



# Set Yourself Up for Success With Root Cause Analysis

Significant Disproportionality Summit November 9, 2021

Joanna Bivins, IDC Rachel Wilkinson, IDC Elizabeth Graichen, New Hampshire Department of Education Hannah Krajcik, New Hampshire Department of Education



### Agenda

- Introductions
- Systems planning process
- Conducting root cause analysis
  - Before a meeting
  - During a meeting: Use of data and identifying contributing factors
  - After a meeting
- Resources



### Introductions

- Joanna Bivins, IDC
- Rachel Wilkinson, IDC
- Elizabeth Graichen, New Hampshire Department of Education
- Hannah Krajcik, New Hampshire Department of Education



### Welcome

### Who is in the room?



IDCIDEA DATA<br/>CENTERCollect, Report, Analyze, and<br/>Use High-Quality Part B Data



### **Real World Example**

### **Personal Goals**

- Think of a personal goal
- What's one word to describe your progress toward your personal goal?



### **Typical Planning Process**







### **Embedding a Root Cause Analysis**





### So What Is Root Cause Analysis?

Ð

Root cause analysis is a problem-solving method for uncovering the factors that, if addressed appropriately, will prevent the problem from recurring. Identifying root causes is necessary to identify appropriate solutions.



# **New Hampshire Share-Out**

How have you historically approached root cause analysis work with local education agencies (LEAs)? How has the work changed?

### **Benefits of Root Cause Analysis**

- Encourages systemic thinking
- Can eliminate wasted efforts on potential solutions that will not dissolve root causes of problems or challenges
- Spurs reflection on current processes and practices
- Provides rationale for strategy selection





### **Preparing for Root Cause Analysis**

- Use a team approach (include diverse stakeholder group)
- Clearly define the issue to address
- Use data to make informed decisions
- Use a multi-step approach to test assumptions and dig further into data before determining solutions





### **State Planning for Co-Facilitated Root Cause Analysis**

### State Education Agency (SEA)

- Provide an overview of root cause analysis
- Provide connections to state and federal requirements
- Provide state-level data
- Provide documentation templates
- Coach LEA on root cause analysis process and action plan development
- Facilitate meetings
- Debrief and problem solve with LEA leadership

### Local Education Agency (LEA)

- Develop a leadership team
- Gather and prepare district-level data
- Document meeting discussions, rationale, and decisions
- Develop action plans
- Implement action plans



# **New Hampshire Share-Out**

What differences do you see in LEAs completing root cause analysis work independently as opposed to using a co-facilitation model?



### **Root Cause Analysis Process Planning**

BeforeDuringthethemeetingmeeting

After the meeting

### **Determining Root Cause resource**

### **Before the Meeting**



### **Developing a Team for Root Cause Analysis**



#### Parents and students

representing the group of concern and the children and youth experiencing success



#### Support staff

such as school psychologists, school counselors, and others



# General and special education professionals

who work with the target group and who work with students who are succeeding



#### **Community members**

from organizations that support youth and families and local business representatives



**Leaders** with the influence and authority to make changes

IDEA DATACollect, Report, Analyze, andCENTERUse High-Quality Part B Data

I D C

# Ð

### **Data Preparation**

Obtain information on the data literacy and culture of the LEA to determine the level of support needed to do the following

- Disaggregate data
  - Gender, grade level, school, duration of incidents, etc.
- Identify types of data and determine the most appropriate to use
  - Percentages
  - Raw counts
  - Comparison groups
  - Qualitative data
- Document data for the leadership team (data visualization)

# Þ

### Data Use

Using data is imperative not just to identify problems or challenges but also to identify the causes of these problems and challenges

- Often, there are many causes
- We must dig into the data to get to the roots of the problem







# **New Hampshire Share-Out**

While working with LEAs, what challenges have you observed or experienced as LEAs prepare and analyze their data and what was helpful in addressing those challenges?

### **During the Meeting**

# Ð

### **Best Practices**

- Provide introduction to the root cause analysis work and review key messages
- Present the data
- Discuss
  - Observations of the data
  - Interpretations of the data
  - Implications of the data
- Walk through root cause analysis steps and determine next steps for the group
- Reflect on the meeting's effectiveness



### **Analysis Tool—Diagnostic Tree**





# What Should You Include in Root Cause Analysis?

- Statewide data
  - State targets, averages, and regional information
- LEA data
  - Results from policy, procedure, and practice reviews
  - Comparison data (e.g., students without disabilities)
  - Disaggregated subgroup data (e.g., gender, race/ethnicity)
- School-based data
  - Subgroup data
  - Student-level data
  - Grade-level data
- Diagnostic trees and/or flow charts
- <u>Success Gaps Toolkit</u> rubric findings



### **Questions to Ask About Data**



### Observations

- What are your initial thoughts or reactions?
- What do you know about the data?
- Is it a change or a trend?
- Do the data surprise you?
- What do you want to know?

#### Interpretations

- What do the data tell you?
- What thoughts or assumptions do these data confirm?
- What are the limitations to your conclusions?
- What are your next questions?
- What further data do you want to see?

### Implications

- What are the implications?
- Why does this matter?
- What is/are the root cause(s)? Do you know them yet?
- What do you still need to find out? Do you have enough data/information to move forward?



### **Contributing Factors Related to the Root Cause**





- Factors include characteristics of the school or district culture, curriculum, instruction, and/or physical environment
- Multiple contributing factors are typically the result of a single root cause
- Multiple contributing factors may have multiple root causes
- Addressing the root cause dissolves associated contributing factors

# After the Meeting

### **Steps After the Meeting**

- Distribute notes
- Confirm next steps and timeline for additional activities, as appropriate







# **New Hampshire Share-Out**

# What are some ways NH has discussed using this process moving forward?

### **Resources**

- Data Meeting Toolkit
- <u>Success Gaps Toolkit: Addressing Equity, Inclusion, and</u> <u>Opportunity</u>
- IDC State Liaison



### **Contact Us**

- Joanna Bivins, joannabivins@westat.com
- Rachel Wilkinson, rachelwilkinson@westat.com
- Elizabeth Graichen, <u>elizabeth.j.graichen@doe.nh.gov</u>
- Hannah Krajcik, <u>hannah.m.krajcik@doe.nh.gov</u>



### **For More Information**

IDCVisit the IDC websitehttp://ideadata.org/



Follow us on Twitter https://twitter.com/ideadatacenter



Follow us on LinkedIn

http://www.linkedin.com/company/idea-data-center









The contents of this presentation were developed under a grant from the U.S. Department of Education, #H373Y190001. However, the contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the federal government.

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



