

Changing Requirements in Pennsylvania for High School Graduation

A Policy Brief on Pennsylvania Act 158

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Introduction

Beginning with the class of 2023, graduating Pennsylvania high school students will need to demonstrate career or postsecondary preparedness in addition to meeting existing statewide graduation requirements. Act 158 of 2018 outlines five pathways to meeting this requirement, including two that rely exclusively on Keystone Exam performance and three pathways that allow for alternative demonstration of college or career readiness.¹

This significant policy shift likely has implications for all Pennsylvania school districts, including the School District of Philadelphia (SDP). Over the next three years, the Philadelphia Education Research Consortium will be conducting research focused on this policy to understand its implications for SDP. PERC is a research partnership between SDP's Office of Research and Evaluation and Research for Action, funded by the William Penn Foundation.

In this policy brief, PERC: (1) outlines Act 158 and the new graduation requirements, (2) describes the evolution of the policy, (3) summarizes the previous research conducted on high-stakes graduation requirements in PA, and (4) highlights equity concerns that previous research has raised.

What are the five pathways a student can take to meet the new graduation requirements under Act 158?

All pathways to graduation under Act 158 require successful completion of locally established grade-based requirements for academic content areas associated with each Keystone Exam. Additional requirements vary by pathway. Two pathways provide a route to graduation determined by performance on end-of-course Keystone exams. The remaining three pathways involve "alternative" routes to graduation for students who have achieved course grade requirements but have not demonstrated proficiency on Keystone exams.

Pennsylvania Department of Education has prepared a [toolkit](#) to aid districts, youth-serving organizations, and families in understanding and preparing for the requirements, beginning with the Class of 2023. While the specific requirements associated with each pathway can be found on the PDE website, a high-level summary of each graduation pathway is outlined below:

- **Keystone Proficiency:** Scoring proficient or advanced on each end-of-course Keystone Exam: Biology, Algebra I, and Literature.ⁱⁱ
- **Keystone Composite:** Earning a composite score of 4452 on all three Keystone Exams (while obtaining a proficient score on at least one of the three exams and no less than a basic score on the remaining two).
- **Career and Technical Education (CTE) Concentrator:** Attaining an industry-based competency certification related to the student’s program of study or a demonstration of readiness for continued success or engagement in a CTE program of study.
- **Alternative Assessment:** Attaining approved alternative qualifications (e.g., ACT/SAT achievement, AP/IB exams, or acceptance and ability to enroll in a 4-year college/university).
- **Evidence-Based:** Demonstration of evidence consistent with the student’s goals and career plans (e.g., completion of an internship, externship, or cooperative education program; attainment of an industry-recognized credential, acceptance to a 4-year college/university, and/or letter guaranteeing full-time employment).

What is the history of Act 158?

Act 158 is the product of a long-standing debate surrounding keystones and graduation, which can be traced to a report published in 2006 by the Governor’s Commission on College and Career Success.ⁱⁱⁱ The report communicated a strong desire to leverage standardized tests to set a statewide standard for the skills needed to succeed in a 21st-century economy. When Keystone exams were first administered in 2012-13, the Pennsylvania Legislature had a goal that, by 2017, a “proficient” score on all three end-of-course Keystone exams would be required for graduation.^{iv}

However, the initial intent of Keystone Exams as a consistent, predictable graduation requirement across all 501 Pennsylvania school districts proved complicated, and the Legislature enacted three moratoriums on the adopted 2014 Pennsylvania State Board of Education regulations.^v Delayed implementation was largely due to concerns and criticisms surrounding the equity implications and potential loopholes of a graduation requirement that hinged on Keystone performance.

The first of these delays, Act 1 of 2016, also commissioned the Pennsylvania Department of Education (PDE) to research summarize the evidence base for high school exit exams, assess potential impacts in Pennsylvania, and make policy recommendations based on their findings.^{vi} This report ultimately laid the groundwork for what many perceive as a more inclusive policy,

which is set to initiate with the graduating class of 2023, to allow for alternative routes to graduation in the event that the Keystone proficiency requirement is not met.^{vii} Introduced by Senator McGarrigle as SB 1095, the legislation is intended to account for student strengths, interests, and career goals in addition to demonstrating subject-area competencies.^{viii}

What research has been previously done on the graduation policy?

Because the initial policy tied graduation to performance on Keystone exams, previous research focused on Keystone proficiency rates across districts and student populations. The Keystone exams are standardized tests designed to be end-of-course evaluations that assess a student’s knowledge in Biology, Algebra I, and Literature.^{ix} First administered in the 2012-13 school year to all Pennsylvania public high school students completing associated courses, the exams measure subject-specific proficiency as either Below Basic, Basic, Proficient, or Advanced.^x Table 1 outlines the exam score ranges and thresholds for each performance category by subject.

Table 1. Keystone exam score ranges for each performance category, by subject

Content Area	Below Basic	Basic	Proficient	Advanced
Algebra I	1200-1438	1439-1499	1500-1545	1546-1800
Biology	1200-1459	1460-1499	1500-1548	1549-1800
Literature	1200-1443	1444-1499	1500-1583	1584-1800

Students take Keystone exams in different grades, depending on when they take classes in associated Keystone subjects. For example, students who take Biology in 9th grade will typically take the Biology Keystone exam in 9th grade. Students who score in the “Basic” or “Below Basic” ranges are prompted to retake the exam, with “best by 11th” as their final score. Re-take attempts do not, on average, substantially increase proficiency rates.^{xi}

Historically, students have been required to take the exams for purposes of federal accountability rather than as a requirement for graduation. The push to make exam proficiency “high stakes” for students by tying scores to graduation sparked efforts to understand the implications across PA’s school districts.

PDE’s “Findings and Recommendations - Pursuant to Act 1 of 2016” summarized existing academic literature on high school exit exams and concluded that “exit exam policies often resulted in mixed or inconclusive findings, and were rarely associated with positive outcomes for students” (pg 28).^{xii} In addition, the report included an in-depth analysis of Keystone performance from 2013-2016, showing that nearly half of Pennsylvania high school students scored below proficient on at least one Keystone Exam and that pass rates were lower for economically disadvantaged students and students of color.

Additional research compounded concerns that a graduation requirement relying exclusively on Keystone proficiency would exacerbate the PA education system’s historical inequities.

Statewide publicly available Keystone performance data has been used by external researchers to show that districts and schools serving more non-white, economically disadvantaged, English Learner, and special education populations have lower rates in Keystone proficiency, thus would risk disproportionate declines in graduation rates as a result of a policy that hinged graduation solely on Keystones.^{xiii}

What are the equity concerns for Act 158?

Previous research has shown that historically disadvantaged schools and students would be the most impacted by a requirement that ties exam proficiency to graduation, highlighting the need to understand the new policy through a lens of equity. Largely seen as a more inclusive version of the policy, Act 158 was designed to address equity concerns that Keystone-based pathways to graduation would disproportionately cripple districts and schools with lower Keystone proficiency rates. Additional pathways defined for students to demonstrate college and career readiness offer alternatives to Keystone proficiency that are likely to provide many students a way to demonstrate college and career readiness and graduate with their peers.

Still, based on prior research we can expect that more non-white, economically disadvantaged, English Learner, and special education students will pursue pathways 3-5 under the new policy. To advance the equity underpinnings of the policy, it will be critical that districts, schools and partner organizations that disproportionately serve these students understand and be well positioned to support pathways 3-5 to ensure that historically disadvantaged students and schools are not further systematically disadvantaged by the new policy.

ⁱ Pennsylvania Department of Education. *Statewide High School Graduation Requirement*. [Graduation Requirements \(pa.gov\)](#) Pennsylvania Senate Bill 1095. 2018.

ⁱⁱ Pennsylvania Department of Education. *Graduation Requirements*. [Requirements \(pa.gov\)](#)

ⁱⁱⁱ Commonwealth of Pennsylvania Governor's Office. (December, 2006) *Governor's Commission on College and Career Success Final Report*. [Governor's Commission on College and Career Success Commonwealth of PA](#)

^{iv} Pennsylvania Department of Education. *Statewide High School Graduation Requirement*. [Graduation Requirements \(pa.gov\)](#)

^v Pennsylvania Senate Bill 880. (2016) [Bill Information - Senate Bill 880; Regular Session 2015-2016 - PA General Assembly \(state.pa.us\)](#)

Pennsylvania Senate Bill 178. (2018) [Bill Information - House Bill 178; Regular Session 2017-2018 - PA General Assembly \(state.pa.us\)](#)

Pennsylvania Senate Bill 1148. (2018) [Bill Information - House Bill 1448; Regular Session 2017-2018 - PA General Assembly \(state.pa.us\)](#)

^{vi} Pennsylvania Senate Bill 880. (2016) [Bill Information - Senate Bill 880; Regular Session 2015-2016 - PA General Assembly \(state.pa.us\)](#)

^{vii} Pennsylvania Senate Bill 1095. (2018) [Bill Information - Senate Bill 1095; Regular Session 2017-2018 - PA General Assembly \(state.pa.us\)](#)

^{viii} Senator McGarrigle, T.J. Pennsylvania Senate Bill 1095. (March 8, 2018) *Graduation Requirements*. Senate of Pennsylvania, Session of 2017-2018 Regular Session. [Senate Co-Sponsorship Memoranda - PA State Senate](#)

^{ix} Pennsylvania Department of Education. *Keystone Exams*. [Keystone Exams \(pa.gov\)](#)

^x Pennsylvania Department of Education. *Keystone Exams*. [Keystone Exams \(pa.gov\)](#)

^{xi} Shaw, K. Norton, M. H. Sludden, J. Long, D. Barnes, M. (2015) PA Keystone Exams: Analysis of 2013-14 Publicly-Available Data. Research for Action. https://www.researchforaction.org/wp-content/uploads/2021/07/RFA_PACER_Analysis_13-14_Keystones_June_2015.pdf

^{xii} Pennsylvania Department of Education. (August 2016) Findings and Recommendations Pursuant to Act 1 of 2016. A Report Submitted to the General Assembly of Pennsylvania by the Pennsylvania Department of Education. [Findings and Recommendations Pursuant to Act 1 of 2016 \(pa.gov\)](https://www.pde.pa.gov/Files/2016/08/Findings-and-Recommendations-Pursuant-to-Act-1-of-2016.pdf)

^{xiii} McGlynn, A. (2016) Higher Standards and Lower Achievement? An Evaluation of Pennsylvania's Keystone Exams. *Commonwealth: A Journal of Pennsylvania Politics and Policy*, Vol. 18 No. 1. <https://doi.org/10.15367/cjppp.v18i1.83>; Shaw, K. Norton, M. H. Sludden, J. Long, D. Barnes, M. (2015) PA Keystone Exams: Analysis of 2013-14 Publicly-Available Data. Research for Action. https://www.researchforaction.org/wp-content/uploads/2021/07/RFA_PACER_Analysis_13-14_Keystones_June_2015.pdf