

2022-2025 Instructional Technology Plan - 2021

I. District LEA Information

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- 1. What is the name of the district administrator responsible for entering the Instructional Technology Plan data?**

Eric Stockmeyer

- 2. What is the title of the district administrator responsible for entering the Instructional Technology Plan data?**

Other

- 2B. If 'Other' was selected in Question 2 above, please identify the title.**

Project Administrator

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2022-2025 Instructional Technology Plan - 2021**II. Strategic Technology Planning**

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1. What is the overall district mission?

An equitable, inclusive, and high-quality education is every child's civil right; and our District, Families, Students, and Community Stakeholders must work together collectively speaking with ONE VOICE... focusing on ONE VISION... to achieve ONE MISSION which is to ensure that the brilliance of children is realized and celebrated every day in every BPS school.

BPS Will:

- Place a high premium on safety and wellness
- Continue to advance a curriculum that engages students in work that is meaningful and rigorous
- Implement purposeful recruitment, selection, orientation, and placement of a diverse workforce in our district and schools
- Advance opportunities for community and family engagement which will improve student learning and development

The district's mission will be accomplished through:

- Renewed Relationship with Our Families and Students
- Rigorous Early Elementary Education
- Strong Community Schools
- Innovative High Schools
- Extended Learning Excellence for All Our Students
- Services for Our Neediest Children and Families
- Revive Our Relationship with Our Teachers and Principals
- Fortified Connection with Our Community Partners

2. What is the vision statement that guides instructional technology use in the district?

A technology plan is not an end unto itself, but rather a means to achieve the school district's highest priorities, mission, vision, goals, and objectives. One key to successfully implementing the district's vision is to ensure that strong leadership is in place and that decisions are made based on their alignment to and support of the mission and vision. The vision of the district's Instructional Technology Plan is to work with the school community to build authentic experiences that enhance the curriculum, enrich learning, create global connections and promote digital literacy.

To execute this vision, Instructional Technology Coaches seek to foster an awareness of technology resources and facilitate the integration of technology in the classroom in ways that create interactive authentic learning experiences for our students. Our goal is to help develop learners who can locate, evaluate and synthesize information, using it to develop and support an idea or to create something new. It is our expectation that students will graduate as technology literate individuals possessing transferable skills that ensure that they are prepared to be active participants and lifelong learners in a global community.

3. Summarize the planning process used to develop answers to the Instructional Technology Plan questions and/or your district comprehensive Instructional Technology Plan. Please include the stakeholder groups participating and the outcomes of the instructional technology plan development meetings.

An Instructional Technology Plan is not a document that can be prepared in isolation by Instructional Technology leadership. Rather, monthly meetings were scheduled with Instructional Technology Coaches whose primary responsibility is to work directly with students and teachers on infusing instructional technology into the core curriculum. Based on keen insights from coaches, recurring meetings were scheduled with the Information Technology Department and vendor partners to assess and plan for an IT infrastructure that can support the learning needs of BPS students. While ongoing embedded professional development is key for a successful instructional technology program it can only be as effective as the network and data center infrastructure that supports it.

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Additional steps taken to support the the creation of a new Instructional Technology Plan included:			
	Task		Desired Outcome
	Interview Key Stakeholders regarding how IT security practices can be improved to create a hardened BPS infrastructure to safely support instructional needs.		Identify high profile ways to improve
	Conduct a focus group of Instructional Technolog Coaches on how Information Technology can best support integration of innovative technology into teaching and learning.		Obtain specific recommendations o into instruction.
ent	Conduct an ongoing engagement with the office of Curriculum, Assessment, and Instruction to glean how instructional technology can support upcoming academic initiatives.		Identify upcoming district-level initia Technology Department and draw f
	Site-visits to instructional locations during the school day are used to assess both IT infrastructure need and areas where additional instructional technology supports are needed		Identify instructional and information technology on teaching and learning
	Survey for feedback regarding what IT resources are paying the greatest dividends toward Home/District communication as well as what technology resources are available to support remote learning.		Identify ways to improve Home/Dist Parent Portal). Digital Equity Survey remote learning.
	The Digital Equity survey asked for feedback for on technology access at-home and in the classroom.		Gather information regarding techn engagement.

4. How does the district's Instructional Technology Plan build upon, continue the work of, and improve upon the previous three-year plan?

The district's Instructional Technology Plan continues the work of, and builds upon the previous three-year plan. Past iterations of the BPS Instructional Technology Plan focused on how to improve teaching and learning through instructional technology integration, with investment in a robust data center and network infrastructure to support the district's instructional and operational needs. Building off of this approach is an emphasis on incorporating remote learning as a long-term strategy.

BPS wants to ensure that it has a robust, secure, and reliable high speed network infrastructure to service its end-users. District resources were allocated to procure network switches and wireless access points to increase network capacity to support both instruction and daily operations including: 1 to 1 programs, readiness for Computer Based Testing (CBT), and videoconferencing. The upcoming Instructional Technology Plan focusses on implementation. At a granular level, the districts network investments include:

Support for High-Speed Broadband and Wireless Connectivity

New hub, core, and edge switches will be installed to replace and expand network connectivity between District buildings and with the internet to support instruction within the classroom as well as support the delivery of insruction of students in remote locations. With the support of E-Rate funds, the district already has single-mode fiber optic and multi-mode fiber optic cabling in place between wiring closets in buildings, and all data runs for wired and wireless access are cabled with 5e and 6e cable. Further, the District has just completed a procurement of AX Wireless Access Points to replace its legacy AC Wireless Access Points. These faster WAPS in all instructional areas are capable of providing connectivity for each student, teacher, and administrator to use a mobile computing device. Once implemented, a total of 3670 AC Wireless Access points will be capable of leveraging new, faster AX wireless technology. The District's new wireless infrastructure will be able to provide ubiquitous wireless coverage in buildings and sufficient wireless bandwidth capacity per access point in classrooms to allow for 1 to 1 device implementations.

Improved Delivery of Advanced STEM Software

The District is committed to support anywhere, anytime access to digital resources by students and teachers. Supports will be put in place for students, teachers, and administrators to get greater access to resources when they are not in school. In addition, as the district moves in the direction of mobile applications, the BPS Data Center will be expanded to ensure students and teachers have access to advanced STEM software from any device or location at any time. Furthermore, a collaborative model will engage educators across district schools to cooperatively analyze and align BPS curriculum with technology competencies overlap. Advanced STEM software licensing will be procured and implemented as part of the upcoming Instructional Technology Plan to further past work on virtualization.

5. How does the district Instructional Technology Plan reflect experiences during the COVID pandemic?

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In response to the COVID pandemic and consequential shift to remote learning, the district made emergency procurements of the following items:

- Student iPads for K-2 students
- Student iPads for grade 3-6 students
- Student laptop computers for grades 7-12
- Staff computing devices
- Mifi devices to allow at home internet connectivity to allow for continuity of instruction
- Keyboards and power cords

Building off of the first phase of the District's 1:1 program in 2016-2017, investments were needed to expand implementation to PreK-2 as well as replace outdated operating systems in response to the COVID pandemic and consequential shift to remote learning for all students. Hotspots were deployed during the COVID pandemic to support remote learning during the normal school day. The district's proposed Instructional Technology Plan builds off of the successes of the district's IT response to the COVID pandemic by further supporting 1 to 1 initiatives at all grade levels and continued use of hotspots to support after-school hours remote learning. During the COVID pandemic, ongoing household survey data was collected to identify emergency needs for both devices and internet connectivity. The district's Instructional Technology Plan continues this approach to ensure the IT needs of each student is met allowing for equitable access to digital resources not just inside the confines of the school day, but at all times in all locations.

6. Is your district currently fully 1:1?

Yes

7. Please describe the professional development plan for building the capacity of educators and administrators in the attainment of the instructional technology vision as stated in response to question 2.

Ongoing quality professional development is vital to fully leverage technology to enhance instruction successfully. Utilizing local funds, the District employs Instructional Technology Coaches whose purpose is to provide job embedded professional development to teachers on the use of mobile devices and other innovative technology that benefits all students. This ongoing support is vital to build capacity and create a sustainable system moving forward. Instructional Technology Coaches foster an awareness of technology resources and facilitate the integration of technology in the classroom in ways that create interactive authentic learning experiences for our students. Their goal is to help develop learners who can locate, evaluate, and synthesize information, using it to develop and support an idea or to create something new. During this COVID-19 crisis, Instructional Technology Coaches have shifted their method of delivery with great success by providing virtual presentation rooms where staff can receive instructional support on how to maximize the use of the District's technology resources for at-home student learning. This approach will continue as a professional development strategy in the upcoming Instructional Technology Plan.

For help with completing the plan, please visit 2022-2025 ITP Resources for Districts on our website, contact your district's RIC, or email edtech@nysed.gov.

2022-2025 Instructional Technology Plan - 2021**III. Goal Attainment**

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Overview: In this new section, the District is asked to outline the extent to which they have achieved, at the local level, goals put forth in the 2010 Statewide Learning Technology Plan.

1. Digital Content – The District uses standards-based, accessible digital content that supports all curricula for all learners.
The district has met this goal:
Significantly
2. Digital Use – The District's learners, teachers, and administrators are proficient in the use of technology for learning.
The district has met this goal:
Significantly
3. Digital Capacity and Access – The District's technology infrastructure supports learning and teaching in all of the District's environments.
The district has met this goal:
Significantly
4. Leadership – The District Instructional Technology Plan is in alignment with the Statewide Learning Technology Plan vision.
The district has met this goal:
Significantly
5. Accountability – District-level information is posted on the District website, is easy to access, and is easily understood. Information provided includes the results achieved by the District in their efforts to enable students to build knowledge, master skills, and grasp opportunities for a better life.
The district has met this goal:
Significantly

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IV. Action Plan - Goal 1

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1. Enter Goal 1 below:

Support for Student Learning with Innovative Instructional Technologies: Buffalo Public Schools will expand the use of mobile technologies to provide all students in grades PreK-12 access to their own device when in school for in-person instruction and at home to support remote learning. This will enable teachers to bring together knowledge and creativity in closely integrated learning experiences that maximize student engagement and learning in all areas of the curriculum.

2. Select the NYSED goal that best aligns with this district goal.

Develop a strategic vision and goals to support student achievement and engagement through the seamless integration of technology into teaching and learning

3. Target Student Population(s). Check all that apply.

- | | |
|--|--|
| ☒ All students | ☐ Economically disadvantaged students |
| ☐ Early Learning (Pre-K -3) | ☐ Students between the ages of 18-21 |
| ☐ Elementary/intermediate | ☐ Students who are targeted for dropout prevention or credit recovery programs |
| ☐ Middle School | ☐ Students who do not have adequate access to computing devices and/or high-speed internet at their places of residence |
| ☐ High School | ☐ Students who do not have internet access at their place of residence |
| ☐ Students with Disabilities | ☐ Students in foster care |
| ☐ English Language Learners | ☐ Students in juvenile justice system settings |
| ☐ Students who are migratory or seasonal farmworkers, or children of such workers | ☐ Vulnerable populations/vulnerable students |
| ☐ Students experiencing homelessness and/or housing insecurity | ☐ Other (please identify in Question 3a, below) |

4. Additional Target Population(s). Check all that apply.

- ☒ Teachers/Teacher Aides
- ☐ Administrators
- ☐ Parents/Guardians/Families/School Community
- ☐ Technology Integration Specialists
- ☐ Other

5. How will this instructional technology goal be measured and evaluated during and after implementation? Be sure to include any tools and/or metrics that are part of this evaluation process. Examples might be formative data, local, state, and/or national LEA benchmarks, metrics from instructional software, other technology evaluation programs, etc.

Implementation of his instructional technology goal will be measured through ongoing inventory checks to ensure that all students regardless of grade level have access to a mobile device.

6. List the action steps that correspond to Goal #1 from your answer to Question 1, above. All cells in the table must be populated. If you have less than four action steps for this goal, you must enter N/A into columns two, three,

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IV. Action Plan - Goal 1

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four, five, and seven, and choose June 30, 2021 in the date column for all unneeded rows in the table.

	Action Step	Action Step - Description	Responsible Stakeholder:	'Other' Responsible Stakeholder	Anticipated date of completion	Anticipated Cost
Action Step 1	Purchasing	Purchase mobile devices for 1 to 1 implementation at PreK-2 and replacement devices at grades 3-6.	Business Official	N/A	07/13/2022	9500000
Action Step 2	Implementation	Deploy and install laptop and tablet computers in classrooms	Director of Technology	N/A	06/30/2023	1500000
Action Step 3	Professional Development	Implement and integrate laptop and tablet computers into daily instruction: Develop instructional unit plan template for professional development, conduct professional development for staff, provide ongoing support for staff	Instructional Technology Coach	N/A	06/30/2025	5000000
Action Step 4	N/A	N/A	N/A	N/A	06/30/2021	N/A

7. This question is optional.

If more action steps are needed, continue to list the action steps that correspond to Goal #1 from your answer to Question 1, above.

	Action Step	Action Step - Description	Responsible Stakeholder:	"Other" Responsible Stakeholder	Anticipated date of completion	Anticipated Cost
Action Step 5	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)
Action Step 6	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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IV. Action Plan - Goal 1

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	Action Step	Action Step - Description	Responsible Stakeholder:	"Other" Responsible Stakeholder	Anticipated date of completion	Anticipated Cost
Action Step 7	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)
Action Step 8	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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IV. Action Plan - Goal 2

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1. Enter Goal 2 below:

Provide BPS Stakeholders with Best in Class Resources: Buffalo Public Schools will provide instructional resources that will positively impact all students, teachers, administrators, and support personnel as well as the community. These digital resources will include: educational software and apps, cloud-based resources, applications providing for parental involvement, and automated support for more efficient operations.

2. Select the NYSED goal that best aligns with this district goal.

Provide technology-enhanced, culturally- and linguistically-responsive learning environments to support improved teaching and learning

3. Target Student Population(s). Check all that apply.

- | | |
|--|--|
| ☒ All students | ☐ Economically disadvantaged students |
| ☐ Early Learning (Pre-K -3) | ☐ Students between the ages of 18-21 |
| ☐ Elementary/intermediate | ☐ Students who are targeted for dropout prevention or credit recovery programs |
| ☐ Middle School | ☐ Students who do not have adequate access to computing devices and/or high-speed internet at their places of residence |
| ☐ High School | ☐ Students who do not have internet access at their place of residence |
| ☐ Students with Disabilities | ☐ Students in foster care |
| ☐ English Language Learners | ☐ Students in juvenile justice system settings |
| ☐ Students who are migratory or seasonal farmworkers, or children of such workers | ☐ Vulnerable populations/vulnerable students |
| ☐ Students experiencing homelessness and/or housing insecurity | ☐ Other (please identify in Question 3a, below) |

4. Additional Target Population(s). Check all that apply.

- ☒ Teachers/Teacher Aides
- ☒ Administrators
- ☒ Parents/Guardians/Families/School Community
- ☒ Technology Integration Specialists
- ☐ Other

5. How will this instructional technology goal be measured and evaluated during and after implementation? Be sure to include any tools and/or metrics that are part of this evaluation process. Examples might be formative data, local, state, and/or national LEA benchmarks, metrics from instructional software, other technology evaluation programs, etc.

This instructional technology goal will use access to digital resources as a metric to determine successful implementation. Specifically, the district's learning management system (i.e. Schoology) provides robust user data. Additional authorized instructional resources such as Office 365, Lexia Power Up, Lexia Core 5, Nearpod, Castle Learning, Zearn, Moby Max, IXL, Think Central, I-Ready, and myON provide usage data to help determine if best in class instructional resources are being utilized.

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IV. Action Plan - Goal 2

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6. List the action steps that correspond to Goal #2 from your answer to Question 1, above. All cells in the table must be populated. If you have less than four action steps for this goal, you must enter N/A into columns two, three, four, five, and seven, and choose June 30, 2021 in the date column for all unneeded rows in the table.

	Action Step	Action Step - Description	Responsible Stakeholder:	"Other" Responsible Stakeholder	Anticipated date of completion	Anticipated Cost
Action Step 1	Implementation	Buffalo Public Schools will maintain a robust Content and Learning Management System:	Instructional Technology Coach	N/A	06/30/2023	500000
Action Step 2	Implementation	Buffalo Public Schools will build out and manage collaborative digital work spaces for all levels of District stakeholders.	Director of Technology	N/A	06/30/2023	500000
Action Step 3	Implementation	Buffalo Public Schools will create systems to provide all stakeholder groups anytime/anywhere access to resources such as Virtual Desktop home access, and increased use of cloud-based resources.	Director of Technology	N/A	06/30/2024	5000000
Action Step 4	Implementation	Software in support of teaching and learning to meet the needs of all students.	Instructional Technology Coach	N/A	06/30/2025	5000000

7. This question is optional.

If more action steps are needed, continue to list the action steps that correspond to Goal #2 from your answer to Question 1, above.

	Action Step	Action Step - Description	Responsible Stakeholder:	"Other" Responsible Stakeholder	Anticipated date of completion	Anticipated Cost
Action Step 5	(No Response)	(No Response)	(No Response)	(No Response)	(No Respo	(No Response)

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IV. Action Plan - Goal 2

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	Action Step	Action Step - Description	Responsible Stakeholder:	"Other" Responsible Stakeholder	Anticipated date of completion	Anticipated Cost
					nse)	
Action Step 6	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)
Action Step 7	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)
Action Step 8	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

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IV. Action Plan - Goal 3

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1. Enter Goal 3 below:

Assemble and Maintain an Optimal In-District and At-Home Infrastructure: In order to meet the changing digital needs of a complex educational institution, the Buffalo Public Schools will maintain an infrastructure that has the agility and capacity to support the increasing demands of educational programs both in-district for in-person instruction, and at-home to support remote learning. One to one initiatives, building control systems, security cameras, VOIP telecommunications, video conferencing, cloud software and a host of other applications that call for greater bandwidth in district. Access to digital resources after school hours relies on a computing device and associated broadband internet connection.

2. Select the NYSED goal that best aligns with this district goal.

Design, implement, and sustain a robust, secure network to ensure sufficient, reliable high-speed connectivity for learners, educators, and leaders

3. Target Student Population(s). Check all that apply.

- | | |
|--|--|
| ☒ All students | ☐ Economically disadvantaged students |
| ☐ Early Learning (Pre-K -3) | ☐ Students between the ages of 18-21 |
| ☐ Elementary/intermediate | ☐ Students who are targeted for dropout prevention or credit recovery programs |
| ☐ Middle School | ☐ Students who do not have adequate access to computing devices and/or high-speed internet at their places of residence |
| ☐ High School | ☐ Students who do not have internet access at their place of residence |
| ☐ Students with Disabilities | ☐ Students in foster care |
| ☐ English Language Learners | ☐ Students in juvenile justice system settings |
| ☐ Students who are migratory or seasonal farmworkers, or children of such workers | ☐ Vulnerable populations/vulnerable students |
| ☐ Students experiencing homelessness and/or housing insecurity | ☐ Other (please identify in Question 3a, below) |

4. Additional Target Population(s). Check all that apply.

- ☒ Teachers/Teacher Aides
- ☒ Administrators
- ☐ Parents/Guardians/Families/School Community
- ☐ Technology Integration Specialists
- ☐ Other

5. How will this instructional technology goal be measured and evaluated during and after implementation? Be sure to include any tools and/or metrics that are part of this evaluation process. Examples might be formative data, local, state, and/or national LEA benchmarks, metrics from instructional software, other technology evaluation programs, etc.

This instructional technology goal will be measured and evaluated through a combination of survey data and automated data reporting from manufacturer issued network monitoring systems. Deployment counts for mobile hotspots will augment survey data to identify whether the goal of optimizing at-home connectivity for students is being addressed.

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IV. Action Plan - Goal 3

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6. List the action steps that correspond to Goal #3 from your answer to Question 1, above. All cells in the table must be populated. If you have less than four action steps for this goal, you must enter N/A into columns two, three, four, five, and seven, and choose June 30, 2021 in the date column for all unneeded rows in the table.

	Action Step	Action Step - Description	Responsible Stakeholder:	"Other" Responsible Stakeholder	Anticipated date of completion	Anticipated Cost
Action Step 1	Infrastructure	Buffalo Public Schools will complete infrastructure improvements to the District Data Center. Implement new VDI use cases around STEM accessibility, departmental needs, and new school programs Implement new software data collection tools for refined monitoring and reporting of technology usage stats. Integrate 1:1 initiative Datacenter requirements into Datacenter infrastructure upgrade plan Integrate web and videoconferencing Datacenter requirements into Datacenter upgrade plan	Director of Technology	N/A	06/30/2023	1000000
Action Step 2	Infrastructure	Buffalo Public Schools will complete improvements in its District data network including wireless connectivity, network switches, and network cabling. Explore options for upgrading the wireless infrastructure in support of faster more reliable billing Develop an RFP for procuring	Director of Technology	N/A	06/30/2025	8500000

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IV. Action Plan - Goal 3

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	Action Step	Action Step - Description	Responsible Stakeholder:	"Other" Responsible Stakeholder	Anticipated date of completion	Anticipated Cost
		and deploying these tools. Deploy solution to schools.				
Action Step 3	Infrastructure	Buffalo Public Schools will have identified and begun installing a suitable replacement for its classroom audio and visual display systems. Explore options for classroom audio and visual display systems. Select a strategy that best meets the needs of BPS foreseeable instructional and operational requirements for life of instructional technology plan, Develop an RFP for procuring and deploying these tools. Deploy solution in schools	Director of Technology	N/A	06/30/2025	14000000
Action Step 4	Infrastructure	Buffalo Public Schools will have completely implemented a strategy for web and video conferencing in all schools. Explore options for video conferencing systems, including web-based and VoIP. Select a strategy that best meets the needs of BPS foreseeable instructional and operational requirements for 2017-2023. Develop an RFP for procuring and deploying these tools.	Director of Technology	N/A	06/30/2025	3000000

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IV. Action Plan - Goal 3

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	Action Step	Action Step - Description	Responsible Stakeholder:	"Other" Responsible Stakeholder	Anticipated date of completion	Anticipated Cost
		Vendor deployment of tools.				

7. This question is optional.

If more action steps are needed, continue to list the action steps that correspond to Goal #3 from your answer to Question 1, above.

	Action Step	Action Step - Description	Responsible Stakeholder:	"Other" Responsible Stakeholder	Anticipated date of completion	Anticipated Cost
Action Step 5	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)
Action Step 6	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)
Action Step 7	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)
Action Step 8	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)	(No Response)

8. Would you like to list a fourth goal?

No

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1.

Explain how the district use of instructional technology will serve as a part of a comprehensive and sustained effort to support rigorous academic standards attainment and performance improvement for students.

The District's Instructional Technology Plan seeks to be part of a comprehensive and sustained effort to support rigorous academic standards attainment and performance improvements for students. To that end, the focus must be on creating the conditions necessary for a coordinated approach to the planning and execution of the school district's vision to create challenging, academically rigorous programs for students at all schools. The District plans to use digital connectivity and technology to improve teaching and learning by embracing a strategy that aligns with the current way of accessing information and interacting in a global digital society. This will incorporate a 1:1 deployment at all grade levels. Further, new and innovative STEM technologies will be utilized to make learning both rigorous and relevant. Instructional Technology infrastructure improvements including new interactive whiteboard systems and enhanced use of video conferencing tools will create necessary supports to improve teaching and learning. Instances of lack of at-home internet connectivity will be identified and resolved to help close the digital divide and support equitable access to remote learning. Policies and procedures will be developed to support anywhere, anytime access by students and teachers. This will include enhanced security measures, liability issues and responsible use.
2.

Explain the strategies the district plans to implement to address the need to provide equitable learning “everywhere, all the time” (National Technology Plan). Include both short and long-term solutions, such as device access, internet access, human capacity, infrastructure, partnerships, etc.

BPS students and families are surveyed on an annual basis regarding at-home device and internet accessibility. Based on survey feedback and site feasibility, students are either issued a hotspot or offered a district funded cable broadband connection for equitable access to the internet outside of the confines of the normal school day. Federal funding including Emergency Connectivity Fund and ESSER funding s budgeted to fund at-home internet connectivity for students currently at a disadvantaged compared to their of-means peers. Non-grant restricted funding is being targetted to sustain efforts to provide equitable access to at-home internet connectivity. Originally a consequence of the COVID pandemic and consequential shift to remote learning, BPS will continue the practice of allowing and encouraging students to take district issued devices home rather than keep them in the confines of the school building. This practice, coupled with efforts to assure at home internet connectivity lays the infrastructure for everywhere, all the time learning. To further access to learning materials, Web based digital learning resources optimized form mobile use are procured in lieu of stand alone software. Access to learning resources is increased when accessible by a mobile device (i.e. smart phone).
3.

Students with disabilities may be served through the use of instructional technology as well as assistive technology devices and services to ensure access to and participation in the general education curriculum. Describe how instruction using technology is differentiated to support the individual learning needs of students with disabilities.

Differentiating instruction for those identified with special needs means looking at the unique needs of each student, not just treating students with a special education accommodations as a homogenous group. The Individuals with Disabilities Education Act (IDEA), first enacted by Congress in 1975, and subsequently updated in 2004, 2006, and 2011, provides guidelines for differentiating instruction for students with an Individual Education Plan (IEP). The goal is and must be to ensure access to and participation in the general curriculum. The following are instructional supports to be used to differentiate technology to support the individualized learning needs of students identified as having a disability:

Instructional Supports	Sample Classroom Activities

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V. NYSED Initiatives Alignment

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Differentiating Content/Topic • Survey students to determine their areas of interest to identify topics for content objectives. • Pretest students to determine what they already know.	Technology Resources: • Use free online survey tools, such as SurveyMonkey, that allow for conducting quick and easy interest inventories. • Select and implement software tutorials with built-in "intelligence" that moves students to more difficult questions/problems as mastery is demonstrated and review/remediation activities when lack of mastery occurs.
Differentiating Process/Activities • Support collaborative learning while tapping the individual strengths of each learner using group project based learning strategies.	Technology Resources: • Provide students with information displayed as graphic organizers, maps, diagrams, graphs, and/or charts when presenting new content. • Create learning groups to collectively populate an online shared learning space, such as a wiki or shared Google document, allowing each student to focus on one area of interest or expertise
Differentiating Product • Provide students with a variety of options to demonstrate their knowledge of learning outcomes.	Technology Resources: • Allow students to use graphic organizers, maps, diagrams, graphs, and/or charts to demonstrate mastery of content. • Give students choices for culminating projects that include video, animation, music, artistic compositions, and other nonprint formats.

As identified in Individual Education Plans (IEPs) or individual learning plans, students may benefit from specific adaptive/assistive technology resources including, but not limited to audio enhancement, braille translators, communication boards, mobile computing device(s). The use of assistive technology specifically selected to meet the needs of individual students provides students with a pathway to participate in the general curriculum. Specific need for a student is identified through the Assistive Technology Coordinator in collaboration with the Special Education department. The Information Technology department confirms that each assistive technology resource is compatible with district technology resources so that students with disabilities can participate in the general curriculum. As the District works towards providing each student with a mobile computing device, special attention will be made to ensure that selected devices address the assistive technology needs of students' with a disability.

4. **How does the district utilize technology to address the needs of students with disabilities to ensure equitable access to instruction, materials, and assessments? Please check all that apply from the provided options and/or check 'Other' for options not available on the list.**

- ☒ Class lesson plans, materials, and assignment instructions are available to students and families for "anytime, anywhere" access (such as through a class website or learning management system).
- ☒ Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system or private online video channel).
- ☒ Technology is used to provide additional ways to access key content, such as providing videos or other visuals to supplement verbal or written instruction or content.
- ☒ Text to speech and/or speech to text software is utilized to provide increased support for comprehension of written or verbal

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language.

- ☒ Assistive technology is utilized.
- ☒ Technology is used to increase options for students to demonstrate knowledge and skill.
- ☒ Learning games and other interactive software are used to supplement instruction.
- ☐ Other (please identify in Question 4a, below)

5. **Please select the professional development that will be offered to teachers of students with disabilities that will enable them to differentiate learning and to increase student language and content learning through the use of technology. Please check all that apply from the provided options and/or check 'Other' for options not available on the list.**

- | | |
|---|--|
| ☐ Technology to support writers in the elementary classroom | ☒ Using technology as a way for students with disabilities to demonstrate their knowledge and skills |
| ☐ Technology to support writers in the secondary classroom | ☒ Multiple ways of assessing student learning through technology |
| ☐ Research, writing and technology in a digital world | ☒ Electronic communication and collaboration |
| ☒ Enhancing children's vocabulary development with technology | ☒ Promotion of model digital citizenship and responsibility |
| ☒ Reading strategies through technology for students with disabilities | ☒ Integrating technology and curriculum across core content areas |
| ☒ Choosing assistive technology for instructional purposes in the special education classroom | ☐ Helping students with disabilities to connect with the world |
| ☒ Using technology to differentiate instruction in the special education classroom | ☐ Other (please identify in Question 5a, below) |

6. **How does the district utilize technology to address the needs of English Language Learners to ensure equitable access to instruction, materials, and assessments? Please check all that apply from the provided options and/or check 'Other' for options not available on the list.**

- ☒ Class lesson plans, materials, and assignment instructions are available to students and families for "anytime, anywhere" access (such as through class website or learning management system).
- ☒ Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system or private online video channel).
- ☒ Technology is used to provide additional ways to access key content, such as providing videos or other visuals to supplement verbal or written instruction or content.
- ☒ Text to speech and/or speech to text software is utilized to provide increased support for comprehension of written or verbal language.
- ☒ Home language dictionaries and translation programs are provided through technology.
- ☐ Hardware that supports ELL student learning, such as home-language keyboards, translation pens, and/or interactive whiteboards, is utilized.
- ☐ Technology is used to increase options for students to demonstrate knowledge and skill, such as through the creation of a product or

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recording of an oral response.

☒ Learning games and other interactive software are used to supplement instruction.☐ Other (Please identify in Question 6a, below)

7. The district's Instructional Technology Plan addresses the needs of English Language Learners to ensure equitable access to instruction, materials, and assessments in multiple languages.

Yes

7B. If Yes, check one below:

In the 15 languages most commonly spoken in the district

7C. If 'Other' was selected in 7a, above, please explain here.

(No Response)

8. Please select the professional development that will be offered to teachers of English Language Learners that will enable them to differentiate learning and to increase their student language development and content learning with the use of technology. Please check all that apply from the provided options and/or check 'Other' for options not available on the list.

- | | |
|---|---|
| ☐ Technology to support writers in the elementary classroom | ☒ Multiple ways of assessing student learning through technology |
| ☐ Technology to support writers in the secondary classroom | ☒ Electronic communication and collaboration |
| ☒ Research, writing and technology in a digital world | ☒ Promotion of model digital citizenship and responsibility |
| ☒ Writing and technology workshop for teachers | ☒ Integrating technology and curriculum across core content areas |
| ☒ Enhancing children's vocabulary development with technology | ☐ Web authoring tools |
| ☒ Writer's workshop in the Bilingual classroom | ☒ Helping students connect with the world |
| ☒ Reading strategies for English Language Learners | ☐ The interactive whiteboard and language learning |
| ☒ Moving from learning letters to learning to read | ☒ Use camera for documentation |
| ☒ The power of technology to support language acquisition | ☐ Other (please identify in Question 8a, below) |
| ☒ Using technology to differentiate instruction in the language classroom | |

9. How does the district utilize technology to address the needs of students experiencing homelessness and/or housing insecurity to ensure equitable access to instruction and learning? Please check all that apply from the provided options and/or check 'Other' for options not available on the list.

- | | | |
|--|---|--|
| ☒ McKinney-Vento | ☒ Provide students a way to | ☐ Conduct regular educational |
|--|---|--|

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information is prominently located on individual school websites, as well as the district website.

- ☐ If available, online/enrollment is easily accessible, written in an understandable manner, available in multiple languages and accessible from a phone.
- ☐ Offer/phone/enrollment as an alternative to/in-person/enrollment.
- ☒ Set enrollment forms to automatically provide the McKinney-Vento liaison with contact information for students who indicate possible homelessness and/or housing insecurity
- ☒ Create a survey to obtain information/about students' living situations,/contact information,/access to internet and devices for/all/students in/the/enrollment processes/so the district can/communicate effectively and/evaluate their needs.
- ☐ Create simple videos in multiple languages, and with subtitles, that explain McKinney-Vento rights and services, identify the McKinney-Vento liaison, and clarify enrollment instructions.
- ☐ Create mobile enrollment stations by equipping buses with laptops, internet, and staff

protect and charge any devices they are provided/with/by the district.

- ☒ Replace devices that are damaged or stolen/as needed.
- ☐ Assess readiness-to-use technology/skills/before disseminating devices to students experiencing homelessness and/or housing insecurity.
- ☐ Create individualized plans for providing access to technology and internet on a case-by-case basis for any student experiencing homelessness and/or housing insecurity.
- ☒ Have/resources/available to/get/families and students step-by-step instructions on how to/set-up and/use/their districts Learning Management System or website.
- ☐ Class lesson plans, materials, and assignment instructions are available to students and families for
- ☐ Direct instruction is recorded and provided for students to access asynchronously (such as through a learning management system, DVD,/ or private online video channel)/
- ☐ Technology is used to provide additional ways to access key content, such as providing videos or other

check-ins with all students experiencing homelessness and/or housing insecurity and secure any help needed to keep up with course work.

- ☐ Adjust assignments/to be completed successfully using/only/the/resources students have available./
- ☐ Provide online mentoring programs.
- ☐ Create in-person and web-based tutoring/programs/spaces/and/or live chats/to assist with assignments and technology/issues.
- ☒ Offer a technology/support hotline during flexible hours.
- ☒ Make sure technology/support is offered in multiple languages.
- ☐ Other (Please identify in Question 9a, below)

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at peak enrollment periods. visuals to supplement verbal or
☒ written instruction or content.
 Provide/students/experiencing
 homelessness/and/or housing
 insecurity with tablets or
 laptops, mobile hotspots,
 prepaid cell phones, and other
 devices and connectivity.

10. How does the district use instructional technology to facilitate culturally responsive instruction and learning environments? Please check all that apply from the provided options and/or check 'Other' for options not available on the list.

- ☒ a) The district uses instructional technology to strengthen relationships and connections with families to assist in building a culturally responsive learning environment to enhance student learning.
- ☒ b) The district uses instructional technology to facilitate classroom projects that involve the community.
- ☒ c) The district uses instructional technology to develop and organize coherent and relevant units, lessons, and learning tasks that build upon students' cultural backgrounds and experiences.
- ☒ d) The district uses instructional technology to assist in varying teaching approaches to accommodate diverse learning styles and language proficiencies.
- ☒ e) The district uses instructional technology to enable students to communicate and collaborate with students in different schools or districts in New York State, the United States, or with different countries.
- ☒ f) The district uses instructional technology to facilitate collaborative classroom projects among heterogeneous student groups.
- ☐ g) Other (please identify in Question 10a, below)

For help with completing the plan, please visit 2022-2025 ITP Resources for Districts on our website, contact your district's RIC, or email edtech@nysed.gov.

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VI. Administrative Management Plan

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1. Staff Plan

Provide the Full-Time Equivalent (FTE) count, as of plan submission date, of all staff whose primary responsibility is delivering technology integration training and support and/or technical support.

	Full-time Equivalent (FTE)
District Technology Leadership	7.00
Instructional Support	34.00
Technical Support	23.00
Totals:	64.00

2. Investment Plan

Provide a three-year investment plan to support the vision and goals. All costs must be calculated for the entire three year-period, not annualized. For example, if a cost occurs annually, the estimated cost should include the annual cost times three.

Provide a three-year investment plan to support the vision in Section II and goals in Section IV.

A chart with drop-down choices is provided in order for NYSED to obtain consistent responses to this question.

All cells in the table must be populated. If you have less than four items in your plan, you must choose N/A for columns one, two, four, five and six, and put zero in column three (estimated cost) for each unneeded row.

	Anticipated Item or Service	"Other" Anticipated Item or Service	Estimated Cost	Is Cost One- time, Annual, or Both?	Potential Funding Source	"Other" Funding Source
1	N/A	N/A	26,500,000	Annual	☐ BOCES Co-Ser purchase ☒ District Operating Budget ☐ District Public Bond ☒ E-Rate ☒ Grants ☐ Instructional Materials Aid ☐ Instructional Resources Aid ☐ Smart Schools Bond Act ☐ Other (please identify in next column,	N/A

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	Anticipated Item or Service	"Other" Anticipated Item or Service	Estimated Cost	Is Cost One- time, Annual, or Both?	Potential Funding Source	"Other" Funding Source
					to the right) ☐ N/A	
2	End User Computing Devices	N/A	16,000,000	One-time	☐ BOCES Co- Ser purchase ☒ District Operating Budget ☐ District Public Bond ☐ E-Rate ☒ Grants ☐ Instructional Materials Aid ☐ Instructional Resources Aid ☐ Smart Schools Bond Act ☐ Other (please identify in next column, to the right) ☐ N/A	N/A
3	Other (please identify in next column, to the right)	STEM Software	11,000,000	Both	☐ BOCES Co- Ser purchase ☒ District Operating Budget ☐ District Public Bond ☐ E-Rate ☒ Grants ☐ Instructional Materials Aid ☐ Instructional	N/A

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	Anticipated Item or Service	"Other" Anticipated Item or Service	Estimated Cost	Is Cost One- time, Annual, or Both?	Potential Funding Source	"Other" Funding Source
					Resources Aid ☐ Smart Schools Bond Act ☐ Other (please identify in next column, to the right) ☐ N/A	
4	Other (please identify in next column, to the right)	Security Enhancements (Cameras, Access Controls, Intrusion, PA System Upgrades)	6,000,000	One-time	☐ BOCES Co- Ser purchase ☒ District Operating Budget ☐ District Public Bond ☐ E-Rate ☒ Grants ☐ Instructional Materials Aid ☐ Instructional Resources Aid ☒ Smart Schools Bond Act ☐ Other (please identify in next column, to the right) ☐ N/A	N/A
Totals:			59,500,000			

3. Has the school district provided for the loan of instructional computer hardware to students legally attending nonpublic schools pursuant to Education Law, section 754?

Yes

4. Districts are required to post either the responses to this survey or a more comprehensive technology plan that

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includes all of the elements in this survey. Please provide the URL here. The URL must link to a public website where the survey or plan can be easily accessed by the community.

<https://www.buffaloschools.org/Page/2400>

For help with completing the plan, please visit 2022-2025 ITP Resources for Districts on our website, contact your district's RIC, or email edtech@nysed.gov.

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VII. Sharing Innovative Educational Technology Programs

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1. Please choose one or more topics that reflect an innovative/educational technology program that has been implemented for at least two years at a building or district level. Use 'Other' to share a topic that is not on the list.

- | | | |
|--|---|--|
| ☒ 1:1 Device Program | ☒ Engaging School | ☒ Policy, Planning, and |
| ☐ Active Learning | Community through | Leadership |
| Spaces/Makerspaces | Technology | ☒ Professional Development / |
| ☐ Blended and/or Flipped | ☐ English Language Learner | Professional Learning |
| Classrooms | ☐ Instruction and Learning | ☐ Special Education |
| ☐ Culturally Responsive | with Technology | Instruction and Learning with |
| Instruction with Technology | ☒ Infrastructure | Technology |
| ☐ Data Privacy and Security | ☐ OER and Digital Content | ☐ Technology Support |
| ☐ Digital Equity Initiatives | ☐ Online Learning | ☐ Other Topic A |
| ☐ Digital Fluency Standards | ☐ Personalized Learning | ☐ Other Topic B |
| | | ☐ Other Topic C |

2. Provide the name, title, and e-mail of the person to be contacted in order to obtain more information about the innovative program(s) at your district.

	Name of Contact Person	Title	Email Address	Innovative Programs
Please complete all columns	Joshua Kovacich	Director of Information Technology	jkovacich@buffaloschools.org	☐ 1:1 Device Program ☐ Active Learning Spaces/Makerspaces ☐ Blended and/or Flipped Classrooms ☐ Culturally Responsive Instruction with Technology ☐ Data Privacy and Security ☐ Digital Equity Initiatives ☐ Digital Fluency Standards ☐ Engaging School Community through Technology ☐ English Language Learner ☐ Instruction and

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	Name of Contact Person	Title	Email Address	Innovative Programs
				Learning with Technology ☒ Infrastructure ☐ OER and Digital Content ☐ Online Learning ☐ Personalized Learning ☒ Policy, Planning, and Leadership ☐ Professional Development / Professional Learning ☐ Special Education Instruction and Learning with Technology ☐ Technology Support ☐ Other Topic A ☐ Other Topic B ☐ Other Topic C

3. If you want to list multiple contact points for the innovative programs above, please provide the names, titles, and e-mail addresses of the people to be contacted to obtain more information about the innovative program(s) at your district.

	Name of Contact Person	Title	Email Address	Innovative Programs
Please complete all columns	Sarah Edwards	Director of Instructional Technology	sedwards@buffaloschools.org	☒ 1:1 Device Program ☐ Active Learning Spaces/Makerspaces ☐ Blended and/or Flipped Classrooms ☐ Culturally Responsive Instruction with Technology

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	Name of Contact Person	Title	Email Address	Innovative Programs
				☐ Data Privacy and Security ☐ Digital Equity Initiatives ☐ Digital Fluency Standards ☐ Engaging School Community through Technology ☐ English Language Learner ☐ Instruction and Learning with Technology ☐ Infrastructure ☐ OER and Digital Content ☐ Online Learning ☐ Personalized Learning ☒ Policy, Planning, and Leadership ☐ Professional Development / Professional Learning ☐ Special Education Instruction and Learning with Technology ☐ Technology Support ☐ Other Topic A ☐ Other Topic B ☐ Other Topic C
Please complete all columns	Natasha Mehta	Supervisor of Instructional Technology	nmehta@buffaloschools.org	☐ 1:1 Device Program ☐ Active Learning

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	Name of Contact Person	Title	Email Address	Innovative Programs
				Spaces/Makerspaces ☐ Blended and/or Flipped Classrooms ☐ Culturally Responsive Instruction with Technology ☐ Data Privacy and Security ☐ Digital Equity Initiatives ☐ Digital Fluency Standards ☐ Engaging School Community through Technology ☐ English Language Learner ☐ Instruction and Learning with Technology ☐ Infrastructure ☐ OER and Digital Content ☐ Online Learning ☐ Personalized Learning ☐ Policy, Planning, and Leadership ☒ Professional Development / Professional Learning ☐ Special Education Instruction and Learning with Technology ☐ Technology

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	Name of Contact Person	Title	Email Address	Innovative Programs
				Support ☐ Other Topic A ☐ Other Topic B ☐ Other Topic C
Please complete all columns	Michael Hume	Supervisor of Administrative Technology	mhume@buffaloschools.org	☐ 1:1 Device Program ☐ Active Learning Spaces/Makerspaces ☐ Blended and/or Flipped Classrooms ☐ Culturally Responsive Instruction with Technology ☐ Data Privacy and Security ☐ Digital Equity Initiatives ☐ Digital Fluency Standards ☒ Engaging School Community through Technology ☐ English Language Learner ☐ Instruction and Learning with Technology ☐ Infrastructure ☐ OER and Digital Content ☐ Online Learning ☐ Personalized Learning ☐ Policy, Planning, and Leadership ☐ Professional Development /

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	Name of Contact Person	Title	Email Address	Innovative Programs
				Professional Learning ☐ Special Education Instruction and Learning with Technology ☐ Technology Support ☐ Other Topic A ☐ Other Topic B ☐ Other Topic C

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