## 1 INTERACTIVE INSTITUTE 2021 BUILDING AND SUSTAINING A CULTURE OF HIGH-QUALITY DATA



IDEA DATA CENTER April 13 - 15, 2021

**Virtual Event** 

#ii21

## **Data Analysis and Use Plan**

Purpose of this analysis	
What is the priority issue that led us to conduct data analysis?	
What is our <u>broad</u> objective for conducting this analysis?	
Defining the question  What specific question do we	
want to answer through this analysis?	





Questions to consider	Our strategies, discussion, and decisions	Who is responsible?	When will we complete it?	Additional resources
Defining a data measurement strategy				
What data do we need to answer our question?				
What data does our program have? How confident are we in the quality of our data (accurate, reliable, timely)?				
What data can we access within our own agency or obtain from another agency/entity?				
What data elements help to enhance the analysis?				



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Data collection and entry strategies				
What existing processes for obtaining, managing, and storing data will we leverage for this analysis?				
What tools and sources will we use to collect/gather data?				



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Data preparation and analysis strategies				
What methods will we use for examining our data?				
How will we organize the data to find the relevant patterns, trends, and relationships for answering our question?				



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Conducting the analysis				
<ul> <li>Context</li> <li>Where is the concern occurring?</li> <li>With what group is the concern occurring?</li> <li>What else do we know about the concern or about the group affected?</li> </ul>				
<ul> <li>Observations</li> <li>What are our initial thoughts or reactions?</li> <li>What do we know about the data?</li> <li>Is it a change or a trend?</li> <li>Do the data surprise us?</li> </ul>				
<ul><li>How?</li><li>What else do we want to know?</li></ul>				



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Interpretations				
• What do the data tell us?				
<ul> <li>What thoughts or assumptions do these data confirm?</li> </ul>				
<ul> <li>What are the limitations to our conclusions?</li> </ul>				
<ul><li>What are our next questions?</li></ul>				
What further data do we want to see?				



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Implications				
• What are the implications?				
• Why does this matter?				
<ul> <li>Do we have any ideas about what might be causing/contributing to what the data show?</li> </ul>				
<ul> <li>What do we still need to find out? Do we have enough data/information to move forward?</li> </ul>				
<ul> <li>What do the results tell us about the question we asked?</li> </ul>				
<ul> <li>How do our results match with what we thought they would tell us?</li> </ul>				



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Identifying possible contributing factors				
What could be contributing to the issues or concerns we have identified?				
How do each of these areas contribute to our current outcomes (consider internal issues within the control of our school/district)?				
• Curriculum: Are instructional materials a good match for student needs in the subject?				
• Instruction: What instructional strategies, high-leverage practices, or other pedagogical practices are we using? Are they a good fit for our students?				
• Environment: How does the classroom or online setting influence learning? Would different groupings of students or staff change outcomes?				



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• Systems: How does of school/district support teachers and students. What resources are available (learning materials, professions development, coaching support, etc.)? How a important ideas about teaching and learning communicated?	t 5? al ng re t			
• Learner needs: What we know about our students? What are the strengths? Where do need more support for learning? Are the curre and instructional met we are using a good for most, some, or few of students? What happ when student needs change?	heir they r ricula hods it for			
What could explain why gr are experiencing different outcomes?	oups			



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Investigating contributing factors				
Who could tell us more about the possible contributing factors?				
What data might help us understand the causes for the contributing factors?				
Of the possible contributing factors we identified, which ones fit with what we found during our investigation?				
Do stakeholders agree that the contributing factors seem reasonable?				
Which of the possible contributing factors seem most likely?				



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Determining root causes				
What could be causing the most likely contributing factors? Consider				
<ul> <li>Policies</li> </ul>				
<ul> <li>Procedures</li> </ul>				
<ul> <li>Practices</li> </ul>				
Is there any one root cause that could explain more than one of the contributing factors?				
Do our data support our ideas about the root cause?				
Do stakeholders agree that the root cause we have identified seems reasonable?				
Which of the root cause(s) we have identified are				
<ul> <li>Within the control of our school/district?</li> </ul>				
<ul> <li>Aligned with the priority work of our school/district?</li> </ul>				



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Considering solutions and setting priorities				
What are all the possible solutions that could dissolve the root cause?				
Of the possible solutions, which are the best fit for the resources and skills of the school/district right now?				
What data will we monitor to determine if the solution is having the desired effect(s) immediately and over time (consider both implementation and outcome data that will help us track short-term, intermediate, and long-term progress)?				



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Developing and implementing a plan				
Which of the solutions will we use now?				
What are the action steps we will need to follow? Who is responsible for each part of the work?				
What support will we need to implement our plan?				



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Disseminating and using analysis results				
How will we use the results for state and local programming?				
What process will we follow to apply the results to our work?				
Who else needs to see these results?				
What formats will best communicate our results and the implications with our stakeholders?				



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Following up				
Evaluate the process:				
What worked well?				
<ul><li>What would we do differently next time?</li></ul>				
What are our next steps?				