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# Berkeley Heights Public Schools

## Curriculum and Instruction during a Global Pandemic: Using Data to Identify Gaps, Differentiate Instruction, and Meet Student Needs

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# COVID-19 and Impact on Student Learning

The Global Pandemic forced our schools into Remote Instruction for the last third of the 2019-2020 school year. This abrupt transition to virtual learning impacted the delivery of instruction for students across the entire state of New Jersey. This crisis made it imperative that the district formulate a plan to identify gaps in curriculum and target instruction to foster student growth and achievement.

Although we have not fully returned to normalcy in our schools, we have launched our plan to identify and remediate students. This priority is supported through the creation of timely and aligned:

- Administrative Team Goals
- Staff Member Professional Development Plans (PDPs)
- Teacher Student Growth Objectives (SGOs)
- Department Curriculum and Instruction Planning Meetings
- Student Data Meetings
- Classroom Observations



# Identifying Student Needs

At the start of each school year, teachers use a variety of diagnostic tools and data points to learn about their students. The information is used to:

- Identify areas of strength
- Identify areas in need of remediation
- Gather baseline information used to provide evidence of growth and achievement

This information is collected and analyzed by teachers, support staff, and administrators (data, grade-level, team, and/or department meetings) to:

- Identify trends
- Plan to address curricular and/or skill deficiencies
- Establish intervention plan to address identified student needs
- Effectively plan and group students to remediate, instruct, and enrich according to student needs
- Collaborate with parents to develop home/school partnership



# Data Points and Collection

Data points collected using:

- Fountas and Pinnell Reading Assessment (K-5)
- DIBELS 8 (K-3)
- Predictive Assessment of Reading (PAR) as needed
- i-Ready
- District-created Content Area Benchmarks
- Real-time data gathered by teachers and District Interventionists
- Historical data from prior years
- Mathspace (5-12)
- Skill-based rubrics
- Performance-Based Assessments
- Previous & Current Year Teacher Recommendations
- Student/Parent interviews, feedback, and surveys



# General Findings: What did the data tells us?

As we performed these diagnostic assessments with our students, results were varied.

- While some students need significant supports and remediations, many remained on track and on grade level, and some students thrived in this new learning environment.
- Overall, student attendance during the pandemic has been consistent or better than pre-COVID 19 attendance which has helped the continuity of instruction.
- Transition years (entering public school, Grade 2, Grade 6 & Grade 9) have an additional challenge of learning the practices and procedures attached to moving into a new & different school setting.
- Instructing students in a virtual setting takes longer, as there are inherent issues with communication and checking for student understanding.
- Establishing class routines and limiting change increases efficiency and learning in the virtual classroom.
- Students who are struggling or falling behind generally fall into one of the following categories:
  - Lack of engagement and/or attendance in a remote learning environment
  - Struggling with digital organization and online learning skills
  - Struggling with the virtual learning structure with regards to screen time and stamina for learning



# Data Analysis Snapshot

## K-5 Reading Summary

- Fountas and Pinnell Benchmark Assessment Systems are used to determine independent and instructional reading levels of students.
- These benchmarks are used to measure student reading behaviors, develop reading comprehension, and help teachers make informed instructional decisions.
- As we would have predicted, our students showed a slight decline overall in percentage of students reading “at or above grade level.”
- Using this information, reading groups are formed and teachers are able to provide targeted supports to facilitate growth for all students and remediate any identified deficiencies.

	<b>Fall 2019</b>	<b>Fall 2020</b>	<b>Change</b>
<b>K</b>	54%	53%	-1%
<b>1</b>	58%	65%	+7%
<b>2</b>	78%	73%	-5%
<b>3</b>	74%	74%	0%
<b>4</b>	77%	71%	-6%
<b>5</b>	75%	75%	0%



# Data Analysis Snapshot CMS Mathspace Diagnostic

- Mathspace is an adaptive Math tool that is tied to NJ Student Learning Standards used in the district to support Math instruction for students in Grades 5-12.
- While the tool is used in a variety of ways, the chart below shows a comparison of a start of year diagnostic measurement of student mastery of key concepts, ideas, and skills from the previous year's coursework.
- This assessment provides current year teachers with valuable insight as to student needs and supports.
- The chart below indicates that students are starting the school year with the same or slightly better mastery of foundational Math skills than in the previous school year.

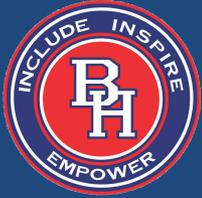
	<b>Sept. 2019</b>	<b>Sept. 2020</b>	<b>Change</b>
<b>Math 6</b>	86%	89%	3%
<b>Pre-Alg</b>	88%	91%	3%
<b>Alg. 1</b>	88%	93%	5%
<b>Geo.</b>	96%	95%	-1%



# Data Analysis Snapshot

## AP Exam Analysis and Comparison

- The Spring 2020 AP exams were modified in scope and provided in a virtual setting to students nationwide.
- The move to Remote Learning and the change in test format did not dramatically impact student participation or performance at Governor Livingston High School.
  - In fact, GLHS had another increase in the number of AP test takers (294) and the number of AP tests administered (843) despite a slight decline in overall student enrollment.
  - Additionally, GLHS students maintained an 85% passing rate on all tests administered and 92% of AP test takers earned a three or better on at least one AP test.
  - The results did reflect a small decrease in the number of students earning 4's and 5's on their exams.



# Addressing Student Needs & Accelerating Student Learning

## **DOE Steps for Accelerating Student Learning**

1. Prioritize the most critical prerequisite skills and knowledge for each subject area and grade level.
2. Diagnose students' unfinished learning in prerequisite content knowledge and prerequisite skills.
3. Adapt your scope and sequence/pacing guidance for each subject area and grade level to reflect where teachers might need to provide acceleration support.
4. Train your teachers and leaders to diagnose students' unfinished learning and provide acceleration support.
5. Monitor your students' progress on grade-appropriate assignments and adjust your supports for teachers and leaders based on student results.

## **Curricular Modifications**

- Focus instruction on major/foundational concepts, skill mastery and application of these skills
- Adjust scope and sequence in response to student needs and time constraints

## **Individualized Student Supports**

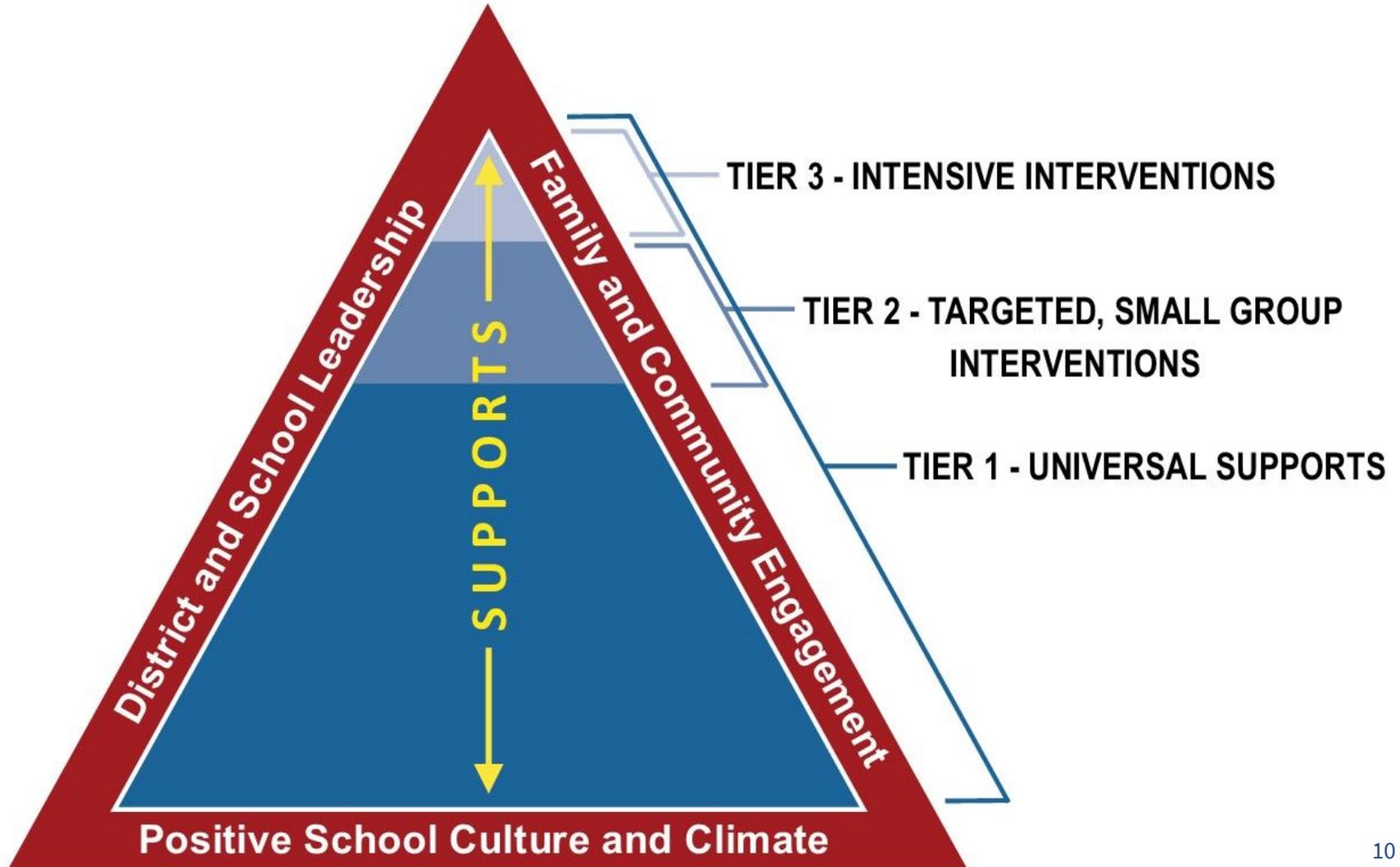
- Grouping students to target instruction to meet student needs with content, process, and product
- Utilizing Reading Specialists, Math Interventionists, Instructional Review Teachers, and Strategies courses

## **Maintaining Student Engagement**

- Utilizing district resources to prepare daily lessons that support students by teaching the big ideas, meeting content standards, and developing metacognitive strategies
- Fostering the school/home partnership to support students



# Individualized Student Supports





**QUESTIONS?**