

An Analysis of the Act 158 Graduation Pathways Used by Graduating Seniors in 2022-23

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Summary

Pennsylvania's Act 158, passed in 2018 and effective with the graduating class of 2023, created five pathways to graduation for high school seniors. Each senior must meet the requirements of at least one pathway in order to graduate, unless they receive special education services or receive a graduation waiver.

Among 2022-23 12th grade School District of Philadelphia students:*

- 83% graduated through any pathway
- 14% did not graduate
- 3% graduated through IEP goals and objectives (a pathway for students receiving special education services)
- Fewer than 1% graduated through a waiver

Of graduating 12th graders in 2022-23:**

- 36% met the requirements for the Keystone Proficiency Pathway (Pathway 1)
- 19% met the requirements for the Keystone Composite Pathway (Pathway 2)
- 9% met the requirements for the CTE Concentrator Pathway (Pathway 3)
- 8% met the graduation requirements of the Alternative Assessment Pathway (Pathway 4)
- 27% met the graduation requirements of the Evidence-based Pathway (Pathway 5)

*This represents a separate and different calculation from the 4-year cohort graduation rate.

**If students met the requirements for multiple pathways, they are reported in the first pathway whose requirements they met, going in order from Pathway 1-5. For instance, a student who met both Pathways 1 and 3 is counted as graduating through Pathway 1.

The School District of Philadelphia has long-standing high school graduation requirements. Seniors must earn at least 23.5 course credits, and those credits have distribution constraints (e.g., at least 4 credits in English). Students must also complete a service learning project.¹

Act 158, passed in 2018, created a new, additional statewide graduation requirement for all Pennsylvania high school students. To satisfy this requirement, students must complete one (or more) of five pathways designed to demonstrate readiness for postsecondary education or entry into the workforce. In some cases, however, students may be exempted from completing a pathway. For example, some students who receive special education services and have Individualized Education Programs (IEPs) can graduate by meeting the goals and objectives of their IEPs, and graduation waivers may be granted to students who are unable to satisfy the requirements of a pathway because of unusual circumstances (see Box 1 for details).²

Act 158 was originally set to go into effect for the graduating class of 2021-22, but was delayed by one year due to the Covid-19 pandemic. This means that the students who were in 12th grade during the 2022-23 school year were the first graduates who needed to satisfy the Act 158 requirements. For this reason, outcomes for this cohort are of particular interest. This brief summarizes that cohort's completion rates of the five pathways. Those summaries have been conducted for overall District rates, and also by student groups. In all cases, these analyses are organized around two central questions:

1. What were the essential graduation outcomes for these students? Did they graduate? If so, did they complete an Act 158 pathway, or did they graduate via goals and objectives or via waiver?
2. For those students who graduated via a pathway, which pathway did they complete?

¹ For details of the graduation requirements, see:

<https://www.philasd.org/collegeandcareer/graduationrequirements/>

² For a more detailed description of Act 158 and the graduation pathways, see [Changing Requirements in Pennsylvania for High School Graduation: A Research Brief on Pennsylvania Act 158](#)

Box 1. Act 158 Pathways

Keystone Proficiency Pathway (Pathway 1): To graduate through this pathway, students must score Proficient or Advanced on all three Keystone exams (Algebra 1, Biology, and Literature).

Keystone Composite Pathway (Pathway 2): To graduate through this pathway, students must take all three Keystone exams and score Proficient or Advanced on one of them without scoring Below Basic in either of the other two, with a combined score of at least 4452 out of 5400 possible points.

- Note: Act 55, passed in 2020 as a result of testing disruptions during the Covid-19 pandemic, created an option for students to graduate through the Keystone Composite Pathway if they take two Keystone exams, score Proficient or Advanced on one of them, and score at least Basic on the other one, with a combined score of at least 2939. During the time that Keystone exams were not offered, students were granted a status of *non-numeric Proficient* for the exam (if they passed the corresponding course) for purposes of satisfying Pathway 1 requirements, or for invoking the 2-score variant of Pathway 2.

Career and Technical Education Concentrator Pathway (Pathway 3): To graduate through this pathway, students must enroll in a CTE program and pass at least half of the courses in the program, earn passing grades in any content area in which the student did not pass the corresponding Keystone exam, and either attain an industry-based CTE certification, demonstrate a high likelihood of success on an industry-based competency exam (the NOCTI or the NIMS), or earn a passing score on either a NOCTI pre-test or, for courses with no corresponding NOCTI test, the final exam for a CTE-related course.

Alternative Assessment Pathway (Pathway 4): To graduate through this pathway, students must earn passing grades in any content area in which the student did not pass the corresponding Keystone exam, and either: earn a specified score on a comprehensive alternative assessment (e.g., SAT); OR pass an alternative assessment (e.g., AP exam) or a dual-enrollment class for each subject they did not score proficient or advanced in on the corresponding Keystone exam; OR complete an approved pre-apprenticeship program; OR gain acceptance into a four-year higher education program.

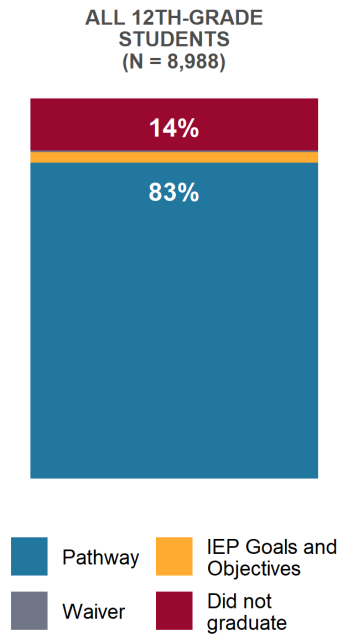
Evidence-based Pathway (Pathway 5): To graduate through this pathway, students must earn a passing grade in coursework corresponding to any Keystone exam the student did not pass, and demonstrate three approved pieces of evidence of aptitude in areas that could help the student achieve success in life after high school.

Goals and Objectives: Students who receive special education services may graduate by satisfying the goals and objectives of an Individualized Education Program.

Waivers: Students may receive a waiver allowing them to graduate without satisfying the Act 158 requirements due to extenuating circumstances.

Overall, 83% of SDP students enrolled in 12th grade as of May 25, 2023 satisfied all requirements for graduation, including completion of at least one graduation pathway, by September 30, 2023. Another 3% graduated through IEP goals and objectives, and fewer than 1% were provided waivers to graduate. Fourteen percent of 12th grade students did not graduate by September 30 (Figure 1).

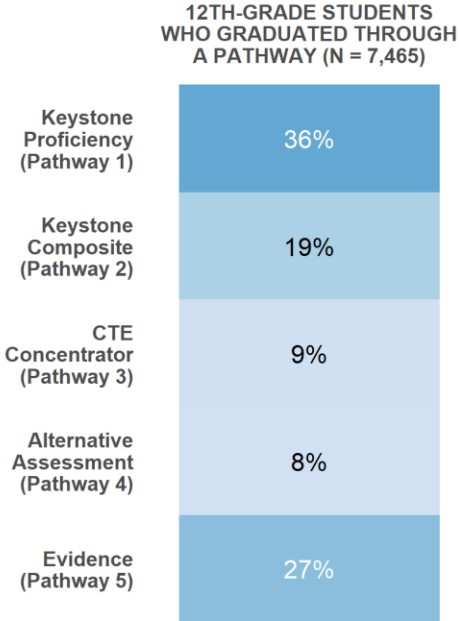
Figure 1. The overall percentage of 12th graders who graduated through a pathway, graduated through IEP Goals and Objectives, graduated through waivers, and did not graduate



If students met the requirements for multiple pathways, they are reported in the first pathway whose requirements they met, going in order from Pathway 1-5; for example, if a particular student satisfied the requirements for both the Keystone Composite Pathway (Pathway 2) and the Alternative Assessment Pathway (Pathway 4), they would be considered as graduating through the Keystone Composite Pathway.

More graduating students met the requirements for the Keystone Proficiency Pathway (Pathway 1) than through any other pathway (36% of 12th grade graduates) (Table 1). Students graduating through the Evidence-based Pathway (Pathway 5) made up the second-largest group, at 27%, followed by those graduating through the Keystone Composite Pathway (Pathway 2) (19%), the CTE Concentrator Pathway (Pathway 3) (9%), and the Alternative Assessment Pathway (Pathway 4) (8%).

Table 1. The percentage of 12th graders who graduated through a pathway, by pathway type



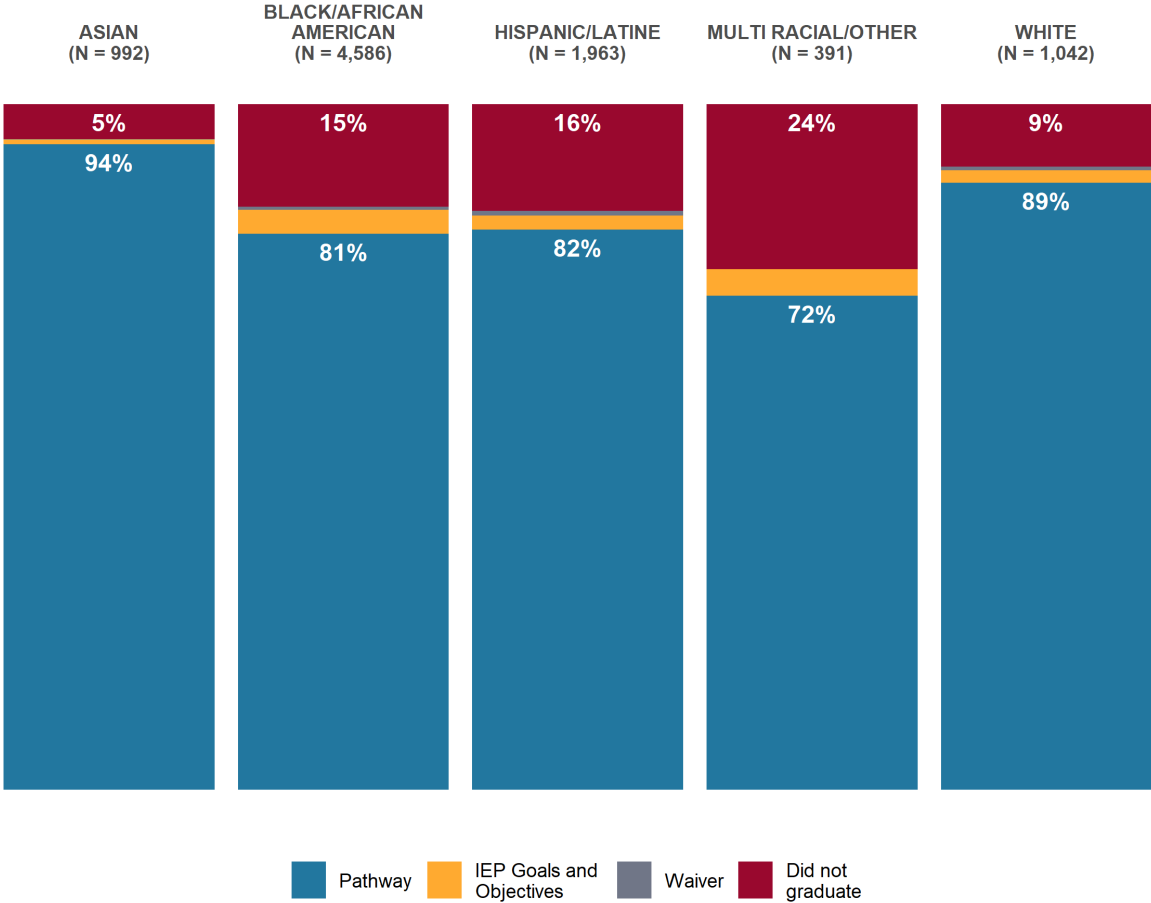
How to read this table (and the ones that follow): This table is formatted as a *heatmap*, in which the color of each cell corresponds directly to the percentage found in that cell. The larger the percentage, the darker the shade of blue. This makes it very easy to quickly identify which pathway(s) were used by many students, or by relatively few students. In all cases, the percentages in the five segments add up to 100.

Throughout this brief, all heatmaps use the exact same shade of blue for a particular percentage. This allows the reader to easily compare values in one heatmap with those in another. For example, in this table for overall District results, the darkest blue and largest percentage correspond to the Keystone Proficiency pathway (Pathway 1). If a reader wanted to quickly find examples of student groups that graduated using that pathway at higher percentages than the overall District rate, they could scan through the brief looking for tables whose Keystone Proficiency pathway cells are shaded darker than the one pictured here.

Graduation pathways, by race and ethnicity

Looking at graduation pathways by race/ethnicity, Asian students graduated through a pathway at the highest rate (94%) and had the smallest percentage of students who did not graduate (5%) (Figure 2). In contrast, students identifying as Multi Racial/Other graduated through a pathway at the lowest rate (72%), and had the highest percentage of students who did not graduate (24%). Higher percentages of Multi Racial/Other students and Black/African American (4%) students graduated through IEP goals and objectives than students in other groups.

Figure 2. The overall percentage of 12th graders who graduated through a pathway, graduated through IEP Goals and Objectives, graduated through waivers, and did not graduate, by race/ethnicity



Note: Multi-racial/Other students include Native American/Alaska Native students and Native Hawaiian/Pacific Islander students.

Among students who graduated through a pathway, more students identifying as Asian (67%), White (58%), or Multi Racial/Other (46%) graduated through the Keystone Proficiency Pathway (Pathway 1) than through any other pathway (Table 2). Higher percentages of graduating students who identify as Hispanic/Latine (38%) or Black/African American (31%) graduated through the Evidence-based Pathway (Pathway 5) than through any other pathway. For both of those groups, the Keystone Proficiency Pathway was the second-most used pathway.

Table 2. The overall percentage of 12th graders who graduated through a pathway, by pathway and race/ethnicity

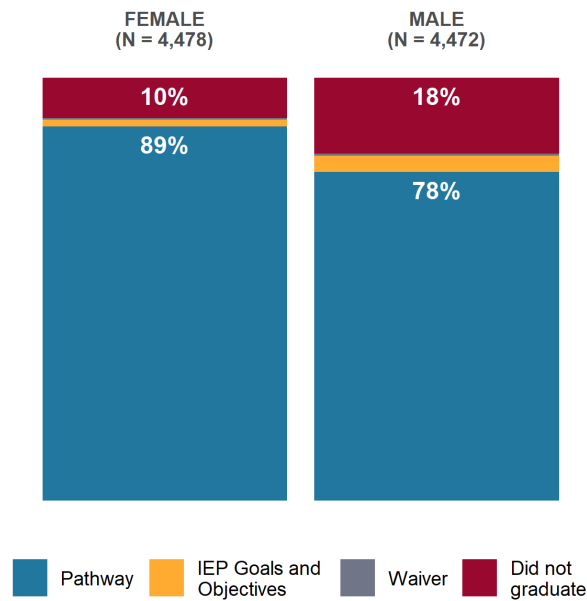
	ASIAN (N = 934)	BLACK/AFRICAN AMERICAN (N = 3,721)	HISPANIC/LATINE (N = 1,605)	MULTI RACIAL/OTHER (N = 282)	WHITE (N = 923)
Keystone Proficiency (Pathway 1)	67%	28%	23%	46%	58%
Keystone Composite (Pathway 2)	15%	21%	20%	17%	15%
CTE Concentrator (Pathway 3)	2%	11%	11%	9%	5%
Alternative Assessment (Pathway 4)	7%	10%	8%	9%	7%
Evidence (Pathway 5)	10%	31%	38%	20%	15%

Note: Multi-racial/Other students include Native American/Alaska Native students and Native Hawaiian/Pacific Islander students.

Graduation pathways, by gender

Female students in 12th grade graduated through a pathway at a higher rate (89%) than male students in 12th grade (78%), and a higher percentage of male students (4%) than female students (2%) graduated through IEP Goals and Objectives. The percentage of male students who did not graduate was nearly twice the percentage of female students who did not graduate (18%, compared to 10%) (Figure 3).

Figure 3. The overall percentage of 12th graders who graduated through a pathway, graduated through IEP Goals and Objectives, graduated through waivers, and did not graduate, by gender



Among students who graduated through a pathway, the Keystone Proficiency Pathway (Pathway 1) and the Evidence-based Pathway (Pathway 5) were used by higher percentages of both male and female students than the other pathways. Forty percent of female students graduated through the Keystone Proficiency Pathway, and 23% graduated through the Evidence-based Pathway, while equal percentages of male students graduated through the Keystone Proficiency Pathway and the Evidence-based Pathway, at 32% (Table 3).

Table 3. The overall percentage of 12th graders who graduated through a pathway, by pathway and gender

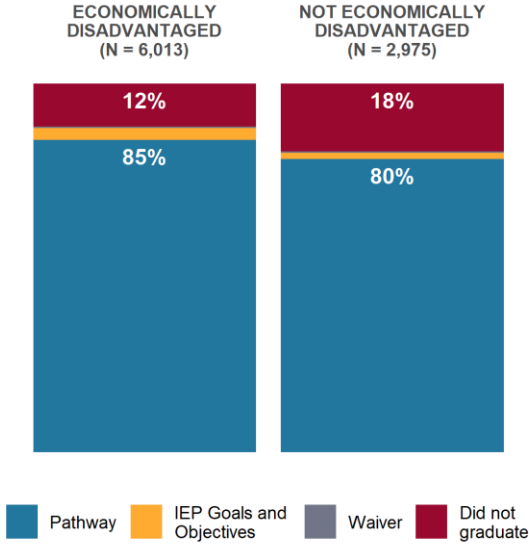
	FEMALE (N = 3,965)	MALE (N = 3,476)
Keystone Proficiency (Pathway 1)	40%	32%
Keystone Composite (Pathway 2)	19%	18%
CTE Concentrator (Pathway 3)	8%	10%
Alternative Assessment (Pathway 4)	9%	7%
Evidence (Pathway 5)	23%	32%

Note: Non-binary students have not been included in the gender-level analysis due to their small sample size.

Graduation pathways, by economic disadvantage status

A higher percentage of economically disadvantaged students (85%) graduated through a pathway than non-economically disadvantaged students (80%) (Figure 4). A higher percentage of economically disadvantaged students also graduated through IEP Goals and Objectives (3%) than non-economically disadvantaged students (2%). A lower percentage of economically disadvantaged students did not graduate (12%) than non-economically disadvantaged students (18%).

Figure 4. The overall percentage of 12th graders who graduated through a pathway, graduated through IEP Goals and Objectives, graduated through waivers, and did not graduate, by economic disadvantage status



Among students who graduated through a pathway, the Keystone Proficiency Pathway (Pathway 1) was used by more economically disadvantaged and non-economically disadvantaged students than any other pathway, while the Evidence-based Pathway (Pathway 5) was the second-most used pathway for both groups. A higher percentage of non-economically disadvantaged students (46%) graduated through the Keystone Proficiency Pathway than economically disadvantaged students (32%), while a higher percentage of economically disadvantaged students (29%) graduated through the Evidence-based Pathway than non-economically disadvantaged students (25%) (Table 4).

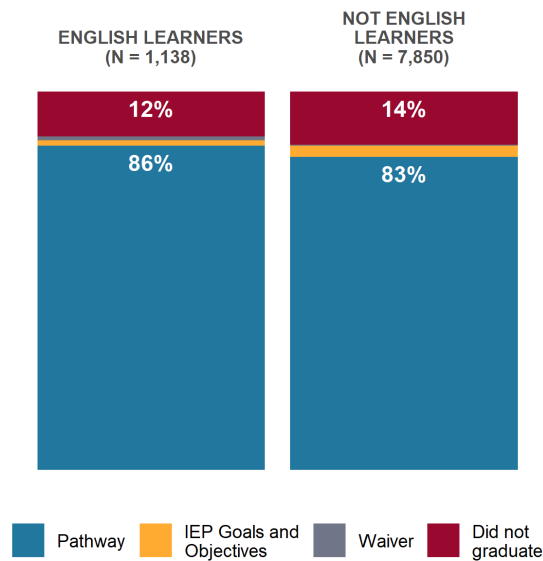
Table 4. The overall percentage of 12th graders who graduated through a pathway, by pathway and economic disadvantage status

	ECONOMICALLY DISADVANTAGED (N = 5,097)	NOT ECONOMICALLY DISADVANTAGED (N = 2,368)
Keystone Proficiency (Pathway 1)	32%	46%
Keystone Composite (Pathway 2)	20%	17%
CTE Concentrator (Pathway 3)	11%	5%
Alternative Assessment (Pathway 4)	9%	7%
Evidence (Pathway 5)	29%	25%

Graduation pathways, by English Learner status

A higher percentage of 12th grade students identified as English Learners (ELs; 86%) graduated through a pathway than students not identified as ELs (83%). Another 1% of ELs graduated through IEP Goals and Objectives, compared to 3% of non-ELs. Twelve percent of ELs did not graduate, compared to 14% of other students. Slightly more than 1% of 12th grade ELs graduated through waivers, compared to less than 1% of non-ELs (Figure 5).

Figure 5. The overall percentage of 12th graders who graduated through a pathway, graduated through IEP Goals and Objectives, graduated through waivers, and did not graduate, by English Learner status



Over half of 12th grade EL students who graduated through a pathway graduated through the Evidence-based Pathway (Pathway 5), at 52%, compared to 24% of non-EL students who graduated through a pathway. A higher percentage of non-EL students (41%) graduated through the Keystone Proficiency Pathway (Pathway 1) than EL students (7%), while equal percentages of both groups graduated through the Keystone Composite pathway (Pathway 2), at 19% each (Table 5).

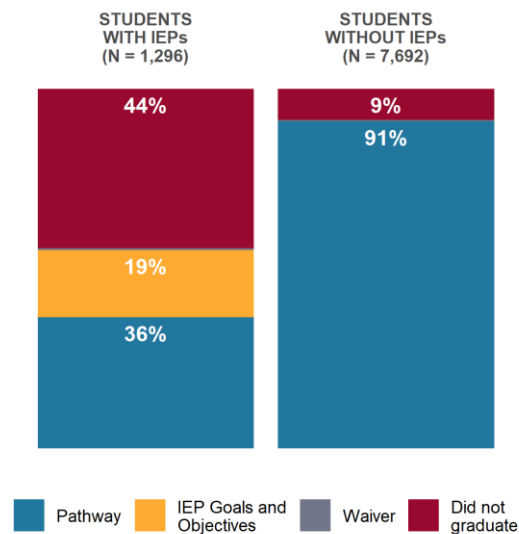
Table 5. The overall percentage of 12th graders who graduated through a pathway, by pathway and English Learner status

	ENGLISH LEARNERS (N = 975)	NOT ENGLISH LEARNERS (N = 6,490)
Keystone Proficiency (Pathway 1)	7%	41%
Keystone Composite (Pathway 2)	19%	19%
CTE Concentrator (Pathway 3)	9%	9%
Alternative Assessment (Pathway 4)	13%	8%
Evidence (Pathway 5)	52%	24%

Graduation pathways, by IEP status

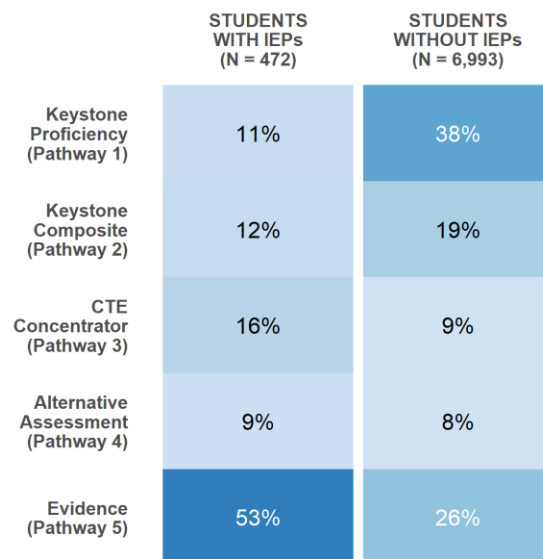
Among students without IEPs, 91% graduated through a pathway, while 9% did not graduate. The profile of students with IEPs is distinctive; 36% graduated through a pathway, while 44% did not graduate, and an additional 19% graduated through Goals and Objectives (Figure 6). Recall that the Goals and Objectives exemption is specific to students with IEPs, which accounts for the relatively large percentage of students with IEPs who graduated through this option.

Figure 6. The overall percentage of 12th graders who graduated through a pathway, graduated through IEP Goals and Objectives, graduated through waivers, and did not graduate, by IEP status



More than half of students with IEPs who graduated through a pathway (53%) used the Evidence-based Pathway (Pathway 5), compared to 26% of students without IEPs who graduated through a pathway. More of those without IEPs (38%) graduated through the Keystone Proficiency Pathway (Pathway 1), compared to 11% of those with IEPs (Table 6).

Table 6. The overall percentage of 12th graders who graduated through a pathway, by pathway and IEP status



Limitations

All of the summaries presented in this brief should be understood and interpreted within important context. In particular, we emphasize the following two considerations:

This cohort might prove to be unusual.

The 2022-23 school year was the first year in which SDP seniors needed to satisfy the conditions of an Act 158 pathway in order to graduate. In addition, this cohort was subject to several special conditions associated with the pandemic, including access to non-numeric Proficient scores on a scale that is not expected to persist over time. It is possible, therefore, that the patterns seen in the percentages of 12th graders graduating through each pathway will change in future years, as schools and students adapt to the new requirements and adjust to a post-pandemic educational setting.

The Act 158 cohort in this analysis is not exactly the same as the graduating cohort in other analyses.

The total percentage of SDP seniors reported here as graduating through the five pathways, through IEP Goals and Objectives, and through waivers is not comparable to 4-year or 5-year graduation rates that SDP publishes elsewhere, due to differences in the ways in which they were calculated. For example, graduation rates are based on cohorts of students who were all first-time 9th graders in the same year, whereas the Act 158 analyses contained in this brief are based on 12th grade status as of May 25, 2022-23, regardless of when those students were first-time 9th graders. In addition, any 12th grade SDP students who graduated, transferred to a non-SDP school, or dropped out of school before that date were not included in the analyses for this brief.

Conclusions

Overall, more 12th grade students in 2022-23 graduated through the Keystone Proficiency Pathway (Pathway 1) than through any other pathway. The next most common graduation pathway was the Evidence-based Pathway (Pathway 5). This was the case for students overall and nearly all student groups. Higher percentages of Asian students, female students, non-English Learner students, and students without IEPs graduated via the Keystone Proficiency Pathway compared with other students in each respective demographic grouping. Similarly, higher percentages of Hispanic/Latine students, male students, English Learners and students with IEPs graduated through the Evidence-based Pathway compared with other student groups in each respective demographic grouping. In the case of economic disadvantage status, both groups of students were most likely to graduate via the Keystone Proficiency Pathway, but the percentage was higher for non-economically disadvantaged students; and the percentage graduating via the Evidence-based Pathway was higher for students classified as economically disadvantaged.

Because the 2022-23 school year was the first year in which high school seniors in Pennsylvania were required to meet the conditions of an Act 158 pathway in order to graduate, it is likely that the percentages of students graduating through each pathway will change for future graduating classes, as both schools and students adapt to the new requirements. We will continue to report on Act 158 outcomes for our students as longer-term patterns emerge.