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Collect, Report, Analyze, and
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Unpacking and Understanding Part B SPP/APR Indicator 3D

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Unpacking and Understanding Part B SPP/APR Indicator 3D

The purpose of this resource is to unpack Part B State Performance Plan/Annual Performance Report (SPP/APR) Indicator 3D to better understand how to use it to improve outcomes for children with individualized education programs (IEPs). Indicator 3D is a new subcomponent of Indicator 3 in the Office of Special Education Programs' (OSEP) FFY 2020–2025 SPP/APR measurement table. This resource guides the reader through an overview of Indicator 3D, including how to calculate it and information on the setting/resetting of its baselines and targets. This resource also offers details about Indicator 3D such as where the data come from, how the APR Tool performs the Indicator 3D proficiency gap calculation, and considerations when analyzing, reporting, and using Indicator 3D data. As an aid to deepen learning, this resource includes examples with fictitious data. This resource will be useful to personnel in a state education agency (SEA) who are responsible for the collection, validation, reporting, analysis, or use of assessment data, including, but not limited to, the SEA director, SPP/APR coordinator, Part B data manager, EDFacts coordinator, and assessment program staff. This guide may also be helpful to those state staff charged with sharing information about Indicator 3D with internal and external stakeholders, including, but not limited to, colleagues at the SEA, parents and families of children with disabilities, members of the State Special Education Advisory Panel, local education agency (LEA) teachers and administrators, and external partners.

Indicator 3D Overview

This section includes a description of what Indicator 3D measures, how 3D differs from the other subcomponents of Indicator 3, and how to calculate Indicator 3D.

What Is Indicator 3D?

OSEP's [Part B State Performance Plan \(SPP\) and Annual Performance Report \(APR\) Part B Indicator Measurement Table: For Federal Fiscal Year \(FFY\) 2020 Submission](#) states that Indicator 3D measures the “gap in proficiency rates for children with IEPs and for all students against grade level academic achievement standards.” A state’s assessments against grade-level standards are also known as regular assessments. Indicator 3D does not include children with IEPs who participated in the state’s alternate assessment based on alternate academic achievement standards (AA-AAAS), also known as the alternate assessment.

Part B Indicator 3D is different from the other parts of Indicator 3—Indicators 3A, 3B, and 3C—in several ways:

- The gap in Indicator 3D is the **difference** between the *percentage of all students* who scored proficient or above on the statewide regular assessment in reading/language arts and mathematics for the current reporting year compared to the *percentage of children with IEPs* who scored proficient or above on the statewide regular assessment in reading/language arts and mathematics for the current reporting year.
- The calculation results in a proficiency percentage point gap, not a proficiency percentage.
- The calculation includes children with IEPs and all students (i.e., those with an IEP and those without an IEP) who received a valid score and were given a proficiency level (e.g., advanced, proficient, basic,

below basic) on the regular statewide assessment in reading/language arts and mathematics in grade 4, grade 8, and high school.

How Is Indicator 3D Calculated?

Per OSEP's [Part B State Performance Plan \(SPP\) and Annual Performance Report \(APR\) Part B Indicator Measurement Table: For Federal Fiscal Year \(FFY\) 2020 Submission](#), the calculation for Indicator 3D is as follows:

Proficiency rate gap = [(proficiency rate for children with IEPs scoring at or above proficient against grade level academic achievement standards for the 2020–2021¹ school year) subtracted from the (proficiency rate for all students scoring at or above proficient against grade level academic achievement standards for the 2020–2021 school year)]. Calculate separately for reading and math. Calculate separately for grades 4, 8, and high school. The proficiency rate includes all children enrolled for a full academic year and those not enrolled for a full academic year.

What Are the Baseline and Target Data for Indicator 3D?

This section provides background information about baseline and target setting for Indicator 3D and includes fictitious data to illustrate possible baselines and targets in reading for grades 4, 8, and high school.

Indicator 3D Baseline Data

3D was a new indicator for the FFY 2020–2025 SPP/APR, so states needed to work with stakeholders to identify a baseline year to report on in their FFY 2022 submission. States that propose to revise their baseline for Indicator 3D in subsequent years will need to provide an explanation in their submission. OSEP expects that states will revise baseline data when states change methodology or data source for the indicator, and it affects comparability of the data.

Table 1 provides an example of a state's fictitious baseline data in reading for FFY 2018. It identifies what grade level took the assessment and their proficiency percentage point gap, which the state will use as a baseline for calculating Indicator 3D.

¹ Note, the indicator reflects the data for the current reporting year. In this case, the current reporting year was FFY 2020.

Table 1. Example of Indicator 3D FFY 2018 baselines for reading*

Grade assessment taken	Baseline year	Baseline proficiency percentage point gap
Grade 4	FFY 2018	26.4
Grade 8	FFY 2018	27.9
High school	FFY 2018	29.6

*These are fictitious data the resource uses to help unpack and illustrate Indicator 3D; the data do not represent a recommendation or endorsement by IDC of particular proficiency gap, baseline, or target numbers.

Indicator 3D Target Setting FFY 2020–2025

OSEP required states to gather stakeholder input to set targets that showed improvement over the baseline data for the FFY 2020–2025 SPP/APR. In setting its targets, each state also had to describe its stakeholder input process. Part of this process involves understanding and communicating how Part B Indicator 3D is different from the other parts of Indicator 3 in terms of target setting. Specifically, targets (and actual data, hopefully) should decrease over time (like Part B Indicator 2: Dropout), so the target for FFY 2025 must be lower than the baseline. Slippage, or a worsening from the previous year’s data AND a failure to meet the target, is also different for Indicator 3D. Indicator 3D slippage occurs if the actual data for a specific year are **above** the target and **above** the previous year’s actual data, depending on the thresholds applied.²

Table 2 presents an example of a state’s Indicator 3D FFY 2020–2025 targets for reading. In this example, “stakeholders” recommended that the state decrease the proficiency percentage point gap gradually over the SPP/APR 6-year cycle.

² For a “large” percentage (10% or above), slippage occurs if the worsening is more than 1 percentage point. For example:

- It is not slippage if the FFY 2018 data for Indicator X are 32 percent and the FFY 2017 data were 32.9 percent.
- It is slippage if the FFY 2018 data for Indicator X are 32 percent and the FFY 2017 data were 33.1 percent.

For a “small” percentage (less than 10%), slippage occurs if the worsening is more than 0.1 percentage point. For example:

- It is not slippage if the FFY 2018 data for Indicator Y are 5.1 percent and the FFY 2017 data were 5 percent.
- It is slippage if the FFY 2018 data for Indicator Y are 5.1 percent and the FFY 2017 data were 4.9 percent.

Table 2. Example of Indicator 3D FFY 2020–2025 targets for reading*

Grade assessment taken	FFY 2020	FFY 2021	FFY 2022	FFY 2023	FFY 2024	FFY 2025
Grade 4	26.1	25.2	24.7	23.96	22.96	20.0
Grade 8	27.5	25.6	25.1	24.35	23.35	22.0
High school	29.4	27.5	27.0	26.25	25.0	23.0

*These are fictitious data the resource uses to help unpack and illustrate Indicator 3D; the data do not represent a recommendation or endorsement by IDC of particular proficiency gap, baseline, or target numbers.

Indicator 3D in Detail

This section provides an in-depth look at Indicator 3D, including a detailed breakdown of where the data originate within *EDFacts*, the steps involved when the APR Tool calculates Indicator 3D, and a comparison of the current reporting year's targets and data. It includes fictitious data to illustrate the calculation and comparison processes.

Where Do the Data for Indicator 3D Come From?

Indicator 3D uses the same data that states report to the Department of Education under Title I of the *Elementary and Secondary Education Act (ESEA)*, using *EDFacts* file specifications FS175 (mathematics) and FS178 (reading/language arts).

FS175 and FS178 contain information about performance on statewide assessments in mathematics and reading/language arts, including the assessment administered, disability status, grade level, performance level achieved, racial and ethnic group, sex, English learner status, etc.

The APR Tool, which the U.S. Department of Education developed as a part of its modernization of the APR collection and submission process, then uses some of the following information from FS175 and FS178 to prepopulate and calculate Indicator 3D:

- Assessment administered
 - **REGASSWOACC**—Regular assessments based on grade-level achievement standards without accommodations
 - **REGASSWACC**—Regular assessments based on grade-level achievement standards with accommodations
- Disability status (yes/no)
- Grade level (3–8 and high school end-of-course or end-of-grade assessment used for *Every Student Succeeds Act* [ESSA] accountability)
- Performance level (the data reported in academic achievement files based on state-defined academic achievement [performance] levels)

- The files must label the state-defined academic achievement levels as level 1 through level 6, with level 1 representing the lowest level of achievement.
- A state must report at least three levels that correspond to advanced, proficient, and not proficient. In terms of Indicator 3, students who score in the top two levels are proficient or above and students who score below proficient are not proficient.
- The information about performance levels must map to the information in the EMAPS Assessment Metadata Survey, which, among other things, identifies which performance levels are proficient or above and which are not proficient.

How Does the APR Tool Determine the Indicator 3D Proficiency Gap Calculation for Each Specific Year?

Behind the scenes, the APR Tool performs several steps in calculating the percentage point gap for each year from FFY 2020–2025. Table 3 describes these steps and provides a detailed explanation of calculations the APR Tool uses during each step to generate Indicator 3D data.

Table 3. Steps for calculating Indicator 3D proficiency point gap

Step	Calculation
Step 1: Proficiency rate for children with IEPs scoring at or above proficient against grade-level academic achievement standards	<p>Children with IEPs in regular assessment with no accommodations who scored at or above proficient against grade level + Children with IEPs in regular assessment with accommodations who scored at or above proficient against grade level</p> <p>÷</p> <p>Children with IEPs who received a valid score and proficiency was assigned for the regular assessment</p> <p>= Children With IEPs Proficiency Rate</p>
Step 2: Proficiency rate for all students scoring at or above proficient against grade-level academic achievement standards	<p>All students in regular assessment with no accommodations who scored at or above proficient against grade level + All students in regular assessment with accommodations who scored at or above proficient against grade level</p> <p>÷</p> <p>All students who received a valid score and proficiency was assigned for the regular assessment</p> <p>= All Students Proficiency Rate</p>
Step 3: Percentage gap	<p>All Students Proficiency Rate - Children With IEPs Proficiency Rate</p> <p>= Percentage Point Gap in Proficiency Rates</p>

Next, table 4 applies fictitious data to the steps outlined in table 3 to illustrate how the APR Tool would calculate Indicator 3D in reading. Table 4 shows calculations for the proficiency rates for children with IEPs against grade-level academic standards; in this example, these proficiency rates are 18.7 percent, 15.7 percent, and 11.7 percent in grade 4, grade 8, and high school, respectively. Next, it shows calculations for the proficiency rates for all students against grade-level academic standards; in this example, these proficiency rates are 44.4 percent, 41.8 percent, and 39.7 percent in grade 4, grade 8, and high school, respectively. Finally, table 4 shows the calculations for the percentage point gaps that result when the

proficiency rates for children with IEPs are subtracted from the proficiency rates for all students; in this example, these percentage point gaps are 25.7, 26.1, and 28.0 in grade 4, grade 8, and high school, respectively.

Table 4. Example of Indicator 3D calculations for reading*

Grade assessment taken	Step 1: Proficiency rate for children with IEPs scoring at or above proficient against grade-level academic achievement standards	Step 2: Proficiency rate for all students scoring at or above proficient against grade level academic achievement standards	Step 3: Proficiency percentage point gap in rates
Grade 4	$\frac{850+1,860}{14,445} = 0.188 \times 100 = 18.8\%$	$\frac{62,435+2,710}{146,570} = 0.444 \times 100 = 44.4\%$	44.4% - 18.8% = 25.6
Grade 8	$\frac{560+1,570}{13,571} = 0.157 \times 100 = 15.7\%$	$\frac{49,904+2,130}{124,269} = 0.419 \times 100 = 41.9\%$	41.9% - 15.7% = 26.2
High School	$\frac{460+965}{12,096} = 0.118 \times 100 = 11.8\%$	$\frac{46,943+1,425}{121,547} = 0.398 \times 100 = 39.8\%$	39.8% - 11.8% = 28.0

*These are fictitious data the resource uses to help unpack and illustrate Indicator 3D; the data do not represent a recommendation or endorsement by IDC of particular proficiency gap, baseline, or target numbers.

Finally, table 5 shows the proficiency percentage point gaps in reading in grades 4, 8, and high school for the current reporting year compared to the target for the current reporting year. In this example, the state met FFY 2020 targets because the actual FFY 2020 proficiency point gaps of 25.6, 26.2, and 28.0 in grade 4, grade 8, and high school, respectively, were **below** the FFY 2020 targets of 26.1, 27.5, and 29.4 in grade 4, grade 8, and high school, respectively, and therefore showed improvement.

Table 5. Example of comparing targets and current reporting year data in reading*

Grade assessment taken	Proficiency rate for children with IEPs scoring at or above proficient against grade-level academic achievement standards	Proficiency rate for all students scoring at or above proficient against grade-level academic achievement standards	FFY 2020 targets	FFY 2020 data
Grade 4	18.8%	44.4%	26.1	25.6
Grade 8	15.7%	41.9%	27.5	26.2
High school	11.8%	39.8%	29.4	28.0

*These are fictitious data the resource uses to help unpack and illustrate Indicator 3D; the data do not represent a recommendation or endorsement by IDC of particular proficiency gap, baseline, or target numbers.

Understanding and Interpreting the Data Resulting From Indicator 3D Calculations

This section includes suggestions for explaining Indicator 3D to stakeholders using the fictitious data from the example presented in this guide. It also provides additional considerations related to Indicator 3D and possible questions to use when analyzing Indicator 3D.

How Might States Explain Indicator 3D to Stakeholders?

Because Indicator 3D was a new subcomponent of Indicator 3 beginning in FFY 2020, and because it is different from the other parts of Indicator 3, states may want to consider how to explain Indicator 3D data to stakeholders. Overall, it is important that stakeholders understand that the data represent the gap between the percentage of children with IEPs who scored proficient or above on statewide regular assessments in reading/language arts and mathematics in grade 4, grade 8, and high school and the percentage of ALL students who scored proficient or above on statewide regular assessments in reading/language arts and mathematics in grade 4, grade 8, and high school. It is also important to note that Indicator 3D does not include students who participated in the AA-AAAS.

More specifically, here are some possible ways to explain the fictitious data from table 5 to stakeholders:

- The state met its targets for the current reporting year in reading in grades 4, 8, and high school since the proficiency gaps between children with IEPs and all students on the regular assessment decreased.
- The proficiency rate for children with IEPs on the grade 4 regular statewide reading assessment was 25.6 percentage points below that for all students.

- Children with IEPs did not perform as well as all students on the grade 8 regular statewide assessment in reading. Almost 16 percent of children with disabilities scored proficient or above compared to almost 42 percent of all students scoring proficient or above. That is a gap of over 26 percentage points.
- Across grade 4, grade 8, and high school, the proficiency rates for children with IEPs on the regular statewide reading assessments were over 25 percentage points below the proficiency rates for all students.

What Additional Considerations About Indicator 3D Are Important to Remember?

As states consider the data presented in Indicator 3D, it's important to bear in mind what makes Indicator 3D different from most other SPP/APR indicators. The following list provides examples of points to remember about Indicator 3D:

- Indicator 3D represents a gap in the proficiency of children with IEPs and ALL students. Children with IEPs are included in the all-student group. The comparison is not between mutually exclusive groups of students.
- The context of overall achievement influences Indicator 3D. For example, a narrow gap on Indicator 3D could indicate low overall proficiency for children with IEPs and all students.
- A state may see its Indicator 3D gap data narrow over time but for the wrong reasons. For example, if the proficiency rate of the all-student group drops, the proficiency gap may narrow, but it could be due to a decline in student achievement overall rather than an increase in the proficiency rate of children with IEPs. (Not the ideal scenario.)
- The best-case scenario for improvement on Indicator 3D is that the performance of all students increases over time, but the performance of children with IEPs increases at a faster rate than the performance of the all-student group, thus decreasing the proficiency rate gap.

What Questions May Be Helpful to Ask When Analyzing Indicator 3D Data?

Below are some questions states may want to consider as they begin to unpack and understand the data presented in Indicator 3D:

- How do the proficiency gaps between the percentage of children with IEPs who are proficient or above on the regular state assessment and all students look overall? Are the gaps “small” or “large,” generally speaking?
- How well do all students perform in general? (What are their overall proficiency rates?)
 - Are there differences in how all students perform across grade levels?
 - Are there differences in how all students perform by content area?
- How well do children with IEPs perform in general? (What are their overall proficiency rates?)
 - Are there differences in how children with IEPs perform across grade levels?
 - Are there differences in how children with IEPs perform by content area?

- How do the proficiency gaps between children with IEPs and all students differ across grade levels? How does overall performance differ across grade levels? What are the differences by content area?
 - Where are the proficiency gaps the narrowest?
 - Where are the proficiency gaps the greatest?
- What are the various ways these proficiency gaps could narrow over time? What is the most ideal way the proficiency gaps could narrow?
- What other data could help states better understand Indicator 3D data? (Consider disability category data, educational environment data, discipline data, disproportionate representation data, race/ethnicity data, socio-economic data, etc.)
 - How might states approach conducting analyses using these different data?
 - Who should be involved in these analyses?

Summary and Final Thoughts

This resource unpacks Part B Indicator 3D by providing a detailed yet clear explanation of important details regarding its calculation and analysis while helping states understand how to use Indicator 3D with stakeholders to guide improvement efforts. It includes information on where the data depicted in Indicator 3D come from and uses fictitious data to illustrate how the APR Tool automatically calculates the proficiency gap between children with IEPs and all students on regular assessments in reading/language arts and mathematics in grade 4, grade 8, and high school. In addition, this resource makes recommendations for how to explain the results shown in Indicator 3D to stakeholders, possible questions to consider when digging deeper into the indicator, and additional data to look at that may further illuminate a state's Indicator 3D results.

A clear understanding of Indicator 3D is important, as it is the only indicator in the SPP/APR that provides a comparison between the academic performance in reading/language arts and mathematics of children with IEPs and all students at specific grade levels. As such, it provides a unique opportunity for states to share the differences and similarities in the academic achievement of children with disabilities and all students with stakeholders and, if applicable, begin a dialogue on how to close the achievement gap.

Additional Support and Resources

If you have additional questions or would like support with unpacking and understanding Indicator 3D, please contact your IDC State Liaison at <https://ideadata.org/technical-assistance>.

IDC can help your state to

- unpack the important and distinctive elements of Indicator 3D with state agency staff (including staff from your assessment or ESSA offices) and enhance understanding of how to meet Indicator 3D requirements;
- consider how to best support stakeholders in understanding and interpreting Indicator 3D data;
- prepare summary analyses for dissemination and use by stakeholder groups;
- explore the use of Indicator 3 data in state accountability metrics, including LEA determinations; and
- analyze Indicator 3 data in relationship to other available state data (e.g., educational environment or discipline data).



You can also check out [The Assessment Data Journey: Are We There Yet?](#) from IDC. This resource depicts the path that assessment data follow from student registration and test administration to federal reporting. In addition to an infographic depicting the process, the resource includes a dialogue guide, a PowerPoint, and a printable PDF to support conversations among the various data quality influencers who affect the assessment data process.