
Assessment of the DCPS Technology Plan 2023–2026

October 6, 2023

A report by the Office of the District of Columbia Auditor



Audit Team

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Executive Summary



What ODCA Found

Of the 15 requirements listed in § 38-831.21(b) of the D.C. Code, ODCA found the District of Columbia Public Schools (DCPS) met 11 and did not meet four. ODCA determined a requirement was included in the Technology Plan if relevant language in the Plan was identified and provided context to support the D.C. Code requirement. A requirement was identified as not met if the Technology Plan needed additional information to support the stated requirement.

ODCA also found that:

During the process of developing a Technology Plan, DCPS:

- Included internal (DCPS) and external education technology experts, including but not limited to, the District's Chief Technology Officer.
- Prioritized stakeholder engagement, including DCPS parents and DCPS teachers.
- Was in compliance with all three outreach requirements under D.C. Code § 38-831.21(d).

Why ODCA Did This Audit

D.C. Code § 38-831.21 (f) requires ODCA to conduct a review of the DCPS Technology Plan to assess whether it meets the requirements outlined and to report its findings to the Council.

What ODCA Recommends

We recommend that DCPS include all elements as required by D.C. Code § 38-831.21 in the next yearly update to the Technology Plan and where necessary request that the D.C. Council provide clarification or amend the requirements in the D.C. Code to achieve the goals of the legislation.

Background

In 2017, The Office of the District of Columbia Auditor (ODCA) issued a report Budgeting and Staffing at Eight DCPS Elementary Schools¹ which included a recommendation that “DCPS should create and make public a multi-year technology needs plan to define and provide adequate technology to each school. The plan should include expected costs and planned funding sources.” Following the report, DCPS developed The Empowered Learners Initiative: 3-Year Technology Integration Roadmap (ELI)² to “close the digital divide and empower every learner through technology.”

On September 20, 2022, the Council of the District of Columbia (Council) passed the DCPS Digital Equity Act of 2022,³ which established § 38-831.21 of the D.C. Code and requires the Chancellor of DCPS to develop and maintain a Comprehensive Student Technology Equity Plan (Technology Plan or Plan) and include in it specific elements outlined in the law. DCPS was required to submit a draft Plan to the Council for review and comment no less than 2 months in advance of the final submission date⁴ which was March 31, 2023.⁵ The legislation also required that ODCA conduct a review of the Plan after its submission to the Council to assess whether it meets the requirements of this act and report its findings to the Council.⁶

According to the Council Committee of the Whole July 2022 report on the DCPS Digital Equity Act, “The Plan aims to create a vision, goals, and strategy to ensure that DCPS students have sufficient technology, digital literacy, robust IT support, and access to the internet to support in-school and assigned out-of-school learning. The bill also requires the Plan to create a system to manage and maintain the devices and software used by students and teachers across schools and grade levels.” The Committee of the Whole also noted that public comments received indicated there are problems with digital access, and it hopes the legislation “...will finally focus DCPS to deal with the shortcomings and inequities of digital access in its system.”

DCPS transmitted the draft Technology Plan to the Council on February 2, 2023,⁷ and transmitted the DCPS Technology Plan 2023-2026 to the Council on April 4, 2023.⁸ This report is ODCA’s assessment of whether the requirements identified in the Act are included in the Technology Plan.

1 Office of the DC Auditor, Budgeting and Staffing at Eight DCPS Elementary Schools, October 30, 2017 <https://dcauditor.org/report/budgeting-and-staffing-at-eight-dcps-elementary-schools/>.

2 <https://dcps.dc.gov/page/empowered-learners-initiative-eli-0>, published March 2020.

3 Bill 24-77, the DCPS Digital Equity Act of 2022, Law 24-191, effective December 13, 2022, 69 DCR 015292.

4 D.C. Code § 38-831.21(e).

5 D.C. Code § 38-831.21(c).

6 D.C. Code § 38-831.21(f).

7 RC 25-14, <https://lims.dccouncil.gov/Legislation/RC25-0014>.

8 RC 25-38, <https://lims.dccouncil.gov/Legislation/RC25-0038>.

Objective, Scope, and Methodology

Objective

The objective was to assess whether the Technology Equity Plan meets the requirements of The DCPS Digital Equity Act of 2022 (D.C. Code § 38-831.21).

Scope

The scope included the process used by DCPS to develop the DCPS Technology Plan 2023-2026 that was submitted to the D.C. Council on April 4, 2023.

Methodology

ODCA's methodology for evaluating whether each requirement was met involved reviewing D.C. Code section 38-831.21 (b), reviewing the Plan as submitted to the Council, identifying relevant language or section(s) of the Technology Plan that speak to the requirement; conducting interviews with DCPS staff and members of the DCPS Technical Advisory Committee which included school staff, parents and OCTO staff, and obtaining supporting documentation, if needed, to support the conclusion of whether each requirement was met.

We also assessed whether the requirements of D.C. Code § 38-831.21 (d) were met by conducting interviews and reviewing supporting documentation provided by DCPS to determine if during the development of the Technology Plan the Chancellor included both internal (DCPS) and external education technology experts (including the District's Chief Technology Officer); prioritized stakeholder engagement including DCPS parents and DCPS teachers; and incorporated feedback from an advisory committee comprised of internal (DCPS) and external individuals.

This report was drafted, reviewed, and approved in accordance with standards outlined in ODCA's Audit Policies and Procedures.

Results

Of the 15 requirements listed in § 38-831.21 (b)⁹ of the D.C. Code, ODCA found DCPS met 11 and did not meet four (noting that some requirements had multiple parts and ODCA examined each part separately). Below is ODCA's evaluation of the information DCPS included in the Technology Plan. ODCA determined a requirement was met if relevant language in the Technology Plan was identified and provided context to support the D.C. Code requirement. This review does not evaluate the execution of the Plan and we did not examine or evaluate the format of or the order of information presented in the Plan. A discussion of what ODCA found follows. See Appendix A for a complete list of requirements and the status reported by ODCA.

The DCPS Technology Plan included 11 of the 15 DCPS Digital Equity Act of 2022 requirements.

ODCA determined that the requirements were met if relevant language or sections of the Technology Plan were identified and provided context to support the D.C. Code requirement. Follow-up interviews with DCPS staff who focused on the development of the Plan were also conducted. A list of requirements that were met is shown in Figure 1 below.

Figure 1: Requirements Met in the Technology Plan

Requirement	Status
(1) Articulate DCPS's vision and goals for ensuring that all DCPS students have:	
(1)(A) Digital literacy skills and access to technology in and outside the classroom sufficient to support their learning needs;	Met
(1)(B) Access to robust IT support;	Met
(3) Include an assessment of the technology needs of each DCPS school, including for each school:	
(3)(B) Dedicated resources for technology device and asset management;	Met
(3)(C) Quality of the Wi-Fi; and	Met
(3)(D) Technology training opportunities for school staff;	Met
(4) Include a schedule and framework for refreshing the technology for all schools in order to maintain current (in-lifecycle) devices for teachers and students, classroom technology, and reliable school building internet infrastructure;	Met

⁹ D.C. Code § 38-831.21(b) has ten numbered subsections two of which contain multiple requirements.

Requirement	Status
(5) Design an asset management system to maintain, support, and track the devices and software for students and teachers at each school level (elementary, middle, and high school), including staffing, funding, and training;	Met
(6) Include an educational technology professional development plan to provide all teachers with baseline technology skills for instruction;	Met
(8) Provide multi-year detailed cost estimates for every component of the Plan, including hardware and software acquisition costs, the costs of service provision, and capital expenses;	Met
(9) Include comprehensive privacy impact assessments of any third-party learning applications that schools use or any planned expansion of technology; and	Met
(10) Include a section or chapter that explains how the Plan will meet additional technology needs for schools with a large number of at-risk students and schools located in areas with weak internet access.	Met

Source: ODCA analysis

For four of the 15 requirements, additional information is needed in the Technology Plan to satisfy the requirements of the Act.

ODCA determined that requirements were not met if the Technology Plan needed additional information to support the stated requirements of D.C. Code § 38-831.21 (b) (1) through (10). A discussion of each requirement that was not met is included below.

We were unable to identify details of sufficient internet access to support assigned out of school learning.

D.C. Code § 38-831.21(b)(1) required DCPS to (1) Articulate DCPS’s vision and goals for ensuring that all DCPS students have: (1)(C) Sufficient internet access to support in-school and assigned out-of-school learning. We were unable to identify details of sufficient internet access to support assigned out-of-school-learning except for DCPS mentioning providing supplementary resources to staff, families, and students in the Strategic Plan Alignment section of the Plan.

ODCA’s review of D.C. Code and discussions with DCPS staff disclosed the need to clearly define what was meant by out of school learning particularly given the COVID-19 public health emergency and lengthy period of remote learning.

ODCA was unable to confirm whether DCPS defined the strategies to achieve the vision and goals required in (b)(1) because (b)(1)(C) was not met.

D.C. Code § 38-831.21 (b)(2) required DCPS to “Articulate and clearly define the strategies to achieve the vision and goals identified pursuant to paragraph (1) of this subsection during each of the 3 years following the date of submission of the Plan to the Council”. Paragraph (b)(1) contains three requirements, (A), (B), and (C). DCPS included information in the Plan for (A) and (B) but as noted in the previous finding, the Plan does not provide sufficient information for (C) in order to satisfy the requirements of (b)(2).

DCPS did not identify or include estimated number of teacher devices or student devices per school or provide any information on condition.

The D.C. Code § 38-831.21 (b)(3) set forth the requirement for DCPS to include an assessment of the technology needs of each DCPS school, including for each school (3)(A) “The number and condition of student and teacher devices and classroom technology”. The Plan provides a snapshot of total number of student and teacher devices in DCPS inventory and a total number of devices per school at the beginning of school year 2022-2023 but does not identify or include estimated numbers of teacher devices or student devices per school or any information on the condition of the equipment. Also, the Plan does not provide information on the number or condition of classroom technology per school.

The Plan does not delineate the responsibilities of the Department of General Services (DGS) or DC-Net.

D.C. Code § 38-831.21 (b)(7) required DCPS to “Delineate the responsibilities of DCPS, the Office of the Chief Technology Officer, DC-Net, and the Department of General Services in the provision of technology support and services with clear lines of reporting, metrics, and performance standards...”. While OCTO is identified and there is mention of coordinating with DGS, the Technology Plan does not specifically mention DGS or DC-NET responsibilities. DCPS stated DGS does not play a significant role in the day-to-day teaching and learning, and that DC- Net was not directly mentioned separately because it is a service provided by OCTO.

Recommendation

1. DCPS should include all elements as required by § 38-831.21 in their next yearly update to the Technology Plan and where necessary request the D.C. Council provide clarification or amend the requirements in the D.C. Code to achieve the goals of the legislation.

ODCA found that during the process of developing the Technology Plan, DCPS included internal (DCPS) and external education technology experts; prioritized stakeholder engagement of DCPS parents and teachers; and incorporated feedback from an advisory committee.

D.C. Code § 38-831.21(d) required DCPS to use a process that:

1. (1) Included both internal (DCPS) and external education technology experts; including, but not limited to the District’s Chief Technology Officer.
2. (2) Prioritized stakeholder engagement, including DCPS parents and DCPS teachers.
3. (3) Incorporated feedback from an advisory committee comprised of internal (DCPS) and external individuals.

ODCA found DCPS met all three requirements during the process of developing the Technology Plan. DCPS established the Technology Advisory Committee (TAC), which met monthly. TAC participants provided feedback on draft versions, which DCPS summarized internally and tracked their actions in response. Actions included adding additional information to the Plan or evaluating comments further for inclusion in a future version of the Plan. DCPS shared their decision making with the TAC.

Auditor Observations

During the assessment we made the following observations based on reviewing the Technology Plan and interviews conducted with DCPS staff, members of the TAC, and staff at the D.C. Council.

- DCPS staff stated that they did not receive any feedback from the D.C. Council on the draft Plan that was submitted in February 2023 or on the final version transmitted in early April. D.C. Code requirement § 38-831.21(e) required the draft Plan to be submitted to the D.C. Council for “review and comment.”
- While the draft Plan and the Plan submitted for the final submission are both in the D.C. Council’s Legislative Information Management System (LIMS), opportunities for public awareness of the plan and information on how the public can provide feedback are limited. Consideration of publishing the Plan in the D.C. Register, or sharing the plan through either D.C. Council or DCPS public distribution lists could increase awareness and productive feedback for consideration.
- The DCPS Technology Plan is not currently posted on the DCPS website. Interviews with DCPS staff indicated their intention was to get feedback from the D.C. Council on the Technology Plan before posting it on their website.
- The Fiscal Impact Statement¹⁰ (FIS) for Bill 24-77 certified funding was sufficient for two staff (a project manager and an outreach specialist) and also a contracted content expert to assist DCPS. For our review, ODCA learned that DCPS did hire the two staff, but did not contract a paid content expert to support the drafting of the Technology Plan to date, due to the timing of funding availability. According to DCPS, they are “...exploring ways in which contracted content expertise will best be utilized as we move forward with implementation and refinement of the plan.” The D.C. Council included funding in the Fiscal Year 2023 budget and then passed the corresponding legislation.
- The Technology Plan also included additional information that was not directly linked to a D.C. Code requirement. DCPS included a section on Enhanced IT Security and Desktop Engineering which includes information about device and network security, plans for content filtering, and account and file retention policies. Additionally, DCPS included information on plans for a complete buildout of Canvas, their learning management system. Topics discussed in both of these areas did not directly link to a requirement in the D.C. Code, but nonetheless support the vision, goals, and strategy of the DCPS Technology Plan.

¹⁰ Issued July 15, 2022, on the engrossed original of Bill 24-77 by the Office of the Chief Financial Officer.

Conclusion

DCPS has created a Technology Plan that responded to a majority of the requirements outlined in the DCPS Digital Equity Act of 2022. At the same time, opportunities exist for expanding upon the information provided, using the yearly update requirements to adjust, and continue to enhance the Plan or seek clarity on the underlying intent of particular requirements.

DCPS has demonstrated its commitment to continuing to work with the Technology Advisory Committee that was established under the law and to work with other District of Columbia government agencies including OCTO and DGS to achieve the vision, goals, and strategies outlined in their Technology Plan.

ODCA would like to thank the team at DCPS, particularly the team in the Office of Data and Technology, for being very responsive to our requests for information and documentation. ODCA would also like to thank the members of the DCPS Technical Advisory Committee, including DCPS parents and school staff, and staff at the Office of the Chief Technology Officer and DC-Net, who shared their thoughts and experiences with us.

Summary of Report Recommendations

Our review identified one recommendation that could improve DCPS's Technology Plan and ensure compliance with the law:

1. DCPS should include all elements as required by § 38-831.21 in their next yearly update to the Technology Plan and where necessary request the D.C. Council provide clarification or amend the requirements in the D.C. Code to achieve the goals of the legislation.

Appendix A

Appendix A: Requirements of D.C. Code § 38-831.21 (b)(1) through (10)

D.C. Code Section § 38-831.21(b) Comprehensive Student Technology Equity Plan	Status	Notes
(1) Articulate DCPS's vision and goals for ensuring that all DCPS students have:		
(1)(A) Digital literacy skills and access to technology in and outside the classroom sufficient to support their learning needs;	Met	
(1)(B) Access to robust IT support; and	Met	
(1)(C) Sufficient internet access to support in-school and assigned out-of-school learning.	Not met	We were unable to identify details of sufficient internet access to support assigned out of school learning except for DCPS mentioning providing supplementary resources to staff, families, and students in the Strategic Plan alignment section of the Plan.
(2) Articulate and clearly define the strategies to achieve the vision and goals identified pursuant to paragraph (1) of this subsection during each of the 3 years following the date of submission of the Plan to the Council;	Not met	DCPS included information in the Plan for (A) and (B), however as noted in the previous finding, the Plan does not provide sufficient information for (C) in order to satisfy the requirements of (b)(2).
(3) Include an assessment of the technology needs of each DCPS school, including for each school:		
(3)(A) The number and condition of student and teacher devices and classroom technology;	Not met	The Plan provides a snapshot of total number of student and teacher devices in DCPS inventory and a total number of devices per school, but does not identify or include estimated number of teacher devices or student devices per school or any information on condition. Also, the Plan does not provide a number of classroom technology per school.
(3)(B) Dedicated resources for technology device and asset management;	Met	
(3)(C) Quality of the Wi-Fi; and	Met	
(3)(D) Technology training opportunities for school staff;	Met	

D.C. Code Section § 38-831.21(b) Comprehensive Student Technology Equity Plan	Status	Notes
(4) Include a schedule and framework for refreshing the technology for all schools in order to maintain current (in-lifecycle) devices for teachers and students, classroom technology, and reliable school building internet infrastructure;	Met	
(5) Design an asset management system to maintain, support, and track the devices and software for students and teachers at each school level (elementary, middle, and high school) including staffing, funding and training;	Met	
(6) Include an educational technology professional development plan to provide all teachers with baseline technology skills for instruction;	Met	
(7) Delineate the responsibilities of DCPS, the Office of the Chief Technology Officer, DC Net, and the Department of General Services in the provision of technology support and services with clear lines of reporting, metrics, and performance standards.	Not met	While OCTO is identified, and there is mention of coordinating with DGS, the Technology Plan does not specifically mention DGS or DC NET responsibilities. DCPS stated DGS does not play a significant role in the day-to-day teaching and learning aspects, and that DC Net was not directly mentioned because it is a part of OCTO.
(8) Provide multi-year detailed cost estimates for every component of the Plan, including hardware and software acquisition costs, the costs of service provision, and capital expenses;	Met	
(9) Include comprehensive privacy impact assessments of any third-party learning applications that schools use or any planned expansion of technology; and	Met	
(10) Include a section or chapter that explains how the Plan will meet additional technology needs for schools with a large number of at-risk students and schools located in areas with weak internet access.	Met	

Agency Comments

On September 26, 2023 we sent a draft copy of this report to DCPS for review and comment. DCPS responded with comments on October 3, 2023.

Agency comments are included here in their entirety.

VIA EMAIL

October 3, 2023

Kathleen Patterson
District of Columbia Auditor
717 14th Street, N.W. Suite 900
Washington, DC 20005

Dear Ms. Patterson:

This letter responds to your September 26, 2023, draft audit report entitled, “*Assessment of the DCPS Technology Plan 2023-2026*”. Thank you for conducting this audit and allowing us the opportunity to respond and provide feedback. Our response to the recommendation contained in the draft audit report and requirements of D.C. Code §38-831.21 (b) (1) through (10) are detailed below.

Recommendation

DCPS should include all elements as required by § 38-831.21 in their next yearly update to the Technology Plan and where necessary request that the D.C. Council provide clarification or amend the requirements in the D.C. Code to achieve the goals of the legislation.

DCPS Response:

DCPS agrees in part with the recommendation. DCPS will adjust the Technology Plan in accordance with the audit finding and submit adjustments to the D.C. Council by January 31, 2024, in alignment with District requirements.

The table below provides DCPS’ position to the status of requirements not met for D.C. Code Section § 38-831.21(b) (1) through (10) as cited in the audit report.

D.C. Code Section § 38-831.21(b) Comprehensive Student Technology Equity Plan	D.C. Auditor Notes	DCPS Response
(1) Articulate DCPS’s vision and goals for ensuring that all DCPS students have: (1)(C) Sufficient internet access to support in-school and assigned out-of-school learning.	We were unable to identify details of sufficient internet access to support assigned out of school learning except for DCPS mentioning providing supplementary resources to staff, families, and students in the Strategic Plan alignment section of the Plan.	DCPS partially agrees with this finding. DCPS defines assigned out-of-school learning as 100% virtual instruction. Starting in 2020, DCPS fully funded and activated mobile internet connectivity on all student devices during the COVID-19 pandemic which necessitated a transition to virtual learning. Following the termination of the public health emergency, DCPS has remained committed to supporting mobile connectivity for students authorized for 100% virtual learning. DCPS will clarify its policy for providing internet connectivity to students authorized for 100% virtual learning in the next submission of the Technology Plan.

(2) Articulate and clearly define the strategies to achieve the vision and goals identified pursuant to paragraph (1) of this subsection during each of the 3 years following the date of submission of the Plan to the Council;	DCPS included information in the Plan for(A) and (B), however as noted in the previous finding, the Plan does not provide sufficient information for (C) in order to satisfy the requirements of (b)(2).	See previous response.
(3) Include an assessment of the technology needs of each DCPS school, including for each school: (3)(A) The number and condition of student and teacher devices and classroom technology;	The Plan provides a snapshot of total number of student and teacher devices in DCPS inventory and a total number of devices per school but does not identify or include estimated number of teacher devices or student devices per school or any information on condition. Also, the Plan does not provide a number of classroom technology per school.	DCPS agrees with this finding and will include further details on number and condition of devices per school in the next submission of the Technology Plan.
(7) Delineate the responsibilities of DCPS, the Office of the Chief Technology Officer, DC Net, and the Department of General Services in the provision of technology support and services with clear lines of reporting, metrics, and performance standards.	While OCTO is identified, and there is mention of coordinating with DGS, the Technology Plan does not specifically mention DGS or DC NET responsibilities. DCPS stated DGS does not play a significant role in the day-to-day teaching and learning aspects, and that DC Net was not directly mentioned because it is a part of OCTO.	DCPS partially agrees with this finding. While the Department of General Services is not directly involved in the daily provision of technology support and services for DCPS, DCPS will clarify the scope of DGS in the next submission of the Technology Plan. While DC-Net is mentioned as a part of OCTO responsibilities on page 28 in the Technology Plan, DCPS will work to further clarify scope in the next submission.

Thank you again for conducting this audit and for the opportunity to respond to the draft report.

Sincerely,


box SIGN 15Q6WKVW-18L7X887

Lewis D. Ferebee, Ed.D.
Chancellor

ODCA Response to Agency Comments

ODCA appreciates the response from DCPS and hopes this assessment is helpful to them when considering future updates to the Technology Plan. ODCA also encourages the Council and DCPS to collaborate on evaluating any clarifications or definitions that would enhance the information provided in the Technology Plan, including any potential amendments to the legislation.

About ODCA

The mission of the Office of the District of Columbia Auditor (ODCA) is to support the Council of the District of Columbia by making sound recommendations that improve the effectiveness, efficiency, and accountability of the District government.

To fulfill our mission, we conduct performance audits, non-audit reviews, and revenue certifications. The residents of the District of Columbia are one of our primary customers and we strive to keep the residents of the District of Columbia informed on how their government is operating and how their tax money is being spent.

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