

Using PVAAS to Inform Graduation Pathways

PVAAS Projections Support Graduation Pathways Decisions



There are five overall pathways to graduation under Pennsylvania's Act 158.

The visual at right outlines the Pathways. Each has several other layers and ways to meet and complete each pathway.

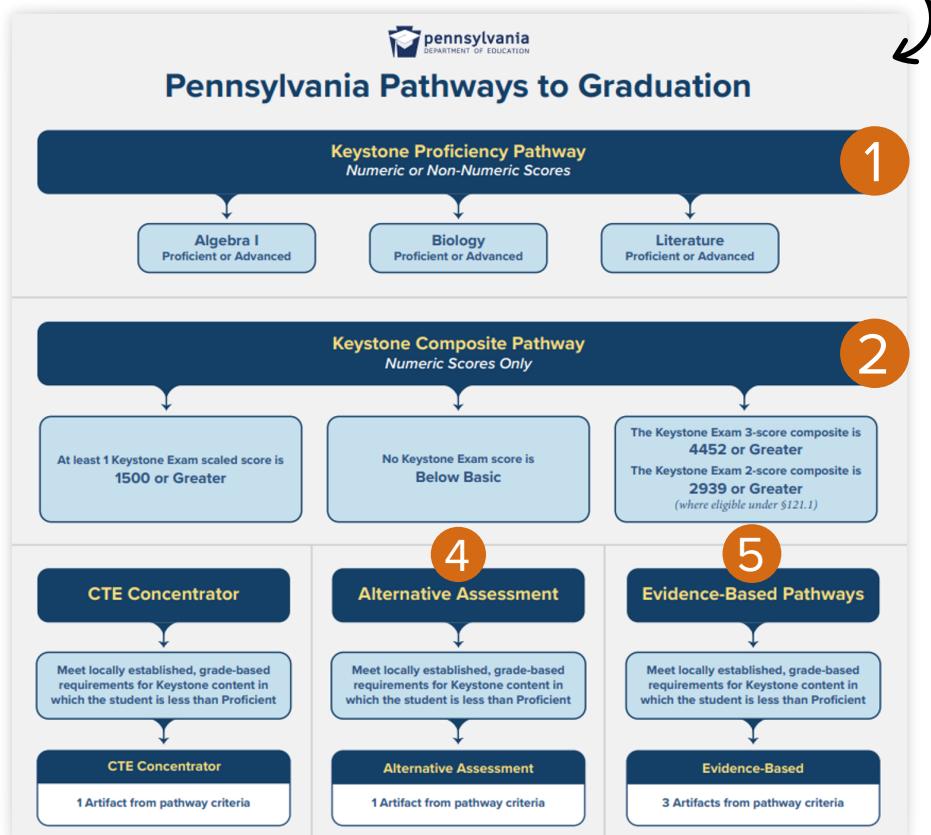
Four of these five pathways have a direct connection to the use of PVAAS projections as a way to inform discussions and decisions about students pursuing those pathways:

- 1 Pathway 1: Keystone Proficiency
- 2 Pathway 2: Keystone Composite
- 4 Pathway 4: Alternative Assessment
- 5 Pathway 5: Evidence-Based Pathways

You can make use of the PVAAS projection data to inform which pathways students are likely to complete as they enter high school. You want to be sure you don't just pick one pathway – and to pick that pathway without data to support that decision. You want to have as many pathways open to students as you can – and for all students.

The first pathway is likely the most obvious. You probably have lots of data to know who these students are who are likely going to pass all of their Keystone exams. Have you used PVAAS projections for this though, to support that knowledge?

What about the other pathways – the Keystone Composite pathway, the Alternative Assessment pathway, and the Evidence-Based pathway? Are these pathways being considered for everyone?



Flowchart available in the [PDE SAS Portal: Grad Pathways Toolkit > Resources > Graphics & Charts > Pennsylvania Pathways to Graduation & Other Diploma Options \(PDF\)](#).



There are PVAAS projections that can inform decisions about the appropriateness of these pathways for your students. By using PVAAS projections, you can have data available to ensure that all students have opportunities to pursue all of the graduation pathways appropriate and best suited for them.

Using PVAAS Projections for Keystone Pathways 1 and 2

Graduation Pathway 1 – Keystone Proficiency is defined as:

- 1 Students needing to achieve a proficient score with a minimum scaled score of 1500 on each of the three Keystone exams.

PVAAS projections can help inform who is on track to pursue pathway 1 by answering the question:

→ *What are student's projected probabilities of reaching proficiency on all 3 Keystone exams?*

Graduation Pathway 2 – Keystone Composite is defined as:

- 2 A student scoring at least Proficient on one of the Keystone exams and scoring at least Basic on the other two Keystone exams. Additionally, the composite scaled score must be a minimum of 4452.

PVAAS projections can help inform who is on track to pursue Pathway 2 by answering the questions:

→ *What are students' projected probabilities of reaching proficiency on any one of the Keystone exams?
And what are students' probabilities of reaching at least Basic on all three Keystone exams?*

EXAMPLE: We can look at this as a whole cohort, or grade level group, of students using the Student Search feature. There are options in PVAAS Student Search to search for students based on certain criteria. Let's set the cohort we are interested in viewing as current 9th graders. So, we set the criteria of 70% probability or higher of reaching proficiency or higher on all 3 exams. Note that setting the option to AND in between all 3 tests allows us to search only for students who meet all 3 of the criteria selected. This is shown in the image below.

Using the “AND” option allows you to find students who meet ALL the criteria you selected! The result will be a full list of the students who meet this criteria of having a higher likelihood of reaching at least proficiency on ALL 3 Keystone exams.

Figure 3. Student Search of currently enrolled Grade 9 students with a 70% probability of proficiency on all three Keystone exams

Currently enrolled in: 9th Grade
Tested with an Alternate Assessment: All Schools

Projected Proficiencies:

Test	Subject (Level)	Lower %	Upper %
Keystone	Keystone Algebra I (Proficient)	70	100
And	Keystone Biology (Proficient)	70	100
And	Keystone Literature (Proficient)	70	100

Test	Subject (Level)	Lower %	Upper %
Keystone	Keystone Algebra I (Proficient)	70	100
And	Keystone Biology (Proficient)	70	100
And	Keystone Literature (Proficient)	70	100

For Pathways 1 AND 2 combined, we can do the same thing but change the search criteria a bit. Next, we select a 70% probability or higher to be at least Basic on one of these three exams. We now see the students who meet this updated search criteria, meeting the criteria of having a higher likelihood of reaching AT LEAST BASIC on these exams. The search is shown in the image at right.

These students do include the other students from our original search, who have higher probability of proficiency on all 3 Keystone exams. So we can consider that we have this larger group who may need support in meeting Pathways 1 and 2.

From the resulting search list, we can drill down to the student level and see what this looks like for individual students with the PVAAS Student Report. This allows us to see the student's testing history, as well as future projections. We can use the graph to see the overall performance trend in any of the subject areas. Or we can use the table below the graph to view the details of the students' history by viewing the change in NCE, scale score, percentile and performance level. The Student Projections Tile on the filter panel allows us to view the detailed projections to upcoming exams.

The screenshot shows the PVAAS Student Report interface. At the top, there are dropdown menus for 'Currently enrolled in:' (9th Grade), 'School' (All Schools, Blue Sky Elementary (3231)), and 'Tested with an Alternate Assessment' (unchecked). Below these are sections for 'Demographics' (Race, Sex, Other) and 'Projected Proficiencies' (Test, Subject (Level), Lower %, Upper %). The 'Projected Proficiencies' table shows three rows for 'Keystone' tests: 'Keystone Algebra I (Basic)' with 70% Lower % and 100% Upper %; 'Keystone Biology (Basic)' with 70% Lower % and 100% Upper %; and 'Keystone Literature (Basic)' with 70% Lower % and 100% Upper %. At the bottom of the report, a note says 'Changed to Basic Performance Level'.

Test	Subject (Level)	Lower %	Upper %
Keystone	Keystone Algebra I (Basic)	70	100
And	Keystone Biology (Basic)	70	100
And	Keystone Literature (Basic)	70	100

Changed to Basic Performance Level

PVAAS Projections for Keystone Pathways 4 and 5

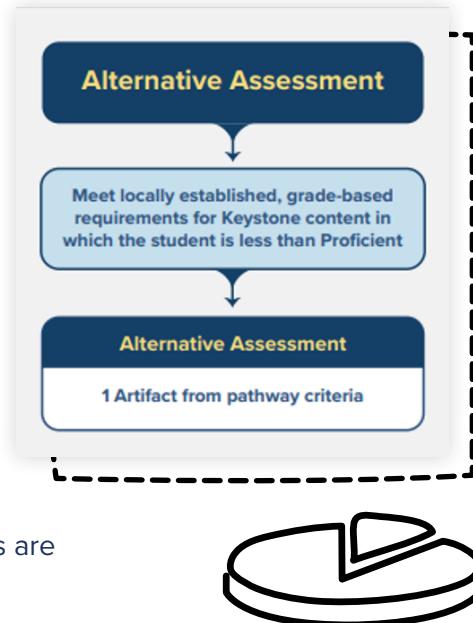
Graduation Pathway 4 – Alternative Assessment reveals that there are a number of various assessments that can be used to demonstrate mastery or proficiency beyond our state assessments. These might include:

- 4 A minimum composite score on a college readiness exam like the ACT, PSAT, or SAT.
- OR
- 4 A score of a 3 or higher on any of the AP exam approved and aligned to Algebra I, Biology, or Literature.

PVAAS has projections for both of these options!

First, PVAAS has projections to the benchmarks set by ACT and the College Board – including the ACT, PSAT, and SAT exams. Higher probabilities of reaching these benchmarks would be indicators that students are likely to be successful under Graduation Pathway 4.

→ Do you know who these students are and what supports are available for them to pursue Graduation Pathway 4 under this criteria?



Additionally, PVAAS has probabilities to 8 approved AP exams. These probabilities are available to reaching a 3 or higher on these exams. Students with higher probabilities of reaching a 3 or higher would be those who are good candidates for pursuing Graduation Pathway 4 (and possibly Graduation Pathway 5 – see below).

→ *Do you know who these students are and what supports you have available for them to pursue these Graduation Pathways?*

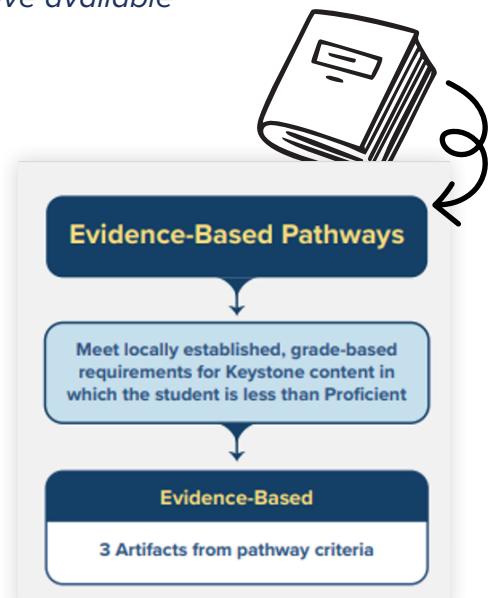
Graduation Pathway 5 – Evidence-Based Pathways allows for flexibility for students to meet local, grade-based requirements for each Keystone content area in which a student has no score or less than a Proficient score. For example, one of the available requirements is:

5 A score of 3 or higher on any AP exam consistent with the student's goals and career plans.

PVAAS has projections to those AP exams, to reaching a score of 3 or higher. Students with higher probabilities of reaching a 3 or higher may be good candidates for pursuing Graduation Pathway 5.

→ *Do you know who these students are and what supports you have available for them to pursue these Graduation Pathways?*

Remember the PVAAS Student Search? We can use the AND selection option to find students with higher probabilities of meeting both Math and Reading and Writing benchmarks on the SAT – or for reaching a 3 or higher on various AP exams, for example. See images at right.



The screenshot shows the PVAAS Student Search interface. At the top, there are dropdown menus for "Currently enrolled in..." (9th Grade) and "Tested with an Alternate Assessment" (unchecked). Below these are sections for "School" (listing All Schools, Blue Sky Elementary, Blue Sky High School, Cedar Creek Elementary, Daylight Peaks Elementary, Lightway Elementary, and Rainforest Elementary), "Demographics" (listing Race, Sex, and Other categories), and "Projected Proficiencies" (listing various subjects and levels with checkboxes for "Lower %" and "Upper %").

Test	Subject (Level)	Lower %	Upper %
SAT	SAT Reading and Writing (College Readiness Benchmark)	70	100
And	SAT Math (College Readiness Benchmark)	70	100
AP	AP Biology (3 or Higher)	70	100
Or	AP English Language and Composition (3 or Higher)	70	100
Or	AP Statistics (3 or Higher)	70	100

Using the “AND” option will find students who meet ALL of the criteria you selected, so that they would meet the overall Composite criteria.

Using the “OR” option will find students who meet ONE of the criteria you selected for any of the AP exams.

★ For more about PVAAS Projections:

[What Educators Should Know about PVAAS Projection Probabilities \(PDF\)](https://pvaas.sas.com/support/PVAAS-StudentProbabilities.pdf)

<https://pvaas.sas.com/support/PVAAS-StudentProbabilities.pdf>

All available projections in PVAAS; what data in a student's testing history is used in the calculation of the projection; reliability and accuracy of the projections.