Exceptional Student Services (ESS)
Special Education Advisory Panel (SEAP)

Indicator 4 Methodology

11/28/23

Introduction to Indicator 4

- Includes students ages 3–21
- Uses 618 discipline data
- 10 days is cumulative
- Only out-of-school suspension and expulsions
- Data lag one year
  (2024 submission of the State Performance Plan/Annual Performance Report (SPP/APR) would use data from SY 2021–22).
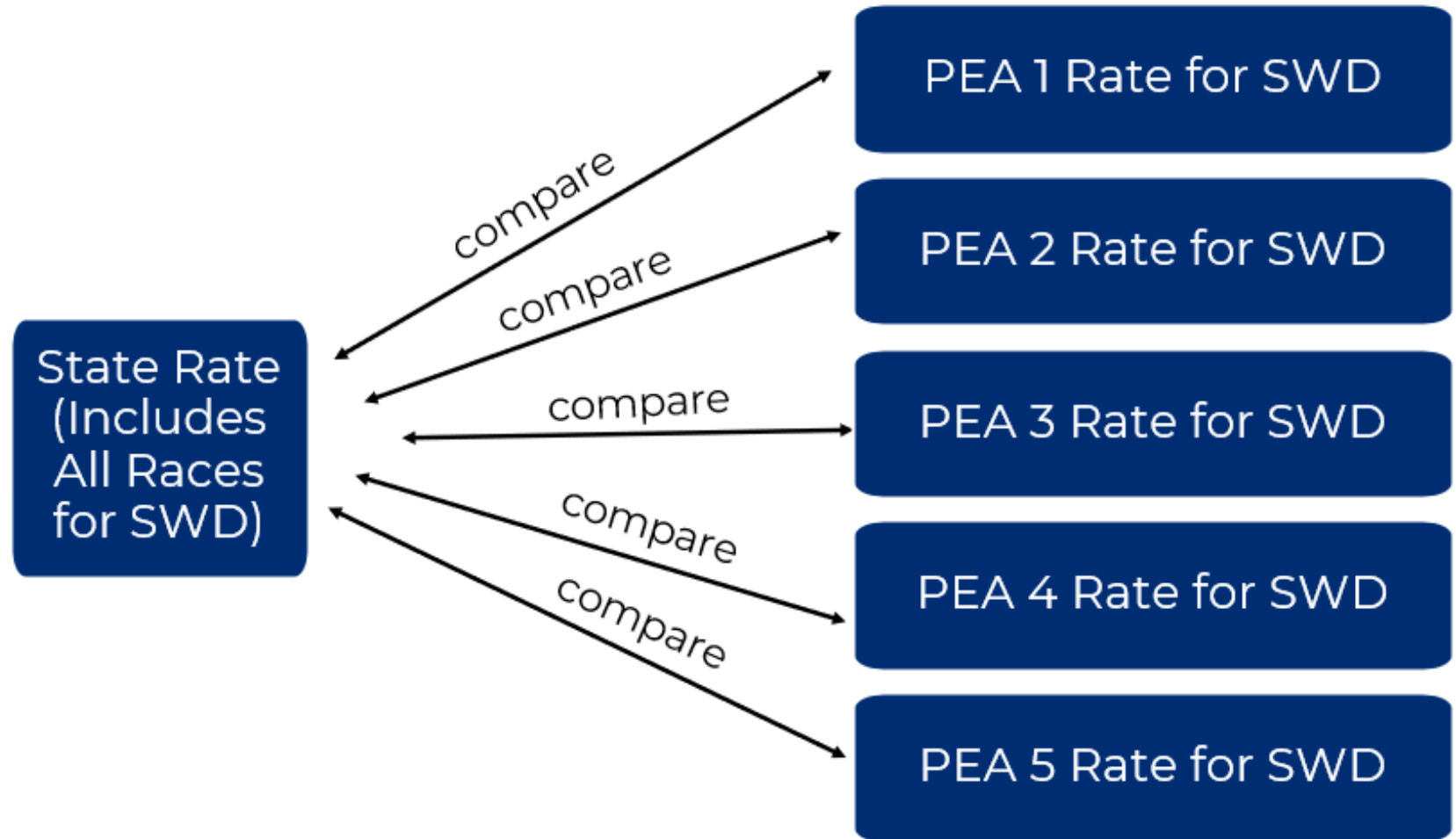
4A Definition:

States report the percentage of PEAs that have a **significant discrepancy, as defined by the state,** in the rate of suspensions and expulsions greater than 10 days in a school year for students with disabilities (SWD).

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The State Rate for all SWD suspended/ expelled greater than 10 days is compared to each PEAs rate for SWD suspended/ expelled greater than 10 days.

State Rate (Includes All Races for SWD)

compare → PEA 1 Rate for SWD

compare → PEA 2 Rate for SWD

compare → PEA 3 Rate for SWD

compare → PEA 4 Rate for SWD

compare → PEA 5 Rate for SWD

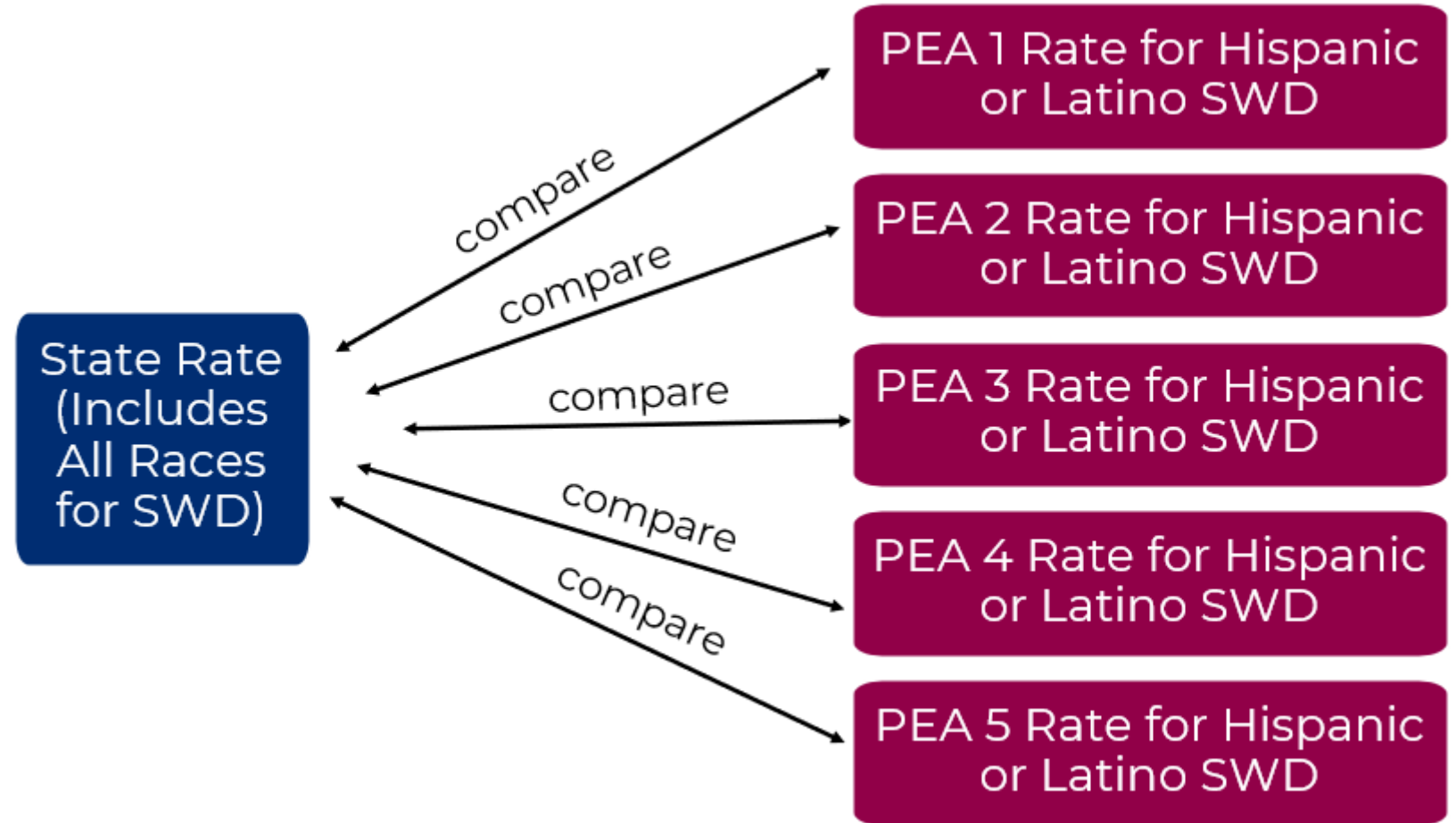**Exceptional Student Services**

4B Definition

States report the percentage of PEAs that have a **significant discrepancy, as defined by the state,** in the rate of suspensions and expulsions greater than 10 days in a school year **by race and ethnicity** and policies, procedures, or practices that contribute to the significant discrepancy, as defined by the State, and do not comply with requirements relating to the development and implementation of IEPs, the use of positive behavioral interventions and supports, and procedural safeguards.

Example 4B:

The State Rate for all SWD suspended/ expelled greater than 10 days is compared to each PEA's rate for Hispanic or Latino SWD suspended/ expelled greater than 10 days.

This is repeated for all racial groups

State Rate (Includes All Races for SWD)

compare → PEA 1 Rate for Hispanic or Latino SWD

compare → PEA 2 Rate for Hispanic or Latino SWD

compare → PEA 3 Rate for Hispanic or Latino SWD

compare → PEA 4 Rate for Hispanic or Latino SWD

compare → PEA 5 Rate for Hispanic or Latino SWD

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Current Methodology for Indicator 4

Current Methodology (1 of 2)

State's definition of "significant discrepancy" and methodology Arizona utilizes a rate ratio methodology

Rate ratio = PEA-level suspension/expulsion rate for children with disabilities ÷ state-level suspension/expulsion rate for children with disabilities

Current Methodology (2 of 2)

- The cell (numerator) is unique for children with disabilities in a PEA who were suspended or expelled greater than 10 days in a school year

- The N (denominator) is unique children with a disability in the state that were suspended or expelled greater than 10 days in a school year

- Minimum n (risk denominator) size = 30 and Minimum cell (risk numerator) size = 10

- The level at which significant discrepancy is identified: 3.0 (or 3 times as likely) the PEA-level suspension/expulsion rate for children with disabilities is above the state-level rate of state-level suspension/expulsion rate for children with disabilities

Identifying Parts of the Calculation: Cell Size

PEA Name	Cell Size
PEA 1	1
PEA 2	2
PEA 3	2
PEA 4	9
PEA 5	11

The cell size is the number of students with disabilities suspended/expelled greater than 10 days

Example:
PEA 5 had 11 children who were suspended or expelled greater than 10 days cumulative

Identifying Parts of the Calculation: N Size

PEA Name	Cell Size	N Size
PEA 1	1	8
PEA 2	2	20
PEA 3	2	300
PEA 4	9	500
PEA 5	11	3,000

The N size is the number of students with disabilities in the PEA

Example:
PEA 5 had 3,000 children with disabilities in the PEA

Identifying Parts of the Calculation: PEA Rate

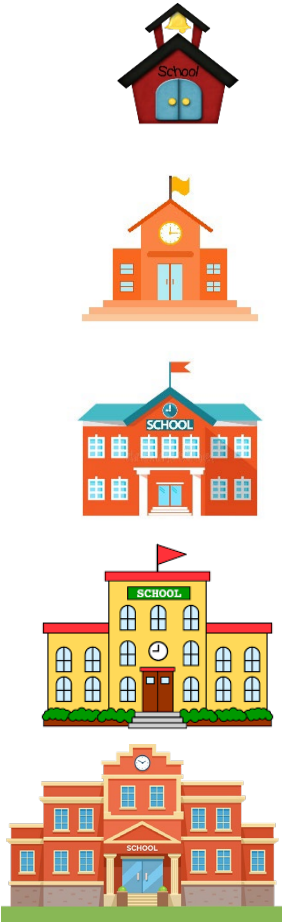| PEA Name	Cell Size	N Size	PEA Rate
PEA 1	1	8	12.50%
PEA 2	2	20	10.00%
PEA 3	2	300	0.67%
PEA 4	9	500	1.8%
PEA 5	11	3,000	0.37%

The PEA Rate is found by dividing the cell size by the N size

Identifying Parts of the Calculation: State Rate

PEA Name	Cell Size	N Size	PEA Rate	State Rate
PEA 1	1	8	12.50%	.50%
PEA 2	2	20	10.00%	.50%
PEA 3	2	300	0.67%	.50%
PEA 4	9	500	1.8%	.50%
PEA 5	11	3,000	0.37%	.50%

The State Rate is found by dividing State Cell size by the State N size

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Identifying Parts of the Calculation: Rate Ratio

PEA Name	Cell Size	N Size	PEA Rate	State Rate	Rate Ratio
PEA 1	1	8	12.50%	.50%	25.00
PEA 2	2	20	10.00%	.50%	20.00
PEA 3	2	300	0.67%	.50%	1.33
PEA 4	9	500	1.8%	.50%	3.60
PEA 5	11	3,000	0.37%	.50%	0.74

The Rate Ratio is found by dividing the PEA Rate by the State Rate. Currently it is set at 3.0.

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Identifying Parts of the Calculation: Threshold

PEA Name	Cell Size	N Size	PEA Rate	State Rate	Rate Ratio
PEA 1	1	8	12.50%	.50%	25.00
PEA 2	2	20	10.00%	.50%	20.00
PEA 3	2	300	0.67%	.50%	1.33
PEA 4	9	500	1.8%	.50%	3.60
PEA 5	11	3,000	0.37%	.50%	0.74

PEAs 1, 2, and 4 are over the threshold of 3.0 so they would be flagged if they meet the minimum N and cell size.

Identifying Parts of the Calculation: N Size (1 of 2)

PEA Name	Cell Size	N Size	PEA Rate	State Rate	Rate Ratio
PEA 1	1	8	12.50%	.50%	25.00
PEA 2	2	20	10.00%	.50%	20.00
PEA 3	2	300	0.67%	.50%	1.33
PEA 4	9	500	1.8%	.50%	3.60
PEA 5	11	3,000	0.37%	.50%	0.74

The current minimum cell size is 10 and N size is 30.

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Identifying Parts of the Calculation: N Size (2 of 2)

PEA Name	Cell Size	N Size	PEA Rate	State Rate	Rate Ratio
PEA 1	1	8	12.50%	.50%	25.00
PEA 2	2	20	10.00%	.50%	20.00
PEA 3	2	300	0.67%	.50%	1.33
PEA 4	9	500	1.8%	.50%	3.60
PEA 5	11	3,000	0.37%	.50%	0.74

Only PEA 5 met the minimum N size and cell size to be in the calculation.

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Reason to Change the Methodology

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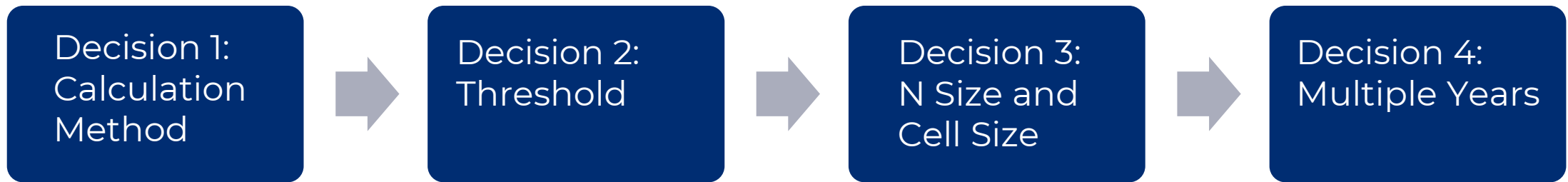
Why Change the Methodology?

- Arizona excludes 95% or more of their PEAs from being in the indicator 4 calculation.

- Newly released Office of Special Education (OSEP) 2023 guidance:

  - For Indicators 4A and 4B, the State's methodology for examining data must be reasonably designed to determine if significant discrepancies are occurring in the rate of long-term suspensions and expulsions of children with disabilities among PEAs in the State.

  - Factors that OSEP may consider in determining the reasonableness of the State's methodology include the number of PEAs being examined in the calculation.

Proposed New Methodology for Indicator 4

Decisions Regarding Indicator 4 Methodology

States are given flexibility in some of the decisions regarding how PEAs are identified as having a significant discrepancy.

| Decision 1: Calculation Method | → | Decision 2: Threshold | → | Decision 3: N Size and Cell Size | → | Decision 4: Multiple Years |

Decision #1: Calculation Method

- Flat rate of 2% (or any %)
- Standard Deviation
- Percentage points above or below state rate
- Compare each PEA to the state mean
- Rate ratio

Decision #2: Threshold

How discrepant should a PEA be to have "significant discrepancy?"

- How many times more than the state's rate?

- How many standard deviations above the mean?

Decision #3: N Size and Cell Size

- Does having a minimum cell size and/or minimum N size make sense?

- How do you set the minimum cell/N-size to capture districts with an actual significant discrepancy?

Decision #4: Multiple Years

Should it be required that PEAs meet the State's definition of significant discrepancy 2 or 3 years in a row?

Proposed Indicator 4 Methodology

Arizona is proposing the following methodology for Indicator 4:

- Cell Size (SWD suspended/expelled greater than 10 days): None

- N Size (total enrollment of SWD): 10

- Rate ratio: >=2.0

- Years of data: 3 years

PEA Name	FY 22 Cell Size	FY 22 N Size	FY 22 Rate Ratio	FY 21 Rate Ratio	FY 20 Rate Ratio
PEA 1	1	8	25.00	0	0
PEA 2	2	20	20.00	10.00	20.00
PEA 3	2	300	1.33	.66	1.57
PEA 4	9	500	3.60	1.90	2.25
PEA 5	11	3,000	0.74	0.51	0.65

Using the example PEAs with the proposed methodology, let's look at the last three years of data.

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Proposed Indicator 4 Methodology Example (2 of 5)

PEA Name	FY 22 Cell Size	FY 22 N Size	FY 22 Rate Ratio	FY 21 Rate Ratio	FY 20 Rate Ratio
PEA 1	1	8	25.00	0	0
PEA 2	2	20	20.00	10.00	20.00
PEA 3	2	300	1.33	.66	1.57
PEA 4	9	500	3.60	1.90	2.25
PEA 5	11	3,000	0.74	0.51	0.65

Which PEAs would be excluded in the FY22 analysis?

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PEA Name	FY 22 Cell Size	FY 22 N Size	FY 22 Rate Ratio	FY 21 Rate Ratio	FY 20 Rate Ratio
PEA 1	1	8	25.00	0	0
PEA 2	2	20	20.00	10.00	20.00
PEA 3	2	300	1.33	.66	1.57
PEA 4	9	500	3.60	1.90	2.25
PEA 5	11	3,000	0.74	0.51	0.65

Using the new methodology, PEA 1 would be excluded from the calculation because it did not have at least 10 SWD in the PEA.

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Proposed Indicator 4 Methodology Example (4 of 5)

Current methodology

PEA Name	Cell Size	N Size	PEA Rate	State Rate	Rate Ratio
PEA 1	1	8	12.50%	.50%	25.00
PEA 2	2	20	10.00%	.50%	20.00
PEA 3	2	300	0.67%	.50%	1.33
PEA 4	9	500	1.8%	.50%	3.60
PEA 5	11	3,000	0.37%	.50%	0.74

Proposed methodology

PEA Name	FY 22 Cell Size	FY 22 N Size	FY 22 Rate Ratio	FY 21 Rate Ratio	FY 20 Rate Ratio
PEA 1	1	8	25.00	0	0
PEA 2	2	20	20.00	10.00	20.00
PEA 3	2	300	1.33	.66	1.57
PEA 4	9	500	3.60	1.90	5.10
PEA 5	11	3,000	0.74	0.51	0.65

Fewer PEAs are excluded in the proposed methodology

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PEA Name	FY 22 Cell Size	FY 22 N Size	FY 22 Rate Ratio	FY 21 Rate Ratio	FY 20 Rate Ratio
PEA 1	1	8	25.00	0	0
PEA 2	2	20	20.00	10.00	20.00
PEA 3	2	300	1.33	.66	1.57
PEA 4	9	500	3.60	1.90	5.10
PEA 5	11	3,000	0.74	0.51	0.65

Which PEA would be identified as having a significant discrepancy?

PEA 2 would be identified.

They would have a review of their policies, procedures and practices.

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We Welcome Your Feedback!

To access the Public Comment Form, please visit www.azed.gov/specialeducation

The "Public Comment" button is located under the "Contact" section.

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ESS Reception Desk

(602) 542-4013

ESSInbox@azed.gov

Public Comment

Special Education - Public Comment Form

Online Form

Exceptional Student Services accepts feedback from the public concerning the Individuals with Disabilities Education Act (IDEA) Part B State Application, the State Per...

This form has certain fields required and those are notated with an asterisk. Other fields are optional but are helpful for our unit determining the representativeness of p...

Commenters Information

Type *
Select one or more options below:
- ☐ Parent
- ☐ Teacher
- ☐ School Administrator
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Select one or more options below:
- ☐ American Indian and Alaska Native
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- ☐ Native Hawaiian and Other Pacific Islander
- ☐ White
- ☐ Do not wish to disclose

Category *
Choose one...

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☐ I acknowledge that I am making a public comment, either voluntarily or at the request of Exceptional Student Services, I...

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