<th>_Moderate</th>
<th>_Weak</th>
<th>_None</th>
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</table>

5e. Assignment prompts learners’ metalinguistic thinking about how English language structures relate to their home language.  

<table>
<thead>
<tr>
<th>_Strong</th>
<th>_Moderate</th>
<th>_Weak</th>
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</table>

**English Language Arts Rubric Further Guidance**

**Scoring guidelines**

For all items, raters should score the assignment holistically. In other words, we are looking for a rating of *quality* rather than *quantity*. Whether the assignment has multiple tasks or one main task, raters should evaluate the quality of the assignment as a whole.

**Rigor**

Guidance in assessing text complexity (2a): please use a *combination of:*

1. **Lexile level**\(^\text{10}\), if the text is from a book, you can look it up online. Please use the following range in conjunction with the qualitative components. As a general rule of thumb, if an assignment is 150 Lexiles below the grade-level range, it should not be rated better than “weak.”
   a. 5th-grade range: 740L – 1010L  
   b. 6th- to 8th-grade range: 925L – 1185L  
2. **Qualitative components**\(^\text{11}\) that signal a text is complex, such as:  
   a. Structure complexity: flashbacks, multiple points of view, etc.


b. Language unconventionality: figurative language, ambiguous or archaic language, domain-specific language, or otherwise new and unfamiliar language

c. Knowledge demands: the text assumes readers have some depth of content knowledge about the cultural, literary, content, and disciplinary themes

d. Levels of meaning (literary texts): satire or other forms of nonliteral meaning

e. Levels of purpose (informational texts): implicit, hidden, or obscure meaning rather than direct statements of facts

**Cognitive Demand**

Cognitive demand (3a) is scored based on Norman A. Webb’s Depth of Knowledge Levels.\(^\text{12}\) Examples of each rating below are from Ed Trust’s Literacy Assignment Analysis Guide.\(^\text{13}\) Keep in mind that multiple choice is not always low in cognitive demand; be sure to look at what kind of thinking is being demanded of the student.

**Level 1. Recall/reproduction**

- a. Recall a fact, term, principle, or concept, or perform a routine procedure

**Level 2. Basic application of skills**

- a. Use of information
- b. Conceptual knowledge
- c. Select appropriate procedures for a task
- d. Two or more steps with decision points along the way
- e. Routine problems
- f. Organize/display data
- g. Interpret/use sample data

---


Level 3. Strategic thinking

a. Requires reasoning or developing a plan or sequence of steps to approach problem; requires some decision-making and justification
b. Abstract, complex, or nonroutine
c. Often more than one possible answer

Level 4. Research and extended thinking

a. An investigation or application to the real world
b. Requires time to research, problem solve, and process multiple conditions of the problem or task
c. Nonroutine manipulations across disciplines/content areas/multiple sources

Intentional Scaffolds and Opportunities for ELD

All scaffolds may be provided in English or in home language. Please pay close attention to the language of the scaffolds and its appropriateness for the intended student. Scaffolds may be provided in the text of the task and/or may be provided alongside the task.

Examples of scaffolds to look for:

1. Translation and translanguaging\textsuperscript{14} opportunities (home language supports)
2. Modeling
3. Pre-teaching vocabulary (Note: This in isolation is not considered a Common Core–aligned strategy. Pre-teaching should only occur for words that cannot be defined through context clues.)
4. Opportunities to interact with peers and teacher
5. Developing metacognition: look for questions that guide learners to self introduce, assess performance, develop personal learning strategies, etc.
6. Graphic organizers
7. Sentence frames
8. Word banks

\textsuperscript{14} “Translanguaging Resources.” CUNY-NYS Initiative on Emergent Bilinguals. https://www.cuny-nysieb.org/
Appendix E: High-Quality Assignments for English Learners Rubric: Mathematics

For all strands, “Strong” means the evidence is present most or all of the time, or that the evidence is strong; “Moderate” means the evidence is present at least half of the time, or that the evidence is moderately strong; “Weak” means the evidence is at least minimally present but is of poor quality; and “None” means that the evidence is absent.

1. Alignment with the grade-level content and practice standards

1a. Tasks focus on grade-level work as specified in math content and practice standards.

*Guidance: See CCSS for mathematics expectations for each grade.*

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1b. Assessments are presented in ways that are accessible to learners.

*Guidance: “Accessible” means assessment directions and grading criteria are presented clearly and explicitly. It is clear what students are being asked to do.*

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1c. Tasks connect math practices with math content.

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2. Rigor

2a. Tasks focus on the development of conceptual mathematical understanding.

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# Meeting the Moment

**2b.** Tasks focus on the **building** of **procedural fluency**.

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**2c.** Tasks focus on the **application** of math concepts OR skills to **real-world situations**.

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# 3. Cognitive Demand

**Evidence**

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</table>

**3a.** The assignment requires high levels of cognitive demand, aligning with **Strategic Thinking (DOK 3)** or **Research and Extended Thinking (DOK 4)** in Norman L. Webb’s **Depth of Knowledge Levels**.

*More details are in the Further Guidance section.*

# 4. Intentional Scaffolds and Opportunities for ELD

**Evidence**

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</table>

**4a.** Scaffolds support learners to access grade level content **independently**.

*Guidance: Scaffolds may be provided in English or the home language. Pay close attention to the language of the scaffolds and its appropriateness for the intended students. Example scaffolds are in the Further Guidance section.*

**4b.** Assignment helps learners to **connect prior knowledge or home language skills** to build understanding of new concepts.

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</table>


4c. Scaffolds support learners to **pay close attention to target language** during planned opportunities for discussing, reasoning, problem solving, justifying, OR explaining.

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<th>Strong</th>
<th>Moderate</th>
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<th>None</th>
</tr>
</thead>
</table>

4d. Scaffolds include structures or procedures that engage learners in **metacognitive thinking, negotiating, or analyzing** in collaboration with peers.

<table>
<thead>
<tr>
<th></th>
<th>Strong</th>
<th>Moderate</th>
<th>Weak</th>
<th>None</th>
</tr>
</thead>
</table>

4e. Assignment contains **clear expectations** for mathematical reasoning through **written language use**.

**Guidance:** Students are guided to be strategic and purposeful in their choice of words and use of written language in order to form and demonstrate meaning. Task or question prompts may suggest functional uses of language (e.g., Describe, List, Tabulate, Generate questions, Respond with complete sentences, Show your graph, Write a formula, Diagram, etc.).

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<th>Strong</th>
<th>Moderate</th>
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<th>None</th>
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</table>

4f. Assignment contains **clear expectations** for mathematical reasoning through **speaking**.

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<tr>
<th></th>
<th>Strong</th>
<th>Moderate</th>
<th>Weak</th>
<th>None</th>
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</table>

4g. Assignment contains **clear expectations** for mathematical reasoning through **listening**.

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<tr>
<th></th>
<th>Strong</th>
<th>Moderate</th>
<th>Weak</th>
<th>None</th>
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</thead>
</table>
4h. Assignment specifies the language students should use for communication (English, home language, or student’s choice).

5. Learner Autonomy and Choice

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<tbody>
<tr>
<td>5a. Assignment provides learners with ample choice in content. Content can include text, optional mini-lessons, home language, and more.</td>
<td>_Strong</td>
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<td>_None</td>
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<tr>
<td>5b. Assignment provides learners with ample choice in product. Product refers to how students present their final thinking.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
<tr>
<td>5c. Assignment provides learners with ample choice in process. Processes can include format of engagement or expression, medium (e.g., audio vs. written text), and working with peers or alone.</td>
<td>_Strong</td>
<td>_Moderate</td>
<td>_Weak</td>
<td>_None</td>
</tr>
</tbody>
</table>
5d. Assignment prompts learners’ **metacognitive thinking** about any of the following: 1) their engagement in the task, 2) what they learned, and/or 3) where they experienced difficulties.

5e. Assignment prompts learners’ **metalinguistic thinking** about how English language structures relate to their home language.

<table>
<thead>
<tr>
<th>Strong</th>
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**Mathematics Rubric Guidance**

**Scoring guidelines**

For all items, raters should score the assignment holistically. In other words, we are looking for a rating of quality rather than quantity. Whether the assignment has multiple tasks or one main task, raters should evaluate the quality of the assignment as a whole.

**Cognitive Demand**

This row is based on Norman A. Webb’s Degrees of Knowledge. The examples below are from Education Trust’s Math Assignment Analysis Guide. Keep in mind that multiple choice is not always low in cognitive demand; be sure to look at what kind of thinking is being demanded of the student.

1. Recall/reproduction
   a. Recall a fact, term, principle, concept
   b. Perform a routine procedure or a simple algorithm; or apply a formula

2. Basic application of skills
   a. Use information


b. Apply conceptual knowledge

c. Select appropriate procedures for a task

d. Complete two or more steps with decision points along the way

e. Complete routine problems

f. Organize/display data

g. Interpret/use sample data

3. Strategic thinking
   a. Requires reasoning or developing a plan or sequence of steps to approach the problem; requires some decision-making and justification
   b. Abstract, complex, or nonroutine
   c. There is often more than one possible answer

4. Research and extended thinking
   a. An investigation or application to the real world; requires time to research, problem solve, and process multiple conditions of the problem or task
   b. Requires nonroutine manipulations across disciplines/content areas/multiple sources

Intentional Scaffolds and Opportunities for ELD

Scaffolds may be provided in the text of the task and/or may be provided alongside the task. Examples of scaffolds to look for:

1. Translation and translanguaging\textsuperscript{17} opportunities

2. Modeling

3. Pre-teaching vocabulary (Note: This in isolation is not considered a Common Core–aligned strategy. Pre-teaching should only occur for words that cannot be defined through context clues.)

4. Directions to interact with peers and teacher

5. Developing metacognition: look for questions that guide learners to self-assess performance, develop personal learning strategies, etc.

6. Graphic organizers

\textsuperscript{17} “Translanguaging Resources.” CUNY-NYS Initiative on Emergent Bilinguals. \url{https://www.cuny-nysieb.org/}
Acknowledgements

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About Pivot Learning

*In pursuit of educational justice, Pivot Learning partners with teachers and leaders to improve instructional coherence and ensure a rigorous, relevant, and inclusive public education for all students.*
References


California Department of Education. (n.d.-f). *Newcomer students.* Retrieved November 11, 2022, from https://www.cde.ca.gov/sp/el/er/newcomerstudnts.asp


