

Analyze: Internal and External Data

Facilitator Guidance Document

Why It's Important

- Internal and External Data provide critical information regarding the effectiveness of schoolwide practices. Teams that understand the information the data provides can begin to consider where additional attention and resources may be necessary to support continuous improvement.

How Data Analysis Fits into the Improvement Planning Process

- The Internal and External Data Analysis is one of the *Analyze* activities within the Five-Part Needs Assessment process. This should be done after *Envision* and before *Listen*. The *Analyze* activities can occur in any order.

SCEP Needs Assessment and Plan Development Activities	Envision:	Analyze:	Analyze:	Listen:	Envision:	Writing the Plan
	Exploring the Vision, Values and Aspirations for the school	Internal and External Data	Survey Data	Interviewing Students	Reflect, Synthesize, and Plan	

Facilitator Guidance

Potential for Customization

- The facilitator or team may modify the structure of the meeting or the prompts offered. The facilitator should read through the outline below in advance of the meeting to determine if or where adjustments may be appropriate.
- The guidance that follows is offered as an example of what data analysis may look like. School teams should incorporate existing data analysis protocols the school has been using rather than institute something new.

Prior to the Meeting

Preparing Your Data

- Decide in advance which data you will be reviewing. This should include academic, behavioral, and attendance data as well as any other data that the team feels is relevant to understanding your school. It is likely that you will have multiple sources for each type of data, so it might be helpful to identify those that provide the most meaningful and reliable information about the current conditions in your school.
- Prepare the data so that it is in a format that will be easily understood by all members of your team. Raw data may be difficult to make sense of, so consider disaggregating the data or creating visualizations to make it easier to identify trends. For example, it may be helpful if the data is disaggregated by grade level, subgroup, subject, etc.

- **Focus on Variation in Performance:** *“Understanding the sources of variation in outcomes, and responding effectively to them, lies in the heart of quality improvement.”*¹ Select data that identifies areas where there is **variation in outcomes** (i.e. the performance in one area is not the same as the performance in another area). This could result in looking at variation within **certain subjects** (i.e., students perform better on some standards or skills compared to others), or variation within **certain standards or skills** (i.e., some students perform better on a certain standard than other students), or variation across classrooms or grade levels, or variation across groups of students. The job of team can then be to **consider WHY those variations** exist.
- To ensure confidentiality, data should be presented without any personally identifiable information (e.g., student/teacher names, dates of birth, student ID numbers, etc.)
- To better understand the trends that exist in your school, in addition to 2023-24 data, if possible, it will be helpful to also have at least two years of prior data available for review.

Types of Data to Consider

Academic Data

- Examples include New York State assessment data, local benchmark assessment data, teacher-created assessment data, report card data, course completion data, and student portfolio data.

Behavioral Data

- Examples include in-school and out-of-school suspension data, referral data, PBIS data, restorative practices data, and behavior intervention data.

Attendance Data

- Examples include average daily attendance, Chronic Absenteeism data, tardiness, and individual class attendance.

Other Types of Data

- Examples include participation data, implementation data, teacher performance data, stakeholder feedback, and data regarding specific programs, interventions, or enrichment activities.

Planning for Your Meeting

- If possible, distribute the data you will be reviewing to all participants prior to the meeting.
- In the interest of time, you may want to:
 - Encourage participants to review the data before the meeting.
 - Provide participants with the [Data Analysis worksheets](#) prior to meeting so that they can make note of their observations ahead of time.

Considerations to Promote Equity and Inclusion

As the team analyzes its internal and external data, there may be barriers that need to be addressed to strengthen practices and processes that support diversity, equity, and inclusion.

¹ Byrk, Anthony S., Louis M.Gomez, Alicia Grunow, and Paul G. Le Mahieu, *Learning to Improve: How America’s Schools Can Get Better at Getting Better*. Cambridge, MA: Harvard Education Press, 2015

In addition to making sure that all students are considered as part of the Internal and External Data Analysis activity the team completes, the following reflective questions are offered as suggestions for teams to consider:

- Are there noticings or wonderings connected to diversity, equity, and inclusion in our academic, behavioral, attendance, and other data?
- In addition to analyzing the disaggregated subgroup data from specific assessments or points in time, would it be helpful to explore any longitudinal data by subgroup?
- Beyond the disaggregated subgroup data, are there other groups of students (e.g. Students in Temporary Housing, English as a New Language (ENL) students with IEPs, former ENL students, ENL students whose primary language is not Spanish etc.) that it may be useful to explore?

Teams may also find the Department’s resources on [Culturally Relevant and Sustaining Practices](#) and the Board of Regents’ [Framework on Diversity, Equity, and Inclusion in New York’s Schools: A Call to Action](#) useful in exploring this topic further.

Conducting Your Meeting

Completing the Data Analysis worksheet

1. Provide one of the data sets you will use, along with the [Data Analysis worksheet](#).
 - Ensure that the participants understand the information presented and how to review it.
 - Review the Data Analysis worksheet and question prompts. Emphasize the entries in the “Notice” column should be limited to facts about the data, rather than speculations.
 - Caution the use of terms that lead to speculation, such as, “because,” “therefore,” “it seems,” and “however.”
2. Ask participants to study the data independently and record initial observations on the Data Analysis worksheet.
3. After providing a short amount of time for initial observations, have individuals work together, either as one large group or several smaller groups, to discuss observations. Ask participants as part of their observations to use an equity and inclusion lens when looking at the data collectively.
4. Report out findings into one entry for the team. The facilitator may want to chart and visually capture overlaps with tick marks, stars, etc.
5. Complete the “Making Connections” section as a group and identify any trends that may occur within each focus area.

After completing the Data Analysis worksheet for one set of data, repeat the process with a different set of data. School teams can determine how many sets of data to review.

Completing the Data Summary

After the team has completed multiple Data Analysis worksheets for different sets of data, ask the team to complete the Data Summary by looking across multiple data sets.

Data Analysis Worksheet

Understanding The Data	
What data are we reviewing?	
What does this data measure?	
What population is included in this data?	
Are there any limitations to this data (i.e., are there things that this data does not tell us)?	
What factors might impact the reliability of this data?	

Considering What the Data Reveals		
Prompts	Notice: <i>Only Facts - No Opinions</i>	Wonder: <i>What questions do you have? What do you need to know more about?</i>
If the data is disaggregated by subgroup, grade-level, etc., what similarities do we see in the responses of each group?		
If the data is disaggregated by subgroup, grade-level, etc., are there areas where responses differ across the different groups?		
Is there anything else that stands out when looking at this data?		
What trends do we see if the data are compared to the same data from previous years (if available)?		
What did we learn from reviewing this data that we did not know before?		
Other:		

Making Connections
In looking at our responses, what connections or trends do we see within this data set?

Data Summary

After reviewing multiple data sets, consider the following questions:

Are there trends that are consistent across multiple types of data (academic, behavioral, attendance, etc.)?
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Are there trends that differ across the different types of data?
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What questions remain that we want to explore further?
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