

Developing Effective Practices for In-depth Analysis of Your Data to Improve Results





Presenters



Fort Worth, TX – March 3–4, 2020 Nancy O'Hara, IDEA Data Center Carol Seay, IDEA Data Center

Nashville, TN – Cancelled Due to COVID-19
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Agenda



- Welcome and introductions
- Rationale for in-depth analysis*
- In-depth analysis process and simulation

*See Preuss, P. (2003). School leader's guide to root cause analysis: Using data to dissolve problems. Larchmont, NY: Eye on Education.



Welcome



Who is in the room?

- Data managers
- State directors
- State Systemic Improvement Plan (SSIP) coordinators
- State Performance Plan/Annual Performance Report (SPP/APR) coordinators
- 619 coordinators
- Others?



Rationale



In-depth Data Analysis



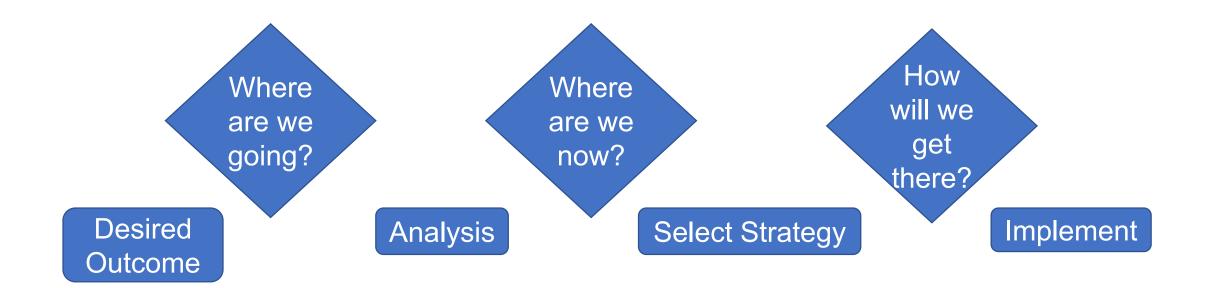
- Requires spending time to identify the causes of the problem
 - Often has multiple causes
 - Requires digging deeply to get to the root(s)
- Encourages systemic thinking
- Can eliminate wasted effort on patches that will not dissolve the roots
- Encourages reflection on current practices
- Provides rationale for strategy selection



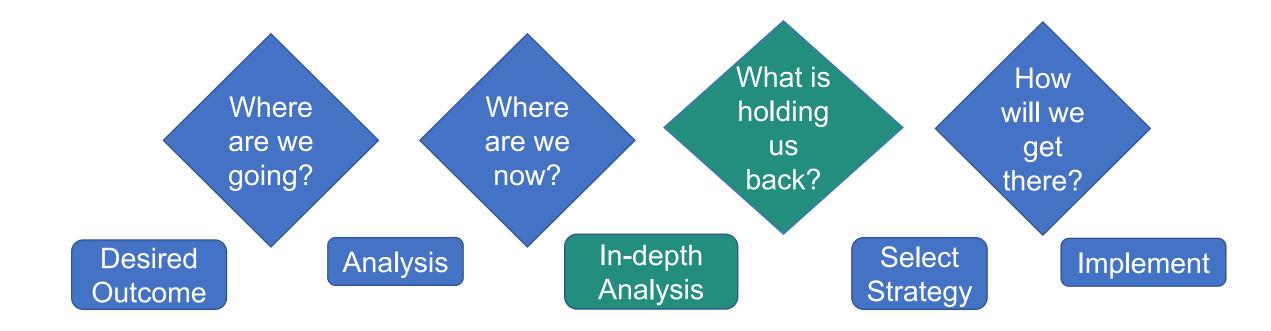




1120 A Typical Planning Process



1120 A Systems Planning Process



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





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Who Should Be Included in the Systems Planning Process?

- Parents and students representing the group of concern and the students experiencing success
- General and special education professionals who work with the target group and who work with students succeeding
- Support staff (school psychologists, school counselors, etc.)
- Leaders with the influence and authority to make changes
- Community members from organizations that support youth and families and local business representatives

1120 Converting Data to Wisdom

- Convene a team that
 - Can speak with authority to all angles of the problem
 - Understands the relevant data
 - Has the power to make changes (sometimes radical) to the system
- Use
 - Shared analysis
 - Contemplation
 - Reflection
 - Honesty



In-depth Data Analysis



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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?



Collect, Report, Analyze, and Use High-Quality Part B Data

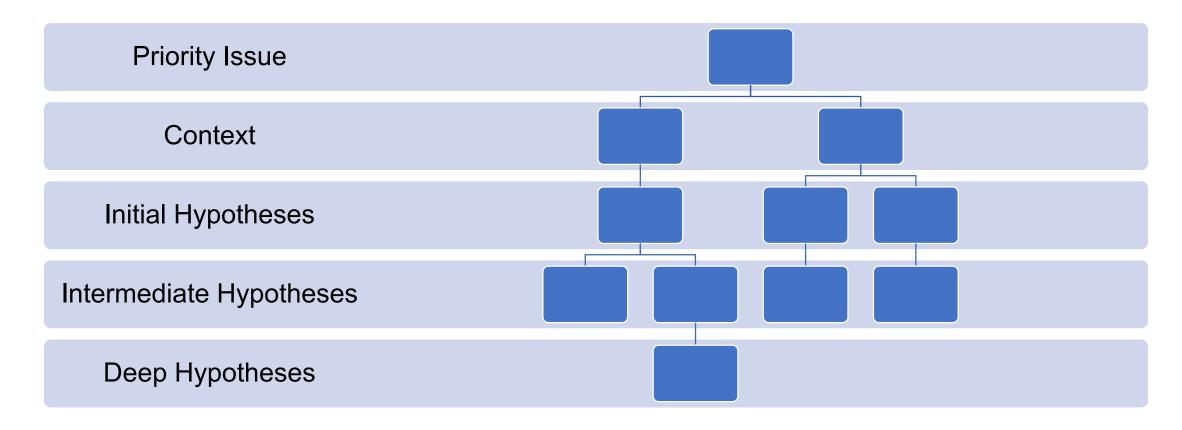
Interpretations

- 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

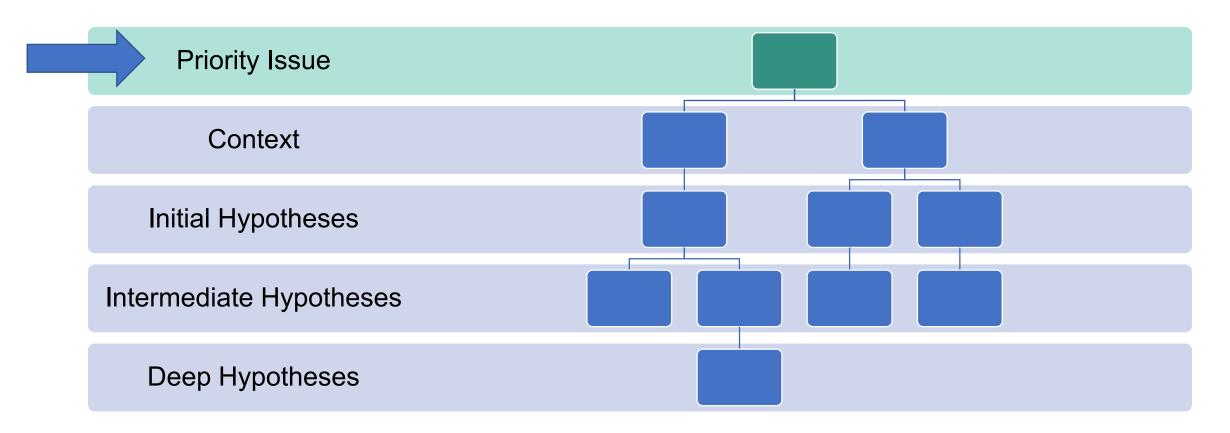
- What are the implications?
- Why does this matter?
- What is/are the root cause(s)? Do we know them yet?
- What do we still need to find out? Do we have enough data/information to move forward?

1120 Analysis Tool: Diagnostic Tree





1120 Priority Issue



1120 Process: Priority Issue

Priority Issue

Focus for improvement: student success indicator

1120 Data: Priority Issue

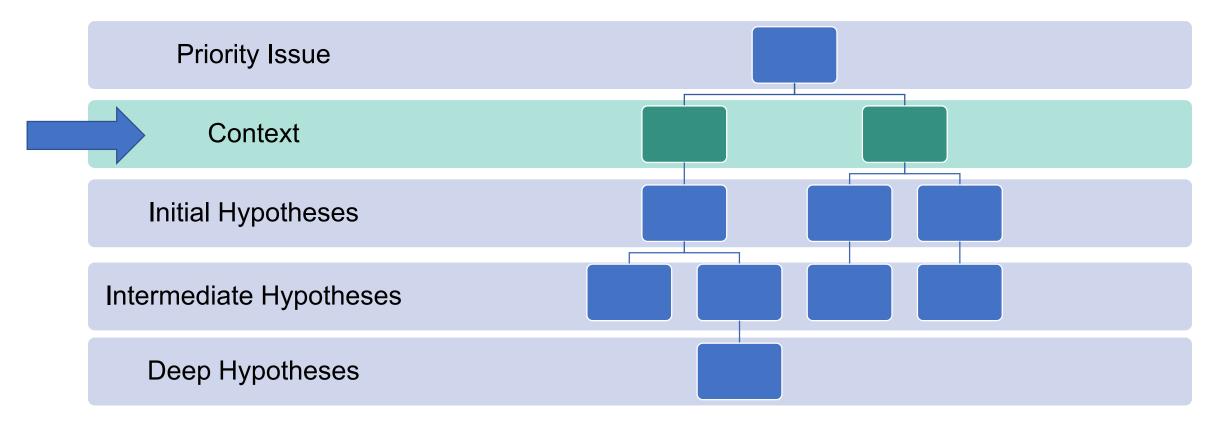
- Take a look at the data on handout
- Discuss the data at your table and identify possible priority issue(s)
 - Focus on student outcomes

1120 Priority Issue

Priority Issue

Increase graduation rates for students with disabilities by 3% annually

1120 Context



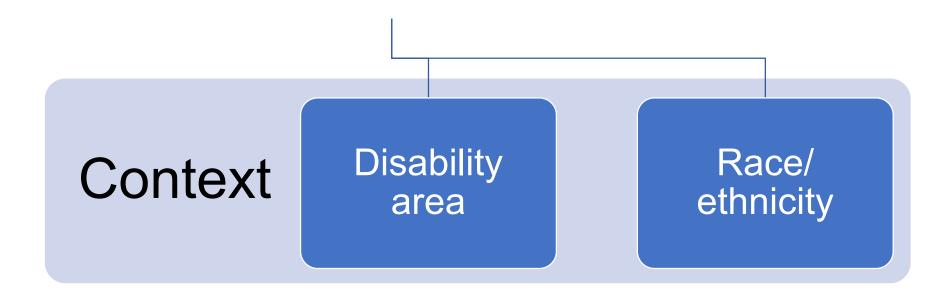
1120 Process: Context



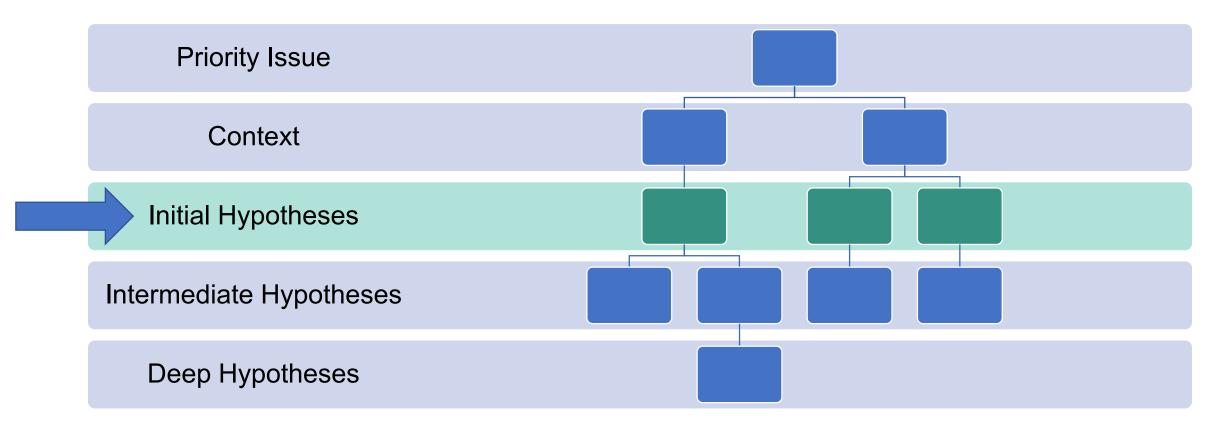
1120 Data: Context

- Take a look at the data on handout
- Discuss the data at your table and identify possible location(s)
 - Consider where and for whom the priority issue is a concern

1120 Decision: Context

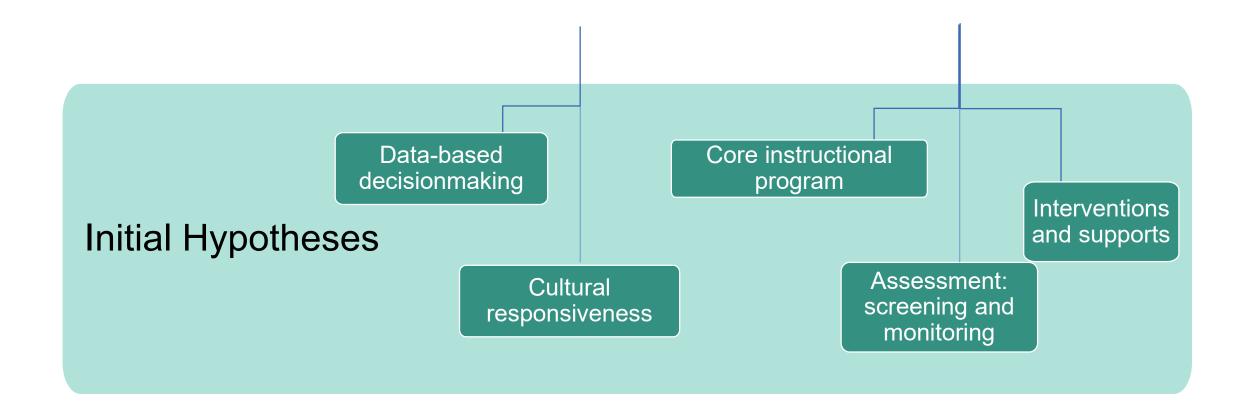


1120 Initial Hypotheses





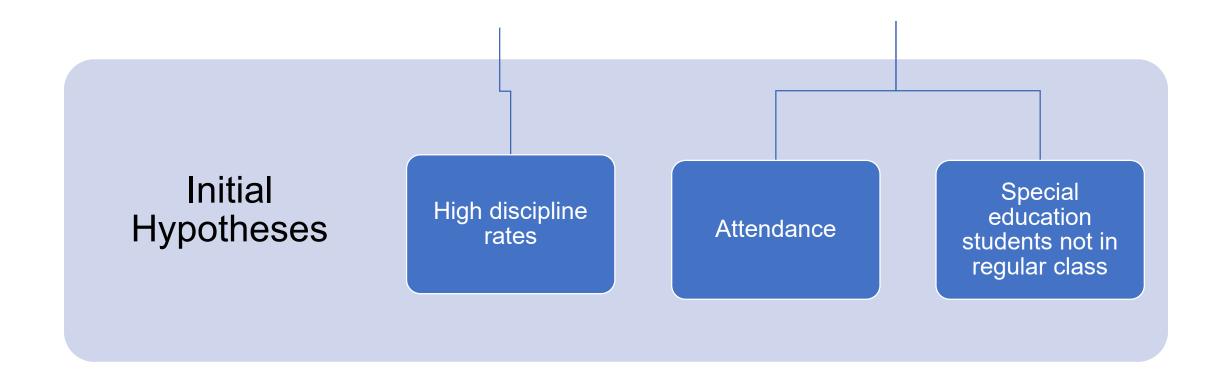
1120 Process: Initial Hypotheses



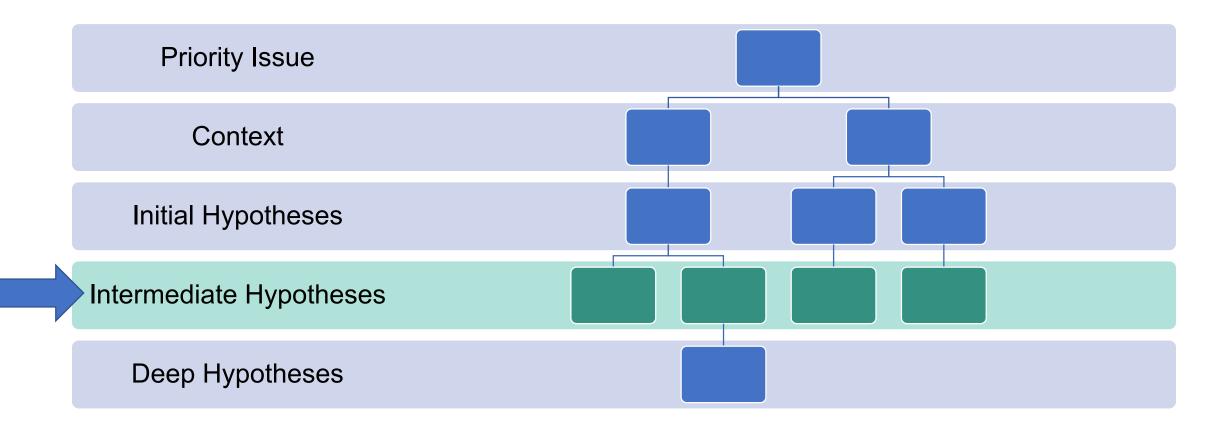
1120 Data: Initial Hypotheses

- Take a look at the data on handout
- Discuss the data at your table and identify initial hypotheses
 - Consider
 - Curriculum
 - Instruction
 - Environment
 - Systems
 - Learner needs
 - Focus on internal issues that are within the control of the school or district

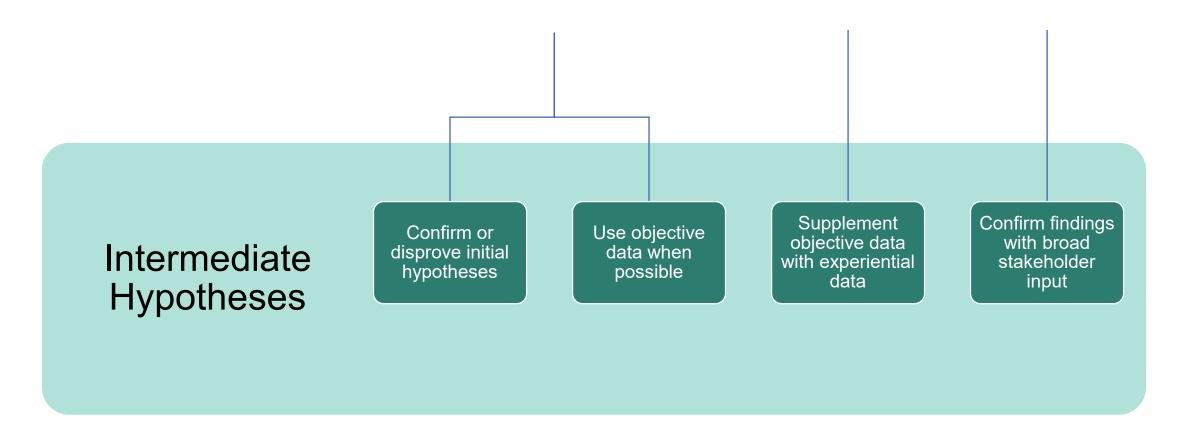
1120 Decision: Initial Hypotheses



1120 Intermediate Hypotheses



1120 Process: Intermediate Hypotheses



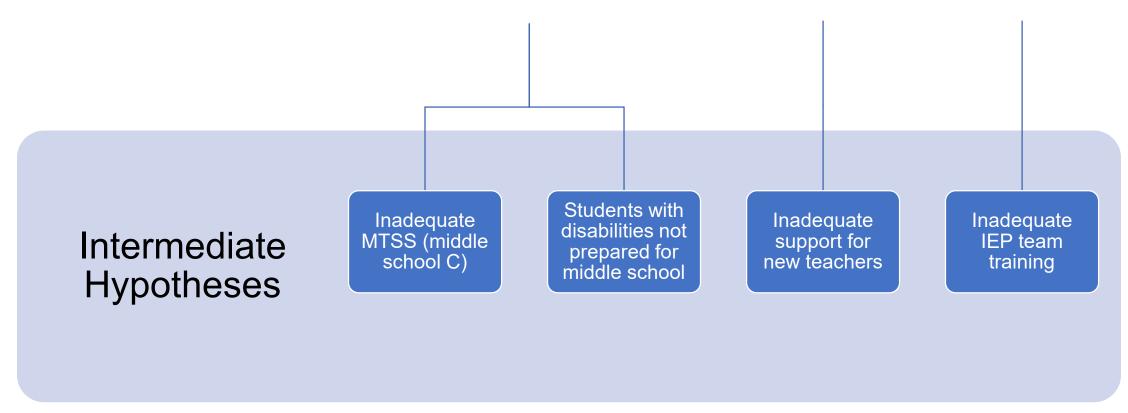
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Data: Intermediate Hypotheses

- Take a look at the data on handout
- Review the data and determine whether the data support your hypotheses
 - Identify evidence to support your determination
- Identify at least one intermediate hypothesis that you would continue to investigate and what data you would need to continue your analysis

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Decision: Intermediate Hypotheses

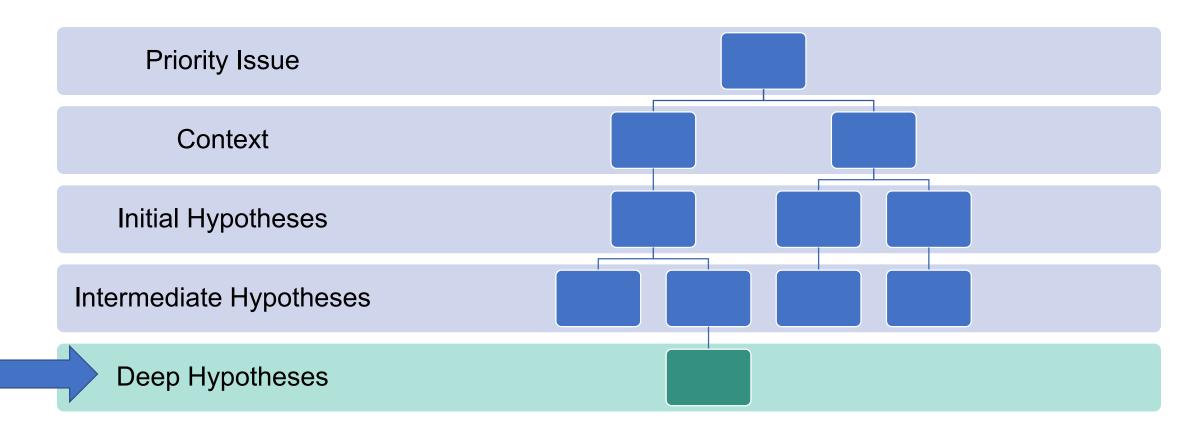


Multi-Tiered System of Support (MTSS) Individualized education program (IEP)

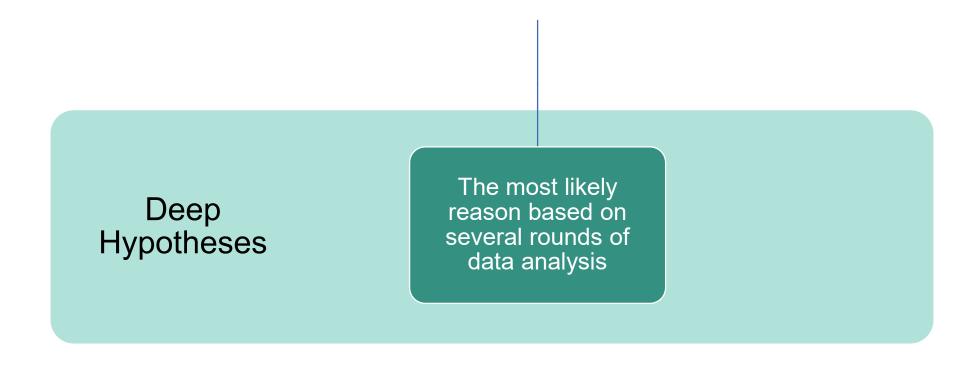


IDEA DATA CENTER Collect, Report, Analyze, and Use High-Quality Part B Data

1120 Deep Hypotheses



1120 Process: Deep Hypotheses



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Data: Deep Hypotheses

- Take a look at the data on handout
- Review the data and determine whether the data support your hypotheses
 - Identify evidence to support your determination

1120 Decision: Deep Hypotheses

Deep Hypotheses What other data or perspectives do you need to identify the root cause?

1120 Next Steps

- Continue the process of thinking about possible causes and data investigation until you have reached the root of the problem
- Always confirm your hypotheses with a broad range of stakeholders
- Consider potential actions that would address the root cause(s) your deep hypotheses suggest

Reflect on Your Current Practices



- How does this deep analysis method compare to your usual practices for data analysis?
- Are there data questions that would be a good fit for this type of analysis?
- Can you think of any situations where this method would not be appropriate?

Helpful Resources



- Data Meeting Toolkit
- Success Gaps Toolkit

Contact Us



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For More Information





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