CALIFORNIA TEACHERS ASSOCIATION

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July 6, 2023

Dr. Linda Darling-Hammond
President, State Board of Education
1430 N Street, Suite 5111
Sacramento, CA 95814-5901



***RE: CTA COMMENTS REGARDING ITEM #11: Adoption of the 2023 Mathematics Framework for California Public Schools, Kindergarten Through Grade Twelve***.

Dear State Board of Education President Darling-Hammond and SBE Members,

On behalf of the over 310,000 members of the California Teachers Association (CTA), we appreciate the opportunity to express our support for the adoption of the 2023 Mathematics Framework. Our members are the practitioners that are the ultimate end users of the framework, and our hope is to ensure that the framework is usable and can impact instruction in a tangible way.

Beginning with the Introduction in Chapter 1 and throughout the document, CTA is impressed with the tone that was set prioritizing social justice and equity and access for all students, including pathways for acceleration. CTA is committed to equal access, social justice, and diverse resources for all of California's students, teachers, and classrooms. This commitment is embodied in our mission statement, and we hold true to ensuring students are provided with the skills necessary to become responsible and healthy members of society. CTA supports your efforts to bring math equity into the instructional realm. The framework is straight forward about acknowledging that implicit and explicit bias have factored into the systemic deficit approach in teaching math. There have been historic gatekeepers within our system that have limited opportunities for students, and we will work to help break these down.

The framework is headed in the right direction with its declarations of making math accessible for all students. In the introduction, the framework was not afraid to call out the inequities that students in our state face. CTA is appreciative of the fact that the framework is applying the equity lens using asset or strength-based teaching and learning. Teaching with the big ideas; investigating ideas, discovering, and making connections; replacing remediation and acceleration with access and depth; and eliminating and reducing tracking are all examples of erasing racial, social, gender, economic, and educational inequalities in the school system.

Chapter 1 also introduces Big Ideas with the Drivers of Investigation. Its design is to explain the "why" of learning math. Paired with the "what" in the Content Connections and the "how" of the Standards for Mathematical Practice, the Drivers of Investigation will help guide instruction. This will make math learning more coherent, focused, and rigorous.

CTA recommends that the CDE develop video demonstrations of the "Drivers of Investigation" to help make it accessible to educators across the state. Additionally, ongoing professional development is going to be critical for this concept to take root. CTA also appreciates that the document has been shortened and redesigned to make it more digestible and coherent for teacher use by moving the longer vignettes and research to an appendix. We also support the concept of providing teachers with release time to work out the big ideas in their grade level or course. Teachers need time to work together to plan and implement the big ideas, open tasks, social justice-oriented perspectives, and culturally relevant pedagogy.

We believe it would be valuable for an index to be created at the end of the framework to direct teachers on where to find topics such as special education, co-teaching, English Learners, Universal Design for Learning, formative assessment, summative assessment, rubrics, etc. A website where a repository of resources and lesson plans developed by educators would also be very helpful.

**Specific Supports for Educators to Meet the Needs of Students with Disabilities**

We continue to have deep concerns about the lack of supports for students with IEPs and 504s as they continue to be harmed by deficit model teaching and siloed school structures. With the shift to a strength-based teaching model, we hope that our students with IEPs and 504s will benefit from the focus on Universal Design for Learning (UDL) and the elimination of tracking students. Even though UDL lays out a strong instructional foundation, we feel that some students may need more support and wonder if the pathway approach truly provides those additional levels of support beyond UDL. With more emphasis being placed on inclusion throughout the state, we feel strongly that vignettes with co-teaching examples, differentiation and tiered supports would help our educators plan appropriate instruction for our students with special needs. Additionally, by providing vignettes for tiered supports, school sites will be able to make better team decisions on how to support our students with the highest needs.

We note that Chapter 3 on Number Sense is a critical chapter providing a sequence of activities and tasks by grade bands. Teachers will appreciate knowing what the big ideas are across the grade bands and seeing how math talks or number talks could be applied at each grade band. The connection to the ELD standards for expression and language is another opportunity for teachers to connect learning and language together.

CTA continues to have concerns about the placement of Chapter 5 on Data Science. We strongly feel that this chapter was introduced prematurely and would prefer to see it placed after chapters 6, 7, and 8 about the grade spans. Teachers should be grounded in the pedagogy of learning at each grade span before they begin to integrate data science into their curriculum. Additionally, intensive professional development is needed for teachers to understand the use of data in the teaching of math. While it makes a lot of sense to include data science as part of the skill development for greater depth of knowledge, many teachers, particularly in the elementary grades, will have limited experience in teaching data science. Using data to show evidence and validate one's thinking on a particular topic is critical in the

mastery of math usage in an authentic way and encourages the development of habits of mind.

In Chapter 12 on Assessments, CTA is supportive of the chapter's focus on the growth mindset and how this mindset supports broadening assessment practices to include multi-dimensional assessments which is appropriately applied in Universal Design for Learning (UDL). CTA supports the notion of moving away from narrowly focused assessments, such as rote memorization and procedures, and moving towards broadening the variety of formative and interim assessment tools that are more flexible and less restrictive. CTA supports assessment practices where students can share conceptual thinking and reasoning. The examples and snapshots in this chapter make the distinction between formative assessment for learning and summative assessment of learning and we believe that these illustrative examples will be powerful for educators. We are also appreciative of how the variety of ways students can demonstrate their learnings through language and in drawings, graphs, and other forms of expression are included in the chapter.

We also believe that there are ways to make the framework more accessible for educators. The CDE could develop a one-to-three-page executive summary that leads right into what teachers can expect and how to use the vignettes or snapshots for each chapter. Additionally, you could delineate sections in framework that are for instructional purposes, research components, and vignettes and resources.

**Need for a Comprehensive Statewide Rollout of the Framework**

At this time, we are unaware of a statewide rollout plan for the framework and are concerned with the lack of deep and engaging professional development opportunities to help deepen the knowledge of our teachers in teaching math equity. Unfortunately, our past experiences have been that many districts will resort to the one shot, fly-by type of professional development that has been proven to be ineffective.

We hope to partner with the CDE and key math partners in the state to design and implement impactful, ongoing professional development opportunities for our educators in every corner of the state. We hope Instructional Leadership Corps types of teacher-led professional development opportunities are provided so teachers can learn from other teachers and be the leaders of the learning at their local schools and districts. CTA would also like to encourage the CDE to develop videos that showcase demonstration lessons that can be a part of an on-demand professional development approach that can be accessed via QR codes.

We believe that developing more teacher presentations demonstrating application of concepts and ideas throughout the document can be a part of an effective, multi-pronged approach to meeting the needs of educators. As we are using more technology, many of the vignettes or snapshots could be linked to a video demonstration of a topic or lesson or a hyperlink to a video. We would like to see a menu offering continuous professional development opportunities that teachers can use on-demand when they are developing lessons. Our teachers are hungry for professional learning that is meaningful to them. Over 3,000 teachers

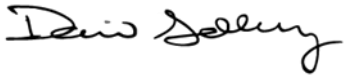
attend our annual Good Teaching Conferences because they like seeing their colleagues present a concept so they can see what the instructional technique looks like and then take it back to their classrooms immediately. Through our Instructional Leadership Corps we also provided online trainings via Zoom for over 40,000 teachers at the start of the pandemic. The use of virtual or online learning can be a valuable asset to framing the approach to teaching math equity and understanding the systemic changes in order for that to happen.

**Ensuring that the Framework is Used in Teacher Preparation Programs**

CTA recommends that the CDE and SBE work with the CTC to ensure that the math framework is infused into teacher preparation programs. This will help to ensure that new teachers are familiar with the mindset of infusing equity in teaching math. Through the induction programs, we advise intensive professional development and training for new and beginning teachers. These efforts coupled with a statewide rollout will help to ensure that all educators are receiving the supports they need to shift their instruction.

We thank you for your earnest efforts in revising the math framework to address the social justice and equity issues in teaching math. We look forward to the adoption of the 2023 Mathematics Framework.

Sincerely,



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