

Transitional Kindergarten Requirements

Presented by: The School Fiscal Services Division and the Early Education Division

CALIFORNIA DEPARTMENT OF EDUCATION

Tony Thurmond, State Superintendent of Public Instruction

Acronyms and Abbreviations

- **AB** = Assembly Bill
- **ADA** = Average Daily Attendance
- CDE = California Department of Education
- **COLA** = Cost of Living Adjustment
- **EAAP** = Education Audit Appeals Panel
- **EC** = Education Code
- **FY** = Fiscal Year
- GSA = Grade Span Adjustment
- **IS** = Independent Study

- **K-3** = Kindergarten (including TK) through third grade
- LCFF= Local Control Funding Formula
- **LEA** = Local Education Agency
- Mo. = School Month
- **P-2** = Second Principal Apportionment
- **PY** = Prior Year
- **SBE** = State Board of Education
- **TK** = Transitional Kindergarten
- **UPC** = Unduplicated Pupil Count

Webinar Topics

- Universal PreKindergarten
- TK age eligibility expansion
- TK requirements, as conditions of LCFF apportionment, and applicable penalties:
 - Average class size
 - Adult-to-student ratio
 - Teacher qualifications
- Compliance verification
- Answers to Frequently Asked Questions



UNIVERSAL PREKINDERGARTEN

As part of State Superintendent of Public Instruction Tony Thurmond's vision for cransforming California schools, the Universal PreKindergarten (UPK) initiative seeks to offer developmentally-informed, high-quality instruction to all 4-year-old children in the year prior to Kindergarten, regardless of the child's location, background, home language, or exceptional needs.

Implementing Legislation

- AB 130 (Chapter 44, Statutes of 2021)
 - Expanded age eligibility for TK
 - Introduced TK specific requirements
- AB 181 (Chapter 52, Statutes of 2022)
 - Chaptered June 30, 2022
 - Implemented LCFF TK Add-on (\$2,813 per ADA for FY 2022-23)
 - Added fiscal penalties related to TK requirements
- AB 185 (Chapter 571, Statutes of 2022)
 - Chaptered September 27, 2022
 - Added TK requirements details
 - Revised fiscal penalty calculations

TK Age Eligibility Expansion

- TK age eligibility expansion means every child whose fourth birthday occurs by September 1 will have access to TK by 2025–26. TK age expansion is phased in over several years.
- Students are eligible for TK who will have their 5th birthday:
 - 2022–23: by February 2
 - 2023–24: by April 2
 - 2024–25: by June 2
 - 2025–26: fourth birthday by September 1
- LEAs can enroll TK students who will have their 5th birthday after the date in statute, but those students shall not generate ADA or be included in the UPC until their 5th birthday.

TK ADA Reporting Example



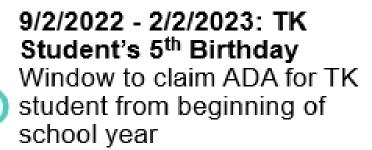
8/15/2022: Start of School Year

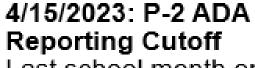


2/5/2023: TK Student's 5th

Birthday

May claim ADA for any student attendance from 2/5/2023





Last school month ending on or before 4/15/2023

TK Requirements Summary

- Current requirements (2022-23):
 - Average Class Size of 24
 - Adult-to-student ratio of 1:12
- Additional future requirements (2023-24):
 - Teacher qualification requirements
 - Adult-to-student ratio of 1:10 (contingent upon Budget Act appropriation)
- Compliance subject to audit:
 - 2022-23 Audit Guide Supplement
 - 2023-24 Audit Guide

Benefits of Reducing TK Class Size

- More individualized attention and feedback for students, students have more opportunities to learn from their peers, and student engagement goes up!
- Teachers can form better relationships with students, create a more cohesive class culture, and the environment is more inclusive of students with exceptional needs as well as dual language learners.
- Parent participation increases with a smaller class size while at the same time, decreasing teacher workload and stress.
- Smaller class sizes create an environment to facilitate play-based learning, and improve the quality of assessment and evaluation by teachers.

Benefits of a Lower Adult-to-Pupil Ratio

- Smaller adult-to-pupil ratios allow more staff to provide individualized learning, such as differentiation, and supervision at all times of the day.
- Pupils demonstrate increased cognitive and social emotional development with more adult attention.
- Lower ratios have shown to result in lower rates of special education placements.
- Teachers experience less stress and a more positive classroom environment with additional adult support.

The 1:12 ratio aligns more closely with common practices in early education:

Current Preschool Ratios

- Licensed child care 1:8
- Private preschool 1:8
- California State Preschool Programs (CSPP) – 1:8
- Head Start 1:10

Why Require Additional Teacher Training in Early Education?

Teachers holding a multiple-subject teaching credential are authorized to teach grades Kindergarten (which includes TK) through 8th grade.

Since rapid cognitive, social, and emotional development occurs during the first 5 years of life, specialized training in early education and child development is crucial for teachers to understand the learning needs of 4-year-old students.

Early Education Experience and Training

- Instruction in inclusive classrooms
- Culturally responsive instruction
- Supporting dual language learners
- Enhancing social-emotional learning
- Implementing trauma-informed practices and restorative practices
- Mitigating implicit biases to eliminate exclusionary discipline

TK Requirements: the Basics

- Apply to school districts and charter schools
- Apply to any classroom with TK students, with the exception of special day classes [EC 48000 (g)(1)(A) and 48000.1(b)(2)]
- Each requirement is presented with the following:
 - Summary
 - Calculation Example
 - Penalty Calculation

TK Average Class Enrollment

LCFF K-3 Class Size Requirement

- LCFF K-3 GSA
 - 10.4% TK/K-3 Base Grant Adjustment for school districts and charter schools
 - Maximum average class enrollment for each schoolsite of 24 pupils in TK/K-3 (school districts only)
 - Alternative: collectively bargained ratio of greater than 24 pupils
 - Ongoing class size monitoring required to determine schoolsite average class enrollment for TK, K, Grades 1, 2, and 3
 - Compliance subject to audit and fiscal penalties

TK Average Class Size as Addition to K-3 GSA

School District XYZ School

K-3 GSA based on:

- all TK classes all K classes
- all Grade 1 all Grade 3
- all Grade 2 all combo classes

TK Average Class Size based on:

- all TK classes
- all combo classes

ABC Charter School

TK Average Class Size based on:

- all TK classes
- all combo classes

TK Average Class Enrollment for TK

- EC 48000(g)(1) and 42238.02(d)(3)(D)(ii)
- TK average class enrollment size not to exceed 24
- Calculation based on student enrollment counts taken on the last teaching day of each school month ending before April 15
- School districts can build upon current monitoring system for class enrollment for K-3 GSA
- Charter schools must develop systems to monitor TK enrollment

TK Average Class Enrollment: Definitions

- "Class" includes any classroom with TK students (including combination classes), excluding special day classes
- "Active enrollment" includes counts of all students in a TK "class", excluding students enrolled in "long-term" independent study, as described in *EC* 48000(g)(1)(B)
- "School month" is determined by each LEA's specific school calendar. The school month for attendance accounting consists of 20 days or four weeks of five days each, including legal holidays. A regular school week consists of five days, Monday to Friday (except for charter schools).

TK Average Class Enrollment Size Calculation Example

Example Schoolsite: XYZ Elementary	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7	Mo. 8	Sum of Active Enrollment Counts	Number of Active Enrollment Counts	Average Number of Pupils Enrolled Per Class
Class A	24	24	24	24	24	25	25	25	195	8	24.375
Class B	23	23	24	24	24	24	24	24	190	8	23.750
Class C	24	24	25	25	25	25	25	25	198	8	24.750
Class D	24	24	26	26	26	26	26	26	204	8	25.500

Sum of Average Number of Pupils Enrolled Per Class: 98.375

Average Transitional Kindergarten Class Enrollment*: 98.375 ÷ 4 = 24.59 ≈ 24.5

^{*}Average Transitional Kindergarten Class Enrollment is rounded to the nearest half or whole integer.

TK Average Class Size Penalty

- EC 48000.1(b)(1)(C)
- Loss of the K-3 LCFF Grade Span Adjustment (GSA) (10.4% of the K-3 LCFF base grant per ADA) for all TK ADA in the LEA
- Calculation: K-3 GSA Rate x P-2 TK ADA
- TK average class size penalty does not apply to a school district that incurs K-3 GSA penalty

TK Average Class Size Penalty: Calculation Example

Sample school district with 2022-23 P-2 TK ADA = 285



K-3 GSA compared to TK Class Size

K-3 GSA	Transitional Kindergarten
EC 42238.02(d)(3)	EC 48000(g)(1)
School districts only	School districts and charter schools
Average class enrollment for each schoolsite =< 24	Average class enrollment for each schoolsite =< 24
Classes: TK, K, Grades 1, 2, 3 and combination	Classes with TK students
Alternative: collectively bargained alternative ratio agreed to by the school district	Collectively bargained alternative ratio cannot be used for exceeding the maximum of 24
Monthly monitoring via enrollment counts	Monthly monitoring via enrollment counts
Penalty equal to K-3 GSA for all funded K-3 ADA	Penalty equal to K-3 GSA for all reported TK ADA

TK Adult-to-Student Ratio

Adult-to-Student Ratio

- EC 48000(g)(2)
- 1:12 adult-to-student ratio
- Based on adult counts taken on the last teaching day of each school month ending before April 15
- Adult count includes employees of the school district or charter school
- Uses the average number of pupils enrolled per class determined for the TK average class size

Adult-to-Student Ratio Calculation Example

Example Schoolsite: XYZ Elementary	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7	Mo. 8	Sum of Adult Counts	Number of Adult Counts	Average Number of Adults*	Average Number of Pupils Enrolled Per Class
Class A	2	2	2	2	2	2	2	2	16	8	2	24.375
Class B	1	1	1	1	2	2	2	2	12	8	1.5	23.750
Class C	2	2	2	1	1	1	2	2	13	8	1.5	24.750
Class D	2	2	2	2	2	2	2	2	16	8	2	25.500
Sum	N/A	N/A	7	98.375								

Pupils Per Adult: 98.375 ÷ 7 = 14.05 ≈ 1:14 Adult-to-Student Ratio*

^{*}Average number of adults and adult-to-student ratio are rounded to the nearest half or whole integer.

Adult-to-Student Ratio Penalty

- EC 48000.1(b)(1)(A)
- Penalty equals the product of:
 - 1. Additional adults needed
 - 2. 24 reduced by prior year elementary statewide absence rate
 - 3. TK add-on funding rate

Adult-to-Student Ratio Penalty: Number of Adults Needed

Pupils Per Adult

98.375 ÷ 7 = 14.05 ≈ 1:14 Adult-to-Student Ratio

Total Adults Needed

 $98.375 \div 12 = 8.20 \approx 8$

rounded to the nearest half or whole integer.

Additional Adults Needed: 8 - 7 = 1

Adult-to-Student Ratio Penalty: Rates

1. Statewide absence rates

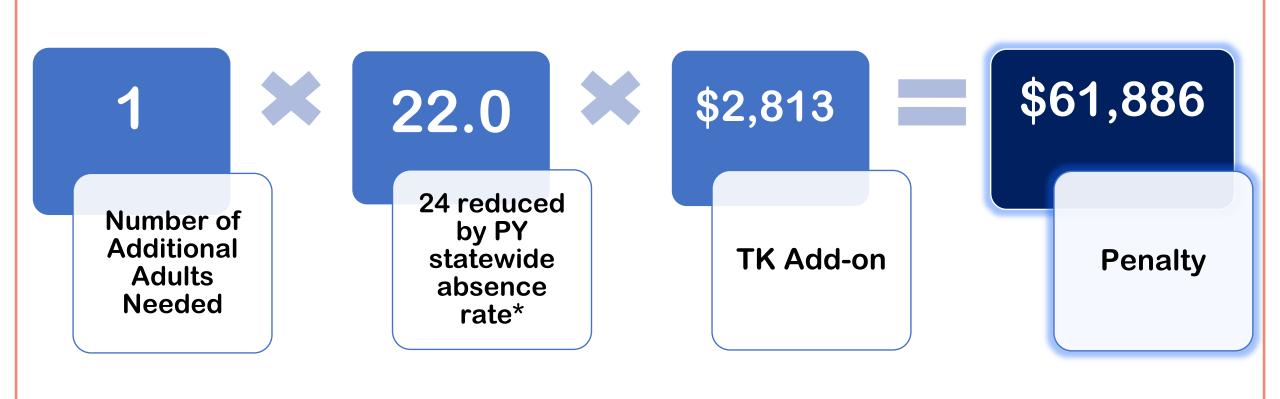
Grade Level	Statewide Absence Rate	Adjustment Factor		
Elementary (K-8)	8.34%	91.66%		
High (9-12)	10.21%	89.79%		

Example: 24 x 91.66% = 21.9984 ≈ 22

2. TK Add-on: \$2,813 (plus COLA starting FY 2023-24)

Rates are available on CDE website Principal Apportionment section in the Funding Rates and Information page.

Adult-to-Student Ratio Penalty: Calculation Example



TK Teacher Qualification Requirements

Teacher Qualification Requirements

- EC 48000(g)(4)
- Beginning in 2023-24, credentialed teachers assigned to a TK class (including independent study) after July 1, 2015 must have one of the following by August 1, 2023:
 - At least 24 units in early childhood education, or childhood development, or both.
 - As determined and documented by the LEA employing the teacher, professional experience in a classroom setting with preschool age children meeting the criteria established by the governing board or body of the LEA that is comparable to the 24 units of education.
 - A child development teacher permit, or an early childhood education specialist credential, issued by the Commission on Teacher Credentialing.

Teacher Qualification Penalty

- EC 48000.1(b)(1)(B)
- 2023-24 FY and after
- Penalty equals the product of:
 - 1. Number of credentialed teachers out of compliance with *EC* 48000(g)(4)(A)-(C)
 - 2. 24 reduced by prior year elementary statewide absence rate
 - 3. K-3 LCFF Base Grant per ADA rate
 - 4. Sum of all schooldays those teachers rendered services in a TK classroom without meeting the requirements divided by the total days of instruction for those teachers

Teacher Qualification Calculation Example

Example Schoolsite: XYZ Elementary	Teacher Qualifications Met	Days Taught Without Qualifications Met	Total Days Taught
Class A	YES	N/A	N/A
Class B	YES	N/A	N/A
Class C	NO	90	180
Class D	NO	45	180
Sum	N/A	135	360

Percentage of unqualified teachers: $(135 \div 360) = 0.375$

^{*}The percentage of unqualified teachers is based on the amount of time that the applicable teachers taught without meeting the teacher qualifications requirements

Teacher Qualification Penalty: Calculation Example

2

Number of unqualified teachers

22

24 reduced by PY statewide absence rate*

\$9,166

2022-23 LCFF K-3 Base Grant per ADA



0.375

Percentage of unqualified teachers

\$151,239

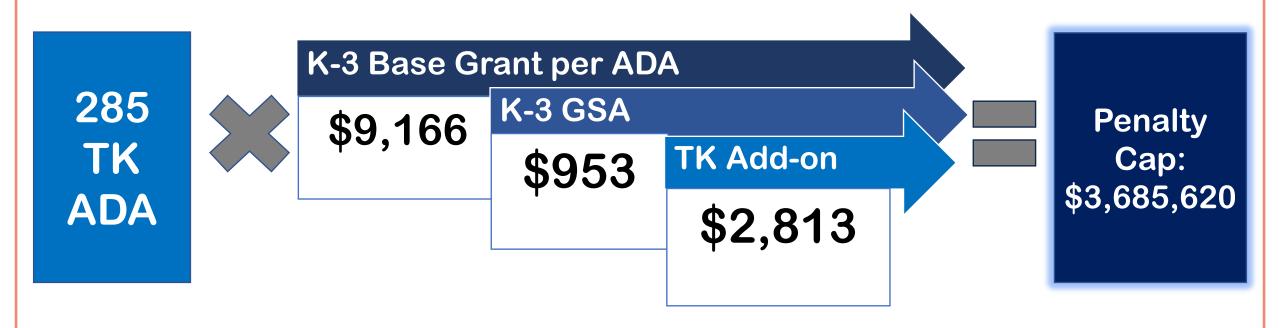
Penalty

*The 2021-22 statewide average rate of absence for elementary (K-8) was calculated by the CDE as 8.34% **The percentage of unqualified teachers is based on the amount of time that the applicable teachers taught without meeting the teacher qualifications requirements

Penalty Cap

- *EC* 48000.1(c)
- The maximum penalty for all three TK requirements is the product of the following:
 - 1. LEA's total P-2 TK ADA
 - 2. Sum of the following:
 - K–3 base grant per ADA
 - K-3 GSA
 - TK Add-On

Penalty Cap: Calculation Example



Compliance Verification

- LCFF funding is provided to LEAs prior to verification of compliance with TK requirements
- TK requirement compliance is verified in the annual audit:
 - Based on *Guide for Annual Audits of K-12 Local Education Agencies* and State Compliance Reporting issued by EAAP
 - Occurs after the end of the school year
- Noncompliance = financial penalty
- Options to mitigate audit finding:
 - Submit request for summary review and/or appeal to EAAP
 - Submit repayment plan request to CDE

Can LEAs Request a Waiver?

- The requirements of TK in EC 48000(g) are conditions of apportionment and are, therefore, not waivable by the SBE.
- School districts and charter schools will incur fiscal penalties to the TK LCFF funding pursuant to *EC* 48000.1 if the annual audit finds that they failed to meet the TK requirements.

Answers to Frequently Asked Questions and Specific Scenarios

Do the TK class size and adult-to-student ratio requirements apply to all students in combination classes, or only to the TK students in the class?

The TK class size and adult-to-student ratio requirements apply to **all** students in a classroom providing instruction to TK students, with the exception of students enrolled in "long term" independent study, as described in 48000(g)(1)(B), and special day classes [*EC* 42238.02 (d)(3)(D)(ii), 48000(g)(1)(A) and 48000.1(b)(2)].

Can a LEA implement TK age eligibility expansion ahead of the statutory schedule?

Yes. EC 48000(c)(2)(A) states that a school district or charter school may, at any time during a school year, admit a child to a transitional kindergarten program who will have their fifth birthday after the date specified for the applicable year in, but during that same school year, subject to conditions. Pupils that are enrolled but have birthdays outside of the date range do not generate ADA, and therefore LCFF apportionment, and are not included in enrollment or unduplicated pupil count pursuant to Section 42238.02, until their fifth birthdays [EC 48000(c)(2)(B)]. However, since these children are still TK pupils, they must be included in pupil counts for the TK class size and adult-to-pupil ratios, K-3 GSA, and class size penalties (*EC* 41378).

Can we have a TK class with more than 24 students if we add a third adult?

Since EC 48000(g)(1) requires that a school district or charter school maintain an average TK class enrollment of not more than 24 pupils for each schoolsite, it is possible for an LEA to have an individual TK class with more than 24 pupils while maintaining an average at the schoolsite of 24 or less. Failure to maintain an average of 24 pupils or less at the schoolsite would lead to a penalty to the TK LCFF funding pursuant to EC 48000.1, regardless of the number of adults.

Do the TK class size and adult-to-student ratio requirements apply to special education students?

The TK class size and adult-to-student ratio requirements apply to any classroom providing instruction to TK students, with the exception of special day classes. Special education students in general education classes are subject to the TK requirements [EC 48000(g)(1)(A) and 48000.1(b)(2)].

Are TK pupils who are ineligible to generate ADA due to their age included in the TK class size and adult-to-pupil ratio counts?

Yes. TK pupils despite not generating apportionment funding must be included in pupil counts for the TK class size and adult-to-pupil ratios.

Can a school district or charter school apply for a waiver for the TK classroom enrollment and ratio requirements?

No. The requirements of TK in EC 48000(g) are conditions of apportionment and are therefore not waivable.

How can I meet the 24 units of additional education required for TK teachers? Which classes will count?

Units are defined as 24 semester units (or their quarterly equivalent) in the academic disciplines of early education or child development (or both), as used for the purposes of a degree program at the University of California, California State University, California Community Colleges, or independent institutions of higher education. "Continuing education" units are only applicable if they are issued by an accredited institution of higher education as semester- or quarter-equivalent units.

LEAs will monitor and document the completion of units.

A classroom has an adult assigned to work with specific students in the TK classroom, such as a special education aid or a speech therapist. Can this adult be counted in the 1:12 ratio?

No. The "assigned" adult must be an employee who is dedicated and available to all TK pupils.

A small school has one multi-graded classroom (TK - 1st) that serves all of the students in these grade levels. Is the school required to meet the class size and the 1:12 ratio requirements?

Yes. Pursuant to *EC* 48000(g)(1) and (g)(2), a school district or charter school must maintain an average class enrollment of not more than 24 and at least one adult for every 12 pupils for transitional kindergarten classrooms. This includes any class that has transitional kindergarten students, and statute does not provide exceptions to this requirement.

A school with only one TK class has 24 students in it with one teacher and one aide to bring the ratio to 1:12. There is a special education student with a 1:1 aide who the school would like to add to this classroom at the beginning of the school year. Can the school do this without a penalty, since the 1:12 ratio is preserved because the aide is in the classroom with the student?

No. The average class size requirement is set up separately from the adult-to-student ratio requirement. Even though the school will not exceed the adult-to-student ratio it will still be in violation of the TK average class size requirement, because the school only has one TK class, therefore the calculation yields an average class size greater than 24 in this scenario. For all other cases where there may be multiple TK classrooms, the average calculation by schoolsite must be performed to determine compliance.

A school district begins the school year with 24 students enrolled in every TK classrooms at a schoolsite. What does the district do when a new TK student enrolls after the beginning of the school year?

The average TK class enrollment requirement is by schoolsite, not individual TK class, therefore it is possible for an LEA to have an individual TK class with more than 24 students and maintain an average at the schoolsite of 24 or less.

LEAs need to develop best practices to monitor class sizes throughout the year and plan for later enrollees. This may include, but not limited to, beginning the year with class sizes below 24, and consider other schoolsites that have spots available for late enrollees.

Example Calculation for Scenario 4

Example Schoolsite: XYZ Elementary	Mo. 1	Mo. 2	Mo. 3	Mo. 4	Mo. 5	Mo. 6	Mo. 7	Mo. 8	Sum of Active Enrollment Counts	Number of Active Enrollment Counts	Average Number of Pupils Enrolled Per Class
Class A	24	24	25	25	25	25	25	25	198	8	24.75
Class B	24	24	24	24	24	24	24	24	192	8	24
Class C	24	24	24	24	24	24	24	24	192	8	24
Class D	24	24	24	24	24	24	24	24	192	8	24

Sum of Average Number of Pupils Enrolled Per Class: 96.75

Average Transitional Kindergarten Class Enrollment*: 96.75 ÷ 4 = 24.19 ≈ 24

^{*}Average Transitional Kindergarten Class Enrollment is rounded to the nearest half or whole integer.

Contact Information and Resources

Email Questions to:

- For programmatic questions regarding the TK Program, please contact the Early Education Division at UPK@cde.ca.gov.
- For fiscal questions regarding TK or fiscal penalties contact the Principal Apportionment Section at attendanceaccounting@cde.ca.gov.

Resources

 Principal Apportionment Funding Rates and Information: https://www.cde.ca.gov/fg/aa/pa/ratesandinfo.asp

 Universal Prekindergarten FAQs: https://www.cde.ca.gov/ci/gs/em/kinderfaq.asp

 2022-23 Supplement and 2023-24 Audit Guide to be available at Education Audit Appeals Panel website: https://eaap.ca.gov/

THANK YOU



Appendix (1)

*Due to 508 compliance regulations, slide 7 "Transitional Kindergarten Example" requires a long text description (see below).

Here is an example of TK ADA reporting and the impact on an LEA's funding in the 2022-23 school year:

- In this example 8/15/2022 is the first day of school.
- ADA is generated from the beginning of the school year for TK students who turn five years old between Sept 2, 2022 and Feb 2, 2023.
- For TK students who turn five years old after Feb 2, 2023, ADA is generated beginning on the student's 5th birthday.
- P-2 ADA is primarily used in LEA funding calculations; P-2 ADA is attendance generated between July 1 and the last school month ending on or before April 15th, therefore TK students who turn five after that school month do not generate funding based on P-2 ADA in 2022-23.
- Additionally, only TK students who turn five on or before February 2, 2023 will be included in the unduplicated pupil count for LCFF supplemental and concentration grants in the 2022-23 school year.

Appendix (2)

*Due to 508 compliance regulations, slide 16 "TK Average Class Size as Addition to K-3 GSA" requires a long text description (see below).

This slide shows how the K-3 GSA requirement remains in place for school districts, while the TK average class size requirement is implemented in addition to K-3 GSA. School districts continue to calculate and monitor the average class size for Kindergarten (including TK) through 3rd grade, including any combo classes at each site offering those grade levels, plus, they also calculate and monitor the TK class sizes. Classes with TK students are included in both calculations. The new TK class size average requirement is in addition to K-3 GSA for school districts and a new requirement for charter schools.

Appendix (3)

*Due to 508 compliance regulations, slide 21 "TK Average Class Size Penalty: Calculation Example" requires a long text description (see below).

This slide shows an example penalty calculation for the school district that had an average TK class enrollment of 24.5 at the sampled schoolsite. The penalty applies to all TK ADA in the district. In this example, the district has a couple of other schools that offer TK, with a total district-wide TK ADA of 285 at 2022-23 P-2 reporting period.

The penalty is calculated as the K-3 grade span adjustment rate, which equals \$953 in 2022-23, multiplied by the LEA's P-2 TK ADA of 285. This district would incur a penalty of \$271,605.

Appendix (4)

*Due to 508 compliance regulations, slide 29 "Adult-to-Student Ratio Penalty: Calculation Example" requires a long text description (see below).

This slide shows an example penalty calculation for the school district that exceeded the 1:12 adult-to-student ratio at a sample schoolsite selected in the audit.

The penalty is calculated as the product of the number of additional adults needed (1), multiplied by 24 reduced by the prior year statewide absence rate for elementary grades as calculated by the CDE and rounded to the nearest tenth (22.0), multiplied by the TK add-on funding rate of \$2,813. The total adult-to-student ratio penalty amount for the schoolsite in this example is \$61,886.

The school district may incur additional adult-to-student ratio penalties, if other schoolsites selected in the audit also exceeded the 1 to 12 ratio.

Appendix (5)

*Due to 508 compliance regulations, slide 34 "Teacher Qualification Penalty: Calculation Example" requires a long text description (see below).

This slide shows an example penalty calculation for the school district that had two teachers who rendered service in a TK classroom without meeting the requirements in *EC* 48000(g)(4). To calculate the penalty, the count of 2 teachers is multiplied by 24 reduced by the prior year statewide absence rate for elementary grades as calculated by the CDE and rounded to the nearest tenth (22.0), multiplied by the LCFF Base Grant per ADA for K-3 grade span (\$9,166), then multiplied by the quotient of total days that both teachers taught, without the necessary qualifications, which is 135 divided by the total number the two teachers taught during the entire school year, which is 360 (0.375).

The adjustment for the statewide absence rate is the same as was described earlier. The \$9,166 base grant rate is listed on the Funding Rates and Information page along with all other applicable rates.

Appendix (6)

*Due to 508 compliance regulations, slide 36 "Penalty Cap: Calculation Example" requires a long text description (see below).

This slide shows an example penalty calculation for the school district with 285 TK ADA.

The maximum penalty is applied to the 285 TK ADA, which is the total reported TK ADA for the school district, multiplied by the sum of the following:

- K-3 base grant per ADA rate of \$9,166
- K-3 grade span adjustment of \$953
- TK add-on of \$2,813

The penalty cap for this district is \$3,685,620. The sum of the district's individual TK penalties shown on the previous slides is \$484,730, therefore the cap is not triggered.