

A Summary of District-Wide Assessments Administered to School District of Philadelphia Students During the 2020-21 School Year

Ebru Erdem, Ph.D., Director, Research, Policy, and Practice; Amber Fullam, PMP, Senior Project Manager

Overview

The School District of Philadelphia (SDP) responded to the global Covid-19 pandemic by closing school buildings on March 13, 2020 and pivoting to 100% virtual education for the remainder of the 2019-20 school year. Students then started the 2020-21 school year 100% virtual and continued remote education until a phased, hybrid return started on March 8, 2021. Teaching and learning continued during the pandemic, albeit very differently than the usual at-school, in-person instruction.

Assessing student learning throughout this period was important in order to have continuity in measuring student achievement and growth and also to understand the impact of this unusual disruption to usual teaching and learning.¹ SDP administered aimswebPlus (three testing windows) and Star assessments (four testing windows) during the 2020-21 school year for grades K-5 and 6-12 respectively, using a mix of in-person and remote administration. Results of these reading and math assessments were used in progress monitoring throughout the year and they were also analyzed in publicly available briefs and reports (see footnote 6 below).

Administering the state-required standardized tests² was more complicated, however, largely due to difficulties in administering these secure, in-person tests with consistency. During the 2019-20

Information in this brief:

Interim Assessments

- aimswebPlus/Star
- Biology Benchmark

Summative End-of-Course Exams

- Civics Test
- IB Exam
- AP Exams
- NOCTI Assessments

State Standardized Assessments

- PSSA/PASA
- Keystone Exams
- ACCESS for ELLs

Other Tests

- KEI
- NNAT
- NAEP
- SAT/ACT
- PSAT and PSAT 8/9

¹ For a detailed description of tests administered at SDP, see: <https://www.philasd.org/research/wp-content/uploads/sites/90/2021/04/Assessments-Overview-2020-2021.pdf>

² Regularly administered state tests are: Pennsylvania System of School Assessment (PSSA) for grades 3-8; Pennsylvania Alternate System of Assessment (PASA) for grades 3-8 and 11 special education students; Keystones for end-of-course assessment for high school Algebra I, Literature, and Biology; and Assessing

school year, ACCESS and early testing windows of Keystone tests were completed before the Pennsylvania stay-at-home orders were issued. All PSSA/PASA testing, as well as the spring administration of Keystone tests, were cancelled. In 2020-21, no testing windows were cancelled by PDE: PSSA and ACCESS tests were administered to students who were enrolled in the hybrid-education program and attended in-person during the spring testing window. Spring 2020 Keystone tests were mostly administered in fall 2021, when students returned to school in person for the new school year.

This brief describes which District-wide tests, among those regularly administered by the Office of Assessment each year, were administered during the 2020-21 school year. For those tests that were administered, details on about student participation are provided.³

Virtual Education and Advancing Education Safely Plan, 2020-21

All students began the 2020-21 school year fully virtual, and starting in March 2021, some families chose to attend school through a phased hybrid model that continued through the end of the year.⁴ At the end of the school year in June 2021, 25,423 of 93,994 eligible students across all grade levels had enrolled in hybrid education (Table 1).

Table 1. Phased return to hybrid, in-person education, Spring 2020-21

| Advancing Education Safely Plan Phase | Start Date | Number of Additional Schools Offering Hybrid Model | Number of Students Enrolled in Hybrid Model | Percent of Students Enrolled in Hybrid Model |
|---|--------------------------|--|---|--|
| Phase I (PreK-2 opt-in, K-5 complex needs) | 3/8/2021 | 53 | 2,224 | 24.9% |
| | 3/15/2021 | 98 | 3,801 | 23.7% |
| | 3/22/2021 | 133 | 6,092 | 27% |
| Additional PreK-2 opt-in | 4/5/2021 | 155 | 9,994 | 37.7% |
| Phase II (3-5 opt-in, 6-8 complex needs) | 4/26/2021 | 178 | 18,420 | 32.5% |
| Phase III (6-9 opt-in, 10-12 complex needs) | 5/10/2021 | All schools open for phased in grade levels | 25,541 | 27.2% |
| | Last week of school year | All schools open for phased in grade levels | 25,423 | 27% |

Sources: <https://dashboards.philasd.org/extensions/covid-dashboard-2020-21/index.html#/hybrid-selection>, <https://www.philasd.org/blog/tag/hybrid-reopening/>

Communication and Comprehension in English State to State (ACCESS) for English Learners' English proficiency level.

³ For more information about the Office of Assessment, see: <https://www.philasd.org/era/assessment/>. To access the assessment calendars, click [here](#) for 2020-21 and [here](#) for 2021-22.

⁴ For more information about the Advancing Education Safely Plan in 2020-21 school year, including information about the phased return to hybrid education starting March 2021, see: <https://www.philasd.org/coronavirus/schoolstart2020-2/>. Students whose families chose the hybrid option could attend school in-person 2 days a week, all special education students could attend school in-person 4 days a week, all other instruction was virtual.

Interim Assessments

AimswEBPlus and Star

SDP's District-wide interim assessments, aimswEBPlus and Star, were a required part of virtual teaching and learning throughout the 2020-21 school year. These tests could be administered online or, in the case of some early literacy and math aimswEBPlus modules, in virtual one-on-one meetings between the student and their teacher.

SDP implemented a universal K-12 interim assessment program beginning in the 2020-21 school year. All schools across the District administered aimswEBPlus for grades K-5 and Star for grades 6-12; reading and math tests were administered for both assessments.⁵ AimswEBPlus reading and math tests were administered in three testing windows and Star reading and math tests were given in four testing windows. Date ranges for the testing windows of both interim assessments are shown in Table 2. Before the phased return to hybrid education started in spring 2020-21, all interim tests were administered virtually and students completed them from home; once hybrid education began, students attending school in person took the tests while at school. When the aimswEBPlus/Star administration windows overlapped with state tests such as ACCESS or PSSAs, guidance to schools emphasized prioritizing the administration of state tests for the students who were in-person (see below for state test administration dates).

As data from each testing cycle became available, the Office of Research and Evaluation produced analyses focusing on student participation and performance, both overall for the District and for demographic groups.⁶ Data from the interim tests were also instrumental in progress monitoring towards the Goals and Guardrails adopted by the Board of Education.⁷

⁵ In the report, special education students are included only in the grade range the assessment is required for all students. Spanish language tests are included only for Math and not Reading. Star Spanish results are not included for high school grades because Star Spanish is not yet nationally normed and a National Percentile Rank (NPR) cannot be assigned to these scores. Tier performance is assigned according to NPR.

⁶ For aimswEBPlus, see: <https://www.philasd.org/research/category/assessments/aimswEBplus/>; for Star see: <https://www.philasd.org/research/category/assessments/star/>

⁷ For information about the Goals and Guardrails, see: <https://www.philasd.org/goalsandguardrails/>

Table 2. 2020-21 Testing windows and participation rates for aimswebPlus and Star reading and math assessments

| | Testing Window | Number of Eligible Students | Reading Assessment Participation Rate | Math Assessment Participation Rate |
|--------------------|------------------------|-----------------------------|---------------------------------------|------------------------------------|
| aimswebPlus | | | | |
| <i>Fall</i> | 9/7/2020 - 10/23/2020 | 59,256 | 82.1% | 79.7% |
| <i>Winter</i> | 12/1/2020 - 1/29/2021 | 59,409 | 82.8% | 81.8% |
| <i>Spring</i> | 4/14/2021 - 6/11/2021 | 59,434 | 77.6% | 76.3% |
| Star | | | | |
| <i>Fall</i> | 9/14/2020 - 10/23/2020 | 66,509 | 78.4% | 75.4% |
| <i>Winter 1</i> | 12/14/2020 - 1/29/2020 | 66,438 | 74.4% | 71.9% |
| <i>Winter 2</i> | 3/8/2021 - 3/19/2021 | 66,356 | 69.1% | 66.1% |
| <i>Spring</i> | 5/3/2021 - 6/11/2021 | 66,225 | 61.8% | 59.3% |

Source: Qlik aimsweb/Star (renamed to Academic Screeners) application, v.2.3.0, “Participation Details” sheet, accessed September 27, 2021.

Biology Benchmark Testing

The Biology Benchmark is an online instructional assessment aligned with the Biology scope and sequence and administered to 8th- to 12th-grade students who are enrolled in a Biology course. In the 2020-21 school year, it was offered in three testing windows for fall, winter, and spring (between November 16-December 4, 2020, January 25-February 12, 2021, and March 17-April 9, 2021 respectively). Remote testing was permitted. The number of students that participated in 2020-21 was lower than the pre-pandemic administrations in 2018-19 and 2019-20 (Table 3).

Table 3. Number of students who took the Biology Benchmark Tests in 2018-19, 2019-20, and 2020-21 School Years

| | 2018-19 | 2019-20 | 2020-21 |
|---------------|---------|------------------|---------|
| <i>Fall</i> | 6,576 | 6,482 | 3,739 |
| <i>Winter</i> | 6,150 | 6,018 | 4,173 |
| <i>Spring</i> | 5,668 | <i>cancelled</i> | 3,788 |

Summative End-of-Course Exams

Civics Test

SDP administered state-mandated Civics testing, required for students enrolled in Social Science, Civics, AP US Government and Politics, and IB History courses in grades 9-12 between February 8-March 3, 2021. Remote testing was permitted. This was the first year this test was administered, as was required per PDE Act 35. 5,543 students participated.

International Baccalaureate Exams

Students enrolled in International Baccalaureate courses, which offer college-level credits, take end-of-course exams to show their mastery of the course material. For 2020-21, the IB program allowed a dual route to course completion: a non-exam route (where the final determination was based on the teachers' evaluation of the coursework) and an exam-route.⁸ Most SDP schools chose the non-exam route in 2020-21. As a reference, the number of SDP students who took the IB exams in 2018-19 (before Covid-19) was 409.

Advanced Placement Exams

SDP offers Advanced Placement (AP) courses in many different subjects and these courses offer college-level credits to high school students. End-of-course Advanced Placement exams are administered by the College Board and they were administered in three administrations between May 3 and June 11, 2021 to 9-12th grade students who were enrolled in AP courses. Both virtual and in-person testing was offered. The number of students who took AP tests in 2020-21 is 3,802 compared to 3,784 in 2019-20 and 4,094 in 2018-19.

NOCTI (National Occupational Competency Testing Institute) Assessments

The National Occupational Competency Testing Institute assessments are administered to the students enrolled in Career and Technical Education (CTE) courses. Pre-tests in the fall were cancelled and both the online/theoretical and the performance/skills sections of the post tests were administered in-person, between April 19-30, 2021 to eligible 12th grade CTE students by invitation. The number of students who took NOCTI tests in 2020-21 was 175, compared to 1,171 in 2018-19.

State Standardized Assessments

The Pennsylvania Department of Education (PDE) directs the administration of PSSA/PASA, ACCESS, and Keystone exams each year. These tests are all secure and designed to be administered in-person, so virtual schooling vastly impacted their administration. The details of administration and participation in each state test are outlined below.

PSSA and PASA

The Pennsylvania State Standardized Assessments (PSSA) are standardized end-of-year assessments in English, Language and Arts (ELA), Math, and Science, and the results are used for district, state, and federal accountability. ELA and Math tests are administered to grades 3-8 and

⁸ For details on this dual assessment model, see: <https://www.ibo.org/globalassets/programme-information/dp/how-is-the-ib-awarding-results-in-may-2021-en.pdf>

the Science test is administered to grades 4 and 8 in the spring quarter of the school year. The Pennsylvania Alternate State Assessment (PASA) is an alternate assessment designed for students with the most significant cognitive disabilities who are unable to participate meaningfully in the PSSA or Keystone exams even with appropriate accommodations.

In the 2019-20 school year, PDE cancelled PSSA and PASA when schools across the state were closed due to Covid-19. During the 2020-21 school year, PDE encouraged administration of the tests to students whenever they could be in-person in the spring or in the fall of the following year. Due to the unusual conditions under which these assessments were administered, the results will not be used for accountability purposes.

SDP administered the PSSA between May 3 and June 4, 2021, and PASA between April 8 and June 4, 2021, only to students who were attending school in person during the phased hybrid education and whose parents did not opt out of state testing. There was a period of PSSA make-up testing the last week of the school year, June 7-11, 2021. Participation in PSSA/PASA tests in the 2020-21 school year was only a fraction of what it is in a typical year (Table 4).

Table 4. Number of students who took PSSA/PASA by grade, 2020-21 (hybrid) and 2018-19 (pre-pandemic)

| Test | Grade | Number of Students Tested, 2020-21 | Number of Students Enrolled in Hybrid ^a | Percent of Students Tested who were Enrolled in Hybrid | Percent of Eligible Students Tested, 2020-21 | Number of Students Tested, 2018-19 | Percent of Eligible Students Tested, 2018-19 |
|------------------------------|--------------|------------------------------------|--|--|--|------------------------------------|--|
| PSSA - English Language Arts | 3 | 2,009 | 2,750 | 73.1% | 21.2% | 9,662 | 97.4% |
| | 4 | 1,891 | 2,565 | 73.7% | 19.9% | 9,670 | 97.3% |
| | 5 | 1,793 | 2,483 | 72.2% | 19.3% | 9,488 | 97.7% |
| | 6 | 1,221 | 1,840 | 66.4% | 13.9% | 8,726 | 98.1% |
| | 7 | 1,134 | 1,822 | 62.2% | 12.7% | 7,859 | 97.3% |
| | 8 | 1,006 | 1,865 | 53.9% | 11.2% | 7,803 | 95.7% |
| | Total | | 9,054 | 13,325 | 67.9% | 16.5% | 53,208 |
| PSSA - Math | 3 | 2,008 | 2,750 | 73.0% | 21.2% | 9,728 | 98.0% |
| | 4 | 1,857 | 2,565 | 72.4% | 19.5% | 9,708 | 97.7% |
| | 5 | 1,776 | 2,483 | 71.5% | 19.1% | 9,500 | 97.9% |
| | 6 | 1,229 | 1,840 | 66.8% | 14.0% | 8,727 | 98.1% |
| | 7 | 1,145 | 1,822 | 62.8% | 12.9% | 7,864 | 97.4% |
| | 8 | 1,016 | 1,865 | 54.5% | 11.3% | 7,771 | 95.3% |
| | Total | | 9,031 | 13,325 | 67.8% | 16.4% | 53,298 |
| PSSA - Science | 4 | 1,805 | 2,565 | 70.4% | 19.0% | 9,710 | 97.8% |
| | 8 | 906 | 1,865 | 48.6% | 10.1% | 7,759 | 95.1% |
| | Total | 2,711 | 4,430 | 61.2% | 14.6% | 17,496 | 96.6% |

Source: Qlik PSSA & Keystone application, v.2.1.2, “PSSA Participation: Multi-Year Trends” sheet (modified), accessed January 26, 2022. Advancing Education Safely Dashboard, Hybrid Learning Selection (modified).

^aSee Table 1 for information about when students could opt-in for hybrid education. Students in grades 6-8 could return for hybrid education later than students in grades 3-5, so there was less time during the assessment window for them to complete the assessments.

Note: Hybrid Enrollment is as of the last week of school for 2020-21 school year and counts students who were enrolled in-person regardless of attendance. Eligible students in this table are not limited to the students who opted-in to hybrid education in 2020-21; they include all students enrolled in that grade per PDE records and attributed to District K-12 or Alternative school for both school years reported. Students attributed to the District but not to a specific school are excluded.

Keystone Exams

Keystone exams are end-of-course assessments designed to assess proficiency in Algebra I, Literature, and Biology. They are typically administered in winter (in two waves), spring, and summer to students who take these courses in grades 7-12. Typically, most students take the exam in the spring. In the 2019-20 school year, only the winter administration was completed. In the 2020-21 school year, Keystone exams were not administered in winter, spring, or summer. Instead, 2020-21 exams were administered at the beginning of the following school year, in fall 2021. Although the exams were administered after the students had returned to school buildings in-

person, participation in 2020-21 Keystone exams was much lower than what it is in a typical year such as the last usual administration in 2018-19 (Table 5).⁹

Table 5. Number of students who took Keystone tests by grade, 2020-21 (fall 2021-22) and 2018-19

| Test | Grade | Number of Students Tested, 2020-21 | Number of Students Tested, 2018-19 |
|-----------------------|---------------|------------------------------------|------------------------------------|
| Keystone – Literature | Not specified | 25 | 39 |
| | 8 | 1 | 0 |
| | 9 | 149 | 302 |
| | 10 | 5,629 | 6,565 |
| | 11 | 662 | 2,214 |
| | 12 | 43 | 119 |
| | Total | 6,509 | 9,239 |
| Keystone – Algebra I | Not specified | 19 | 34 |
| | 7 | 0 | 66 |
| | 8 | 264 | 1,779 |
| | 9 | 5,870 | 6,759 |
| | 10 | 980 | 3,439 |
| | 11 | 455 | 1,857 |
| | 12 | 27 | 136 |
| Total | 7,615 | 14,070 | |
| Keystone - Biology | Not specified | 17 | 30 |
| | 8 | 9 | 33 |
| | 9 | 2,561 | 3,040 |
| | 10 | 3,002 | 4,206 |
| | 11 | 711 | 2,162 |
| | 12 | 35 | 127 |
| | Total | 6,335 | 9,598 |

Source: Qlik PSSA & Keystone application, v.2.1.2, “Performance Details Table” sheet, accessed January 26, 2022.

⁹ For more information about Keystone Exams, see: <https://www.education.pa.gov/K-12/Assessment%20and%20Accountability/Keystones/Pages/default.aspx>

ACCESS for ELLs

ACCESS for ELLs is a required, standards-based instrument for the annual assessment of English language proficiency. It is administered annually, typically in January, to identify the students who need supports in English proficiency as well as to track the development of English proficiency and to exit students from English to Speakers of Other Languages (ESOL) programming. An alternative version is administered for English Learners with severe cognitive disabilities.¹⁰

Unlike other state standardized tests, 2019-20 ACCESS administration was completed by the time school buildings closed due to Covid-19. In the 2019-20 administration, 16,663 students took ACCESS, including the alternative version. In 2020-21, ACCESS was administered to English Learners who were attending in-person during the hybrid phase. During this period, 2,753 students were tested: 2,672 completed all domains and have composite scores and 81 were tested partially and thus did not have composite scores.

Other Screeners and Tests

KEI (Kindergarten Entry Inventory)

The Pennsylvania Kindergarten Entry Inventory (KEI) is a Kindergarten readiness tool developed by the PA Office of Child Development and Early Learning (OCDEL) that Kindergarten teachers use to assess every incoming Kindergarten student within the first 45 days of school. In the fall of 2020-21, a modified version of the KEI was implemented by Kindergarten teachers based on their virtual interactions with the students.

Cancelled tests and screeners

NNAT (Naglieri Nonverbal Ability Test)

NNAT is a screener administered to 2nd grade students to assess general ability. Results are used to identify students who will be further evaluated for giftedness. In 2020-21, NNAT was not administered. During the 2021-22 school year, this screener was administered to 4th graders (2019-20 2nd graders whose screening window was truncated due to Covid-19 school closures), 3rd graders (2020-21 2nd graders who were virtual/hybrid) and current 2nd grade students, in that order.

NAEP (The National Assessment of Educational Progress)

The National Assessment of Educational Progress (NAEP)/Trial Urban District Assessment (TUDA)¹¹ is a nationally representative assessment of what U.S. 4th, 8th, and 12th grade students know and can do. Not all subjects are tested at each cycle; the most frequent NEAP/TUDA tests are in reading, math, and writing. Science, US history, civics, geography, economics, the arts, and similar topics are periodically assessed as well. NAEP is given in even years to a small number of schools in the District. Administration of these tests in 2020-21 was postponed.

¹⁰ For more information on ACCESS for ELLs, see: <https://wida.wisc.edu/assess/access/tests>. For more information on PDE's approach to educating English Learners, see: <https://www.education.pa.gov/Policy-Funding/BECS/PACode/Pages/EducatingELs.aspx>

¹¹ For details, see: <https://nces.ed.gov/nationsreportcard/> and <https://nces.ed.gov/nationsreportcard/tuda/>

SAT and ACT

The SAT is composed of three tests (reading, writing and language, math) that assess academic readiness for college. The ACT is a national college admissions examination that consists of subject area tests in English, math, reading, science, and writing. These tests are typically taken by 11th and 12th grade students. Although the organizations that administer these tests continued administering these tests with certain health and safety restrictions, the SDP-sponsored administrations were cancelled in the 2020-21 school year.

PSAT/NMSQT and PSAT 8/9

PSAT/NMSQT (Preliminary SAT/National Merit Scholarship Qualifying Test) is a test administered to 10th and 11th grade students as a practice for the SAT test. Another version, PSAT 8/9 is administered to 8th and 9th grade students, also as a practice for the SAT test. The SDP administrations of all PSAT tests were cancelled in the 2020-21 school year.

Conclusions

Virtual teaching and learning throughout 2020-21 school year presented unique challenges related to assessing students across the District, state, and nation. SDP was able to carry out its interim testing virtually with high participation rates throughout the year.¹² Because state standardized tests have to be administered in person, they could only be administered to students who opted-in to in-person hybrid education and attended school on the day(s) of test administration. Although administration of the ACCESS and PSSA/PASA tests were prioritized over the spring administration of aimswebPlus and Star tests, and Keystone exams were delayed after students returned to school buildings in fall 2021-22, participation was still much lower than the last usual administration of these tests in the 2018-19 school year.

Correction

The Advanced Placement exam participation numbers originally reported in this brief were based on data pulled for District and Alternative students from the College and Career Readiness Qlik application on February 10, 2022. These numbers were updated since, and the Advanced Placement Exams section has been updated accordingly.

The last sentence in the Advanced Placement Exams section on p. 5 originally appeared as follows: *The number of students who took AP tests in 2020-21 is 3,030 compared to 2,949 in 2019-20 and 3,531 in 2018-19.*

This sentence was updated in May 2023 and now reads: *The number of students who took AP tests in 2020-21 is 3,802 compared to 3,784 in 2019-20 and 4,094 in 2018-19.*

¹² For participation and performance in aimswebPlus and Star reading and math tests throughout 2020-21 school year, see our summary slide decks at: <https://www.philasd.org/research/2021/09/17/k-12-student-participation-and-performance-in-math-and-literacy-assessments-during-the-2020-21-mostly-virtual-school-year/>