Chesapeake Bay Watershed 2024 Environmental Literacy Report

District of Columbia

Results from the ELIT Survey

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ELIT Background & Purpose

The Chesapeake Bay Environmental Literacy Indicator Tool (ELIT) was developed to monitor the capacity and progress of public school districts toward meeting the environmental literacy goal stated in the 2014 Chesapeake Bay Watershed Agreement. The goal was to:

> **Enable every student in the region to graduate with the knowledge and skills to act responsibly to protect and restore their local watershed.**

Three outcomes are stated in the agreement:

1. **Students**: Increase age-appropriate understanding of the watershed through meaningful watershed educational experiences (MWEEs) and rigorous, inquiry-based instruction, with a target of at least one MWEE in elementary, middle, and high school, depending on available resources.

2. **Sustainable Schools**: Increase the number of schools that reduce impact of buildings and grounds on their local watershed, environment, and human health through best practices, including student-led protection and restoration projects.

3. **Environmental Literacy Planning**: Develop a comprehensive and systemic approach to environmental literacy for all students, including policies, practices and voluntary metrics that support environmental literacy goals and outcomes.

The ELIT contributes to monitoring public school districts' progress toward these outcomes, collecting data about:

- School district preparedness to implement a comprehensive and systemic approach to environmental literacy education (Outcome 3);
- Student participation in MWEEs during the school year (Outcome 1);
- School district needs to support further improvements in environmental literacy education.

The ELIT tool used in 2024 was identical to the tool used in 2022.

The ELIT is administered biennially to all local education agencies (LEAs) in six jurisdictions in the Chesapeake Bay Watershed. **This report presents results from the one public school district in the District of Columbia.**

ELIT Data Collection

Data Collection Procedure

The ELIT is administered every two years as an electronic survey. It is intended to be completed by a single representative from the administration of each LEA (school district) who is able to report on district-wide activities. Additional data that are more reliably obtained through non-survey means (e.g., student enrollment) are identified from external sources and merged with the survey responses.

Past ELIT data were collected in 2015, 2017, 2019, and 2022. There was a one-year pause in data collection during the COVID-19 pandemic.

The Chesapeake Bay Program Education Workgroup organized data collection in 2024. Representatives from each state's education office led distribution of the survey to LEAs within their jurisdiction. ELIT data collection targets only public school districts. This report does not contain data about private or charter schools.

Data Collection Timing & Details

The 2024 ELIT asked districts to report on the status of activities for the 2023-24 school year. The ELIT survey opened for responses in August 2024 and remained open for responses through early December 2024.

This report presents results from the one public school district in the District of Columbia – DC Public Schools (or DCPS).

Additional Information about Data

The most significant challenge of the ELIT is obtaining a strong response rate from 680 LEAs across six jurisdictions. As more LEAs report their activities into this dataset, the Chesapeake Bay Program has a more accurate understanding of the status of environmental literacy regionwide.

To maximize ability to generalize about conditions across the region, ELIT results include all data submitted in the current year's survey, as well as available data from prior ELIT surveys, within two years. **In this report, results include all responses to the 2024 ELIT, as well as data from any LEA that responded in 2022, but did not update their records in 2024.** The underlying assumption is that changes for non-reporting districts are likely minor in just two years.

In some analyses, we constrain the dataset to only those districts who provided data in *both* recent years – 2024 and 2022 – to offer the most accurate reporting of patterns of change at the district level.

DCPS has consistently responded to the ELIT.

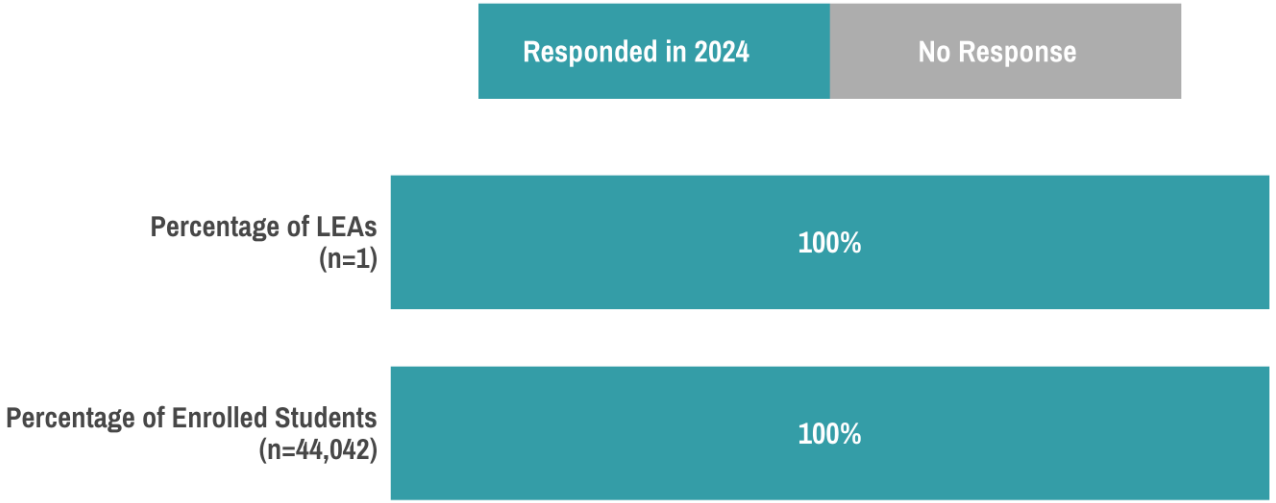
2024 ELIT Response Rate & Paired Data Availability

DC Public Schools, the only non-charter local education agency in the District, responded to the 2024 ELIT survey. The district has consistently responded to the ELIT each year, allowing examination of changes over time.

The public school system in Washington, DC, is comprised of approximately 67 local education agencies. DC Public Schools, the largest local agency, enrolls 53% of the total number of students enrolled in public schools and operates 115 school campuses. The additional 66 agencies are charter schools not represented in this report.

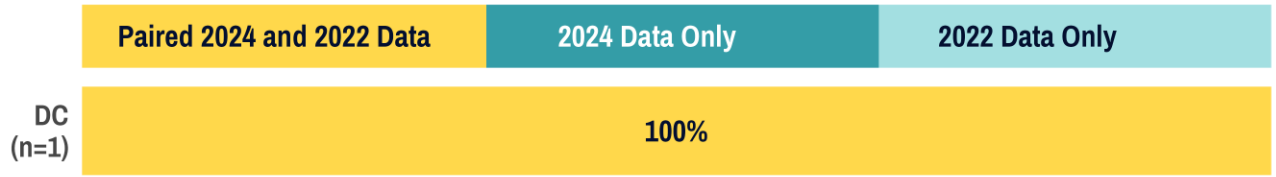
This report represents an accurate picture of environmental literacy efforts for students enrolled in DC Public Schools.

ELIT Response Rate: Percentage of Public LEA (DCPS) and of Enrolled Students from the District of Columbia in 2024



Repeat ELIT Respondents: Availability of Paired 2024 and 2022 Data

The dataset used for the 2024 analysis includes data from 1 LEA. The yellow segments show the proportion with paired data from both 2024 and 2022 ELIT collection. The remaining segments (teal) would indicate availability of only one year's data (either 2024 or carried-forward data from 2022).



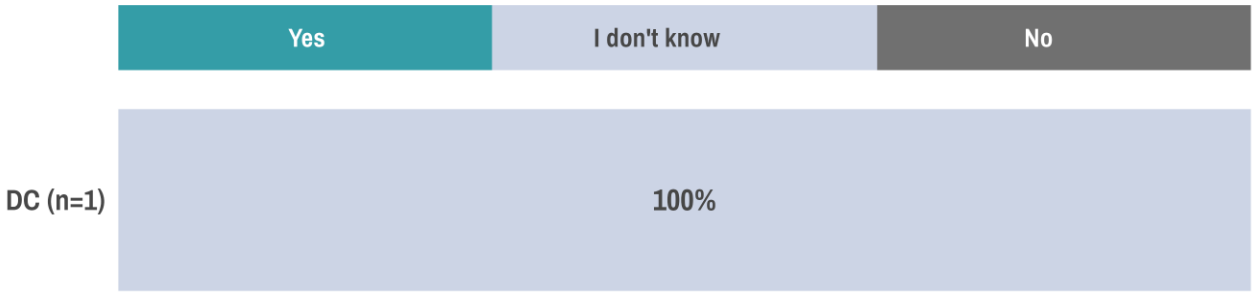
Staff Responsible for Sustainable Schools

In 2024, DC Public Schools were uncertain if they had staff responsible for coordinating sustainable school efforts.

The 2024 ELIT did not engage in a full inquiry of sustainable schools practices, to reduce the burden on districts where data may be gathered elsewhere. Only one question was asked, which was to gauge if the district had dedicated staff responsible for sustainable school efforts.

Sustainable Schools: Presence of Support Staff

Responses to the question: Does your LEA have a staff lead or team responsible for coordinating sustainable schools efforts?



RESULTS

Preparedness to Implement Environmental Education

Measurement Overview

To assess each LEA's current capacity to implement a comprehensive and systemic approach to environmental education (EE), respondents considered six elements (below) and indicated for each whether it was:

- Not in place
- Partially in place
- Fully in place

The response for each element was scored with a value of 0, 1, or 2, respectively. These values were summed to arrive at a total preparedness score for the district.

Six Elements Used to Determine LEA Preparedness for EE:

a) An established program leader for environmental education (providing effective, sustained, and system leadership).

b) An integrated program infusing environmental concepts into appropriate curricular areas.

c) Regular communication among staff responsible for environmental education curriculum and program implementation.

d) A support system in place that enables teachers and administrators to engage in high quality professional development in content knowledge, instructional materials, and methodology related to environmental education.

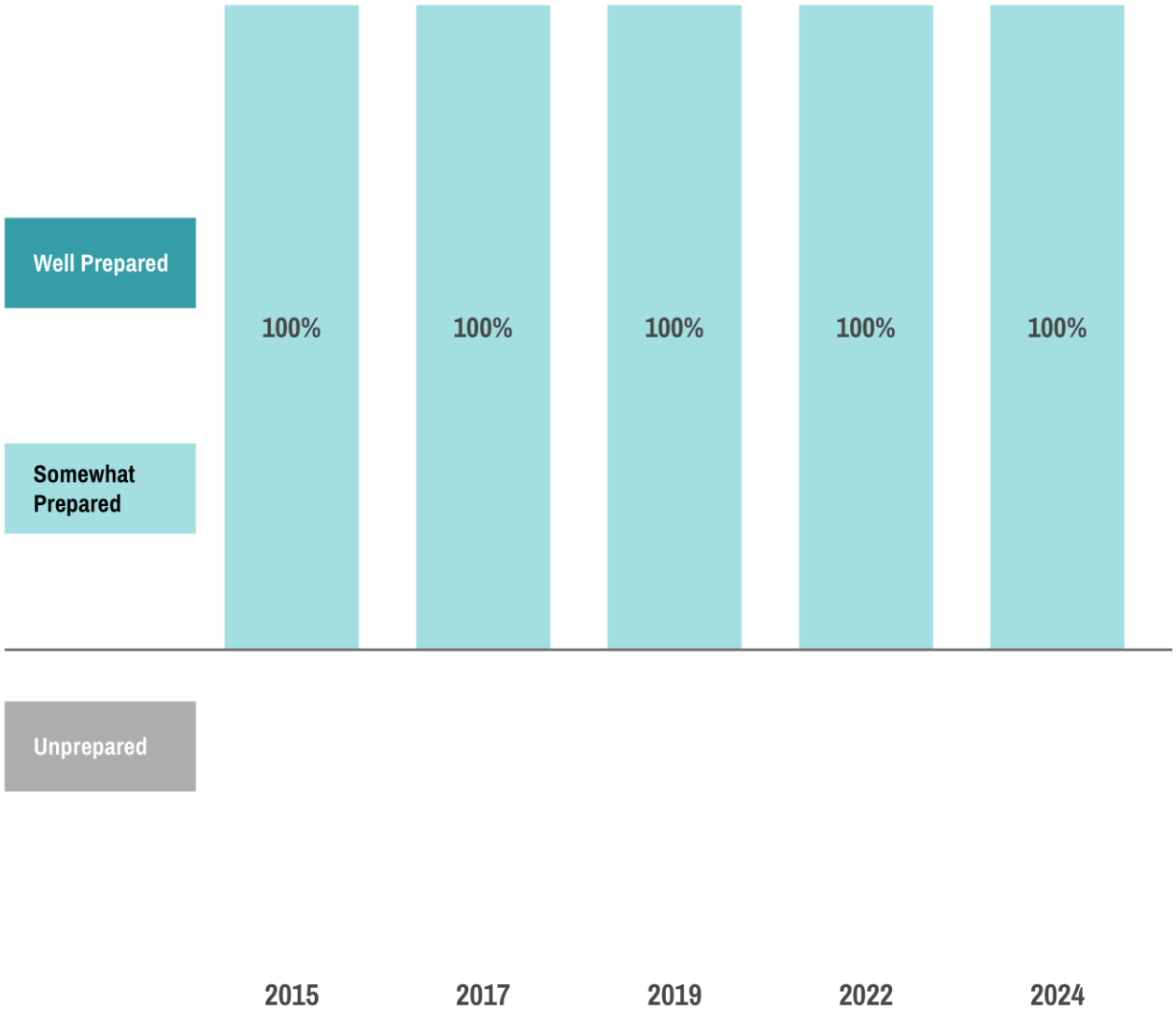
e) A plan to ensure opportunities for all students to engage in meaningful watershed educational experiences (MWEEs) at the elementary, middle and high school levels.

f) Established community partnerships for delivery of environmental education, including implementation of MWEEs.

LEA Preparedness: Trends Over Time

Changes in Environmental Literacy Preparedness Over Time (2015-2024)

DCPS preparedness levels in each of the ELIT years' reporting. Divergence illustrates the change in proportion of districts reporting any level of preparedness.



DC Public Schools consistently reported being somewhat prepared to implement high quality environmental education since 2017.

Responding LEAs rated how fully their district has implemented the six indicators of planning and infrastructure for high quality EE. Total preparedness scores, across all indicators, were grouped into three levels of preparedness:

- Well Prepared: scores from 9-12
- Somewhat Prepared: scores from 4-8
- Not Prepared: scores from 0-3

DC Public Schools had a preparedness score of 5 (out of 12) in 2024. This decreased from the previous years, each of which each scored 7.

Breaking Down the Elements of Readiness

DC Public Schools reported that all but one element were partially in place as of 2024. Established leadership was the only element not implemented in the district, which was unchanged from 2022.

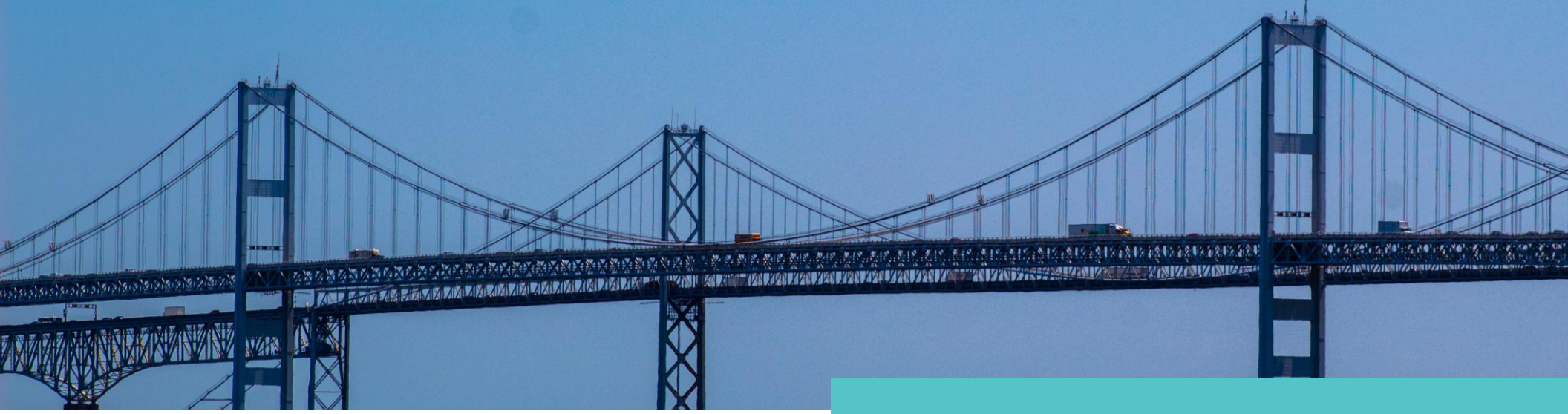
The biggest change from 2022 was that two elements were previously reported as being fully in place in 2022 – infusing EE into appropriate disciplines across the curriculum and having established community partnerships. Both of these elements were rated as being less in place than they were in 2022.

Degree of Readiness Among Elements of LEAs' Planning and Infrastructure
Selected levels for each element of readiness by DCPS in 2022 and 2024.

	2022	2024
EE infused into appropriate disciplinary areas in curriculum	Fully in Place	Partially in Place
Regular communication among staff responsible for EE	Partially in Place	Partially in Place
A support system for high quality EE PD	Partially in Place	Partially in Place
Plan to ensure MWEEs at all levels	Partially in Place	Partially in Place
Establish community partnerships for EE / MWEEs	Fully in Place	Partially in Place
Established leader for EE	Not in Place	Not in Place

RESULTS

Student Participation in Meaningful Watershed Educational Experiences (MWEEs)



RESULTS: STUDENT PARTICIPATION IN MWEES

Measurement

To assess the level of student participation in MWEEs within each LEA, respondents were asked to assess the presence of MWEEs within curricular offerings within each grade level (K-12), considering if they were system-wide or isolated to schools or classes. (See detail, right.) Respondents were given a reminder of the complete definition of a MWEE before the questions.

Although respondents reported at individual grade levels, analysis aggregated these data to report results by grade band (elementary, middle, or high school). The aggregation grouped each LEA into one of three levels within each grade band:

- At least one system-wide MWEE provided in the grade band;
- Some MWEE programming in the grade band, but not system-wide;
- No MWEE programming provided in the grade band.

For elementary (K-5) and middle school (6-8) grades, respondents indicated whether the district had:

- A system-wide MWEE experience for students in this grade
- Some schools or classes in this grade participate in MWEEs
- No evidence that students in this grade participate in a MWEE

For high school, MWEEs are more likely to correspond to a course than a grade level. Therefore, respondents reflected on courses at the high school level, indicated if the course was required or elective and whether the district had:

- A system-wide MWEE experience for students in this course
- Some schools or classes participate in MWEEs for this course
- No evidence that students in this course participate in a MWEE

The MWEE level was computed based only on courses that were indicated to be graduation requirements (i.e., needed for all students).

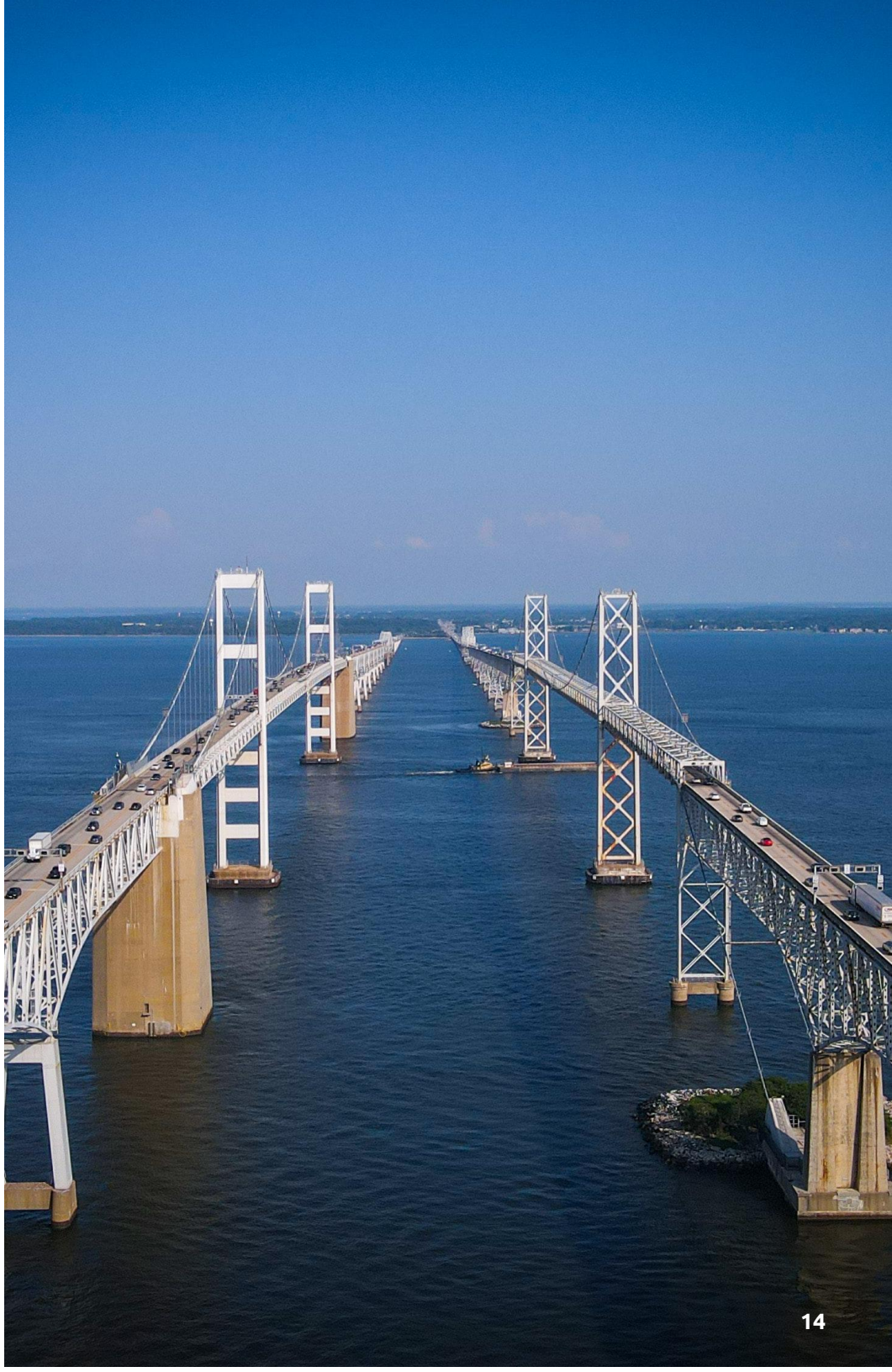
HS MWEE Measurement

The method for gathering data about high school MWEEs in 2024 was identical to the method used in 2022. However, the 2022 method was a shift from past years, as described below.

Early ELIT surveys received feedback that there may be inaccuracies in how high school courses were reported, particularly regarding clarifying whether MWEE reports were clearly limited to *required* courses (a critical element to be "system-wide"). For example, an AP course might be listed as a system-wide MWEE; but as AP course are electives, it indicated that early ELIT reports may have conflated requirements and electives.

In 2022, the question provided LEAs with an inventory of specific, common subjects, including: biology, chemistry, physics, Earth/ environmental science, history, government/civics, geography, algebra I, algebra II, geometry, language arts, literature, health/physical education, AP science, AP English, AP math, AP history, with space for write-in courses. LEA representatives reported the presence of MWEEs in each of these courses (system-wide, some schools, no evidence) – *regardless* of if it was required or elective. This allowed LEAs to focus on course topics.

A secondary question provided the same list of subjects and asked them to indicate which courses were graduation requirements. Analysis used this response to distinguish if each MWEE rating (above) pertained to a requirement (for the indicator) or an elective.



Student Participation in MWEEs

In DC Public Schools, there is a system-wide MWEE in place at the middle school level, and some MWEEs are available in both elementary and high school (but not system-wide).

On the next page, results from ELIT years 2017 through 2024 are compared. This shows that 2024 marked the first year of change in results.

In the past, the district has reported system-wide MWEEs in elementary school; in 2024, this was reported as only some MWEE use.

In the reverse direction, the middle school grades have historically only achieved some MWEE use. But in 2024, the district reported system-wide MWEEs at this level.

The high school level has remained unchanged.

MWEE Availability within DC Public Schools in 2024

Rate of availability across DC Public Schools. If the district reported there was a system-wide MWEE at any grade level(s), they were scored as having "System-Wide MWEEs"; "No MWEEs" indicates no MWEEs at any grade in the band.

MWEEs by Grade Band: Change Over Time

High School: Courses Using MWEEs

MWEE experiences within required high school courses were reported as occurring to some degree within in biology and health courses.

Like in 2019, the high school level MWEEs took place in required biology courses. The District reported that MWEEs are available in some sections of required biology classes, as well as in some required health or physical education courses.

In electives, the District reported that MWEEs are used within AP science courses and elective Earth or environmental science courses.

Specific high school courses in which DCPS indicated that MWEEs were used
Course subjects selected by DCPS as having MWEEs and whether the course was identified as a required or elective subject.

	Required or Elective	MWEE Use
Biology	Required Course	Some Schools / Classes
Health or Physical Education	Required Course	Some Schools / Classes
AP Science (any)	Elective	Some Schools / Classes
Earth or Environmental Science	Elective	Some Schools / Classes

RESULTS

Environmental Education Support Needs

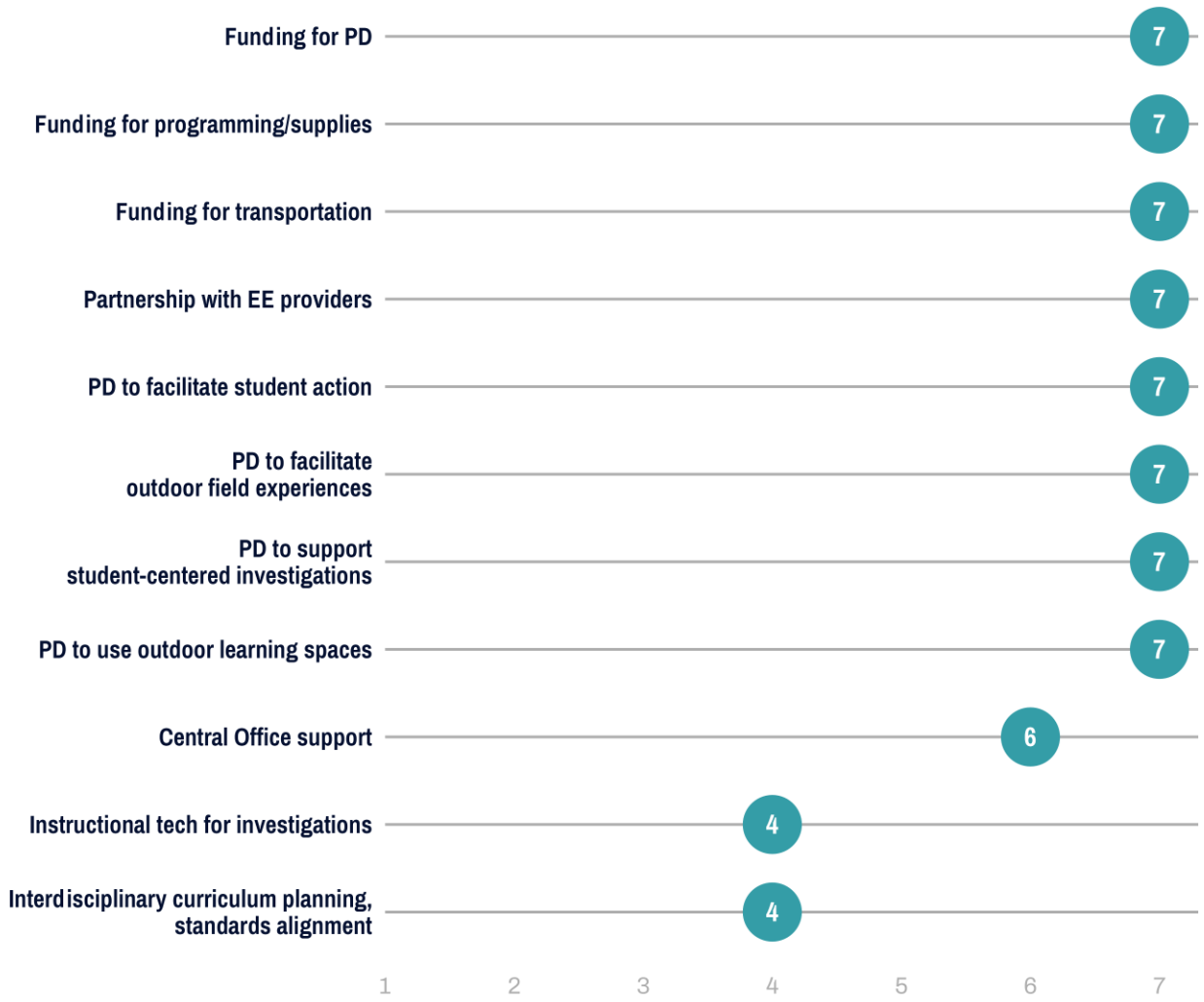
Greatest Needs for EE Support

DC Public Schools reported having the highest level of need in 8 of the 11 items on the list. These included every item that referenced need for funding, PD, and partnerships to support EE.

Instructional technology and interdisciplinary curriculum planning were rated the lowest needs. Support from the central office was rated as less of a need, but only one point below the highest ranked needs.

Rating of Need for Support in Each Area in DC Public Schools (n=1)

Responding LEA was asked to rate their level of need for support in each area from 1 to 7, with 7 being the greatest need.



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