# PHYSICA <br>  <br> DATA PROJECT Arizona 

## 2020-2021

All data in this report are from 2020-2021 unless otherwise noted.

Suggested Citation: Morrison, R., 2022. Physical Education Data Project Report, Arizona.

## Data Notes

The Physical Education Data Project is a project of Quadrant Research. The nationwide project coordinates with participating state departments of education to collect and report physical education data from State Longitudinal Data Systems (SLDS) and other state department of education datasets on an annual basis.

The data were reported through the AzEDS system, based on the annual enrollment data snapshots taken on October 1st.
The state of Arizona has established a series of course codes and course definitions, which are provided at the Arizona Department of Education website: http://www.azed.gov/stc/

The Arizona Department of Education captures enrollment by grade level for physical education courses delivered in traditional public and charter schools.

Arizona requires that at least one PE course is offered per grade for grades K-8.

This summary provides a top-line view of the data anlyses. Please visit: https://www.azed.gov/pe/physical-education-data-dashboard to view the companion interactive dashboards.

Basic Information by Grade Level for 2020-2021

|  | \# of Schools | \% of Schools | School Enrollment | \% of Students |
| :---: | :---: | :---: | :---: | :---: |
| Elementary | 652 | 31.2\% | 281,141 | 26.2\% |
| Middle | 191 | 9.1\% | 104,716 | 9.8\% |
| High | 472 | 22.6\% | 257,138 | 24.0\% |
| Mixed | 777 | 37.1\% | 428,492 | 40.0\% |
| Grand Total | 2,092 | 100.0\% | 1,071,487 | 100.0\% |

## Key Findings from the Physical Education Data Project <br> Arizona <br> 2020-2021

- Most students (89\%) had access to at least one PE course.
- More than half (59\%) of all students participated in physical education courses. This represents more than 628,000 students. This participation rate is about the same as it was in 2020 (57\%).
- PE enrollment was highest among students in elementary schools (66\%) and lowest at high schools, 34\%.
- $10.9 \%$ of students did not have access to any phys ed instruction. This is an improvement over the prior year's rate of 11.7\%.
- Schools, where a low proportion of students were eligible for free or reduced-price lunch (FRL), were more likely to lack physical education (39\%) than schools with a higher proportion of FRL-eligible students.
- Overall phys ed participation was highest in schools with mid-low and mid-high proportions of an FRL-eligible population (63\% and 65\%, respectively).
- Physical education enrollment was higher in traditional schools than in charter schools (61\% vs. 49\%).
- Among students without access to PE, more than twice as many attended a charter school (22.2\%) vs. a traditional school (7.9\%).
- The phys ed participation rate was highest (64\%) in schools where there was not a majority by race/ethnicity and was lowest in majority-White schools (46\%).
- Schools in rural, distant locations had the highest PE participation rate (69\%); schools in remote town locales had the lowest rate: 44\%.


## Access to and Enrollment in Physical Education

"Access" is the lowest threshold measure for physical education. It is used to determine if a school offers at least one PE course with any student enrollment. This only indicates presence of program, not breadth, and is used primarily to determine where schools may be operating without PE instruction.

Enrollments, on the other hand, indicate the proportion of all students that are enrolled in at least one arts course. Enrollments by arts discipline and as a trend over time of enrollment in any arts course are depicted below.

## Enrollment Trends



PE \% Student Access


PE \% School Access


2019

628,440
2021
County-Level Change in Phys Ed Enrollment: 2020 vs. 2021


## Physical Education Enrollments by Grade Level

Elementary = grades K -5 $\mid$ Middle = grades 6-8| High = grades 9-12 $\mid$ Mixed = grade spans that cross these boundaries, such as K-8

Student and School Access to Phys Ed


76\%


Elementary


Middle


High


Mixed

## Phys Ed Enrollments by School and Student Characteristics

## Student Enrollment vs. Phys Ed Enrollment by Locale

The \%s on the left show the overall phys ed enrollment within that locale. The vertical black lines ( $\mid$ ) show the \% of all students by locale type; the blue squares ( $\mathbf{(}$ ) show the \% of students enrolled in phys ed across locales. If the blue square is further to the right than the black line, then more students participate in phys ed in that locale than would be expected based on the overall distribution of students.


Phys Ed Enrollment by School Locale Type


## Student Enrollment vs. Phys Ed Enrollment by School-Majority Race/Ethnicity

The \%s on the left show the overall phys ed enrollment within schools where the majority of students are of that race/ethnicity. The vertical black lines (\|) show the \% of all students by school-majority race/ethnicity; the blue squares (■) show the \% of students enrolled in phys ed in those schools. If the blue square is further to the right than the black line, then more students participate in phys ed than would be expected based on the overall distribution of students.


Phys Ed Enrollment by School Type


Phys Ed Enrollment Rate by Student Characteristics
The statewide PE enrollment rate is denoted with the vertical gray line

Arts Enrollment Rate by Race/Ethnicity


Arts Enrollment Rate by Gender


Arts Enrollment Rate by Special Education


Arts Enrollment Rate by Free or Reduced-Price Lunch Program Eligibility

FRLP eligible
not FRLP eligible


Arts Enrollment Rate by English Language Learner Status


## PE Access and Enrollment by School-Level Free or Reduced-Price Lunch Program Participation

 students within a school. Children from families with incomes at or below 130 percent of the poverty level are eligible for free meals; incomes between 130 percent and 185 percent are eligible for reduced-price meals.

- Low-poverty $=25.0 \%$ or less are eligible
- Mid-low poverty $=25.1 \%$ to $50.0 \%$ are eligible

Access to Physical Education and Enrollment

- PE enrollment is highest in schools where some students are eligible for the FRPL program

- Mid-high poverty $=50.1 \%$ to $75.0 \%$ are eligible
- High-poverty schools = more than $75.0 \%$ of the students are eligible for FRPL

Schools With vs. Without Phys Ed, by FRPL Category The height of the bars shows how many schools are in each category; the coloring shows the \% of those schools that do vs. do not offer any PE curricula; most schools do offer phys ed.


## Schools Without Phys Ed Programs and the Students Affected

Some schools do not offer any phys ed courses, meaning the students in those schools do not have the opportunity to participate in phys ed through their school.

116,910

Trend Over Time: Students Without Phys Ed Access


Students Without Phys Ed Access, By Grade Level

- Students in elementary schools are the most likely to not have access to a PE program.


Proportion of All Schools vs. No PE Schools by School-Majority Race/Ethnicity

\% of Students Without PE Access
10.9\%

Students Without Phys Ed Access, By School Type The proportion of students without phys ed is significantly higher in charter schools than in traditional schools.

Charter


Traditional


More students without access to phys ed attend a traditional school than attend a charter school.

| Charter: 43\% Traditional: 57\% |
| :---: | :---: |

Students Without Phys Ed Access, By Locale
More students who attend schools located in rural, distant and rural, remote areas do not have access to any phys ed as compared to the suburbs and cities.


Supplemental Data: Number and Percent of Schools by Category and Year

| School-Majority Race/Ethnicity |  |  |  | Locale Type |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2019 | 2020 | 2021 |  | 2019 | 2020 | 2021 |
| Hispanic | $\begin{aligned} & 766 \\ & 39 \% \end{aligned}$ | $\begin{aligned} & 767 \\ & 38 \% \end{aligned}$ | $\begin{aligned} & 806 \\ & 39 \% \end{aligned}$ | City, Large | $\begin{aligned} & 767 \\ & 39 \% \end{aligned}$ | $\begin{aligned} & 861 \\ & 43 \% \end{aligned}$ | 879 $42 \%$ |
| Native American | $\begin{aligned} & 92 \\ & 5 \% \end{aligned}$ | $\begin{aligned} & 88 \\ & 4 \% \end{aligned}$ | $\begin{aligned} & 96 \\ & 5 \% \end{aligned}$ | City, Midsize | $\begin{aligned} & 87 \\ & 4 \% \end{aligned}$ | 48 $2 \%$ | 50 $2 \%$ |
| No Majority | $\begin{aligned} & 370 \\ & 19 \% \end{aligned}$ | $\begin{aligned} & 402 \\ & 20 \% \end{aligned}$ | $449$ | City, Small | 73 $4 \%$ | 111 $6 \%$ | 109 $5 \%$ |
| Other Other | $\begin{array}{r} 13 \\ 100 \% \end{array}$ | $\begin{array}{r} 10 \\ 100 \% \end{array}$ | $\begin{array}{r} 15 \\ 100 \% \end{array}$ | Suburb, Large | $\begin{aligned} & 412 \\ & 21 \% \end{aligned}$ | $\begin{aligned} & 351 \\ & 18 \% \end{aligned}$ | $\begin{aligned} & 375 \\ & 18 \% \end{aligned}$ |
| White | $\begin{aligned} & 744 \\ & 38 \% \end{aligned}$ | $\begin{array}{r} 736 \\ 37 \% \end{array}$ | $\begin{array}{r} 726 \\ 35 \% \end{array}$ | Suburb, Midsize | 52 $3 \%$ | 57 $3 \%$ | 63 $3 \%$ |
| Grand Total | $\begin{aligned} & 1,985 \\ & 100 \% \end{aligned}$ | $\begin{gathered} 2,003 \\ 100 \% \end{gathered}$ | $\begin{gathered} 2,092 \\ 100 \% \end{gathered}$ | Suburb, Small | $\begin{aligned} & 35 \\ & 2 \% \end{aligned}$ |  |  |
| Free or Reduced Price Lunch |  |  |  | Town, Distant | $\begin{aligned} & 58 \\ & 3 \% \end{aligned}$ | $\begin{aligned} & 56 \\ & 3 \% \end{aligned}$ | 60 $3 \%$ |
| 20192020202 |  |  |  | Town, Fringe | $\begin{aligned} & 43 \\ & 2 \% \end{aligned}$ | $\begin{aligned} & 43 \\ & 2 \% \end{aligned}$ | $\begin{gathered} 48 \\ 2 \% \end{gathered}$ |
| Low | $\begin{aligned} & 824 \\ & 42 \% \end{aligned}$ | $\begin{aligned} & 735 \\ & 37 \% \end{aligned}$ | $\begin{aligned} & 870 \\ & 42 \% \end{aligned}$ |  |  |  |  |
| Mid-Low | $\begin{aligned} & 318 \\ & 16 \% \end{aligned}$ | $\begin{aligned} & 384 \\ & 19 \% \end{aligned}$ | $\begin{array}{r} 501 \\ 24 \% \end{array}$ | Town, Remote | 146 $7 \%$ | 148 $7 \%$ | 164 $8 \%$ |
|  |  |  |  | Rural, Distant | $\begin{aligned} & 60 \\ & 3 \% \end{aligned}$ | $\begin{aligned} & 63 \\ & 3 \% \end{aligned}$ | 66 $3 \%$ |
| Mid-High | $\begin{aligned} & 354 \\ & 18 \% \end{aligned}$ | $\begin{aligned} & 460 \\ & 23 \% \end{aligned}$ | $\begin{aligned} & 411 \\ & 20 \% \end{aligned}$ | Rural, Fringe | 165 $8 \%$ | 176 $9 \%$ | 184 $9 \%$ |
| High | $\begin{aligned} & 489 \\ & 25 \% \end{aligned}$ | $\begin{gathered} 424 \\ 21 \% \end{gathered}$ | $\begin{aligned} & 310 \\ & 15 \% \end{aligned}$ | Rural, Remote | $\begin{aligned} & 87 \\ & 4 \% \end{aligned}$ | 89 $4 \%$ | 94 $4 \%$ |
| Grand Total | $\begin{gathered} 1,985 \\ 100 \% \end{gathered}$ | $\begin{gathered} 2,003 \\ 100 \% \end{gathered}$ | $\begin{gathered} 2,092 \\ 100 \% \end{gathered}$ | Grand Total | $\begin{gathered} 1,985 \\ 100 \% \end{gathered}$ | $\begin{gathered} 2,003 \\ 100 \% \end{gathered}$ | $\begin{gathered} 2,092 \\ 100 \% \end{gathered}$ |

## Laws, Policies, and Requirements Associated with Physical Education

When reviewing the data contained in both the summary report and through the dashboards, it is critical to understand what the state policies or expectations are regarding physical education. This will provide important context in which to view the data. The data used for the Arizona Physical Education Data Project was self-reported by Schools and LEAs and therefore, in some instances, it may not be a complete representation of student enrollment or access.

Arizona Administrative Codes for Physical Education (R7-2-301. Minimum Course of Study and Competency Goals for Students in the Common Schools)
A. Students shall demonstrate competency as defined by the State Board-adopted academic standards, at the grade levels specified (K-8), in the following required subject areas. District and charter school instructional programs shall include an ongoing assessment of student progress toward meeting the competency requirements. These shall include the successful completion of the academic standards in at least reading, writing, mathematics, science and social studies, as determined by district and/or statewide assessments.

1. English language arts;
2. Mathematics;
3. Science;
4. Social Studies; including civics;
5. The Arts, which may consist of two or more of the following: visual arts, dance, theatre, music or media arts;
6. Health/Physical Education

## Definitions

## School Locales

Locale codes are derived from a classification system originally developed by NCES in the 1980s to describe a school's location based on matching the physical address of the school against a geographic database maintained by the U.S. Census Bureau. This database is the Topographically Integrated and Geographically Encoded Referencing system, or TIGER.

| City, Large | Territory inside an urbanized area and inside a principal city with population of 250,000 or more |
| :---: | :---: |
| City, Midsize | Territory inside an urbanized area and inside a principal city with population less than 250,000 and greater than or equal to 100,000 |
| City, Small | Territory inside an urbanized area and inside a principal city with population less than 100,000 |
| Suburb, Large | Territory outside a principal city and inside an urbanized area with population of 250,000 or more |
| Suburb, Midsize | Territory outside a principal city and inside an urbanized area with population less than 250,000 and greater than or equal to 100,000 |
| Suburb, Small | Territory outside a principal city and inside an urbanized area with population less than 100,000 |
| Town, Distant | Territory inside an urban cluster that is more than 10 miles and less than or equal to 35 miles from an urbanized area |
| Town, Fringe | Territory inside an urban cluster that is less than or equal to 10 miles from an urbanized area |
| Town, Remote | Territory inside an urban cluster that is more than 35 miles from an urbanized area |
| Rural, Distant | Census-defined rural territory that is more than 5 miles but less than or equal to 25 miles from an urbanized area, as well as rural territory that is more than 2.5 miles but less than or equal to 10 miles from an urban cluster |
| Rural, Fringe | Census-defined rural territory that is less than or equal to 5 miles from an urbanized area, as well as rural territory that is less than or equal to 2.5 miles from an urban cluster |
| Rural, Remote | Census-defined rural territory that is more than 25 miles from an urbanized area and is also more than 10 miles from an urban cluster |

## Acknowledgements

The Physical Education Data Project would like to acknowledge and thank the following collaborators and contributors:

## Arizona Department of Education

Dustin Loehr, Director of Arts Education \& Title IV-A Yating Tang, PhD, Senior Research Scientist, Data Governance Keri Schoeff, Title IV-A Safe, Healthy, \& Active Students Specialist

## Physical Education Data Project

Robert B. Morrison, Project Director, Quadrant Research
Todd Shipley, Project Director, State Education Agency Directors of Arts Education Patrick McCormick, Chief Data Officer, Quadrant Research
Jen Shepherd, Visualization Design and Dashboard Integration, Quadrant Research Bill Grout, Data Warehouse Architect, Quadrant Research
Jeff Hasselberger, Editorial, Hasselberger Associates

## About the Data Project

The Physical Education Data Project is a project of Quadrant Research. The nationwide project coordinates with participating state departments of education to collect and report physical education data from State Longitudinal Data Systems (SLDS) and other state departments of education data sets on an annual basis.

National Support For the Physical Education Data Project
CMA Foundation
The Music Man Foundation
The William and Flora Hewlett Foundation
NAMM Foundation

The Music Man Foundation

