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School Scheduling with PVAAS

Creating and revising the school schedule is an annual opportunity to align what your school offers with the needs of your students, based on data. PVAAS data tools can play a key role in supporting this work and providing the insights you need to make great decisions. Advanced reporting tools result in deep analysis of data, and form the foundation and rationale for strategic changes to the overall school schedule.



"[The Schedule is] the lever that you can adjust year to year to best meet the needs of incoming students."

ASCD, JUNE 1, 2020, VOL 77, NO.9

A Strong School Scheduling Process

The goal is to develop a school schedule that meets students' needs, rather than needing students to fit into an existing schedule. Look for and develop these characteristics in your schedule development process:

- Decisions based on pre-determined, consistent, and reliable data, including but not limited to PVAAS data
 - In addition to student learning data, there are, of course, many additional considerations in the development of the school schedule, including factors such as contracted time in the school day, family and community priorities, staffing considerations, available resources, etc. These and other factors must be taken into account, in addition to the needs highlighted through ongoing student learning data analysis efforts.
- A schedule that is analyzed and adjusted annually as needed
- · Families, students, and teachers are given opportunities for input, and communication is open and transparent to all stakeholders.
 - Perception data, demographic data, and process data are additional types of useful data for this process!

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Questions to Ask

Typical school schedule questions that can be informed through data include:

- How many Honors sections should be offered in a particular subject/course?
- How many sections of Algebra 1 should be offered in grade 9?
- Which AP courses should be offered and how many sections?
- Do I need an intervention block in the school schedule for (subject)?
- Do we need enrichment blocks in the school schedule?
- Will I schedule for "push in" or "pull out" for ELs and students with IEPs? Is there room in the schedule for the appropriate amount of direct instruction for my ELs and students with IEPs?
- Does our current schedule allow for appropriate and/or required time block allocation for ELA, Math, Science, etc.?

and more!

Suggested Steps for Schedule Development

1. Form a school-wide committee.

A scheduling committee includes teacher leaders, school counselors, and administrators who are tasked with the analysis of data to make recommendations for changes in the school schedule for upcoming year.

- · You may choose to gather input from students, families, local businesses, etc.
- Ensure that your committee members are skilled in the analysis of data.

2. Create a list of questions.

Each year, you may have new and varied questions about the school schedule.

- Start with a list of questions to be informed through data analysis.
- Questions may be generated by the group and also prompted through examples, such as those listed above.

3. Use PVAAS and other data sources.

Prepare to respond to the questions by using the data tools available to you.

- · Identify what data sources are available and will be used.
- Ensure team members have knowledge of PVAAS projection data and reports.

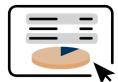
4. Make recommendations for overall school schedule changes.

Once you have evidence from the data, you are ready to make recommendations and consider them against other contextual factors.

- Consider additional factors that may impede desired changes (such as contracted time in the school day, family and community priorities, staffing considerations, available resources, and many other factors)
- Ensure that all recommended changes are accompanied by evidence in the data.

PVAAS Data Informing the School's Schedule

In addition to data commonly used—teacher recommendations, end-of-year or course grades, mid- or end-of-year benchmark data, state assessment data—PVAAS projections play a significant role in helping to inform the school schedule.



The PVAAS Projection Summary Report provides highly reliable probabilities at a system (LEA/ district) or school level, showing students' likelihoods of reaching indicated benchmarks in a future PSSA, Keystone, AP exam, as well as PSAT, SAT and ACT exam. Using that data, along with other data, can more effectively inform school schedule changes and/or revisions to best meet the needs of students.

ELEMENTARY SCHOOL

Example A: Meeting 5th Grade Needs

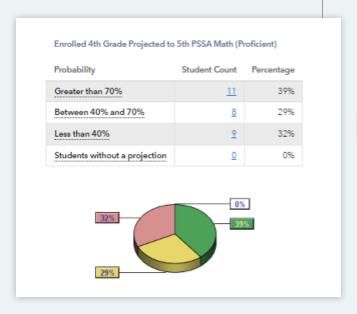
An elementary school scheduling team has two main questions they want to discuss:

- 1. Do we need time in the school schedule for Math intervention for our 5th grade students?
- 2. Is our 45-minute time block sufficient for our 5th grade students in the upcoming year?

Using the PVAAS projection summary of 4th grade students projected to 5th grade Math PSSA proficient, the following is confirmed and recommended:

- Unless we as the school do something to change the trajectory, students with a low likelihood of reaching proficiency are less likely to at least reach that level of performance.
- Given that 32% of the students have a lower likelihood of reaching proficiency in 5th grade and may be in need of intensive support the team recommended that time set aside in the 5th grade school schedule for intervention support for almost 1/3 of the students, requiring an adjustment to the current school schedule.





· Given that there is also an additional 29% of students who have a moderate likelihood of reaching proficiency, the scheduling team recommends that the allocated time for core mathematics instruction be extended from 45 minutes daily to 60 minutes daily.



MIDDLE SCHOOL

Example B: A Forecast for Algebra 1

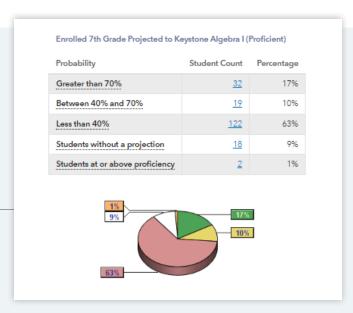
A middle school scheduling team is looking at how many sections of Algebra 1 could be considered for the overall school schedule in the upcoming year.

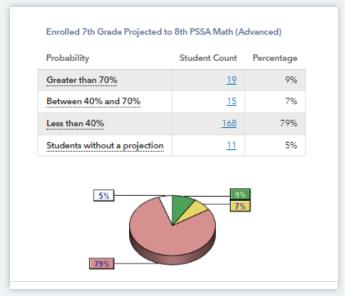
The school has been offering one section of Algebra 1 for students in grade 8, 25 students per section.

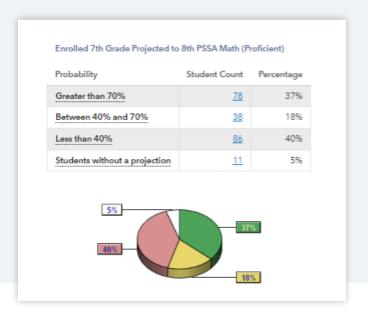
The team decides to run the Projection Summary report to learn:

- the percentage of students currently in 7th grade who have a 70% chance or higher of achieving advanced on 8th grade math,
- the percentage of students in 7th grade math projected to score Advanced on Algebra 1 Keystone, and
- the percentage of students in 7th grade math projected to score Proficient on Algebra 1 Keystone.

Using this data and other local data, they then were able to plan more effectively for the number of sections of Algebra 1 needed in the upcoming year for next year's 8th graders.







HIGH SCHOOL

Example C: AP Course Participation

A high school scheduling committee is meeting to determine how they can encourage more participation in AP courses.

They determine that using the PVAAS Projection Summary report is a reliable and effective way to compare students with potential to participate in an AP course with the current and historical participation numbers in the same AP course. The College Board's student level AP

Potential indicator for all AP Content areas can also be aggregated to provide useful data to make these decisions.

They start with AP English Literature to observe and discuss the projection data (shown at right).

In this case, they note that 33% of their students have a greater than or equal to 70% chance of scoring a 3 or higher on the AP English Literature course. When they compare this number to the quite low participation historically, they conclude that their student representation in AP English Literature could certainly be higher given the probabilities noted.

For that reason, they recommend that the school schedule reflect 2 to 3 sections of AP English Literature versus the typical one section — and they develop strategies for

Probability	Nr of Students	Percentage
Greater than or equal to 70%	129	33%
Between 40% and 70%	<u>69</u>	17%
Less than or equal to 40%	198	50%
Students who lack sufficient data	Q	0%
50%	33%	I

encouraging more students to consider enrolling in AP English Literature, including making teachers, students, and families more aware of PVAAS projections.

Effectively creating, enhancing, and/or refining your overall school schedule to match what your data is telling you is key to having a school schedule that is flexible and meets the needs of students each year! The goal is to adjust the school schedule to meet the needs of the students rather than fitting students into an existing, or longstanding, school schedule. Data plays a key role in those decisions, and PVAAS Projection Summary Report data provides a highly reliable means of informing the needs of students with projection data.

Visit education.pa.gov/pvaas for additional resources on this topic.