

# Curves Ahead: Navigating the Winding Roads of Indicators 8 and 14

November 15–16, 2022

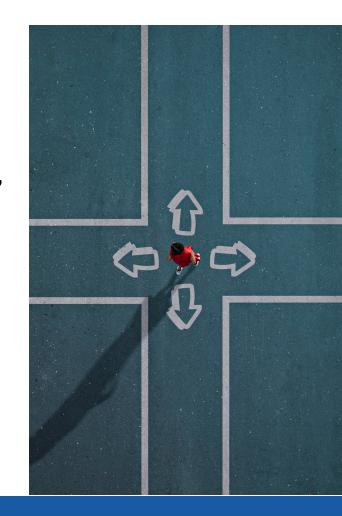
Tom Munk, IDEA Data Center Amber Stohr, IDEA Data Center







- Improved understanding of high-quality data collection methodologies related to Indicators 8 and 14
- Increased knowledge of analyzing data for response rate, representativeness, and nonresponse bias
- Improved ability to mitigate challenges for current and future data collections
- Increased capacity to appropriately and completely respond to SPP/APR prompts for Indicators 8 and 14

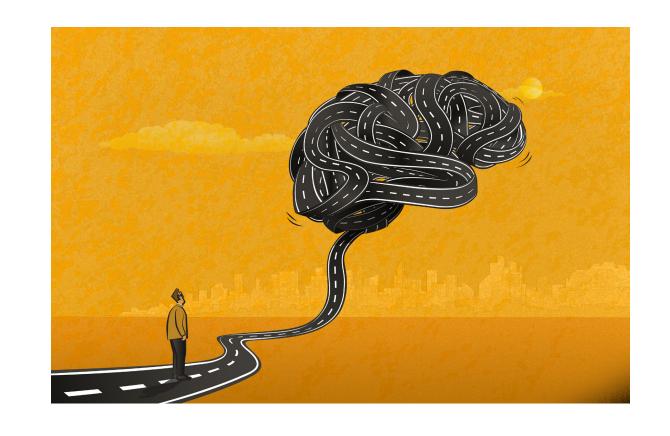


### What Hot Topics Come to Mind for Indicators 8 and 14?



- Use post-it-notes to write down topics, challenges, questions, etc. about Indicators 8 and 14
- Place notes on the Indicator 8
  flipchart or the Indicator 14
  flipchart

Let's take a look and discuss!





#### **Agenda**

- Establish the importance of high-quality Indicator 8 and 14 data
- Discuss strategies to improve quality data collection
- Review analysis methodologies (response rate, representativeness, and nonresponse bias)
- Discuss mitigating challenges for current and future data collections
- Walk through the SPP/APR prompts for Indicators 8 and 14





### Importance of High-Quality Data for Indicators 8 and 14

# What Are Indicators 8 and 14 and Why Are They Important?



- Indicator 8. Parent Involvement—Percent of parents who report that the school facilitated parent involvement
- Indicator 14. Post-School Outcomes—Percent of youth with IEPs no longer in school who are
  - A. Enrolled in higher education
  - B. Enrolled in higher education or competitively employed
  - C. Enrolled in higher education, other postsecondary education, or training program or competitively employed or in some other employment, within one year of leaving high school

Let's discuss—Why are these indicators important?





#### **How States Gather the Data**

- Extant data: Some states use existing administrative data to answer the questions
- Attempted census survey: Some states ask survey questions of all parents or all exiting students
- Sample survey: Some states ask survey questions of carefully-selected samples of parents or exiters to gather this information
  - Relatively easy to collect data from large number of respondents
  - Survey data estimate population quantities



# Strategies to Improve Survey Data Collection Quality

# Six Steps for Making Surveys Represent Your Population



- 1. Design your sample carefully
- 2. Get a good number of respondents (response rate)
- 3. Get a high overall response rate
- Get a good number of respondents from all key groups (may require oversampling some groups)
- 5. Get a high response rate from all key groups
- Have similar response rates for all key groups (representativeness) or weight the results



#### **Survey Design Tips**

- Make the survey easy to access—e.g., offer multiple access options, including mobile devices and multiple languages
- Make the survey easy to complete—e.g., short and quick!
- Make the survey easy to understand—e.g., use plain language, offer surveys in the native language of the respondent

Let's discuss—What strategies have you used?





#### **Survey Administration Tips**

- Partner with LEAs
- Partner with parent organizations—e.g., parent training information centers (PTIs)
- Identify and train local contacts
- Use on-line resources for local contacts, including text messages for reminders
- Have clear timelines for respondents
- Send multiple reminders to those who have not completed the survey





# Analysis of Response Rate, Representativeness, and Nonresponse Bias



### **SPP/APR** Reporting Requirements

Each year, states must examine their survey data and describe

- Extent to which the demographics of respondent youth are representative of the demographics of youth who are no longer in secondary school and had IEPs in effect at the time they left school (i.e., exiters)
- Strategies the state will implement to increase the *response rate* year over year, particularly for those groups that are underrepresented
- Analysis of the response rate, including any nonresponse bias the state identified, and the steps the state has taken to reduce any identified bias and promote response representing a broad cross section of exiters



#### **Response Rates**

- Definition—The number of people who completed a survey, divided by the number of people in a population or sample
- Expressed as a percentage
- Calculate overall and subgroup response rates for Indicators 8 and 14
- Higher response rates may improve reliability and validity of results





#### Representativeness

• The term *representative* means that the data that are collected reflect the population being surveyed



- Key point: Response data can be representative with respect to some characteristics and not others
- Strategy: Disaggregate your data for an understanding of subgroups that are meaningful within your state

Let's discuss—Beyond race/ethnicity, what other subgroups will you analyze for the next SPP/APR?



#### **Nonresponse Bias**

- Nonresponse: Lack of 100% response to a survey
- **Bias:** Systematic error in survey estimates that cause them to be too high or too low—Example: In a state, 25% of students enter postsecondary education, but each year, the survey estimates that number to be somewhere between 30% and 40%
- Nonresponse bias: Bias specifically caused by nonresponse to surveys; both of the following must occur
  - Certain subgroups are systemically underrepresented, AND
  - The subgroups differ in terms of what you're trying to measure

#### When Nonresponse Bias Happens



 A *low* overall response rate does not necessarily mean that there is nonresponse bias

 A high overall response rate does not mean that there isn't nonresponse bias

Nonresponse bias exists when participating subgroups differ from the population you're trying to measure. Uneven response rates across subgroups may indicate a systemic issue.



#### **Remedies for Nonresponse Bias**

- You can't control through survey methodology whether the subgroups differ in what we're trying to measure, but...
- You can control whether subgroups are represented in a survey
  - During survey design and data collection
  - During data analysis



### Remedies for Nonresponse Bias (cont.)

- During survey design and data collection—Work to prevent some groups from having lower response rates
- During data analysis—Use statistical weighting adjustments, which give underrepresented groups greater influence on estimates, to make up for their smaller sample size
  - Requires you to have data that tell you which groups are underrepresented and by how much
  - Weight = % of population ÷ % of sample



#### Mitigating Challenges for This Data Collection

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- Analyze response rates by group as the data arrive and focus survey reminders on groups with low response rates
- When the survey is over, weight results to represent key groups





### Mitigating Challenges for the Next Data Collection

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- Identify the groups that are underresponding
- Hypothesize or analyze the root causes of the under-response
- Make plans to improve the data collection next time





### SPP/APR Prompts for Indicators 8 and 14



#### **Straightening Out Indicators 8 and 14**



SPP/APR prompts can be confusing because

- They ask compound questions
- The order of prompts does not align with the order in which states analyze data

Let's walk through the prompts and discuss the most appropriate responses.



### **Overall Response Rate**

B8 prompt	B14 prompt	Analysis/response
The number of parents to whom the surveys were distributed	Total number of targeted youth in the sample or census	Number (#)
Total number of respondent parents of children with disabilities	Number of respondent youth who are no longer in secondary school and had IEPs in effect at the time they left school	Number (#)
Response rate	Response rate	Percentage (%)

# Subgroup Response Rates and Representativeness



B8 prompt	B14 prompt	Analysis/response
Include in the State's analysis the extent to which the demographics of the children for whom parents responded are representative of the demographics of children receiving special education services. States should consider categories such as race/ethnicity, age of student, disability category, and geographic location in the State	Include the State's analyses of the extent to which the response data are representative of the demographics of youth who are no longer in secondary school and had IEPs in effect at the time they left school	<ul> <li>Calculate response rates by subgroups</li> <li>Test whether subgroups differ in likelihood of responding</li> <li>Compare estimates based on respondent data to external population data</li> <li>Compare estimates based on respondent data to estimates based on data from respondents and non-respondents</li> </ul>
The demographics of the parents responding are representative of the demographics of children receiving special education services (yes/no)	The response data is representative of the demographics of youth who are no longer in school and had IEPs in effect at the time they left school (yes/no)	If no, describe the strategies that the State will use to ensure that in the future the response data are representative of those demographics
Describe the metric used to determine representativeness (e.g., +/- 3% discrepancy in the proportion of responders compared to target group)	Describe the metric used to determine representativeness (e.g., +/- 3% discrepancy in the proportion of responders compared to target group)	Description of the metric, such as using a difference in percentage points or a statistical test of significance (i.e., Chi-square)

### **Identifying and Addressing Nonresponse Bias**



B8 prompt	B14 prompt	Analysis/response
Describe the analysis of the response rate including any nonresponse bias that was identified, and the steps taken to reduce any identified bias and promote response from a broad cross section of parents of children with disabilities	Describe the analysis of the response rate including any nonresponse bias that was identified, and the steps taken to reduce any identified bias and promote response from a broad cross section of youth who are no longer in secondary school and had IEPs in effect at the time they left school	<ul> <li>Compare estimates based on respondent data to external population data</li> <li>Compare estimates based on respondent data to estimates based on data from respondents and non-respondents</li> <li>Identify sub-group variables that are predictive of survey outcomes</li> <li>Compare estimates based on respondent data, before and after weighting adjustments</li> </ul>



#### **Improving Future Data Quality**

B8 prompt	B14 prompt	Analysis/response
Describe strategies that will be implemented which are expected to increase the response rate year over year, particularly for those groups that are underrepresented	Describe strategies that will be implemented which are expected to increase the response rate year over year, particularly for those groups that are underrepresented	Use the results from the other prompts to inform strategies to increase future response rates overall and for underrepresented subgroups specifically

Note: While this is the first prompt requiring a written response for each of these indicators, it is best to answer it last.

### Reporting Nonresponse Bias Analyses to OSEP and Broader Stakeholders



#### Parent involvement example:

- Parents of students who are Hispanic/Latino made up 10% of our survey respondents, significantly lower than are represented in our population (19%). Agreement on Indicator 8 was lower for these respondents (26%) than the overall respondent agreement (55%).
- Because this subgroup is underrepresented and differs from other subgroups in their agreement on Indicator 8, there is risk of nonresponse bias in our data.
- We used statistical weighting to adjust for the underrepresentation of this subgroup. Compared to the unweighted estimate of 55% agreement, the weighted estimate of overall parent agreement was 51%. This suggests that the unweighted estimate was subject to nonresponse bias caused by lack of representativeness with respect to race/ethnicity.

#### **Current TA and Resources**



- <u>IDC Parent Involvement Toolkit—Making the Most of Parent Involvement Data:</u> <u>Improving Quality and Enhancing Understanding</u>
- Parent Involvement: How to Measure and Improve Representativeness for Indicator B8
- Post-School Outcomes: Response Rates and Nonresponse Bias
- Response Rate, Representativeness, and Nonresponse Bias—They All Matter
- SEA Data Processes Toolkit (Protocols for Indicators 8 and 14)

Connect with your IDC State Liaison for targeted TA!



### **Upcoming TA and Resources**

- IDC Nonresponse Bias Analysis Tool
- IDC Hands-on Learning Academy: Spring 2023



#### **Contact Us**



- Tom Munk, tommunk@westat.com
- Amber Stohr, <u>amberstohr@westat.com</u>

#### For More Information





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**Project Officers:** Richelle Davis and Rebecca Smith



