

Instructional Technology Plan - 2016LEA Information

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A. LEA Information**1. 2014-2015 Student Enrollment**

	Total Enrollment	Pre-K Enrollment	K-2 Enrollment	3-5 Enrollment	6-8 Enrollment	9-12 Enrollment	Ungraded Enrollment
Student Enrollment	2,341	0	491	529	546	742	33

2. What is the name of the district administrator entering the technology plan survey data?

Frederick Kaden

3. What is the title of the district administrator entering the technology plan survey data?

Director of Technology

Instructional Technology Plan - 2016Instructional Technology Vision and Goals

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B. Instructional Technology Vision and Goals**1. Please provide the district mission statement.**

The mission of the Seaford Schools is to enhance the students' academic, artistic, social, and technological skills to meet the challenges of a rapidly changing and increasingly global society

2. Please provide the executive summary of the instructional technology plan, including vision and goals.

The goal of the Seaford Union Free District is to provide a 21st century learning environment to help students succeed and thrive in today's rapidly evolving technological society. The goal is to provide appropriate instruction and tools on how to maximize the effective impact that technology has had in everyone's lives and productivity. The vision is for this instruction to take place outside the four walls of the classroom, whether it is creating a mobile learning environment or being able to provide instruction and access to materials from the outside world; this will provide current students with a wealth of access to information that students in the past were not able to obtain.

Goals:

1. Increase access to technology devices through-out District
2. Create a BYOD (Bring your own device) initiative at the high school level
3. Add additional laptop carts & tablets where needed
4. Enhance anytime anywhere access by leveraging cloud based resources such as Microsoft Office365
5. Ensure global technology standards are being met by both educators and students (i.e. ISTE standards)
6. Provide Professional Development for new and existing classroom technologies (i.e. tablet initiative, SmartBoards, cloud based services)
7. Create a fostering peer-to-peer teacher learning model, specific to subject/department
8. Utilize push-in professional development model where possible
9. Provide professional development by utilizing BOCES Model Schools.
10. Expand & Upgrade Wifi coverage throughout the district campus
11. Upgrade backbone network speed to 10+ Gigabits from classrooms to wiring closets, from wiring closets to between buildings to support increased demand
12. Upgrade firewall and enhance cybersecurity via technology (i.e. stronger certificates) and via policy (i.e. data awareness)
13. Provide email to secondary students allowing for a safe and secure way of communicating, thereby promoting digital citizenship
14. Expand usage of differentiated instructional software programs.
15. Annually assess and refresh any technology equipment that no longer meets instructional needs or demands in today's technological society.
16. Increase speed and robustness of network by increasing internet speed and adding redundancy equipment (i.e. backup firewall, core router)

3. Please summarize the planning process used to develop the instructional technology plan. Please include the stakeholder groups participating and outcomes of the instructional technology plan development meetings.

The Technology Department works closely with several stakeholders and committees to produce a unified vision of where the District is headed with instructional technology. Below is a list of stakeholders that have provided valuable input:

- Teachers and Staff
- Advisory Committee on Technology (Committee made up of community members and Director of Technology)

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- Central Administration (includes; Superintendent, Asst Superintendent of Instruction, Asst Superintendent of Pupil Services)
- Building level Principals
- Media Specialist
- Technology Director
- Parents and Students

Outcomes of the meetings are reflected directly in the current goals of the District. Outcomes have included the following:

- Are our students being prepared to work with technology productively and responsibly?
- More access to technological resources is needed; --specifically devices for students (labs, laptops, tablets, etc.).
- Is the infrastructure capable of handling more devices?
- More technical support is needed to keep up with the influx of added technology.
- More Professional Development is required for teachers and staff.
- Is our data secure? What about third party access to data? What do they do with that data?

4. Please provide the source(s) of any gap between the current level of technology and the district's stated vision and goals.

- ☐ Access Points
- ☒ Cabling
- ☐ Connectivity
- ☐ Device Gap
- ☐ Network
- ☒ Professional Development
- ☒ Staffing
- ☐ Other
- ☐ No Gap Present

5. Based upon your answer to question four, what are the top three reasons causing the gap? If you chose "No Gap Present" in question four, please enter N/A.

District budgets and the economic climate make it very difficult to meet the staffing required to adequately provide professional development and support in a timely manner.

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Instructional Technology & Infrastructure Inventory

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C. Technology and Infrastructure Inventory

1. Please identify the capacity of the telecommunications line coming into the district network hub. The district's Regional Information Center can provide the district with this information if needed.

- ☐ Greater than 10 Gbps
- ☐ 10 Gbps
- ☐ 1 Gbps - < 10 Gbps
- ☒ 100 Mbps - < 1Gbps
- ☐ 50 Mbps - < 100 Mbps
- ☐ 10 Mbps - < 50 Mbps
- ☐ Less than 10 Mbps

2. What is the total contracted Internet bandwidth access for the district? Choose one.

- ☐ Greater than 10 Gbps
- ☐ 10 Gbps
- ☐ 1 Gbps - < 10 Gbps
- ☒ 100 Mbps - < 1 Gbps
- ☐ 50 Mbps - < 100 Mbps
- ☐ 10 Mbps - < 50 Mbps
- ☐ Less than 10 Mbps

3. What is the name of the agency or vendor from which the district purchases its primary Internet access bandwidth service?

Nassau BOCES BowTie

4. Please identify the capacity of the telecommunications line coming into the district's school building(s) from the district hub or district data center. The district's Regional Information Center can provide this information if needed

	Speed in Gbps or Mbps
Minimum Capacity	☐ Greater than 10 Gbps ☐ 10 Gbps ☒ 1 Gbps - < 10Gbps ☐ 100 Mbps- < 1 Gbps ☐ 50 Mbps - < 100 Mbps ☐ 10 Mbps - < 50 Mbps ☐ Less than 10 Mbps
Maximum Capacity	☐ Greater than 10 Gbps ☒ 10 Gbps ☐ 1 Gbps - < 10Gbps ☐ 100 Mbps- < 1 Gbps ☐ 50 Mbps - < 100 Mbps

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	Speed in Gpbs or Mbps
	☐ 10 Mbps - < 50 Mbps ☐ Less than 10 Mbps

5. Please identify the minimum and maximum circuit speeds at which the classrooms in the district are connected to the school building wiring/network closet.

	Please provide the speed at which classrooms are connected to building wiring/network closet.
Minimum Circuit Speed Within a School Building	☐ Greater than 10 Gbps ☐ 10 Gbps ☒ 1 Gbps - < 10Gbps ☐ 100 Mbps- < 1 Gbps ☐ 50 Mbps - < 100 Mbps ☐ 10 Mbps - < 50 Mbps ☐ Less than 10 Mbps
Maximum Circuit Speed Within a School Building	☐ Greater than 10 Gbps ☒ 10 Gbps ☐ 1 Gbps - < 10Gbps ☐ 100 Mbps- < 1 Gbps ☐ 50 Mbps - < 100 Mbps ☐ 10 Mbps - < 50 Mbps ☐ Less than 10 Mbps

6. What are the minimum and the maximum port speeds of the switches that are less than five years old in use in the district?

	Port speed of switches	Mbps or Gbps
Minimum Capacity of Switches	1	☐ Mbps ☒ Gbps
Maximum Capacity of Switches	10	☐ Mbps ☒ Gbps

7. What percentage of the district's wireless protocols are less than 802.11g?

0

8. Do you have wireless access points in use in the district?

☒ Yes
☐ No

8B. What percentage of your district's instructional space has wireless coverage?

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100

9. Does the district use a wireless controller?

Yes

10. How many computing devices less than five years old are in use in the district?

	Number of devices in use that are less than five years old	How many of these devices are connected to the LAN?
Desktop computers/Virtual Machine (VM)	523	523
Laptops/Virtual Machine (VM)	13	13
Chromebooks	0	0
Tablets less than nine (9) inches with access to an external keyboard	0	0
Tablets nine (9) inches or greater with access to an external keyboard	30	30
Tablets less than nine (9) inches without access to an external keyboard	65	65
Tablets nine (9) inches or greater without access to an external keyboard	165	165
Totals:	796	796

11. What percentage of students with disabilities in the school district, as of the submission date of this technology plan, have assistive technology documented on their Individual Education Plan (IEP)?

13

12. Please describe any additional assistance or resources that, if provided, would enhance the district's ability to improve access to technologies for students with disabilities.

Additional funding could be used for a comprehensive assistive technology needs evaluation, in support of students that are in need of assistive technology. This might include a consultant with expertise in the area of student assistive technology, appropriate diagnostic tools, professional development for staff on how best to assist the student, as well as instruction for the family of the child to maintain consistency in the use of technology in the home.

13. How many peripheral devices are in use in the district?

	Number of devices in use
Document Cameras	250
Flat Panel Displays	1
Interactive Projectors	137
Interactive Whiteboards	48
Multi-function Printers	47
Projectors	68
Scanners	0

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	Number of devices in use
Other Peripherals	0
Totals:	551

- 14. If a number was provided for "Other Peripherals" please specify the peripheral device(s) and quantities for each.**

(No Response)

- 15. Does your district have an asset inventory tagging system for district-owned equipment?**

Yes

- 16. Does the district allow students to Bring Your Own Device (BYOD)?**

No

- 17. 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

- 18. What barriers may prevent the district from testing 100% of its grade 3-8 students and NYSAA students on computers by the year 2020?**

- ☐ Insufficient number of devices meeting testing requirements
- ☐ Lack of reliable Internet service
- ☒ Insufficient broadband access
- ☐ Inadequate staffing levels
- ☐ Insufficient testing spaces
- ☐ District does not foresee any barriers
- ☐ Other

Instructional Technology Plan - 2016

Software and IT Support

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D. Software and IT Support**1. What are the operating system(s) in use in the district?**

	Is this system in use?
Mac OS Version 9 or earlier	No
Mac OS 10 or later	Yes
Windows XP	No
Windows 7.0	No
Windows 8.0 or greater	Yes
Apple iOS 7 or greater	Yes
Chrome OS	No
Android	No
Other	No

2. Please provide the name of the operating system if the response to question one included "Other."

(No Response)

3. What are the web browsers, both available and supported, for use in the district?

	Web Browsers available and supported for use
Internet Explorer 7	No
Internet Explorer 8	No
Internet Explorer 9 or greater	Yes
Mozilla Firefox	No
Google Chrome	Yes
Safari (Apple)	Yes
Other	No

4. Please provide the name of the web browser if the response to question three included "Other."

(No Response)

5. Please provide the name of the Learning Management System (LMS) most commonly used in the district. A Learning Management System (LMS) is a software application for the administration, documentation, tracking, reporting, and delivery of online and blended learning courses.

None used.

6. Please provide the names of the five most commonly used software programs that support classroom instruction

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in the district.

Microsoft Word

Microsoft Onedrive

Microsoft Powerpoint

Microsoft Sway

Micodsoft One Note

7. Please provide the names of the five most frequently used research databases if applicable.

ProQuest

Britannica

World Books

Facts of File

Capstone

Cengage

8. Does the district have a Parent Portal?

Yes

8B. Check all that apply to the Parent Portal if the response to question eight is "Yes."☒ Attendance☒ Homework☒ Student Schedules☒ Grade Reporting☐ Transcripts☒ Other**8C. If 'Other' was selected in question eight (a), please specify the other feature(s).**

Behavioral Reports

9. What additional technology-based strategies and tools, besides the Parent Portal, are used to increase parent involvement?☐ Learning Management System☒ Emergency Broadcast System☒ Website☐ Facebook☐ Twitter☐ Other**10. Please list title and Full Time Equivalent (FTE) count (as of survey submission date) of all staff whose primary responsibility is providing technical support. Does not include instructional technology integration FTE time.**

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Title	Number of Current FTEs
Technician	4.00
Director of Technology	0.90
	4.90

Instructional Technology Plan - 2016Curriculum and Instruction

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E. Curriculum and Instruction**1. What are the district's plans to use digital connectivity and technology to improve teaching and learning?**

To increase the bandwidth within the district to meet the needs of online applications and services including state-wide assessments which are planned to be computer based and interactive in the near future.

2. Does the district's instructional technology plan address the needs of students with disabilities to ensure equitable access to instruction, materials, and assessments?

Yes

2B. If "Yes", please provide detail.

While decisions concerning the devices needed by the classified special education students are made at meetings of the Committee on Special Education, the ability for the devices to function within our district's infrastructure is part of the responsibility of our technology department. Examples of these devices are as follows:

Tablets

Computers

Specialized Software

Devices supporting the visually, auditorially and verbally impaired students

3. Does the district's instructional technology plan address the provision of assistive technology specifically for students with disabilities to ensure access to and participation in the general curriculum?

Yes

3B. If "Yes", please provide detail.

The District provides assistive technology in both general education and special education classrooms whenever deemed appropriate by certified professionals. As specified in their IEPs students are often assigned devices that enable them to communicate and/or overcome a disability. In many instances these devices are take-home devices which can have a tremendous impact beyond school, allowing for communication between a parent and child which would not have been possible prior, for example. Some assistive technology specified in IEPs have included:

- iPads with specialized communication apps (ie Proloquo2go)
- Tablets with stylus and apps to improve motor function (ie...Dragon Dictation software)
- Disability functions on all computers used by classified students have been enabled
- Hearing devices that connect with classroom computers
- Digital recorders are available for students to assist with verbal communication skills

4. Does the district's instructional technology plan address the needs of English Language Learners to ensure equitable access to instruction, materials, and assessments?

☒ Yes

☐ No

4B. Please provide details. If the district plans to apply for Smart School Bond Act funds for Classroom Learning Technology, the answer to this question must be aligned with the district's Smart Schools Investment Plan (SSIP).

Instructional Technology Plan - 2016Curriculum and Instruction

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The district on a yearly basis purchases both equipment and software to help a student with language learning difficulties to have instructional equality both in and out of the classroom. Each piece of equipment and/or software becomes tailored to the student's individual needs which is determined by the person required to give ENL instruction to the individual student. It is then monitored throughout the year and then evaluated at the end on how successful the student was able to participate and perform.

Instructional Technology Plan - 2016Professional Development

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F. Professional Development

1. **Please provide a summary of professional development offered to teachers and staff, for the time period covered by this plan, to support technology to enhance teaching and learning. Please include topics, audience, and method of delivery within your summary.**

Professional Development topics for all faculty will include interactive technologies (Epson Brightlink, SMART, Use of iPads), communication technologies (website design, Remind, use of automated dialer for home contact), Flipped classroom (Office 365, etc...)

1. In-house training provided by the Director of Technology and other certified staff on the various systems that are used within the district.
2. Contracting with certified vendors that are brought to the district to train the staff on any number of topics.
- 3 Utilizing our BOCES RIC using Model Schools funding.
4. Utilizing the Wantagh- Seaford Teacher Resource and Computer Training Center (TRACT) which offers in-service courses related to techno,ogy for our teachers.

2. **Please list title and Full Time Equivalent (FTE) count (as of survey submission date) of all staff whose primary responsibility is delivering technology integration training and support for teachers. Does not include technical support.**

Title	Number of Current FTEs
Director of Technology	0.10
	0.10

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Technology Investment Plan

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G. Technology Investment Plan

1. Please list the top five planned instructional technology investments in priority order over the next three years.

Infrastructure is considered an instructional technology investment.

	Anticipated Item or Service	Estimated Cost	Is Cost One-time, Annual or Both?	Funding Sources May choose more than one source
1	Broadband	34,000	Annual	☒ BOCES Co-Ser Purchase ☐ District Operating Budget ☐ District Public Bond ☐ E-Rate ☐ Grants ☐ Instructional Material Aid ☐ Instructional Resources Aid ☐ Smart Schools Bond Act ☐ Other
2.	Network Cabling	1,000,000	One Time	☐ BOCES Co-Ser Purchase ☐ District Operating Budget ☐ District Public Bond ☐ E-Rate ☐ Grants ☐ Instructional Material Aid ☐ Instructional Resources Aid ☒ Smart Schools Bond Act ☐ Other
3.	Other	300,000	Annual	☒ BOCES Co-Ser Purchase ☐ District Operating Budget ☐ District Public Bond ☐ E-Rate ☐ Grants ☐ Instructional Material Aid ☐ Instructional Resources Aid ☐ Smart Schools Bond Act

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Technology Investment Plan

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	Anticipated Item or Service	Estimated Cost	Is Cost One-time, Annual or Both?	Funding Sources May choose more than one source
				☐ Other
4.	Laptops	150,000	Annual	☒ BOCES Co-Ser Purchase ☐ District Operating Budget ☐ District Public Bond ☐ E-Rate ☐ Grants ☐ Instructional Material Aid ☐ Instructional Resources Aid ☐ Smart Schools Bond Act ☐ Other
5.	Desktops	75,000	Annual	☒ BOCES Co-Ser Purchase ☐ District Operating Budget ☐ District Public Bond ☐ E-Rate ☐ Grants ☐ Instructional Material Aid ☐ Instructional Resources Aid ☐ Smart Schools Bond Act ☐ Other
Totals:		1,559,000		

2. If "Other" was selected in question one, for items purchased or for a funding source, please specify.

Networking Equipment

Instructional Technology Plan - 2016Status of Technology Initiatives and Community Involvement

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H. Status of Technology Initiatives and Community Connectivity

1. Please check any developments, since your last instructional technology plan, that affect the current status of the technology initiatives.

- ☐ Changes in District Enrollment
- ☐ Changes in Staffing
- ☒ Changes in Funding
- ☐ Technology Plan Implementation
- ☒ Computer-based Testing
- ☐ Catastrophic Event
- ☒ Developments in Technology
- ☒ Changes in Legislation
- ☐ Other
- ☐ None

2. In this section, please describe how the district plans to increase student and teacher access to technology, at home and in the community.

The district is in the process of going to a Bring Your Own Device (BYOD) environment. the district is also exploring one to one initiatives to allow access anytime and anywhere for all students. The teacher and student environment will be migrated to the cloud for instructional purposes only, granting both teachers and students anytime access.

3. Please check all locations where Internet service is available to students within the school district's geographical boundaries.

- ☒ Home
- ☒ Community
- ☐ None

- 3B. Please identify categories of available Internet locations within the community.

The Seaford Public Library
Local Businesses including helkath clubs and restaurants
Local community parks

Instructional Technology Plan - 2016Instructional Technology Plan Implementation

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I. Instructional Technology Plan Implementation

- 1. Please provide the timeline and major milestones for the implementation of the technology plan as well as the action plan to integrate technology into curriculum and instruction to improve student learning.**

Summer 2016- Infrastructure upgrade on the secondary level to increase the bandwidth for all users (wireless, switching, internet bandwidth, etc...). This will provide faster experience for all users and decrease the amount of "lag time."

Summer 2016- The movement of all teachers and students into the Microsoft 365 cloud. This will enable them to create a more robust digital environment, including student email accounts to increase the level of communication between teacher and student.

Instructional Technology Plan - 2016**Monitoring and Evaluation**

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J. Monitoring and Evaluation

1. Please describe the proposed strategies that the district will use to evaluate, at least twice a year, whether the district's instructional technology plan is 1) meeting the vision and goals as outlined in the plan and 2) making a positive impact on teaching and learning in the district.

Through the use of online and local staff and student surveys, classroom observations, and lesson plan submissions the administration of the district will evaluate the impact the technology made on the student learning environment. This evaluation will be ongoing and fluid and part of the budget process on a regular annual basis.

2. Please fill in all information for the policies listed below.

	URL	Year Policy Adopted
Acceptable Use Policy -- AUP	http://www.seaford.k12.ny.us/cms/lib011/NY01000674/Centricity/Domain/3/Seaford_Policy_R21.pdf	2008
Internet Safety/Cyberbullying*	http://www.seaford.k12.ny.us/cms/lib011/NY01000674/Centricity/Domain/3/Seaford_Policy_R21.pdf	2008
Parents' Bill of Rights for Data Privacy and Security	http://www.seaford.k12.ny.us/cms/lib011/NY01000674/Centricity/Domain/3/Seaford_Policy_R21.pdf http://www.seaford.k12.ny.us/Page/177	2008

Instructional Technology Plan - 2016Survey Feedback

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K. Survey Feedback

Thank you for submitting your district's instructional technology plan (ITP) survey via the online collection tool. We appreciate the time and effort you have spent completing the ITP survey. Please answer the following questions to assist us in making ongoing improvements to the online survey tool.

1. Was the survey clear and easy to use

Yes

2. Was the guidance document helpful?

Yes

3. What question(s) would you like to add to the survey? Why?

(No Response)

4. What question(s) would you omit from the survey? Why?

(No Response)

5. Other comments.

On the questions where specific dates are asked as well as actions and outcomes it is very difficult to respond to this accurately for several reasons. Technology is ever-changing and new devices are developed yearly. Technology companies go in and out of business, and company structure changes making it more difficult to use established products. NYS curriculum is constantly changing as well, making classroom planning a challenge.

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Appendices

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Appendices

1. **Upload additional documentation to support your submission**

(No Response)