RECOMMENDATION 3:
Gather Data to Drive Decision Making

Overall summary

The leadership team at the district and school levels is responsible for fostering a culture of data-driven decision making to advance teaching and learning in the building. Data should be used not only to assess and report student achievement but also to identify areas for school improvement, determine short- and long-term school improvement goals, guide professional learning workshops, narrow achievement gaps among student subgroups, and transform student learning.

Recommendations from the literature and practice

Schools have been collecting, storing, and reporting data for decades—data on student achievement, data on the number of students receiving special education services, data on the number of students participating in the free and reduced-price lunch program, budget and finance information, human resources data, and so on. Over the past two decades, school, district, and state administrators have been dealing with continuously expanding data reporting requirements and have had to develop extensive databases for storing and reporting these data.

Despite the wide array of data collected at the school and district levels, many districts continue to struggle with using

> ### Data-driven decision making is about:
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> ▶ Collecting appropriate data
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> ▶ Analyzing data in a meaningful way
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> ▶ Using the data to increase school efficiencies and improve student achievement
>
> ▶ Communicating data-driven decisions to key stakeholders

data-driven decision making to inform instructional practices in the classroom, the focus of professional learning workshops, and overall decisions about school improvement. Data-driven decision making requires more than simply collecting and reporting data; it requires districts and schools to define the key questions needed to guide data collection activities and instruments, identify who the data will be collected from, determine how the data will be analyzed, and, finally, decide how the results of the analysis will be used to inform short-term and long-term goals. Although collecting and reporting data does not generate change, analyzing and using data can serve as an effective tool to inform school change efforts.

Beyond student achievement data, it is critical that district and school leaders collect and analyze data that will help to inform decisions about the short-term and long-term goals that are required to achieve the vision of the district and/or school. Data can help you to:

▶ **Narrow achievement gaps.** With an effective data-driven decision-making system, districts and schools can assess performance data by important student subgroups and address problems at the school and classroom levels.

For example, at the classroom level, principals can use student-level achievement and demographic data to create balanced classrooms.

▶ **Improve teacher quality.** District and school leaders can use data to define and target the specific professional development needs of their staff. For example, an analysis of staff's knowledge of, and experience teaching with, certain technologies can inform the need for targeted technical workshops.

▶ **Share best practices.** Data can provide useful information about how teachers are using evidence-based practices in reading, writing, and mathematics instruction, and how they are integrating technology tools into best practice strategies. These examples of excellence can be shared with other teachers in the building to foster peer learning opportunities.

Research shows that leadership teams that use data to inform the development of their plans are more successful during the implementing and sustaining phases of the implementation process because they are able to anticipate and proactively troubleshoot barriers unique to their context.

Four Steps to Conducting a Needs Assessment:

▶ Perform a "GAP" analysis
▶ Identify priorities and importance
▶ Identify cases of performance problems and/or opportunities
▶ Identify possible solutions and growth opportunities

As a first step, your leadership team will want to conduct a needs assessment. Start by examining the data that are already being collected within the school and at the district level. What questions can you answer with these extant data? Next, you will need to determine what questions remain unanswered by the data that you have and how you will gather these data (e.g., through surveys, focus groups, classroom observations) and from whom (students, teachers, parents, other stakeholders). Analysis of these data will help you to identify the current state of education technology in the district and/or school, student achievement by subgroups, and the professional learning needs of teachers, and they should be used to inform your focus and goal-setting activities.

In data-driven cultures, data collection and analysis are ongoing activities that inform each step of the process. Leadership teams that establish ongoing data collection plans to continually assess the effectiveness of their implementation efforts, their impact on student learning, and the changes they produce in classroom teaching are more successful in achieving their long-term goals and vision. It is the responsibility of the leadership team to design questions for ongoing data collection, to analyze those data, and to continually adapt and revise the action steps based on their findings.

ACTION STEPS FOR RECOMMENDATION 3
Budgeting for Technology

▶ Gather all extant student, teacher, and school data
▶ Analyze data and determine whether additional data need to be collected to address priorities
▶ Collect additional data if necessary and use data to inform PD planning and implementation activities

For additional ideas and support, refer to Module 3: Budgeting for Technology in the Support Modules.