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Action

Educator Preparation Committee

Update on the Development of the CalTPA Math Cycle and Extended Field Test

Executive Summary: This agenda item presents an update on the development of the CalTPA PK-3 Early Childhood Education (ECE) and Education Specialist (EdSp) Deaf and Hard of Hearing (DHH) Math Cycle field test results, analysis, and next steps.

Recommended Action: That the Commission adopt the CalTPA EdSp-DHH Math Cycle for operational administration beginning in the 2025-26 academic year and adopt a passing standard of 16 points across the 8 rubrics, with no side conditions, for the CalTPA Math Cycle for all credential areas (PK-3 ECE, ECSE, DHH, VI) for the first year of operation. This recommended score represents a passing score of 2 points per rubric. Additionally, staff recommend adopting a secondary passing standard of 14 for the first year of operation.

Presenters: Julie Holmes and Heather Kennedy, Consultants, Performance Assessment

Strategic Plan Goals

Educator Preparation and Advancement

- **Goal 1.** Educator preparation programs hold candidates to high standards and adequately prepare them to support all students by using culturally and linguistically responsive and sustaining practices in equitable, inclusive, and safe environments.
    B. Develop educator performance assessments that are embedded in clinical preparation to ensure readiness to begin professional practice

Continuous Improvement

- **Goal 7.** The Commission's work is grounded in research, informed by the voices of practitioners and communities of interests, and supports continuous improvement in educator preparation and licensure.
    O. Strengthen the Commission’s capacity to collect and analyze survey and assessment data related to quality in preparation of the education workforce

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Update on the Development of the CalTPA Math Cycle and Extended Field Test

Introduction
This agenda item presents an update on development of the CalTPA PK-3 Early Childhood Education (ECE) and Education Specialist (EdSp) Deaf and Hard of Hearing Math Cycle Field Test results, analysis, and next steps.

Background
Current law requires individuals seeking a California teaching credential to complete a Teaching Performance Assessment (TPA) (EC §44320.2), in addition to successfully completing coursework and clinical practice through a Commission-approved program. The TPA measures candidates' proficiency on Teaching Performance Expectation (TPE) elements observable through a performance assessment prior to being recommended for a preliminary credential.

Currently there are three Commission-approved TPA models for Multiple Subject (MS), Single Subject (SS), and Education Specialist (EdSp) Mild to Moderate Support Needs (MMSN) and Extensive Support Needs (ESN) candidates: CalTPA, the Commission's TPA model; edTPA, operated by Evaluation Systems (ES); and the Fresno Assessment of Student Teachers (FAST), implemented by California State University, Fresno.

Candidates for Education Specialist Deaf and Hard of Hearing (DHH) credentials must also successfully complete coursework, clinical practice requirements, and the Reading Instruction Competence Assessment (RICA) to be recommended for a preliminary credential. In December 2022, the Commission granted an extension on the development of and requirement for a TPA for the EdSp-DHH credentials to allow the assessments to develop alongside the requirements for a literacy performance assessment, pursuant to SB 488.

In August 2024, Commission staff presented a detailed agenda item describing the development and characteristics of the CalTPA Mathematics Cycle. In April 2025, Commission staff presented the initial findings from the Math Cycle Field Test for PK-3 ECE and EdSp-ECSE and VI and the Commission adopted the CalTPA PK-3 ECE and EdSp-ECSE and VI Math Cycle for operational administration beginning in the 2025-26 academic year. At that time, full field test data for PK-3 ECE and the EdSp-DHH Math Cycles were not available; this agenda item presents those data.

This agenda item is organized into four parts:

- Part I summarizes the extended Math Cycle Field Test development, including the bias review process.
- Part II provides the methodology of the extended Math Cycle Field Test.

- Part III shares the results from the extended Math Cycle Spring 2025 Field Test analysis, including candidate scores and overall themes from analysis of survey and focus group responses from candidates, program coordinators, cooperating teachers, and assessors.
- Part IV provides next steps, including a timeline describing how the Commission and its technical contractor Evaluation Systems group of Pearson (ES) will support PK-3 ECE and EdSp-DHH programs to prepare for the first year of operational administration for candidates enrolling in these programs starting July 1, 2025.

Part I: The Math Cycle Field Test Development Process

Both the PK-3 ECE and the EdSp-DHH Math Cycles were developed collaboratively by Commission staff and math pedagogy specialists. Appendix A provides the list of TPEs addressed within the PK-3 ECE and EdSp-DHH Math Cycles, and Appendix B provides the Evidence Table for the field test version of the Math Cycle. Appendix C provides the members of the Math Cycle expert workgroup and an overview of workgroup meetings.

PK-3 ECE Math Cycle Field Test Development Process

The PK-3 ECE Math Cycle was developed by Commission staff, with the assistance of math pedagogy specialists, to measure elements of PK-3 ECE TPE Domain 8, Effective Mathematics Instruction in a PK–3 Setting. Detailed information related to the development process was presented at the April 2025 Commission meeting.

EdSp-DHH Math Cycle Field Test Development Process

The development of the EdSp CalTPA for DHH began with the EdSp Design Team in February of 2020. In the summer of 2021, it was determined that subgroup meetings were needed for each EdSp credential area. Appendix D provides the names of the EdSp-DHH subgroup members who contributed to the pilot study version.

The EdSp CalTPA pilot study for DHH began in October of 2021 and concluded in June 2022. While the pilot study yielded important information, it was determined that (a) additional field test data needed to be collected and analyzed and (b) the literacy performance assessment needed to be considered to inform the final stages of development for these TPAs.

After the Literacy Performance Assessment (LPA) pilot, EdSp-DHH credential area experts began working. EdSp-DHH credential area experts made recommendations to revise Cycle 1 to become the Math Cycle: Learning about Deaf and Hard of Hearing Students with IEPs and Planning a Math Lesson. Appendix E provides the members of the Math Cycle expert group and a summary of their meetings. The group advocated for candidates to:

- Have focus student options specific to the ages and disabilities served by the credential area (e.g. a student who is an ASL learner or needs support with language development)
- Facilitate and film the math activity with the focus students one-on-one or in a group
- Engage students in discourse strategies (ASL and/or spoken English)

Math Cycle: Extended Field Test

The experts in each of their respective fields used *CalTPA Cycle 1: Getting to Know Students and Planning Instruction*, as the foundational document to develop their respective Math Cycles. A

comparison of the evidence a candidate submits for Cycle 1 of the CalTPA and the field test version of the Math Cycle is available in Appendix F.

Additional adjustments to the evidence candidates submit, along with several innovative changes incorporated from the positive feedback received during the LPA, and the recommendations from the Bias Review Committee are available in Item 3D from the April 2025 Commission Meeting.

Part II: Extended Spring 2025 Field Test Methodology

The Math Cycle Extended Field Test process included recruiting candidates to participate from PK-3 ECE, and EdSp-DHH programs; providing support to those programs and candidates; recruiting and training assessors; conducting consensus scoring; and soliciting feedback through surveys and focus groups.

Candidate Participation: Credential Area, Pathway, Sector, and Ethnicity

Ultimately, four preliminary preparation programs across PK-3 ECE and EdSp-DHH credential areas participated in the Math Cycle extended field test. From those programs, 43 candidates submitted responses (see Appendix G), all of which were determined to be scorable. Pathways represented in the field test included University Student Teaching, District Intern, and Integrated Undergraduate Teacher Credentialing Programs (ITEP). Sectors of preparation programs represented included private and LEA/county office of education. Table 1 outlines the number of candidates in each represented credential area.

Table 1: Number of Candidates by Credential Area

Credential Area	N Candidates
PK-3 ECE	37
EdSp-DHH	6
Total	**43**

Table 2 provides candidate participation by pathway, with District Intern having the highest number (n=28) of candidates participating in the Math Cycle Field Test and Integrated Undergraduate Teacher Credentialing Program (ITEP) pathways having the lowest number of candidates (n=1) participating.

Table 2: Number of Candidates by Pathway

Pathway Type	N
University Student Teaching	14
District Intern	28
University Intern	0
Residency Program	0
Integrated Undergraduate Teacher Credentialing Program (ITEP)	1
Total	**43**

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Table 3 shows the candidates in the field test by sector. The largest number of candidates came from LEA/County Office of Education programs (n=28). As none of the UCs offer PK-3 ECE or EdSp-DHH programs, no field test participants were from a UC.

Table 3: Number of Candidates by Sector

Sector Type	N
CSU	0
Private/Independent	15
LEA/County Office of Education	28
UC	0
Total	**43**

Table 4 outlines the number of candidates by ethnicity, with Mexican American/Chicano (N=13), being the largest group represented. Filipino American/Filipino (N=1), Korean American/Korean (N=1), and Native American/American Indian/Alaskan Native (N=1) were the least represented. Data are self-reported by the candidates.

Table 4: Number of Candidates by Ethnicity

Ethnicity	N Submitted
Mexican American/Chicano	13
White (non-Hispanic)	12
Latino/Latin American/Puerto Rican/Other Hispanic	10
Choose not to response	1
African American/Black	4
Asian Indian American/Asian Indian	0
Filipino American/Filipino	1
Cambodian American/Cambodian	0
Chinese American/Chinese	0
Other Southeast Asian American/Southeast Asian (e.g., Hmong, Khmer)	0
Korean American/Korean	1
Native American/American Indian/Alaskan Native	1
Japanese American/Japanese	0
Laotian American/Laotian	0
Vietnamese American/Vietnamese	0
Total	**43**

Math Cycle Support Provided by Commission Staff

Webinars were held for program coordinators and faculty supporting candidates in the Math Cycle Field Test beginning in January 2025.

To prepare for the extended field test, two additional webinars were held with EdSp DHH programs in November and December. The recorded fall field test webinars were also provided. Individual office hour sessions were held upon request.

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Of the three PK-3 programs that participated in the Math Cycle field test, two were returning programs that had also participated in the fall field test, while one was a new program. To support the new program, Commission staff held webinars to walk their faculty and staff through the PK-3 Math Cycle Assessment Guide and templates.

Commission staff also engaged with cooperating teachers by holding a pre-recorded webinar to introduce them to the Math Cycle Field Test requirements and templates. All communities of interest had ongoing support through the CalTPA@ctc.ca.gov email inbox. For a full outline of events, see Appendix H.

Math Cycle Extended Field Test Assessor Recruitment, Training and Scoring

Beginning in September 2024, ES recruited individuals working in preliminary preparation programs and active practitioners to serve as field test assessors. Table 5 shows the number of assessors for the Math Cycle in each credential area that participated, along with the number of submissions scored by each group of assessors. Assessors in all areas were required to have recent experience and expertise in the age/grade levels and/or credential areas being scored. See Appendix I for the assessor qualifications. Submissions in PK-3 ECE were scored from April 28-30, 2025, and submission in EdSp-DHH were scored May 20-22, 2025. Both sets of submissions were scored using a consensus scoring model.

Table 5: Math Cycle Extended Field Test Assessors

Credential Area	Assessors	Submissions Scored
PK-3 ECE	9	37
EdSp-DHH	2	6
Total	**11**	**43**

Analytic rubrics were used to calibrate and score each step of the *Plan, Teach and Assess, Reflect,* and *Apply* sequence. Appendix J provides the PK-3 ECE Rubric Essential Questions and a sample rubric. While there are five score levels per rubric, the expectation for a candidate is to provide evidence that corresponds to Level 3, which represents expected performance of a teacher candidate. Levels 4 and 5 of the rubrics require the candidate to provide additional evidence, demonstrating a more complex and/or comprehensive performance. Candidates who score at a Level 1 or 2 in any area of a rubric cannot score above that level for that rubric.

Assessors were provided preselected “marker papers” that displayed differing levels of responses from across the five rubric score levels. Once they demonstrated calibration through reviewing marker papers and discussion, assessors moved into pairs or triads for scoring the remaining candidate submissions using the consensus scoring process. Scoring was conducted online. As consensus on the score judgments were reached, data were entered into the computer system to track scores.

Field test scoring procedures were implemented in accordance with the CalTPA Scoring Quality Management Plan. Submissions that were at or around the passing standard were double scored (blind scored by new assessor[s]). In the event rubric scores were adjacent, the higher score was reported. If the rubric scores were exact, the score remained the same. If the rubric

scores were more than one score point apart, the submission was sent to a new assessor for adjudication scores and a final scoring determination was made. Submissions with two or more rubric scores of "5" were backread (read again by Commission staff) for the purpose of studying high performing submissions and to determine that rubric language was appropriate.

Candidates and programs for both PK-3 ECE and EdSP-DHH received notification of passing status at the conclusion of scoring for each credential area. Aggregate scores were sent to programs in June 2025 for both PK-3 ECE and EdSp-DHH.

Part III: Results from the Math Cycle Spring 2025 Extended Field Test Analysis
The following points outline key findings from the extended field test data:

Findings from Scoring
Of the 43 candidates who registered for the Math Cycle Field Test, 100% (N=43) submitted assessments. All submissions were determined to be scorable.

Overall Pass Rate
Table 6 identifies the overall pass rates and mean scores for the Math Cycle field test by program pathway. At the conclusion of scoring, 43 of the 43 Math Cycle Field Test candidates passed (100% pass rate), with an overall mean score of 22.6 (passing standard set at 14 points). Additional score data related to pass rates by pathway, sector, gender, and ethnicity are available in Appendix K.

Table 6: Overall Pass Rates by Pathway

Credential Pathway	N Submitted	% Pass	Mean
District Intern (PK-3)	22	100%	22.6
District Intern (DHH)	6	*	22.8
Integrated Undergraduate (PK3)	1	*	17
University Private School Program (PK3)	2	*	16.5
University Student Teaching (PK3)	12	100%	24.1

*Note: Pass rates are not reported for assessments with fewer than ten candidates

Pass Rate by Racial/Ethnic Group
Table 7 identifies pass rates by different racial and ethnic sub-groups. All subgroups passed at a rate of 100%.

Table 7: Pass Rate by Ethnicity

Ethnicity	N Submitted	N Passed	N Not Passed
African American/Black	4	*	*
Asian Indian American/Asian Indian	0	0	0
Cambodian American/Cambodian	0	0	0
Chinese American/Chinese	0	0	0
Choose not to response	1	*	*

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Ethnicity	N Submitted	N Passed	N Not Passed
Filipino American/Filipino	1	*	*
Japanese American/Japanese	0	0	0
Korean American/Korean	1	*	*
Laotian American/Laotian	0	0	0
Latino/Latin American/Puerto Rican/Other Hispanic	10	10	0
Mexican American/Chicano	13	13	0
Native American/American Indian/Alaskan Native	1	*	*
Other	0	0	0
Other Southeast Asian American/Southeast Asian (e.g., Hmong, Khmer)	0	0	0
Vietnamese American/Vietnamese	0	0	0
White (non-Hispanic)	12	12	0
Total	**43**	**43**	**0**

*Note: Pass rates are not reported for assessments with fewer than ten candidates

Pass Rates by Credential Area

Table 8 outlines the scoring data by credential area (pass rates, mean scores, standard deviation, minimum score assigned, and maximum score assigned). PK-3 ECE had the highest observed score (31) and the lowest observed score (14). Although, the EdSp DHH candidates had the highest mean score (22.8) and the PK-3 ECE candidates had the lowest mean score (22.6), the mean scores across both groups were closely aligned. Due to the limited number of candidates in the EdSp-DHH sample (N=6), the data for this group is not generalizable to the larger EdSp-DHH population and should be interpreted with caution.

Table 8: Mean Scores by Credential Area

Credential Area	Candidates	Pass Rate	Overall Mean Score	S.D.	Min	Max
PK-3 ECE	37	100%	22.6	4.1	14	31
EdSp-DHH	6	*	22.8	4.5	18	29
Total	**43**	**100%**	**22.6**	**4.1**	**14**	**31**

*Note: Pass rates are not reported for assessments with fewer than ten candidates

Score Distribution Across Rubric Levels

Total scores for all submissions ranged from 14 to 31 (out of a possible 40 points) across the eight rubrics.

The distribution of scores for all submissions is presented below in Graph 1. With a total of 40 points possible, the highest observed score was 31, the lowest observed score was 14, and the most frequently observed score was 20 (9 candidates achieving that score). For reference, the green box indicates the passing cut score (14) and the yellow oval is the mean score (23). No scores were below the passing standard, indicating that a score of 14 is a very supportive passing standard for candidates participating in the Math Cycle extended field test.

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Graph 1: Total Distribution of Scores

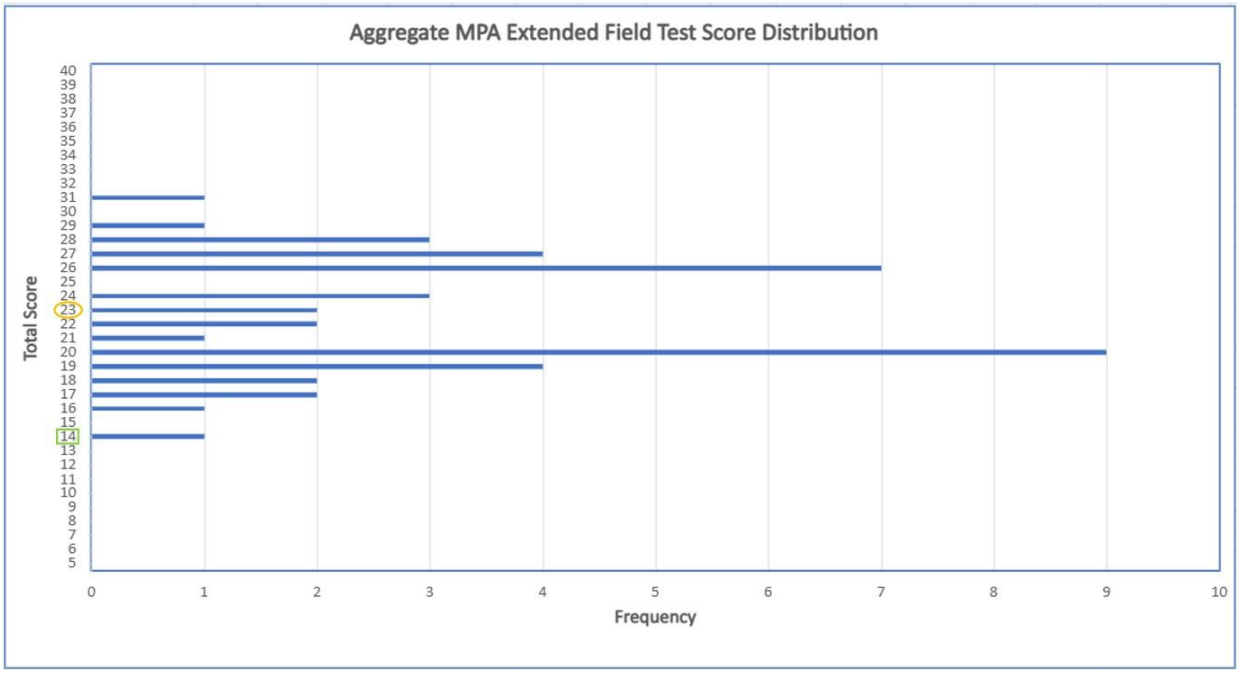

Table 9 outlines the distribution of scores for each Step and Rubric. Scores were observed across the full range of rubric levels (1-5) for Rubric 5. No scores of Level 5 were observed on Rubrics 1 ,2, 3, 4, 6, 7, and 8, and no scores of Level 1 were observed on Rubric 4. While all rubrics will be revised based on the results of the field test, Rubrics 3, 5, and 8, which had the highest number of Level 1 scores, will be closely studied going into the operational administration of the assessment. Information about each credential area's rubric scores is available in Appendix L.

Table 9: Score Distributions by Rubric

	Level 1 (N)	Level 2 (N)	Level 3 (N)	Level 4 (N)	Level 5 (N)
Step 1: Plan					
Rubric 1	1	11	20	11	0
Rubric 2	1	13	26	3	0
Rubric 3	2	11	25	5	0
Rubric 4	0	15	24	4	0
Step 2: Teach and Assess					
Rubric 5	2	10	15	12	4
Rubric 6	1	8	23	11	0
Step 3: Reflect					
Rubric 7	1	18	18	6	0
Step 4: Apply					
Rubric 8	3	18	15	7	0

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In Step 1: Plan, candidates scored primarily at Levels 2 and 3 across all rubrics (Rubrics 1, 2, 3 and 4), and no candidates scored at Level 5. After completing an analysis related to the number of Level 1 and Level 2 scores in Rubrics 1 and 4, staff observed that candidates require more support with leveraging students' assets (cultural and/or linguistic) and/or interests in their planning and would benefit from a shared definition of "play-oriented." Because no Level 5 responses were observed in Rubrics 1, 2, 3, 4, the Level 5 constructs have also been revised. Commission staff will address these areas through callout boxes and glossary additions within the guides.

In Step 2: Teach and Assess, Rubrics 5 and 6 had scores of 3 and 4 assigned the most. Rubric 5 saw a high number of Levels 1 and 2 assigned in scoring. Staff conducted an analysis as to why candidates were assigned Level 1 and discovered that many candidates leveraged students' interests in facilitating the activity/lesson, while the rubric called for leveraging cultural and/or linguistic assets. This was misaligned to Step 1: Plan, which asked candidates to leverage the students' assets (cultural and/or linguistic) and/or interests in their planning. The rubric has subsequently been revised to align with Step 1 and will be closely monitored in the revisions.

Step 3: Reflect has only one rubric, Rubric 7. Levels 2 and 3 were the most frequently observed scores, and no candidates scored at Level 5. In reviewing the scoring data, EdSp- DHH candidates were assigned Level 2 due to providing a vague analysis of the effectiveness of the adaptations for their focus students. Revisions will address the differences in summarizing versus reflection. Because no Level 5 responses were observed in Rubric 7, Levels 4 and 5 constructs have also been revised.

In Step 4: Apply, the majority of scores for Rubric 8 were at Level 2. Rubric 8 also contained the most Level 1 scores across all eight rubrics. Observation from scoring indicates that Levels 1 and 2 were frequently assigned due to candidates' submission of vague responses regarding how the next steps for learning would reinforce, strengthen, and/or extend the student's math learning and ELD/math academic language development. There was no clear trend related to EdSp-DHH candidates frequent Level 2 scores. Prompt revisions will address these areas to elicit clearer candidate responses.

Findings from Candidate, Program Coordinator, Cooperating Teacher, and Assessor Feedback

Candidates, program coordinators, cooperating teachers, and assessors had the opportunity to provide feedback on the Math Cycle through surveys and focus groups. Selected survey responses that reflect themes found in the full set are available in Appendix M, and focus group excerpts are available in Appendix N.

Survey Administration

Candidates, program coordinators, cooperating teachers, and assessors were surveyed based on their extended field test participation to gather their feedback. Candidate, program coordinator, and cooperating teacher surveys had items clustered in three areas: Opportunity to Demonstrate Knowledge, Skills, and Abilities; Clarity and Ease of Use; and Field Test Information and Support. The assessor survey had items clustered in two areas: Clarity and Ease of Use and Field Test Assessor Training.

Across all areas, respondents were asked to indicate their level of agreement with statements using a 4-point scale (Strongly Agree, Agree, Disagree, Strongly Disagree) with the additional option to select Don't Know/Does Not Apply.

In total, 19% (N=8 out of 43) of candidates who participated in the Extended Field Test responded to the survey. All respondents were from the PK-3 ECE credential area; no EdSp-DHH candidates responded. Five of the eleven assessors (45%) completed the survey; of these, four were PK-3 ECE assessors and one was an EdSp DHH assessor. No survey responses were received from participating program coordinators or cooperating teachers. For survey responses from these groups from the fall field test, refer to Item 3D from the April 2025 Commission Meeting.

Focus Group Administration

Following their submission of their Math Cycle Performance Assessments, four PK-3 ECE candidates participated in focus group discussions to share their experiences. One PK-3 ECE program coordinator also participated in a focus group discussion after their candidates had submitted. No DHH candidates or DHH program coordinators attended a focus group discussion, though a DHH program coordinator had been scheduled to attend and a DHH candidate indicated interest. Finally, 11 assessors participated in focus group discussions following the completion of the consensus scoring to share their experiences. Extended excerpts from the focus groups discussions can be found in Appendix N.

Key Findings from Candidates

The following summarizes key findings from the feedback shared by candidates who responded to the surveys and/or participated in focus groups.

Opportunity to Demonstrate Knowledge, Skills, and Abilities

Overall, responding candidates indicated that the Math Cycle allowed them to demonstrate their math instruction in an authentic way. In their survey responses (n=8), all candidates (100%) strongly agreed or agreed that the Math Cycle allowed them to demonstrate their math instruction in an authentic way. Additionally, 63% (n=5) strongly agreed and 37% (n=3) agreed that the tasks associated with completing the Math Cycle aligned with what they had been learning in their educator preparation coursework and that the Math Cycle was a fair measure of their ability to teach math.

As one candidate stated:

> *The Math Cycle made me take a step back and really evaluate "why" I do what I do. I have been in the field for so long that explaining the why was really challenging for me. However, for those that are new to the field I feel it is very important to understand the why.*

Additionally, focus group candidates shared that completing the Math Cycle was a significant accomplishment, despite its difficulty. They noted that reviewing videos of their teaching provided insights and supported their growth as educators. Candidates also highlighted that their participation in the Math Cycle led to their realization of the importance and value of using students' cultural and linguistic assets in their activities/lessons and instruction, their

understanding of the need to provide actionable and specific feedback to students, and of the advantages of play-based learning and allowing students to guide the activity.

As one candidate focus group participant stated:

> *It was challenging. What does culture have to do with math? I asked my coordinator, supervisor, and my peers, and between everybody we helped each other.*

Clarity of Assessment Materials and Ease of Use

All candidates (100%) strongly agreed or agreed (n=8) that having the choice to provide written, verbal, or ASL commentary in Steps 2 and 4 was helpful. This was echoed in the qualitative responses, where candidates reported the flexibility allowed them to choose the format that best suited their strengths and preferences, such as written or verbal commentary.

Candidates also strongly agreed or agreed (100%) that, based on their students' understanding of the math and ELD goals, they felt confident in determining future steps for their math learning and language development.

Two candidates (29%) strongly agreed, four candidates (57%) agreed, and one candidate (14%) disagreed that they understood how to leverage students' cultural and/or linguistic assets and/or interests when planning their activity/lesson. Candidates generally found the commentary prompts in Step 2 helpful, with 38% (n=3) strongly agreeing, 50% (n=4) agreeing, and 12% (n=1) disagreeing. Commission staff will focus on these areas for revisions for the operational versions of the Math Cycle.

In the survey, 63% (n=5) of candidates indicated that they strongly agreed and 37% (n=3) indicated they agreed that the directions for using math content and math practice strands/standards to create learning goals were clear. However, as discussed in Part III, candidate submissions revealed some challenges in applying these strands/standards effectively when creating learning goals.

Math Cycle Field Test Information and Support

In their survey responses, 100% of candidates strongly agreed or agreed that their program faculty encouraged them to self-assess their submissions using the Math Cycle rubrics and that their program provided guidance with registration and uploading their submission. In their focus group comments, candidates again highlighted the importance of faculty support, which supports the implementation of the CalTPA Acceptable Supports.

As one focus group candidate stated:

> *I sought help from our program and I did the candidate office hours. I'd ask my program and supervisor questions in an email or text and they were very helpful.*

Another area of note is that 25% of candidates agreed that they were prepared by their program to write ELD learning goals. While the Math Cycle is shifting toward academic language development and goals (with ELD moving to the Literacy Cycle), this is an area that Commission staff will continue to monitor, especially as the Literacy Field Test concludes.

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Areas for Consideration
Candidates also reported challenges with:

- Clarity of directions and templates was a challenge for some candidates, particularly around writing commentary, sequencing video clips, and interpreting rubrics/prompts.
- Time constraints due to field placement schedules, school breaks, and workload led several candidates to report spending more time than expected completing the cycle.
- Varying levels of program support impacted candidate experiences, with some requesting more consistent guidance, resources, or technical assistance.
- Difficulty articulating teaching decisions especially in explaining the rationale ("why") behind instructional choices in the commentary sections.
- Challenges with the video upload and video sizing process. Although this issue was resolved by ES, it was a challenge at the time of registering.

Key Findings from Program Coordinators
No survey responses were received from participating program coordinators in the extended field test. One PK-3 ECE program coordinator participated in the focus group. For key findings, refer to Item 3D from the April 2025 Commission Meeting.

Opportunity to Demonstrate Knowledge, Skills, and Abilities
When asked if they felt candidates learned something of value about their instructional practice by completing the Math Cycle field test, the Program Coordinator shared:

> *Yes, they have a lot of confidence after doing TPA. One thing some struggled with though was video taping and editing, but they learned a lot. We had a teacher who was 50 and struggled with taping and editing the videos.*

Clarity of Assessment Materials and Ease of Use
When asked whether or not the Math Cycle instructions were clear about how to use both math content and math practice standard(s) to write the learning goal(s), the Program Coordinator shared:

> *Absolutely! Yes, the instructions for how to use the math content and practice standards to write the learning goals was clear. We cover the math content and practice standards in our program so our candidates are familiar with them.*

Math Cycle Field Test Information and Support
When asked whether candidates had enough information about their focus children/students' learning needs, assets, and/or interests to plan adaptations for their math activity, the Program Coordinator shared:

> *Yes. Also, two out of three of our candidates were in their own classroom so that helped. As a program we have a lesson plan template and one section candidates have to complete relates to the students' assets and needs. They have to answer six questions for this section and it gave them enough information to plan the adaptations for the math activity.*

Areas for Consideration
When asked whether there were any aspects of the rubrics that were unclear, the Program Coordinator shared:

I remember one unclear rubric related to cultural aspects for math. What was the expectation for play-based? After talking with CTC staff and getting clarification it made sense. It was too broad in the rubric though, especially since play based in an early childhood setting is quite different. If you can, go in detail and describe about the level of play. That would be helpful.

The Program Coordinator provided feedback on the registration system, when asked if they had anything else to share with Commission staff or Evaluation Systems about their experience:

One thing I noticed was the Pearson registration website was quite complex. We spend 1.5 hours with all three of us (myself, coordinator, and instructor) trying to figure it out. It should be easier for candidates to apply. Fewer steps.

Key Findings from Cooperating Teachers

No additional survey responses were received from cooperating teachers from the extended field test. For key findings, refer to Item 3D from the April 2025 Commission Meeting.

Key Findings from Assessors

The following provides key findings from feedback shared by the assessors of the Math Cycles.

Clarity and Ease of Use

As shown in the survey results (Appendix M), overall, assessors found the Math Cycle materials to be clear. All assessors (100%) indicated that they agreed or strongly agreed that the assessment guide directions were clear. PK-3 focus group participants reported that the rubric language was generally clear enough to make scoring judgements, though some terms—such as "equitable and inclusive participation" in Rubric 1.5 and "appropriate evidence" in Rubric 1.7 and 1.8—needed clarification to ensure consistency in candidate understanding. Assessors also drew attention to inconsistent language in Rubrics 1.1, 1.2, and 1.4 with terms like "vaguely" and "clearly" causing difficulty in distinguishing levels.

DHH assessors cited the need to have clearer levels of performance between Levels 3 and 4 in Rubrics 1.5 and 1.7, noting that it was difficult to determine with which level a candidate's evidence best aligned, due to their similarity. This aligned with the assessors survey response of "Disagree" for "Rubric 1.5: Teach and Assess: Constructs were clear and helped me make a score judgment."

In discussing their ability to reach consensus quickly, the DHH assessors shared that the language used in the assessment guide for instruction and communication modes was a challenge, particularly in relation to academic math language. They assessors recommended that the teacher preparation programs work with candidates to achieve fluency in these areas.

In survey responses, 40% (n=3) of assessors strongly agreed, 40% (n=2) agreed, and 20% (n=1) disagreed that the amount of evidence required from candidates at each step was sufficient to score the submission and that the organization of the Math Cycle guide made it easy to find the information (e.g., rubrics embedded with step instructions, glossary, links to resources).

In focus groups, assessors agreed that they were able to reach consensus quickly when scoring, though they faced challenges with Rubric 1.4 in finding a distinction between "vaguely describes" and "clearly explains." Additionally, an assessor mentioned that the questions in Rubrics 1.7 and 1.8 did not align well with the prompts, making it difficult for candidates to answer thoroughly and for assessors to score accurately.

Field Test Assessor Training

All assessors strongly agreed (n=4) or agreed (n=1) that the implicit bias training effectively prepared them for scoring. Consensus scoring training was also well-received, with all assessors strongly agreeing (n=4) and agreeing (n=1) that it helped them understand scoring judgments. Eighty percent of assessors (4 out of 5) reported confidence in their ability to consistently apply the rubrics to score candidates' evidence across all four Math Cycle steps – three strongly agreed and one agreed. These results indicate that the assessor training offered a strong foundation for applying the rubrics with fairness and consistency, while also pointing to the need for ongoing calibration to support full alignment among all scorers.

Areas for Consideration

As reported above, 63% (n=5) of responding candidates indicated that they strongly agreed or agreed that the directions for using math content and math practice strands/standards to create learning goals were clear, yet candidate submissions revealed some challenges in applying these strands/standards effectively when creating learning goals. While most candidates successfully incorporated the math content standards, many either omitted the Math Practice Standards or confused them with other strands when writing their learning goals. This gap indicates that although candidates felt confident about the instructions, they struggled in practice. In candidate submissions, candidates were able to use the math content strands/standards but would leave out Math Practice Standards or confuse other strands/standards for the Math Practice Standards when creating their learning goal. To address this, Commission staff are working to revise instructions and strengthen examples related to using Math Practice Standards prior to the operational materials being released to programs. Additionally, Commission staff plan to host a "Digging Deeper" session focused on this topic in Fall/Winter of 2025.

Overall, PK-3 ECE assessors felt that while the Math Cycle had several useful elements, there were areas that could be improved to better elicit authentic evidence of effective math instruction in PK–3 settings. One assessor noted that Part D, which focuses on materials, was often not useful because it included images of items like counting bears that did not appear meaningfully connected to the lesson. They recommended that this section instead include work samples that demonstrate how students engaged with the materials during instruction. Another assessor shared that they looked for evidence of cultural assets in the materials section but often did not find any. To address this, they suggested prompting candidates to explicitly identify cultural or linguistic assets within their templates. Additionally, there was a recommendation to have candidates explain how each resource supports students' linguistic or cultural needs, which would provide assessors with a clearer understanding of the interaction between students and the materials.

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DHH assessors acknowledged that while DHH candidates had a strong performance in the field test, there could be improvement in eliciting authentic evidence from candidates due to the complexity of instruction in Deaf education and the variety of clinical practice placements candidates may experience. In their responses, the assessors highlighted the importance of mentorship, specialized teaching approaches, and addressing the diverse needs of Deaf students. Specifically, they suggested the use of a narrow, top-down approach in math instruction and addressing the diverse needs of Deaf students with secondary disabilities, including those with additional challenges such as ADHD, autism, or fine motor weaknesses, that might impact their access to math instruction. The survey response suggested that there be consideration for adding K-12 ASL Content Standards, shifting the focus from communication mode to language of instruction, and providing candidates with clear guidelines for filming in landscape mode to clearly show both the teacher and the students.

Part IV: Next Steps for Math Cycle Development

Based on the results of the field test surveys, focus groups, and candidate scores, Commission staff are finalizing the following adjustments to the Math Cycle assessment guides, templates, and rubrics.

Step 1: Plan

- In all versions, work will be done to provide clarity around what it means to leverage students' cultural and/or linguistic assets and/or interests, and play-based learning will be defined. Candidates will also be asked to include math content and practices and math academic language development (ALD) in their learning goals.
- In all versions, the Part C template – previously a lesson/activity plan rationale - will be changed to Math Adaptation(s) for Focus Students in order to highlight how candidates are the meeting diverse needs of their focus student/children.
- In EdSp-DHH, the focus students will be aligned with what the field and programs are familiar with from the operational versions of CalTPA with Focus Student 1 being a student who has a language need and Focus Student 2 being a student with a math learning need. Focus Student 3 will remain the same.
- EdSp-DHH will move to one Focus Student with the option to include additional students who require similar support to progress toward meeting the learning goals.
- EdSp-DHH candidates will be asked to include the Focus Student's IEP goal(s) related to the math content, practices and/or math academic language that will be addressed in the activity/lesson or to well-being or behavior (e.g., attention, engaging with activities) that would impact their access to the math activity/lesson.
- In EdSp-DHH, if the FS is an ASL user, candidates will be asked to select one K-12 ASL Standard and incorporate it into the ALD learning goal.

Step 2: Teach and Assess:

- Revisions will be made to address the shift from ELD to the focus on math ALD.
- EdSp-DHH candidates will be able to facilitate the activity with the Focus Student or with the Focus Student and additional students who require similar support to progress toward meeting the learning goals.

- EdSp-DHH will have updated guidance around filming in a manner that allows assessors to clearly view the candidate's signing (e.g. filming in landscape, lighting, steady camera).

Step 3: Reflect:

- Step 3 prompts will be revised to elicit more reflection from candidates rather than a summary of the previous steps. A callout box will also be added to support candidates with reflective writing.

Step 4: Apply:

- Candidates will be asked to explain what they would do differently if they taught this activity/lesson again and to address how they would advance the students' math academic language development in future activities/lessons.

All rubrics will be reviewed and revised as needed to align with the above changes. Commission staff will continue to work with candidates, program coordinators, cooperating teachers, and assessors to determine the most effective supports for all groups as teacher preparation programs prepare for the operational assessment in the 25/26 academic year.

Timeline for Operational Administration

As a result of the data from the field test, staff maintains that the development timeline for the Commission is on track to begin a 2025-26 operational administration for the Math Cycle for PK-3 ECE and EdSp-DHH programs.

Scheduled supports for programs and for candidates as they engage in the Math Cycle in the first operational year are detailed in Appendix O. Assessor training dates will be added once determined.

Staff Recommendation

Staff recommends that the Commission adopt the CalTPA EdSp-DHH Math Cycle for operational administration beginning in the 2025-26 academic year and adopt a passing standard of 16 points across the 8 rubrics, with no side conditions, for the CalTPA Math Cycle for all credential areas (PK-3 ECE, ECSE, DHH, VI) for the first year of operation. This recommended score represents a passing score of 2 points per rubric. Additionally, staff recommend adopting a secondary passing standard of 14 for the first year of operation.

Next Steps

Based on the Math Cycle field test results, surveys, and focus group findings, Commission and ES staff will finalize the Math Cycle tasks, rubrics, and program guides. Next steps for development of the Math Cycle include the following:

- Finalize operational Math Cycle Tasks, Rubrics, Program Guides, and Support Materials; and
- Align CalTPA Cycle 1 (MS/SS/WL) and EdSp CalTPA Cycle 1 (MMSN and ESN) with Math Cycle revision as is appropriate for the credential area and/or content area for the 2025/26 academic year.

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Commission and ES staff will convene an additional group of educators for a standard setting study in 2026, with staff bringing forward a recommended passing standard for Commission adoption in June 2026.

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Appendix A

Teaching Performance Expectations (TPEs) Map

PK-3 ECE Teaching Performance Expectations (TPE) Elements Addressed in PK-3 ECE Math Cycle

TPE 1	TPE 2	TPE 3	TPE 4	TPE 5	TPE 6	TPE 7	TPE 8
Element 1	Element 1	Element 1	Element 1	Element 2	Element 1		Element 1
Element 2	Element 2	Element 2	Element 2	Element 3	Element 3		Element 2
Element 3	Element 4	Element 6	Element 3		Element 4		Element 3
Element 4	Element 5		Element 5				Element 4
Element 7	Element 6		Element 7				Element 5
			Element 8				Element 6
							Element 7
							Element 8

EdSp-DHH Teaching Performance Expectations (TPEs) Elements Addressed in EdSp-DHH Math Cycle

TPE 1	TPE 2	TPE 3	TPE 4	TPE 5	TPE 6	TPE 7
Element 1	Element 1	Element 1	Element 1	Element 1	Element 3	Element 9
Element 2	Element 2	Element 2	Element 2	Element 2	Element 4	Element 11
Element 3	Element 3	Element 3	Element 3	Element 3	Element 5	
Element 4	Element 4	Element 4	Element 5	Element 5	Element 7	
Element 5	Element 5	Element 5	Element 6		Element 9	
Element 6	Element 6	Element 6	Element 7		Element 11	
Element 7	Element 7	Element 7				
	Element 8	Element 8				

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Appendix B

Evidence Tables

PK-3 ECE Evidence Table

Cycle Step	What You Need to Do	Evidence to Be Submitted
Step 1: Plan	• With guidance from your cooperating teacher and/or faculty supervisor, review contextual information about the children. • Select three (3) focus children. • Develop one asset-based, UDL-focused, play-oriented math activity that includes one math learning goal and one ELD learning goal. • Provide a rationale for the activity plan. • Provide key math activity resources and/or materials.	• **Part A:** Written Narrative: Contextual Information • **Part B:** PK/TK or K 3 Math Activity Plan • **Part C:** Written Narrative: Math Activity Plan Rationale • **Part D:** Math Activity Resources and/or Materials
Step 2: Teach and Assess	• Facilitate and video record the entire math activity. • Select 1 to 3 video clip(s). • Provide commentary for each video clip.	• **Part E:** Video Clip(s) (up to 15 minutes) • **Part F:** Commentary (written or verbal [or ASL] response)
Step 3: Reflect	• Reflect on the effectiveness of the math activity plan and facilitation. What did the children learn? What did you learn about facilitating a math activity?	• **Part G:** Written Narrative: Reflection on What You Learned
Step 4: Apply	• Based on what you learned through completing Steps 1, 2 and 3, describe what you will do in future activities to advance the children's math learning and language development, including FC1, FC2, and FC3.	• **Part H:** Narrative: Application of What You Learned (written or verbal [or ASL] response)

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EdSp-DHH Evidence Table

Cycle Step	What You Need to Do	Evidence to Be Submitted
Step 1: Plan	• With guidance from your cooperating teacher and/or faculty supervisor, review contextual information about the students. • Select three (3) focus students. • Develop one asset-based, UDL-focused math lesson that includes discourse strategies (ASL and/or spoken English) with at least one math learning goal and one ELD learning goal. • Provide a rationale for the lesson plan. · Provide key math lesson resources and/or materials.	• **Part A:** Written Narrative: Contextual Information (up to 7 pages) • **Part B:** Math Lesson Plan (use optional template or locally provided format) (up to 10 pages) • **Part C:** Written Narrative: Math Lesson Plan Rationale (up to 7 pages) • **Part D:** Math Lesson Resources and/or Materials (up to 7 pages)
Step 2: Teach and Assess	• Teach and video record the entire math lesson. ○ The video clip(s) can be of the focus student(s) working with you individually OR the focus student(s) working together with you (with or without additional students). • Select 1 to 3 video clip(s). • Provide commentary for each video clip.	• **Part E:** Video Clip(s) (1 to 3 video clips, totaling up to 15 minutes) • **Part F:** Commentary (written, up to 8 pages; OR up to 10 minutes of verbal or ASL commentary)
Step 3: Reflect	• Reflect on the effectiveness of your math lesson plan and instruction. What did the students learn? What did you learn about teaching a math lesson?	• **Part G:** Written Narrative: Reflection on What You Learned (up to 7 pages)
Step 4: Apply	• Based on what you learned through completing Steps 1, 2, and 3, describe what you will do in future lessons to advance the students' math learning and language development, including FS1, FS2, and FS3.	• · **Part H:** Narrative: Application of What You Learned (written, up to 4 pages; OR up to 6 minutes of verbal or ASL response)

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Appendix C

Summary of Math Cycle Work Group Meetings & Members Involved

Meeting Date(s)	Meeting Description
March 28, 2024	Math Performance Assessment Work Group Meeting #1
June 5-6, 2024	PK-3 ECE Math Cycle Bias Review Committee
June 17, 2024	Math Performance Assessment Work Group Meeting #2
July 1, 2024	Math Performance Assessment Work Group Meeting #3

PK-3 ECE Math Cycle Performance Assessment Workgroup

Name	Title and Institution
Alexis Hyde	Education Programs Consultant, Standards and Curricular Guidance Unit, California Department of Education (CDE)
Christine Roberts	Math Specialist, Teacher on Special Assignment
Deborah Stipek	Emeritus Judy Koch Professor of Early Childhood Education and former Dean of the Graduate School of Education at Stanford
Duane Habecker	Senior Mathematics Coordinator, Merced County Office of Education
Robyn Stone	Coordinator, Educator Preparation Programs, Santa Clara County Office of Education

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Appendix D

Education Specialist Design Team: DHH Subgroup Members

DHH Subgroup Members Name	Affiliation
Gabrielle Jones	University of California at San Diego
Bridget Scott-Weich	Mount St. Mary's/John Tracy Center
Robert Perry	Los Angeles Unified School District
Christine Oyakawa	Parent Liaison

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Appendix E

Summary of Education Specialist Expert Meetings and Members Involved

EdSp-DHH

Meeting Date(s)	Meeting Description	Credential Area Experts
April 3, 2024	DHH Expert Meeting #1 • Overview of DHH Performance Assessment development • Review of DHH TPEs (Teaching Performance Expectations) • Review of draft DHH Math Cycle, Steps and Rubrics Next steps for providing feedback	Darrin Green, California School for the Deaf, Riverside Janelle Green, California School for the Deaf, Riverside
April 18, 2024	DHH Expert Meeting #2 • Review of updated draft of DHH Math Cycle, Steps and Rubrics	Darrin Green Janelle Green
June 5-6, 2024	Math Cycle Bias Review Committee	Bias Review Committee Members
June 14-18, 2024	DHH Expert Independent Review of updated draft of DHH Math Cycle, Steps and Rubrics	Sarah Carlton, Whitter Area Cooperative Special Education Program Darrin Green Janelle Green
July 5, 2024	DHH Expert Meeting #3 • Review of updated draft of DHH Math Cycle, Steps and Rubrics	Darrin Green Janelle Green
July 24, 2024	DHH Expert Meeting #4 • Review of updated draft of DHH Math Cycle, Steps and Rubrics	Darrin Green Janelle Green

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Appendix F

Comparison of CalTPA Cycle 1 and Field Test Version of the PK-3 ECE Math Cycle

Step	CalTPA Cycle 1- Evidence to Be Submitted	Math Cycle - Evidence to Be Submitted
Step 1: Plan	• **Part A:** Written Narrative: Getting to Know Your Students (no more than 9 pages) • **Part B:** Lesson Plan (include content-specific learning goal[s] and ELD goal[s]) (no more than 10 pages) • **Part C:** Written Narrative: Lesson Plan Rationale (no more than 7 pages) • **Part D:** Related Instructional Resources and Materials (no more than 8 pages)	• **Part A:** Written Narrative: Contextual Information • **Part B:** Math Activity Plan • **Part C:** Written Narrative: Math Activity Plan Rationale • **Part D:** Math Activity Resources and/or Materials
Step 2: Teach and Assess	• **Part E:** 3 Annotated Video Clips (no more than 5 minutes each)	• **Part E:** Video Clip(s) (up to 15 minutes) • **Part F:** Commentary (written or verbal)
Step 3: Reflect	• **Part F:** Written Narrative: Reflection on What You Learned (no more than 4 pages)	• **Part G:** Written Narrative: Reflection on What You Learned
Step 4: Apply	• **Part G:** Narrative: Application of What You Learned (no more than 4 pages of written or no more than 6 minutes of video explanation)	• **Part H:** Narrative: Application of What You Learned (written or verbal)

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Appendix G

Math Cycle Extended Field Test Submissions

PK-3 ECE Submissions

Program	Pathway(s)	N
Riverside County Office of Education	District Intern	22
Biola University	University Student Teaching Program	3
Vanguard University	Integrated Undergraduate	1
Vanguard University	University Private School	2
Vanguard University	University Student Teaching Program	9
	Total	**37**

EdSp-DHH Submissions

Program	Pathway(s)	N
San Diego County Office of Education	District Intern	6
	Total	**6**

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Appendix H

Math Cycle Development Timeline - Extended Field Test

Timeframe	Activity
November 19, 2024	Extended EdSp-DHH Field Test Begins
December 13, 2024	EdSp DHH Extended Field Test Webinar
January 15, 2025	Extended PK-3 ECE Field Test Begins
January-April 2025	Math Cycle Program Office Hours- Weekly Fridays 9-9:30 am
January-April 2025	Math Cycle Candidate Office Hours-as requested
February 2025	Math Cycle Field Test Cooperating Teacher Webinar
January-April 2025	EdSp-DHH-Assessor Training • Implicit Bias Training • Watch the PTKLF Video • Review pages 1–8 of the CA CCSS- Math • Review the Core Content Connectors for Math • Review pages credential area TPEs • Review the Math Cycle assessment guide, rubrics, and score process flow for their designated credential area
April 17, 2025	Math Cycle Marker Orientation • PK-3 ECE- April 17, 2025
April 2025	PK-3 ECE Assessor Training • Implicit Bias Training • Watch the PTKLF Video or review pages 28-34 of the PTKLF At-A-Glance • Review the full PTKLF Mathematics • Review pages 1–27 of the CA CCSS- Math • Review pages 40-41 of the TPE Domain 8: Effective Mathematics Instruction in a PK-3 Setting • Review the Math Cycle assessment guide, rubrics, and score process flow for their designated credential area
April 2025	Math Cycle Focus Group Dates: Candidates: April 9, 2025 (DHH) and April 16, 2025 (PK-3) Coordinators: April 15 --17, 2025 (1-2 PM)
March 31, 2025	EdSp- DHH Math Cycle Field Test Submission Deadline
April-May 2025	Math Cycle Extended Field Test Scoring • PK-3 ECE- April 28-30, 2025 • EdSp-DHH- May 20-22, 2025
May 23, 2025	Math Cycle Field Test programs and candidates notified of pass/no pass status
June 26, 2025	Math Cycle Field Test official scores released to programs and candidates

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Appendix I

Math Cycle Extended Field Test Assessor Qualifications

To be eligible to score the California Teaching Performance Assessment (CalTPA), an applicant MUST meet the following requirements:

PK-3 ECE Assessor Qualifications
To be eligible to score the PK-3 ECE CalTPA Math Cycle Field Test, an applicant MUST meet the following requirements:
Requirement #1: Reside in the state of California

Requirement #2 Professional Experience*:* Be a current (or retired within the last 3 years) California education professional in one (1) or more of the following capacities:

College, University, and/or LEA:

- District/University/program educator providing instruction to PK-3 ECE teacher candidates within a Multiple Subject and/or PK-3 ECE Commission-accredited teacher preparation program
- Early Childhood Education faculty member (e.g., Child Development, Child and Adolescent Development, Human Development, Early Education, Child and Family Studies, Early Childhood Studies, Early Childhood Education, Human Development and Family Science, Family Science, or Child, Adolescent, and Family Studies)
- Field supervisor in PK-3 ECE setting
- Mentor or Cooperating Teacher in PK-3 ECE setting

Preschool Setting:

- Preschool Teacher (Master Teacher Permit)
- Preschool Administrator (e.g., Site Supervisor Permit, Program Director Permit)

TK-3 Setting:

- MS and/or PK-3 ECE Teacher (TK-3)
- Administrator (TK-3) (e.g., principal, assistant principal)
- National Board-Certified Teacher (NBCT) in Early Childhood
- Instructional Coach or Teacher on Special Assignment (TOSA) in TK-3

Requirement #3 Expertise in Content: Have expertise in the content area assigned to score in one (1) or more of the following ways:

- Hold a degree in the content area of Math
- Hold a degree in the content area of Liberal Arts, Liberal Studies, Elementary Education with a concentration or a minor in math
- Hold a degree in one of the following (e.g., Child Development, Child and Adolescent Development, Human Development, Early Education, Child and Family Studies, Early Childhood Studies, Early Childhood Education, Human Development and Family Science, Family Science, or Child, Adolescent, and Family Studies)
- Hold a current California Clear Multiple Subject Teaching Credential
- Hold a current California Clear Multiple Subject Teaching Credential with an added authorization in one or more of the following areas: Introductory or Supplementary

authorization in Mathematics, Mathematics Instructional Leadership Specialist Credential (MILS) *(Formerly Mathematics Specialist Instruction Credential), and/or* Mathematics Instructional Added Authorization (MIAA)

Requirement #4 Adhere to the following confidentiality requirements:

- Maintain the confidentiality of the assessment materials and knowledge gained as a result of participating in scoring the assessment, and will not share information with anyone (e.g., candidates, colleagues, etc.) without direct permission from the Commission and Pearson.
- Agree not to participate in any professional activity, beyond employment in a TK–12 school/district/county office or institution that requires candidates to use a CA-approved performance assessment, that results in payment for services related to supporting candidates in completing any CA-approved performance assessment. For example, TPA independent tutoring or consulting positions.

EdSp-DHH Assessor Qualifications

To be eligible to score the EdSp CalTPA Math Cycle Field Test, an applicant MUST meet the following requirements:

Requirement #1: Reside in the state of California

Requirement #2 Professional Experience*:* Be a current (or retired within the last 3 years) California education professional in one (1) or more of the following capacities:

College, University, and/or LEA:

- District/University/program educator providing instruction to EdSp candidates within a DHH Commission-accredited teacher preparation program
- Field supervisor in DHH setting
- Mentor or Cooperating Teacher in DHH setting

Preschool Setting:

- Preschool Teacher (DHH)
- Preschool Administrator (DHH)

TK-22 Setting:

- DHH Teacher (TK-22)
- DHH Administrator (TK-22) (e.g., principal, assistant principal)
- National Board-Certified Teacher (NBCT) in DHH
- Instructional Coach or Teacher on Special Assignment (TOSA) in DHH

Requirement #3 Expertise in Content: Have expertise in the content area assigned to score in one (1) or more of the following ways:

- Hold a degree in the content area of Math
- Hold a degree in the content area of Liberal Arts, Liberal Studies, Elementary Education with a concentration or a minor in math
- Hold a degree in Deaf Studies
- Hold a degree in one of the following: Child Development, Child and Adolescent Development, Human Development, Early Education, Child and Family Studies, Early

Childhood Studies, Early Childhood Education, Human Development and Family Science, Family Science, or Child, Adolescent, and Family Studies)
- Hold a current California Clear EdSp-Deaf and Hard of Hearing Credential
- Hold a current California Clear EdSp-DHH Teaching Credential with an added authorization in one or more of the following areas: Introductory or Supplementary authorization in Mathematics, Mathematics Instructional Leadership Specialist Credential (MILS) (Formerly Mathematics Specialist Instruction Credential), and/or Mathematics Instructional Added Authorization (MIAA)

Requirement #4: Adhere to the following confidentiality requirements:

- Maintain the confidentiality of the assessment materials and knowledge gained as a result of participating in scoring the assessment, and will not share information with anyone (e.g., candidates, colleagues, etc.) without direct permission from the Commission and Pearson.
- Agree not to participate in any professional activity, beyond employment in a TK–12 school/district/county office or institution that requires candidates to use a CA-approved performance assessment, that results in payment for services related to supporting candidates in completing any CA-approved performance assessment. For example, TPA independent tutoring or consulting positions.

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Appendix J

PK-3 ECE Math Cycle Field Test Rubric Essential Questions

Step 1: Plan
Rubric 1.1 How does the candidate apply findings from recent math information (e.g., formative, summative, state testing) to plan one asset-based, UDL-focused, play-oriented math activity in a safe, positive environment?
Rubric 1.2 How does the candidate apply prior information* to plan adaptation(s) for FC1 based on their assets, interests, and/or learning needs in the math activity?
Rubric 1.3 How does the candidate apply prior information* to plan adaptation(s) for FC2 based on their assets, interests, and/or learning needs in the math activity?
Rubric 1.4 How does the candidate apply prior information* to plan adaptation(s) for FC3 based on their assets, interests, and/or learning needs in the math activity?
Step 2: Teach and Assess
Rubric 1.5 How does the candidate's facilitation lead to children's active engagement in an asset-based, UDL-focused, play-oriented math activity in a safe and positive environment?
Rubric 1.6 How do the candidate's interactions with the children support their progress toward meeting the math and ELD learning goals?
Step 3: Reflect
Rubric 1.7 How does the candidate reflect on the effectiveness of their asset-based math activity planning, teaching, and monitoring of the children's learning and analyze the effectiveness of supporting the three focus children in meeting the math and ELD learning goals (referring to evidence from Steps 1 and/or 2)?
Step 4: Apply
Rubric 1.8 How will the candidate apply what they have learned about the children's understanding of the math and ELD learning goals and determine future steps for math learning (referring to evidence from Steps 1, 2, and/or 3)?

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PK-3 ECE Rubric 1.1 — Step 1: Plan

Essential Question: How does the candidate apply findings from recent math information (e.g., formative, summative, state testing) to plan one asset based, UDL-focused, play-oriented math activity in a safe, positive environment?

Level 1	Level 2	Level 3	Level 4	Level 5
Candidate's activity planning does not use appropriate age/grade level math and ELD strand(s)/standard(s) to develop learning goals, including math academic language development, and does not build on the children's prior learning. **OR** Candidate does not leverage the children's cultural and/or linguistic assets and/or interests in planning the math activity. **OR** Candidate's use of UDL strategy(ies) is not appropriate or provided. **OR** Candidate's activity planning is not play oriented. **OR** Candidate does not plan for a safe, positive learning environment for children to engage in math learning. **OR** Candidate's math activity contains inaccuracies in content.	Candidate's activity planning attempts to use appropriate age/grade level math and ELD strand(s)/standard(s) to develop learning goals, including math academic language development, that vaguely build on the children's prior learning. Candidate minimally leverages the children's cultural and/or linguistic assets and/or interests in planning the math activity. Candidate's use of UDL strategy(ies) is minimally appropriate. Candidate's activity planning attempts to engage children in play-oriented math learning. Candidate's activity planning to create a safe, positive learning environment for children to engage in math learning is vague or unclear.	Candidate's activity planning uses appropriate age/grade level math and ELD strand(s)/standard(s) to develop learning goals, including math academic language development, that clearly build on the children's prior learning. Candidate purposefully leverages the children's cultural and/or linguistic assets and/or interests in planning the math activity. Candidate's activity planning includes appropriate UDL strategy(ies). Candidate's activity planning clearly engages children in play-oriented math learning. Candidate describes how they will provide a safe, positive learning environment for children to engage in math learning.	**All of Level 3, plus:** Candidate plans for intentional differentiation and/or adaptations that are developmentally appropriate to the learning needs of the children to provide equitable access to the math and ELD learning goals.	**All of Levels 3 & 4, plus:** Candidate's planning clearly demonstrates that all children have equal access to math content and practices by engaging in a challenging learning activity that develops higher-order thinking.

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Appendix K

Math Cycle Extended Field Test Pass Rate by Demographic

Pathway Type	N	Pass Rate
University Student Teaching	14	100%
District Intern	28	100%
University Intern	0	0%
Residency Program	0	0%
Integrated Undergraduate Teacher Credentialing Program (ITEP)	1	*
Total	**43**	**100%**

Sector Type	N	Pass Rate
CSU	0	0%
Private/Independent	15	100%
LEA/County Office of Education	28	100%
UC	0	0%
Total	**43**	**100%**

Gender	N	Pass Rate
Decline to State	0	0%
Female	43	100%
Male	0	0%
Non-Binary	0	0%
Total	**43**	**100%**

Ethnicity	N Submitted	Pass Rate
African American/Black	4	*
Asian Indian American/Asian Indian	0	0%
Cambodian American/Cambodian	0	0%
Chinese American/Chinese	0	0%
Choose not to response	1	*
Filipino American/Filipino	1	*
Japanese American/Japanese	0	0%
Korean American/Korean	1	*
Laotian American/Laotian	0	0%
Latino/Latin American/Puerto Rican/Other Hispanic	10	100%
Mexican American/Chicano	13	100%
Native American/American Indian/Alaskan Native	1	*
Other	0	0%
Other Southeast Asian American/Southeast Asian (e.g., Hmong, Khmer)	0	0%

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Ethnicity	N Submitted	Pass Rate
Vietnamese American/Vietnamese	0	0%
White (non-Hispanic)	12	100%
Total	**43**	**100%**

*Note: Pass rates are not reported for assessments with fewer than ten candidates

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Appendix L

Math Cycle Extended Field Test Summary of Candidate Performance

Credential Area	N Candidates	Pass Rate	Overall Mean Score	S.D.	Min	Max
PK-3 ECE	37	100%	22.6	4.1	14	31
EdSp-DHH	6	*	22.8	4.5	18	29
Total	**43**	**100%**	**22.6**	**4.1**	**14**	**31**

Summary of Candidate Performance: PK-3 ECE; N= 37

Rubric	Mean	Min	Max
Rubric 1	2.0	1	4
Rubric 2	2.7	2	4
Rubric 3	2.7	2	4
Rubric 4	2.7	2	4
Rubric 5	3.216	1	5
Rubric 6	3.1	2	4
Rubric 7	2.7	2	4
Rubric 8	2.7	1	4

Summary of Candidate Performance: EdSp-DHH; N= 6

Rubric	Mean	Min	Max
Rubric 1	3.3	2	4
Rubric 2	2.7	1	4
Rubric 3	3.2	2	4
Rubric 4	3.2	2	4
Rubric 5	3.0	1	5
Rubric 6	2.8	1	4
Rubric 7	2.3	1	4
Rubric 8	2.3	2	3

*Note: Pass rates are not reported for assessments with fewer than ten candidates

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Appendix M

Candidate, Program Coordinator, Cooperating Teacher, and Assessor Responses to Selected Survey Items

Candidate Survey Responses (N=8)

Opportunity to Demonstrate Knowledge, Skills, and Abilities	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know/ Does Not Apply
The Math Cycle allowed me to demonstrate my math instruction in an authentic way	6	3	0	0	0
The tasks associated with completing the Math Cycle align with what I have been learning in my educator preparation coursework	5	3	0	0	0
The Math Cycle was a fair measure of my ability to teach math	5	3	0	0	0
Clarity and Ease of Use	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**	**Don't Know/ Does Not Apply**
Having a choice to provide either a written or verbal response (or ASL) to commentary prompts in Step 2 was helpful	3	5	0	0	0
Based on my students' understanding of the math and ELD goals, I felt confident in determining future steps for their math learning and language development	4	4	0	0	0
The Math Cycle essential questions for each of the 8 rubrics were clear	3	5	0	0	0
The directions on how to incorporate both a math content and math practice strand(s)/standard(s) were clear to write a math learning goal	5	3	0	0	0
I understood how to leverage student's cultural and/or linguistic assets and/or interests to plan the math activity	2	5	1	0	0

Math Cycle Field Test Information and Support	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know/ Does Not Apply
My program encouraged me to self-assess using the rubrics	6	2	0	0	0
My program provided guidance on how to register and upload my submission (e.g., video, templates).	6	2	0	0	0
My program prepared me to be able to plan math (content and practice) learning goals	6	2	0	0	0
My program prepared me to be able to plan ELD learning goals	6	2	0	0	0

Program Coordinator Survey Responses (N=0)

No additional survey responses were received from participating program coordinators from the extended field test. For key findings, refer to Item 3D from the April 2025 Commission Meeting.

Cooperating Teacher Survey Responses (N=0)

No additional survey responses were received from cooperating teachers from the extended field test. For key findings, refer to Item 3D from the April 2025 Commission Meeting.

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Assessor Survey Responses (N=5)

Clarity and Ease of Use	Strongly Agree	Agree	Disagree	Strongly Disagree	Don't Know/ Does Not Apply
The assessment guide directions provided for the Math Cycle were clear.	1	4	0	0	0
The Math Cycle templates were clear.	1	3	1	0	0
The constructs in the Math Cycle rubrics were clear.	1	3	1	0	0
The different levels of performance were clearly stated in the Math Cycle rubrics.	0	3	2	0	0
Overall, the amount of evidence required from candidates at each step was sufficient to score the submission.	2	2	1	0	0
The organization of the Math Cycle guide made it easy to find the information I needed (e.g., rubrics embedded with step instructions, glossary, links to resources).	2	2	1	0	0
Math Cycle Field Test Assessor Training	**Strongly Agree**	**Agree**	**Disagree**	**Strongly Disagree**	**Don't Know/ Does Not Apply**
The Implicit Bias training I completed for assessor prework prepared me to assess candidate submissions.	4	1	0	0	0
The consensus scoring training I received helped me clearly understand how to make scoring judgements for the Math Cycle.	4	1	0	0	0
I am confident that I applied the rubrics to consistently to score candidates' evidence for each of the four Math Cycle steps.	3	1	1	0	0

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Appendix N

Math Cycle Extended Field Test Study Qualitative Data

The following is additional information gathered from the surveys and focus groups that will inform operational revisions. Statements provided below are a selection of successes and challenges from candidates, program coordinators, and assessors.

No additional survey responses were received from participating program coordinators and cooperating teachers from the extended field test. For key findings, refer to Item 3D from the April 2025 Commission Meeting.

Successes:

Candidates

- "My success was that I had guidance from the whole group, my supervisor, and my coordinator. They told me exactly what I needed to do. I also had a TPA class just for the MPA."
- "The MPA is something we do in the class anyway. The challenge was putting it in writing. It was fun with the math experience and lesson I used. I really enjoyed bringing out more of the materials we use in the classroom (e.g., measuring tape, scales, etc.) which we are still using in the classroom."

Program Coordinators

- "One success was collaboration between our math instructor and coordinator, and myself in a very short time frame. The support from CTC was great and in the materials that were provided. The backwards mapping document was helpful for our planning."

Challenges:

Candidates

- "I had a challenge shrinking the videos but got through it. Uploading to the website was easy."
- "One challenge was the MPA itself, the whole thing. It was time consuming and a lot to focus on."

Program Coordinators

- "One challenge was the short timeframe. It would have been helpful to have two more weeks."

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Based on your recent experience completing the Math Cycle, describe one discovery (e.g., aha moment, learning, surprise) about your math instruction that will impact your practice.

Candidates

- "One thing I learned more about was the standards for K-6. I work with the little ones so I had not looked at them, but in my program the advisors encouraged me to look over them and I was able to discover new things. I enjoyed it, it was great."
- "I sat on the bargaining team for many years, and this credential is pushing me even more. I'm enjoying learning more, being a student again."
- "I sat on the bargaining team for many years, and this credential is pushing me even more. I'm enjoying learning more, being a student again."

Do you feel candidates learned something of value about their instructional practice by completing the Math Cycle field test? Please explain.

Program Coordinators

- "Yes, they have a lot of confidence after doing TPA. One thing some struggled with though was video taping and editing, but they learned a lot. We had a teacher who was 50 and struggled with taping and editing the videos."

The Math Cycle was designed to provide candidates with options to fulfill submission requirements. For example, the Math Cycle provides a choice of written or verbal commentary as well as options for the number and length of video clips submitted. Did including these elements of candidate choice within the Math Cycle seem helpful or challenging for you? Please explain.

Candidates

- "I chose written, but I liked the options. Others may want to do a video so options are good."
- "The video options were good, but I don't think the length of the videos is sufficient to capture everything going on in the classroom."
- "Options are always better because not everybody is able to express themselves in one way."

Program Coordinators

- **"**Yes, providing candidates with options is good. Our candidates chose the written commentary and I think they did a good job. The candidates are interns, so perhaps that's why it went well. Faculty didn't report any problems."

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Does this cycle elicit authentic evidence of what teachers should know and be able to do related to effective Math instruction for PK-3 ECE/EdSp DHH settings?

Assessors

- One PK-3 assessor mentioned that Part D was often not useful, as it included pictures of materials like counting bears that did not seem connected to the lessons. They suggested that it would be more helpful if this section included work samples showing how students used the materials in the classroom.
- Another PK-3 assessor noted that they were looking for cultural assets in the materials section but often did not find them. They suggested prompting candidates to explicitly identify cultural or linguistic assets in their templates.
- One PK-3 assessor suggested to have candidates explain how each resource connects to students' linguistic or cultural needs, which would help assessors understand the interaction between students and the materials.
- Both DHH assessors expressed that the math cycle does not elicit authentic evidence of what teachers should know and be able to do related to effective Math instruction for DHH settings. They discussed the need for improvements and specific resources that could help in teaching Math to deaf and hard of hearing students.

Step 1: Plan: Were the Step 1 Math Cycle instructions clear about how to use the California Preschool/Transitional Kindergarten Learning Foundations or the California Common Core State Standards for Mathematics to plan your math activity?

Candidates

- “Yes, the instructions were clear for how to include the standards in our lessons. I was familiar with the learning foundations before the TPA. I was not familiar with the math standards before the TPA.”
- “I am a state preschool teacher and I haven't been into elementary so I wasn’t aware of the PTKLF and common core standards for mathematics. This was my first experience with these standards so it was a little challenging.”

Program Coordinators

- “Yes, the instructions for this were very clear.”

Step 1: Plan: Were the Math Cycle instructions clear about how to use both math content and math practice standard(s) to write your learning goal(s)?

Candidates

- “Yes, the instructions were clear. Also, my instructors did a good job and had the assignments aligned with the MPA content to move us along and help understand the content.”
- “It was challenging for me to write the learning goals since this was the first time I was exposed to the math content and practice standards.”

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Program Coordinators

- "Absolutely! Yes, the instructions for how to use the math content and practice standards to write the learning goals was clear. We cover the math content and practice standards in our program so our candidates are familiar with them."

Step 1: Plan: Were the directions clear in how to plan a goal for English Language Development (ELD)?

Candidates

- "Yes, the instructions were clear, and my instructors explained it well even though it was all new information for me. Although I'm in the classroom, the PK3 language is different enough that it's as if we speak two different languages even though we are all on the same campus."

Program Coordinators

- **"**Yes, the directions for planning an ELD goal were clear."

Step 1: Plan: Were the directions for how to identify your focus children/students clear?

Candidates

- "Yes. Some of the materials provided by the program were confusing, but referring to the guide straightened it out."
- "It was not clear. I did not have a copy of the guide. My [program] provided information [piecemeal]."

Step 1: Plan: Did you have enough information about your focus children/students' learning needs, assets, and/or interests to plan adaptations for your math activity?

Candidates

- "Yes. I had access to their DRDP assessments which helped guide me."
- "Yes. I know my students. I had access to DRDP, IEP, and their cumulative file."

Program Coordinators

- "Yes. Also, two out of three of our candidates were in their own classroom so that helped. As a program we have a lesson plan template and one section candidates have to complete relates to the students' assets and needs. They have to answer six questions for this section and it gave them enough information to plan the adaptations for the math activity."

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Step 1: Plan: What did you think of Step 1: Plan? Were the instructions provided in the Math Cycle guide clear and helpful? If not, tell us what was confusing or could be improved.

Candidates

- "They were clear. And if we had any questions we could ask our coordinator or supervisor. The only thing that was a little confusing was the cultural and linguistic assets as they related to math, that was a little challenging."
- "I don't like video recordings, but it was interesting, like oh, I did that. It reflects what and how I was teaching and how the children would grasp. Like "oh, he thought that?" Sometimes you don't notice things until you go back and view the video."

Step 2: Teach and Assess: What insights did you gain from reviewing your video recorded teaching practice?

Candidates

- "I felt comfortable being recorded because I do that anyway. For me was very routine because I show them how to do it. Then we do it together and then they do it by themselves. It was very routine. It felt really good, like it felt very natural."
- "I don't like video recordings, but it was interesting, like oh, I did that. It reflects what and how I was teaching and how the children would grasp. Like "oh, he thought that?" Sometimes you don't notice things until you go back and view the video."

Program Coordinators

- No responses

Step 2: Teach and Assess: Did you understand how to leverage children/students' cultural and/or linguistic assets and/or interests for your math activity?

Candidates

- "It was challenging. What does culture have to do with math? I asked my coordinator, supervisor, and my peers, and between everybody we helped each other."
- "Before we covered that portion, we were already working on the TPA, but after the instructors explained it a few times, we were able to understand it."

Program Coordinators

- "Yes. We had one orientation session with our students and they didn't ask very many questions. Our students are well instructed on cultural and linguistic assets in our courses so I think they had a lot of confidence in doing this for their math activity."

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Step 2: Teach and Assess: What did you think of Step 2: Teach and Assess? Were the instructions provided in the Math Cycle guide clear and helpful? If not, tell us what was confusing or could be improved.

Candidates

- “I think everything was clear on teaching. The expectations were clear. The only thing that was challenging was the part about the cultural and linguistic assets.”

Program Coordinators

- "It was really clear for us. We have experience with the multiple subject credential. So after one orientation, I think it went well.”

Step 2: Teach and Assess: Is there anything in Step 2 that you would recommend changing to support future candidates taking the Math Cycle?

Program Coordinators

- “No.”

Step 3: Reflect: What did you think of Step 3: Reflect? Were the instructions provided in the Math Cycle guide clear and helpful? If not, tell us what was confusing or could be improved.

Candidates

- “After seeing the videos and reflecting on each child, it helped me plan the next activity.”
- “The reflection was clear. Reflecting what they have learned makes me like "So I did teach it right?" I found it important to do the reflection.”

Program Coordinators

- “The instructions for reflect were clear. We did not need to reach out for further clarification.”

Step 3: Reflect: Is there anything in Step 3 that you would recommend changing to support future candidates taking the Math Cycle?

Program Coordinators

- "Nothing.”

Step 4: Apply: What information or evidence from Steps 1, 2, and 3 did you use to determine the next steps for your children/students' math learning and language development?

Candidates

- “I used what I observed during the activity to guide next steps. Some learned really fast so I decided my next step is to make the lesson more challenging and challenge their thinking. I noticed my IEP student was a little behind so I knew she needed more one-on-one time to meet her needs.”

- "I went back to the previous forms, made sure IEP goals for my focus student were being met. I went back to the videos a lot."

Step 4: Apply: Do you feel that candidates understood how to determine future steps for their students' math learning and language development based on their students' progress on the math and ELD goals?

Program Coordinators

- "I don't feel I can answer this question because I did not work directly with the students on this or view their videos."

Step 4: Apply: What did you think of Step 4: Apply? Were the instructions provided in the Math Cycle guide clear and helpful? If not, tell us what was confusing or could be improved.

Candidates

- "The instructions were clear to me."
- "I focused on just answering the questions the way they were asked."

Program Coordinators

- "The instructions were clear. I did not hear any issues from the professor, coordinator, or students so I do not have any suggestions."

Step 4: Apply: Is there anything in Step 4 that you would recommend changing to support future candidates taking the Math Cycle?

Program Coordinators

- "No suggestions."

Rubrics: How did your program support you in understanding the rubrics of the Math Cycle?

Candidates

- "We referenced the rubrics when answering the questions. We had to evaluate ourselves using the rubrics, which helped."
- "My program coordinator figured out that we didn't know about rubrics and took time to explain them."

Program Coordinators

- "We had a separate orientation to introduce the rubrics and went through everything together."

Rubrics: Were there any aspects of the rubrics that were unclear? What recommendations do you have to clarify the rubrics?

Candidates

- "Not for me. It reminded me of Eckers."

- “No, I think they were clear.”

Program Coordinators

- "I remember one unclear rubric related to cultural aspects for math. What was the expectation for play-based? After talking with Julie and getting clarification it made sense. It was too broad in the rubric though, especially since play based in an early childhood setting is quite different. If you can, go in detail and describe about the level of play. That would be helpful.”

Rubrics: Did you use the rubrics to self-assess before you submitted the Math Cycle? If yes, how helpful was this process?

Candidates

- “What I did was I answered all the questions, and then I went back and looked to see if I said it correctly. I am a visual person so I liked having the guide next to me to check.”
- “Yes. I went back and reviewed everything and found things that needed to be improved or changed.”
- “To be really honest. No, I did not.”

Program Coordinators

- "I do not know. I did not participate when candidates were reviewing before submitting.”

Rubrics: Was the language in the rubrics clear enough to make score judgements about the evidence the candidate provided?

Assessors

- One DHH assessor noted difficulty with distinguishing between levels 3 and 4 in Rubrics 1.2, 1.3, 1.4, and 1.5.
- Another DHH assessor highlighted issues with signed communication, specifically whether it referred to one student or all students in the lesson.
- Some PK-3 assessors found parts of Rubrics 1.2, 1.3, and 1.4 unclear, specifically citing the phrase "prior information" and suggested defining terms like "prior information" in the glossary for better understanding.
- In Step 1, PK-3 assessors noted that Rubrics 1.1, 1.2 and 1.4 had inconsistent language, with terms like "vaguely" and "clearly" causing difficulty in distinguishing between levels. Assessors recommended aligning the language across these rubrics. They pointed out how Rubric 1.3 addresses this problem and could be a good model.
- In Step 2, one PK-3 assessor noted that Rubric 1.5 lacked a clear definition of "equitable and inclusive participation," leading to varied interpretations among assessors. They suggested defining this term more clearly.
- In Steps 3 and 4, some PK-3 assessors noted the subjectiveness of "appropriate evidence" in Rubrics 1.7 and 1.8 and suggested clarifying what constitutes appropriate evidence.

- In Step 3, a PK-3 assessor stated that in Rubric 1.7 there was confusion about whether candidates needed to specifically reference video evidence or if general reflections were sufficient. Assessors debated the need for explicit evidence versus processing information correctly.

Prompts: What recommendations do you have to clarify the prompts?

Assessors

- One PK-3 assessor suggested aligning the questions in rubrics 1.7 and 1.8 more closely with the rubric criteria. Specifically, the prompts should ask about how adaptations relate to ELD and math learning goals to ensure candidates answer thoroughly.
- DHH- no responses.

Rubrics: Were you able to come to consensus quickly? If not, why? Be specific (rubric number, template)

Assessors

- For PK-3, the following rubrics prompted more discussion:
    - **Rubric 1.4**: The distinction between "vaguely describes" and "clearly explains" was challenging for assessors.
    - **Rubric 1.5**: The term "equitable and inclusive participation" was not clearly defined, leading to different interpretations among assessors.
    - **Rubric 1.6**: There was a conversation about Level 5 and the criteria for positive dialogue that celebrates children's progress and supports their growth in math. The group was unclear on what constitutes a Level 5.
    - **Rubric 1.7 and 1.8**: An assessor mentioned that the questions in these rubrics did not align well with the prompts, making it difficult for candidates to answer thoroughly and for assessors to score accurately.
- For DHH: The assessors shared that the language use for instruction and communication modes was a challenge, particularly in relation to academic math language. The assessors noted that the real problem lies with teacher preparation programs and highlighted the difficulty in achieving fluency in these areas and the need for better expectations and addressing these issues in teacher prep programs.

Program Support: If you were unclear about any of the Math Cycle instructions or requirements, did you seek help from any of the following: your program, candidate office hours, your cooperating teacher, contacting customer support? If yes, please indicate which one(s) and if they were helpful.

Candidates

- “Yes, I sought help from our program and I did the candidate office hours. I'd ask my program and supervisor questions in an email or text and they were very helpful. I did not contact customer support.”

- "I used the program and mentor teacher most and then I did email my university supervisors a few times and got responses."

Program Coordinators

- "Yes, we reached out directly to CTC whenever we needed clarification. They were very prompt and responsive to email."

Program Support: What additional support(s) could have improved your experience with the field test?

Candidates

- "Having examples would be helpful."

Program Coordinators

- "The lesson plan template was too general and simplified for us, and our university lesson plan was too specific. So what we need is to develop a balance in between."

Additional Feedback

Candidates

- "One thing I learned more about was the standards for K-6. I work with the little ones so I had not looked at them, but in my program the advisors encouraged me to look over them and I was able to discover new things. I enjoyed it, it was great."
- "I was surprised that how much I was already doing in my classroom that was connected to the MPA. This is my second year and it was very surprising for me and very rewarding."
- "Not in the preschool setting, but perhaps in the elementary classroom it made me realize that I need to become more familiar with the PTKLF and common core standards."
- "My instructors helped me to understand why questions were being repeated and that they were actually being asked differently each time."

Program Coordinators

- **"**Thanks to CTC for allowing us to do PK3 field test because we were not ready for the MS (operational) TPA. It was a good stepping stone for us to reach the real TPA. It was well written and well guided. It was great fortune for us to have the chance to participate in the field test."

Assessors

- PK-3 assessors provided several suggestions for teacher preparation programs to better prepare their candidates for the Math Cycle:
    - **Differentiation**: One assessor emphasized the importance of preparing candidates to differentiate instruction effectively. She suggested that candidates

should have a “teacher toolbox" ready to address varying levels of student understanding within a single lesson.
    - **Feedback**: Another assessor noted the need for candidates to provide more in-depth feedback to students, beyond simple affirmations like "good job." They recommended that feedback should be authentic.
    - **Adaptations vs. Differentiation**: There was a discussion about the terminology used, with some assessors suggesting that "differentiation" might be more current and appropriate than "adaptations" or "modifications."
    - **Sentence Starters for Learning Goals**: An assessor noted that candidates often struggle with writing clear learning goals, particularly the procedural knowledge part. She suggested providing sentence starters to help candidates frame their learning goals more effectively.
- DHH assessors provided several suggestions for teacher preparation programs to prepare their candidates for the Math Cycle:
    - Having a mentor who is experienced in teaching math in a signed environment. This is crucial because the visual learning approach for deaf students is very different from auditory-based instruction.
    - General education math classes often focus on broad concepts, which is not effective for teaching deaf children. Instead, a narrow, top-down approach is recommended.
    - New teachers often struggle with detailed approaches and tying concepts together, leading to gaps in students' understanding. A mentor can help guide them through more effective teaching methods.
    - Teacher preparation programs need to address the diverse needs of deaf students, including those with additional challenges such as ADHD, autism, or fine motor weaknesses.

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Appendix O

2025-26 Math Cycle Supports for Programs and Candidates

Type of Support	Date(s)
Program Office Hours	First and Third Friday of each month: • PK-3: 9:30 – 10:00 am • EdSp: 10:00-10:30 am
Candidate Office Hours	Weekly Wednesdays 4:15-5:00
CalTPA Transition Webinars	PK-3 ECE- June 5, 2025, 10:00-12:00 EdSp-DHH- June 4, 2024, 10:00-12:00
CalTPA Operational Materials Orientation	PK-3 ECE- August 13, 2025, 1:00-3:00 EdSp-DHH- August 21, 2025, 1:00-3:00
CalTPA Kickoff Webinars	PK-3 ECE- October 2025 EdSp-DHH- October 2025
Assessor Training	August 2025
Meredith Fellows Implementation Conference	Spring 2026
Digging Deeper Series for CalTPA, EdSp CalTPA, and CalAPA	Fall 2025 Winter 2026 Spring 2026
Faculty Workshops	PK-3 ECE- Spring/Summer 2026 EdSp- Spring/Summer 2026
ListServs	PK-3 ECE- CalTPA Email List EdSp- Education Specialist CalTPA Email List