Orange Board of Education
Three Year Technology Plan

2019-2022

Orange
Public Schools
"Good to Great"

Three-Year Local School District Technology Plan
2019 through 2022

County: **Essex**

District: **Orange**

Grade Levels: **PreK - 12**

County Code: **13**

District Code: **3880**

Website: www.orange.k12.nj.us

Date Technology Plan approved by School Board: April 7, 2020

Is District compliant with Children's Internet Protection Act (CIPA): Yes

Please indicate below person(s) to contact for questions regarding this Technology Plan:

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Signature: _Rodney West_

Superintendent Approval

Superintendent: Gerald Fitzhugh,II, Ed.D.

Email: fitzhuge@orange.k12.nj.us

Phone: (973) 677-4000

Signature _Gerald Fitzhugh, II, Ed. D._

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Technology Plan Stakeholder Committee

Title	Name	Signature
Superintendent	Gerald Fitzhugh, II, Ed.D.	
Business Administrator	Adekunle O. James	
IT Manager	Rodney C. West	
Network Administrator	Jason A. Cordes	
Database Administrator	William J. Grenger	
School Principal	Frank Iannucci Jr.	
Educational Technology	Linda Moses	
Teacher	Monique Walker	
Teacher-Special Needs	Joy Mills	
Curriculum and Instruction	Terri B. Russo, DLitt	

NJDOE Vision Statement

All students will be prepared to meet the challenge of a dynamic global society in which they participate, contribute, achieve, and flourish through universal access to people, information and idea. In a digital world, students need to learn to use the tools to master the learning skills that are essential to everyday life and workplace productivity. The proficiency is known as ICT (information and communication technologies) literacy, defined by the Programme for International Student Assessment as "the interest, attitude and ability of individuals to appropriately use digital technology and communication tools to access, manage, integrate and evaluate information; construct new knowledge; and communicate with others in order to participate effectively in society." This definition goes far beyond a narrow technical competency, which is a relatively low-level skill, to include higher-level skills, critical thinking and intelligent, creative and ethical use of technology. - A Policymakers' Guide to 21st Century Skills (p.11).

Orange Public School's Vision Statement

Technology is the gateway to the future, and when executed properly is seamless in its infusion. In order to effectively address the rapid changes in technology and education today the Orange Board of Education must remain abreast of all technology related issues. The Orange Board of Education is committed to preparing today's students for life in the 21st century and beyond. In addition to technology, computer, and engineering course offerings, Orange Public Schools provides students, staff, and the community with opportunities that build a learning community, using technology as a learning resource and management tool. This technology enriched learning community affords students, staff and families with the commitment to learning, collaboration, and a focus on equitable results.

Mission Statement

The Orange Public Schools will incorporate technology into all areas of the educational process by the infusion of a strengthened curriculum that acquires, applies and evaluates its technology resources to best support the New Jersey Student Learning Standards. This endeavor will develop a community of life-long learners that will enable students to:

- Expand their knowledge base.
- Increase creativity
- Become more innovative
- Participate in technology troubleshooting
- Become self-directed learners
- Reinforce content area literacy
- Improve critical thinking, problem solving, and decision making skills
- Collaborate with others to effectively complete a task
- Explore various professions involving technology
- Use assistive technology to augment the learning process
- Access, analyze, evaluate and communicate information
- Use video to enhance their learning experiences
- Use technology to improve student achievement.

Technology Overview

A. Technology

- ### Equipment and Network Capacity:
  - o The district's technology network and infrastructure is a comprehensive system that allows for the users to adequately access all areas of technology, including but not limited to telecommunications, the Internet, educational software and various database management systems.
  - o Most elementary schools have a minimum of one student workstation lab with 20-27 stations. As each lab's devices age out, additional devices are purchased.
  - o Each classroom has a teacher station for using the mounted interactive boards (IAW). Additionally, schools have multiple carts of Chromebooks. All district schools are now part of a wireless environment that enhances the ability of teachers throughout the district to take attendance, maintain grade books, and perform mark reporting tasks within the district Student Information System (SIS).
  - o All administrators have access to technology in their workplace via desktops and have portable devices with wireless connectivity.
  - o Each school's server has been upgraded to provide additional space in order for students and teachers to begin saving their work in electronic portfolios. This increase in storage space will meet the district's growing need.

- ### Software and Filtering:
  - o The district's network and infrastructure is proficient to provide adequate access to the entire school community. The district's present focus is to continue to build upon the peripherals and software that is used with the current infrastructure. By providing a strong staff development program that infuses technology into the learning process and models effective use of technology within the curriculum, the district will achieve a stronger educational technology presence that encourages technology integration in all content area
  - o The district has moved towards software that is web-based which provides less maintenance and use of server space and allows content to remain current. The following sites are utilized for blended and personalized learning: Discovery, Learning.com, iRead, iReady, ST Math, ALEKS, Brain Pop, NWEA, Reading A-Z, Rosetta Stone, Dreambox, the DBQ Online Project, Britannica Launch-packs, and World Book Interactive.
  - o The option of video on demand can enhance the curriculum by affording the teachers the opportunity to include various examples of video within their instruction. Additionally, many NJDOE Mandatory Professional Development and topics are available in the Frontline Platform.
  - o Cisco Pix, ASA, and Websense are the tools used to secure our network infrastructure.

- ### Technology Maintenance Policy and Plan:
  - o With the growing infrastructure, the need to keep an expansive and cohesive infrastructure is mandatory. To help manage the process of dealing with maintenance, the district implemented Autotask, a software tracking system that reflects the help desk model and allows all technology staff to stay abreast of the technical needs of the district. All teachers have the ability to contact the Technology Department directly through their onsite building Technology Coordinator who logs issues into Autotask.

o This web-based software allows the IT Manager to assign all issues to Technology Coordinators and district System Engineers. The Autotask system generates work order tickets to the assigned individual and progress on the ticket can easily be monitored. The tickets can be retrieved by district System Engineers at any location within the district and via district assigned smartphone browser. Monthly meetings are held amongst the technical staff to stay abreast of issues and best practices in technology advancements. The aforementioned software provides reports and statistics to help better prepare the district for the upcoming year's budget.

- **Facilities Infrastructure:**
  o The district has upgraded Voice over Internet Protocol (VoIP) phone and Internet access to 1000mb TLS lines. This has increased our bandwidth and allows for faster access to the internet and better network communications between buildings. The expanded bandwidth also affords the district the opportunity to improve upon its Disaster Recovery Solution.
  o A plan has been implemented that takes advantage of the Transport Layer Security (TLS) upgrade and 2GB pipe installation which have significantly increased bandwidth e.g., upload and download speed. The school buildings district-wide i.e., classrooms and offices, consist of CAT-6 compatibility commensurate with the installation of POE switches. With current TLS connectivity and fiber optic lines district-wide, users are able to access more data quickly. All learning areas with workstations are at an Operating System of Windows 7 or 10. This has addressed the equity concerns of outdated hardware. The district has realized its goal to expand this access to the Township of Orange community with the hopes of building a learning community that expands beyond the classroom walls.

- **Telecommunications:**
  o The district has recently upgraded its telecommunications software. The implementation of Voice Over Internet Protocol Telephony (VoIP) continues to expand our use of the network infrastructure. This system has proven to be cost effective as a means to provide communication between the schools and community. All staff members have voicemail capability and this accessibility provides an alternative means for receiving information and messages from parents and guardians. The bridge between homes and schools has been strengthened.

- **Technical support:**
  o The district is currently utilizing over 7,500 computers, laptops and Chromebooks. At present, the district has two systems engineers, one network administrator, one information technology manager, one database manager, and one database assistant manager who are full-time employees of the Board of Education. Additional support comes from outsourcing to help maximize the maintenance efficiency.

- **Replacement Plan:**
  o The Orange Board of Education adopts the concept that all computers are obsolete after five years and thus moves to replace all such computers. Using recycling vendors' services, the Orange Board of Education will recycle all computers over five years old. All desktops for administrators will then be re-stocked and reconfigured. All labs are currently running a Windows 10 with isolated Windows 7.

o   All computer peripherals and accessories are replaced as needed.

o   Servers for the district are currently running volume licenses for Microsoft Windows 2012. Our server platform allows the system engineers to push software from the server to workstation rather perform manual installation. This process expedites servicing requests and upgrades.

• **Assistive Technology and Accessibility:**
  o   It is important that all stakeholders be able to access and use the technology available to them. All special needs students have Individual Education Plans (IEPs) that describe the particular needs of each child. Currently the following assistive technologies have been put into place as per the child's IEP:
    • Phonic Ear Buds
    • Augmented Communication Device
    • Text to Speech and Speech to Text software
    • Several schools have an account with RFB&D (Reading for the Blind and Disabled), providing books on tape and or CD
    • iPads
  o   In accordance with Federal Access Laws, the Orange Board Of Education utilizes Schoolwires, an ASP web hosting service. Pages can be found at www.orange.k12.nj.us

Three-Year Technology Plan Inventory Table

Area of Need	Describe for 2019-20	Describe for 2020-21	Describe for 2021-22
Technology Equipment	Interactive Panels, Chromebooks Replace obsolete equipment	Chromebooks, Apple Server, Replace obsolete equipment	Replace obsolete equipment
Networking Capacity	2GB Ethernet, 1GB TLS	10 GB Ethernet, 10GB TLS	10 GB Ethernet, 10GB TLS
Software used for curricular support and filtering	Websense Barracuda Symantec	Websense Barracuda Symantec Cisco Umbrella	Websense Barracuda Symantec Cisco Umbrella
Technology maintenance policy and plans	Consultants	Consultants	Consultants
Telecommunications Services	Schoolwires, Ethernet upgrade	Schoolwires	Schoolwires
Technical Support	Infrastructure Evaluation, NCS	Casper Suite, Solar Winds	Casper Suite, Solar Winds
Facilities – infrastructure including central telephone & security systems	Informacast	Informacast expansion	Video Conferencing Equipment
Other Services:	PD Vendors	PD Vendors	PD Vendors

Cyber Safety

To provide the district with a safeguard against inappropriate access, use, and intrusion, WEBSENSE filtering software and Barracuda are used. This filtering software is robust yet can tailor to provide access to websites that can be used for curricular needs. The software has proven to be successful and will be renewed by the district. The appropriate use of software and other types of technology are outlined in the district's Technology Manual and updated Acceptable Use Policy (AUP) for staff and students. The AUP also discusses the various perils and responsibilities the user must face as well as the consequences for failure to observe the code of conduct regarding cyber bullying.

The Technology Coordinator located in each building is responsible for informing staff and students of the perils of the Internet. Parental resources regarding online safety are available to all parents on the Parent Resource Page of the District website. Orange has implemented a technology curriculum inclusive of a section on cyber safety.

Needs Assessment

Technology Coordinators administer and analyze a technology survey and complete a technology inventory annually. This survey and inventory are used to assist in budgeting for next year. The district Curriculum and Instruction Department oversees the instructional component of Technology Coordinator responsibility. The Technology Coordinators received training and provide ongoing training to their staff. Presently we provide technology training to all staff. Technology Coordinators receive additional training above and beyond and turnkey that training.

Summary

Several professional development days have been established throughout the school year to address the needs and concerns of staff. The days include sessions in both pedagogy and technical abilities. Classes included but were not limited to:

- *Microsoft Office 365*
- EasyTech Software
- Web 2.0 tools
- *Genesis*
- Interactive panels (Interactive White Boards, Prometheum boards...)
- *Schoolwires*
- *Discovery*
- Flip Grid
- Google Platform
- Frontline
- Apple Technology

Educators are assured access to technology to facilitate technology integration across the curriculum. A hard-wired and wireless environment enhances Internet connectivity. IWB's provide heightened presentation and application of skills.

Students district-wide have daily access to technology to support the use of 21st century skills in their learning environment. The district is working towards a one-to-one environment through the use of Chromebooks.

Technology Coordinators are present in every building to assist teachers in the infusion of software, hardware, and online subscriptions throughout the New Jersey Student Learning Standards (NJSLS). System Engineers and the Network Administrator are routinely assigned to service maintenance/repair requests as they appear in Autotask.

Goals and Objectives for 2019-2022

The integration of technology into the curriculum offers the potential to augment student's learning experience by providing an instructional tool for delivering subject matter in the curriculum. The district's responsibility to prepare students to access, analyze, apply and communicate information effectively can be achieved by modeling and encouraging the integration of technology that is aligned with the Core Curriculum Content Standards and best practices that support differentiated learning, integration across the curriculum, and self-directed learning.

Goal 1: All students will acquire 21st century technology skills necessary to be productive members in the community, workplace, and society at large.

> *Objective 1*: Technology integration practices and strategies will be used in the teaching and learning process. Technology Coordinators will be used to move teachers from the use of traditional practices of teaching subject areas towards web 2.0 tools and resources.

> *Objective 2*: Reevaluate the technology development and implementation of a district-wide curriculum that emphasizes the curriculum's correlation to the NJSLS and NJSLA assessments.

> *Objective 3*: Students will be exposed to cross-platform environments and devices in order to continue to excel in the community, workplace, and in a global society.

> *Objective 4*: Increase the number of Computer Science and STEM courses in K-12.

Goal 2: All stakeholders in students' welfare, including educators and administrators, will increase their knowledge and level of 21st century skills in order to effectively integrate educational technology across curricula that will enable students to achieve the goals of the NJSLS and NJSLA and attain success in a global society.

Objective 1: All educators, including administrators, will participate in ongoing, sustained, high- quality professional development activities focused on infusing 21st century skills into curricula and instructional practices.

Objective 2: All school administrators will model the 21st century skills necessary to provide effective and informed leadership that supports the infusion of educational technology and encourages learning beyond the school walls.

Objective 3: All supervision and evaluation practices will address the effective use of educational technology for student achievement of the NJSLS and NJSLA and success in a global society.

Objective 4: All educators, including administrators, will use e-mail and other interactive tools including Schoolwires, Naviance, Global Connect, the SIS [Genesis] and its Parent Portal to communicate with parents/legally designated caregivers, students and other educators electronically.

Goal 3: All students, educators, and administrators will be able to access and utilize educational technology resources for instructional and administrative purposes throughout classrooms, library media centers, and educational venues such as community centers and libraries.

Objective 1: The student population will benefit from the accessibility of technology provided by maintenance of district-wide wireless access and the continuance of the district replacement plan for computers that are 5 years or older.

Objective 2: Voice Over IP telephony will be expanded to include video conferencing, beginning with administration located at Administrative building.

Objective 3: Apple technology will be purchased for the purpose of implementation across grades K- 12 in order to provide all students with hands-on/cross-platform and assistive technologies.

Goal 4: The maintenance of the district infrastructure will be robust in its accessibility and provide the necessary safety and security for all students and administrators to acquire digital information and communicate virtually without risk.

Objective 1: District-wide web based video conferencing will be implemented.

Objective 2: School district will conduct an analysis of infrastructure and use the results to budget for effective implementation of industry standard networking that supports 21st century educational technology system.

Three-Year Technology Implementation Activity Table

District Goal and Objective	Strategy/Activity	Timeline	Person Responsible	Documentation
1.1	Scholastic: Read180, System 44, NWEA, ALEKS, iRead, iReady, Dreambox, Rosetta Stone, DBQ, World Book, Britannica Launch	7/2019 -6/2022	Curriculum Director, Technology Supervisor	PD hours
1.2	Implement Scholastic digital curricula i.e.,Read180, Math180, and System 44	Ongoing	Curriculum Director/Technology Supervisor, Cross-curricula staff	Scholastic data pull, NJSLS and NJSLA guidelines
1.3	Assembled team including IT Department and Tech Coordinators that will configure and deploy devices in cross-platform environment	7/2019 -6/2022	IT Manager, Network Administrator, Systems Engineers, Tech Coordinators	Casper Suite device management system' Google Chrome management
2.1	Staff development in Apple technology, webinar development	7/2019 -6/2022	Curriculum Director, Technology Supervisor	PD hours, Teacher evaluation/observation (Teachscape-Domains 1 and 2)
2.2	Lesson plans and activities that support technology integration	7/2019 -6/2022	Curriculum Director/ Administrator, Technology Supervisor, Cross-curricula staff	PD hours, Teacher evaluation/observation (Teachscape-Domains 1 and 2)
2.3	Lesson plans and activities that support technology integration	7/2019 -6/2022	Curriculum Director/ Administrator, Technology Supervisor, Cross-curricula staff	PD hours, Teacher evaluation/observation (Teachscape-Domains 1 and 2)
2.4	Assignment of access to SIS, Parent Portal, Global Connect, Schoolwires, Naviance, email	7/2019 -6/2022	School Administrator, Database Mngr., Asst. Database Mngr, IT Mngr.	SIS, Naviance, Global Connect generated reports, login logs
3.1	Provide wireless network maintenance/management system; maintain district replacement plan.	7/2019 -6/2022	Business Admn., IT Mngr., Network Administrator	Purchase Orders, Inventory, NCS wireless management system
3.2	Install and manage VoIP conferencing equipment	7/2019 -6/2022	Business Admn., IT Department	Purchase Orders, Inventory
3.3	Configure-maintain: Apple tablets/notebooks, server	7/2019 -6/2022	Business Admn., IT Department	Purchase Orders, Inventory

4.1	Implement web based video conferencing tool and supporting equipment	7/2019 -6/2022	Business Admn., IT Department	Purchase Orders, Inventory, contracts
4.2	Purchase and install network management tools	7/2019 -6/2022	Business Admn., IT Department	Purchase Orders, Inventory, NCS and SolarWinds reports
4.3	Install 2Gbs Ethernet and configure router(s) accordingly	7/2019 -6/2022	Business Admn., IT Department	Purchase Orders, Verizon contracts
4.4	Coordinate with NJSLS/NJSLA and personalized learning platforms	7/2020 -6/2022	IT Department; Curriculum Dept	NJSLS/NJSLA, Personalized learning platforms

Funding Plan

The Three-Year Technology Plan for the Township of Orange has a creation date of July 1, 2019. The Township of Orange is a district that supports spending and decision making at the building level. Each school creates a technology budget that supports its school's needs. Installation, maintenance, and district wide purchases are implemented at the district level. Schools are responsible for working in collaboration with district personnel to provide a comprehensive building technology model that will show the advancement and vision of technology in the classroom.

	Three-Year Educational Technology Plan Anticipated Funding Table 2019 -2020				
ITEM	**DESCRIPTION OF ITEM TO BE PURCHASED**	**FEDERAL FUNDING**	**STATE FUNDING**	**LOCAL FUNDING**	**MISC. (e.g. Donations, Grants)**
Digital curricula (see NIMAS)	Scholastic: Read180, System 44, NWEA, ALEKS, iRead, iReady, Dreambox, Rosetta Stone, DBQ, World Book, Britannica Launch	$115,000		$315,000	
Print media needed to achieve goals					
Technology Equipment	Apple server, Scholastic server, tablets/notebooks	$52,000		$119,00	
Network	TLS 1000 MB	$331,200		$49,680	
Capacity	1000 Mbps Ethernet	$156,000		$23,400	
Filtering	Websense, Barracuda, Symantec, Firewall			$70,000	
Software	SolarWinds, NCS, Casper Suite, Cisco Umbrella			$75,000	
Maintenance	Consultants			$15,000	
Upgrades	Informacast (VoIP)			$17,500	

Policy and Plans					
Other services	PD Vendors, Schoolwires			$52,000	
Further Explanation:					

The total cost of ownership is shared between the school and district budgets as well as grant funded resources. The district receives additional funding from federal title grants as well as IDEA which have enabled the district to provide professional development opportunities and equipment to enhance instruction.

E-rate has been a substantial part of funding for the district's technology needs. This reimbursement process provides a discount rate of about 85%. This cost savings allows for the district to spend 15% towards Internet access, infrastructure and telecommunication needs.

ITEM	DESCRIPTION OF ITEM TO BE PURCHASED	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (e.g. Donations, Grants)
Digital curricula (see NIMAS)	Scholastic: Read180, System 44, NWEA, ALEKS, iRead, iReady, Dreambox, Rosetta Stone, DBQ, World Book Britannica Launch	$175,000		$320,000	
Technology Equipment	Apple server, Scholastic server, tablets/notebooks			$100,000	
Network	TLS 1000 MB	$331,200		$49,680	
Capacity	10000 Mbps Ethernet	$156,000		$23,400	
Filtering	Websense, Barracuda, Symantec, Firewall			$70,000	
Software	SolarWinds, NCS, Casper Suite, Cisco Umbrella			$75,000	
Maintenance	Consultants			$15,000	
Upgrades	Informacast (VoIP)			$17,500	
Policy and Plans					
Other services	PD Vendors, Schoolwires			$52,000	
Further Explanation:					

Three-Year Educational Technology Plan Anticipated Funding Table 2020 – 2021

ITEM	DESCRIPTION OF ITEM TO BE PURCHASED	FEDERAL FUNDING	STATE FUNDING	LOCAL FUNDING	MISC. (e.g. Donations, Grants)
Digital curricula (see NIMAS)	Scholastic: Read180, System 44, NWEA, ALEKS, iRead, iReady, Dreambox, Rosetta Stone, DBQ, World Book Britannica Launch	$190,000		$325.00	
Technology Equipment	Apple server, Scholastic server, tablets/Chromebooks,			$100,000	
Network	TLS 10 Gbs	$400,000		$60,680	
Capacity	10 Gbs Mbps Ethernet	$200,000		$30,400	
Filtering	Websense, Barracuda, Symantec, Firewall			$70,000	
Software	SolarWinds, NCS, Casper Suite, Cisco Umbrella			$75,500	
Maintenance	Consultants			$15,000	
Upgrades	Informacast (VoIP)			$17,500	
Policy and Plans					
Other services	PD Vendors, Schoolwires			$52,000	
Further Explanation:					

Three-Year Educational Technology Plan Anticipated Funding Table 2021 – 2022

Professional Development

In all curriculum areas the implementation of NJSLS and NJSLA are addressed to instill educational programs that support scientifically based researched practices found in all curriculum guides. Despite the magnitude of research on technology's impact on student achievement, as those professional development opportunities are provided to the district, its facilitators must provide information that supports the integration of technology and assesses and implements Technology Literacy Standards in all curricular areas. Additionally, practices should model effective technology infusion.

The staff development activities that will be offered in the district will link to the belief that technology integration is an integral part of successful student achievement. Staff will be offered training that infuses technology into all content areas. The Curriculum Department will supervise the instructional responsibilities of Technology Coordinators in order to further develop the mentor- mentee collaborative efforts of educators, school administrators, and the district technology leaders. This pedagogical evolution will become associated with the development and provision of a comprehensive training program that includes technology integration, in-class support, data driven decision making, and mentorship.

> Extensive training will also be provided for application instruction and instructional implementation. The training will be provided for the teaching staff and district administrators in the form of in- district workshops and technology enriched conferences. These training opportunities will include hardware training and personalized/blended learning platforms.

> Using ISTE's NETS for students, staff and administrators, the curriculum can be revisited to include technology in all content areas to support the goals and objectives of the NJSLS. Additionally, professional development in the technology platform for the teacher and administrator evaluation models will be provided.

> By establishing an equitable professional development program district-wide, the district's commitment to technology and student achievement will continue to support the following curriculum and professional development workshops:

> - Naviance (grades 7-12)
> - Frontline
> - Destiny
> - Discovery
> - World Book Interactive
> - Rosetta Stone
> - Adaptive Technology
> - Sheltered English Instruction
> - Data Analysis
> - Genesis
> - Microsoft 365
> - Personalized Learning Platforms
> - Emerging Technologies

Evaluation Plan

The District Technology Plan will be reviewed annually by a committee designated by the Superintendent of Schools to update, revise and reflect on the current practices and changes in how technology should be best used in education. Telecommunications services, hardware, software, and other services will improve education by the district's ability to remain current in research, practice, and understanding the needs of the district. Currently the district is completing an assessment of the network's topography in order to provide increased access to the Internet, increased reliability of Voice Over IP telephony, and an increased quality of communications to the school community with an infrastructure that is uniform in hardware and software.

The core of district Technology Coordinators, one assigned to each school meet monthly to review, evaluate, modify and implement strategies and methodologies that reflect change/innovations in technology opportunities. Their assessments are turn-keyed to the Information Technology Department which additionally uses software to monitor and evaluate equipment usage and deployment in order to adjust to needs of the infrastructure as it changes

Three-Year Educational Technology Plan
Professional Development Table

Professional development detail is needed for the first school year of the educational technology plan. The use of this table is optional and is provided as a convenience.

Educators' Proficiency/ Identified Need	Ongoing, sustained, high-quality professional development planned	Support
Integration of New Jersey Student Learning Standards and Student Learning Assessment technology requirements	District trainers (Technology Coordinators, content area coaches, and supervisors) will provide job-embedded coaching and mentoring for the CCSS requirements	Subject area Wikis will provide additional resources for teachers. Teachers and administrators will be able to add lessons and resources as they work to implement the technology requirements for the CCSS.
Frontline(Danielson and NJDOE Administrators Rubrics)	All new hires will be trained in the evaluation models by district employees, using Frontline.	Frontline online professional development (PD) modules will provide additional PD for the evaluation models and for improved delivery of instruction/administration.
Discovery	District trainers (Technology Coordinators, content area coaches, and supervisors) will provide continued job-embedded coaching and mentoring for continued implementation of primary document analysis and supplemental materials to address the CCSS.	Discovery tutorials are available on-line for teachers who need additional training.
Rosetta Stone for ELL teachers	The ESL/Bilingual coach and supervisor will continue to provide training to LEP teachers for this interactive software, in order to improve port-of-entry students' oral language acquisition.	Release time will be provided for teachers who did not receive training previously. The ESL/Bilingual Wiki will have additional training resources.
Adaptive technology for SE, ELL, and GE	Initial professional development will be provided by Don Johnsons' company for the adaptive technology. Further job-embedded coaching will be provided by the district.	Subject area Wiki's will provide additional support. Common Planning Time will be utilized to assess which students need to use the adaptive technology and how it can be utilized in the writing centers of each classroom.

My Learning Plan/Frontline training for new teachers	During New Teacher Orientation, Technology Coordinators training for the district's professional development and professional growth plan systems will be provided.	The Distrct provided Jings on Frontline's home page that provide step by step refreshers for users. Secretaries are also provided on-going refreshers to ensure that the requests and plans are submitted in a timely and correct fashion.
Read 180	Continued PD will be provided by Scholastic, especially for data driven instruction.	The program provides on-line tutorials for teachers and ELA coaches. Additionally, the district provides monthly meetings for all involved teachers for vertical articulation.
Naviance	New guidance counselors , grades 7-12 will be trained by the district in order to streamline college applications and for students to increasingly self-monitor their progress and make healthy college and career decisions.	The guidance counselors meet regularly to assist each other in improved utilization of this on-lime program.
Genesis	During New Teacher Orientation, Technology Coordinators will provide training in the SIS, grade book, and lesson planner. Coaches and supervisors will continue to assist during school year.	During Common Planning Time, teachers can utilize the system's tutorials for further clarification.

NJSLA prototypes	The district will provide training for NJSLA prototypes during the school year as they become available. Coaches and supervisors will provide job-embedded training for creating assignments in NJSLA format.	During Common Planning Time and department meetings, teachers will review their assignments to revise them to NJSLA format. Technology teachers will incorporate theses new methods in their lesson plans so students will become familiar with them.
Network and Device management training	The district will provide network/device management training for bandwidth/operating system upgrades	Consultants: Cisco/DynTek
Interactive White Boards (IW) and device training	The district will provide training for implementation of IWB and tablet strategies	Vendors associated with equipment purchase.

Educational Technology Plan Evaluation Narrative

a. Telecommunication services, hardware, software and other services are improving education	• Increased bandwidth allows for digital curricula transfer at greater speed. • Increased bandwidth allows for wireless connectivity and additional access for NJSLA and ACCESS assessment. • Scholastic Read/Math 180, System 44 • Discovery • NWEA • Rosetta Stone • Dreambox • iReady • iRead
b. Effective integration of technology is enabling students to meet challenging state academic standards.	• Student portfolios • NJSLA • ACCESS

Updates and improvements to all areas of technology will be on a continuous basis due to the evolving advancements in technology and its applications to education and society.

NJ Department of Education
District/Nonpublic School/ Charter School
Three-Year Educational Technology Plan Checklist

DIRECTIONS: Place a check ☑ in the unshaded **COMPLETED** column when the **TASK** has been completed.

TASK	Completed	
	Req'd by E-Rate	Not req'd E-Rate
DATE: Provide your educational technology plan's creation date (the date when the technology plan first contained all of the required elements in sufficient detail to support the products and services requested on the Form 470).	p.3	

DIRECTIONS:

- Answers to questions regarding e-rate compliance: Address the numbered items below in a separate District/Nonpublic School/Charter School educational technology plan document.
- Indicate in the *PAGE* # column, the page number where the corresponding information is found.
- For purposes of this document, "educators" are defined as school staff who teache children, including librarians and media specialists.
- Sample table templates are provided (see links embedded in this document) to assist in the development of the educational technology plan. Please use these table templates unless information is already in a digital form.

	Indicate in the unshaded spaces the page number where the corresponding information is found	
	Req'd by E-Rate	Not req'd by E-Rate

TECHNOLOGY INVENTORY:
1. Describe the technology inventory <u>needed to improve</u> student academic achievement in the 2019-2020 school year that informs the basis for the Form 470. Include in the description the internal connections and basic maintenance *for 12 months of the e-rate funded year*, such as the following areas:
    a) Technology equipment including assistive technologies
    b) Networking capacity
    c) Filtering method
    d) Software used for curricular support and filtering
    e) Technology maintenance and support
    f) Telecommunications equipment and services
    g) Other services
NOTE: If this plan is intended to be used for three years of E-Rate funding, provide anticipated inventory information for all three years. See Inventory Sample Table. Definitions of items eligible for e-rate discounts: http://www.usac.org/sl/applicants/beforeyoubegin/eligible-services/default.aspx
	p. 9	

NEEDS ASSESSMENT: 2. Describe the needs assessment process that was used to identify the necessary telecommunication services, hardware, software, and other services to improve education.	p.10	

	Indicate in the unshaded spaces the page number where the corresponding information is found	
	Req'd by E-Rate	Not req'd by E-Rate
THREE-YEAR GOALS: **3.** List clear goals for 2019-2022 that address district needs. There must be strong connections between the proposed physical infrastructure (bandwidth, cabling, electrical systems, networks) and goals. Include goals for using telecommunications and technology that support 21st century learning communities.	Pp 11-13	
THREE-YEAR IMPLEMENTATION AND STRATEGIES TABLE: Ị 4. Describe the realistic implementation strategies to improve education. Include in the description the timeline, person responsible and documentation (or evidence) that will prove the activity occurred. Address only 'a' and 'b' below to meet e-rate requirements. Address all areas below to continue planning for a technology-rich learning environment. a. telecommunications,	Pp 14-15	
b. information technology,		
c. educational technology (including assistive technologies), and		
d. student technology readiness in preparation for online testing in 2019-2022.		p.12
PROFESSIONAL DEVELOPMENT STRATEGIES: 5. Professional development strategies should ensure that staff (teachers, school library media personnel and administrators) knows how to effectively use the technologies described in this plan to improve education and will continue to support identified needs through 2022. *Address only 'a' below to meet e-rate requirements. Address all areas below to continue planning for a technology-rich learning environment.* Describe the planned professional development strategies by addressing each of the following questions: a) How will ongoing, sustained professional development be provided to all educators, (including administrators) that increases effective use of technology in all learning environments, models 21st century skills, and demonstrate learning experiences through global outreach and collaboration in the classroom or library media center?	p.20	
b) What professional development opportunities, resources and support (online or in person) exist for technical staff?		p.21
c) How will professional development be provided to educators on the application of assistive technologies to support educating all students?		p.22
EVALUATION PLAN: 6. Describe the evaluation process that enables the progress and effectiveness of goals to be monitored.	Pp 21& 25	
7. Describe the process to make mid-course corrections in response to new developments and opportunities as they arise.	p.25	
FUNDING PLAN July 2019 – June 2022 8. Provide the anticipated costs for (This date is incorrect) by source of funds (federal, state, local and other) and include expenses such as hardware/software, digital curricula including NIMAS compliance, upgrades and other services including print media that will be needed to achieve the goals of this plan. Allow specific provisions for interoperability among components of such technologies to successfully achieve the goals of this plan.		p. 16-19

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