

Instructional Technology Plan - Annually - 2016

LEA Information

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	1,227	32	275	250	259	395	16

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

Jaime Kikpole

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

Other

3a. If the response to question 3 was "Other", please provide the title.

Network Administrator

Instructional Technology Plan - Annually - 2016Instructional Technology Vision and Goals

B. Instructional Technology Vision and Goals**1. Please provide the district mission statement.****Mission: What We Do**

The Cairo-Durham Central School District, in partnership with the community, is committed to creating multiple learning pathways that empower all students to maximize their individual potential and become leaders in their local and global communities.

Vision: What We Want to Be

The Cairo-Durham Central School District will provide a collaborative and engaging environment that is committed to the educational excellence of each individual student. By fostering high expectations and creating educational leaders, we will be recognized regionally and across the state as an exemplary school system.

- See more at: http://cairodurham.org/vision_statement#sthash.IZT4fYQ0.dpuf

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

The district will move away from the traditional instructional style of "computer lab lessons" and "non-computer lab lessons" and towards a system where technology is seamlessly present throughout lessons and projects when needed and can easily disappear into the background of the lesson. To do this, the district will build the infrastructure and inventory necessary to implement a 1-to-1 deployment among both students and faculty. In addition, students will have access to BYOD services, allowing learning to occur with whatever tool best facilitates the learning process. To this end, we have identified the following goals.

Goal 1 - Technology Literacy Benchmarks

The district will create and implement a vertically aligned instructional technology curriculum with benchmarks across all of K-12 in order to develop student technical literacy. This curriculum will include computer literacy (login, word processor, file management, etc.), information literacy (effective searching, critical reading, evaluating sources and bias, etc.), and privacy and safety (keeping passwords private, careful what is shared online, etc.)

Goal 2 - Reliable & Ready Access

The district will ensure that technical resources are reliable and readily available to classrooms. In addition, frequent training opportunities will be provided to the instructional faculty. By addressing the issues of stability, availability, and training, teachers will be better able to integrate technology into the curriculum as routine tools.

Goal 3 - Classroom Instructional Equipment

The district will review and improve its existing classroom instructional and presentation tools. Specific improvements will include the creation of a consistent set of tools across all classrooms, ensuring equity between classrooms enabling teachers to focus on their lesson. Professional development will be made available, especially that which emphasizes instructional strategy.

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.

Cairo-Durham's Technology Plan was a collaborative effort among many stakeholders.

The process began with the Superintendent and Network Administrator actively recruiting volunteers in every school to serve on the district's Technology Committee. This included teachers in primary, intermediate, middle, and high school grades, the media center specialist, administrators, and members of the Information Technology department. Meetings were held to discuss needs, past experiences, future objectives, and potential visions for the district's future. The committee decided on three goals for the plan and several steps of the action plan to achieve these goals.

The Network Administrator, as the committee facilitator, then met with the Superintendent, Business Manager, and each Principal to communicate the committee's conclusions, discuss details of the implementation, receive additional guidance, etc. This guidance was factored back into the plan. In the end, 12 district projects were identified for the action plan.

Instructional Technology Plan - Annually - 2016Instructional Technology Vision and Goals

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.

Funding to support an increase in the number of access points and student devices and improving network infrastructure.
Time to focus professional development on technology integration while many other competing interests are vying for the same time.
Changing the mindset of educators to transform how technology impacts instruction.

Instructional Technology Plan - Annually - 2016

Instructional Technology & Infrastructure Inventory

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?

NERIC

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 Gpbs or Mbps
Minimum Capacity	<ul style="list-style-type: none"> <input type="checkbox"/> Greater than 10 Gbps <input checked="" type="checkbox"/> 10 Gbps <input type="checkbox"/> 1 Gbps - < 10Gbps <input type="checkbox"/> 100 Mbps- < 1 Gbps <input type="checkbox"/> 50 Mbps - < 100 Mbps <input type="checkbox"/> 10 Mbps - < 50 Mbps <input type="checkbox"/> Less than 10 Mbps
Maximum Capacity	<ul style="list-style-type: none"> <input type="checkbox"/> Greater than 10 Gbps <input checked="" type="checkbox"/> 10 Gbps <input type="checkbox"/> 1 Gbps - < 10Gbps <input type="checkbox"/> 100 Mbps- < 1 Gbps <input type="checkbox"/> 50 Mbps - < 100 Mbps <input type="checkbox"/> 10 Mbps - < 50 Mbps <input type="checkbox"/> 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	<ul style="list-style-type: none"> <input type="checkbox"/> Greater than 10 Gbps <input type="checkbox"/> 10 Gbps <input checked="" type="checkbox"/> 1 Gbps - < 10Gbps

Instructional Technology Plan - Annually - 2016

Instructional Technology & Infrastructure Inventory

	Please provide the speed at which classrooms are connected to building wiring/network closet.
	<input type="checkbox"/> 100 Mbps- < 1 Gbps <input type="checkbox"/> 50 Mbps - < 100 Mbps <input type="checkbox"/> 10 Mbps - < 50 Mbps <input type="checkbox"/> Less than 10 Mbps
Maximum Circuit Speed Within a School Building	<input type="checkbox"/> Greater than 10 Gbps <input type="checkbox"/> 10 Gbps <input checked="" type="checkbox"/> 1 Gbps - < 10Gbps <input type="checkbox"/> 100 Mbps- < 1 Gbps <input type="checkbox"/> 50 Mbps - < 100 Mbps <input type="checkbox"/> 10 Mbps - < 50 Mbps <input type="checkbox"/> 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	<input type="checkbox"/> Mbps <input checked="" type="checkbox"/> Gbps
Maximum Capacity of Switches	10	<input type="checkbox"/> Mbps <input checked="" type="checkbox"/> 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

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

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)	119	119
Laptops/Virtual Machine (VM)	7	7
Chromebooks	709	709
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	0	0
Tablets less than nine (9) inches without access to an external keyboard	4	4
Tablets nine (9) inches or greater without access to an external keyboard	27	27
Totals:	866	866

Instructional Technology Plan - Annually - 2016

Instructional Technology & Infrastructure Inventory

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)?

10

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.

Specialized PD for teachers. Funding for that training.
 Funding for an assistive technology needs assessments for all students identified as disabled.
 Funding for assistive technology for students identified as disabled.
 Increase in Information Technology (IT) staffing in order to quickly and fully support assistive technology.
 Increased opportunities for OT & PT staff to work with IT staff on developing custom solutions for students.

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

	Number of devices in use
Document Cameras	89
Flat Panel Displays	56
Interactive Projectors	0
Interactive Whiteboards	4
Multi-function Printers	9
Projectors	95
Scanners	0
Other Peripherals	3
Totals:	256

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

3 x Distance learning / video conferencing systems

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?

Not Applicable

Instructional Technology Plan - Annually - 2016

Instructional Technology & Infrastructure Inventory

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 - Annually - 2016

Software and IT Support

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	Yes
Windows 7.0	Yes
Windows 8.0 or greater	Yes
Apple iOS 7 or greater	Yes
Chrome OS	Yes
Android	No
Other	Yes

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

iOS 5, FreeBSD, Linux, Windows Server 2003 & 2008

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	Yes
Internet Explorer 9 or greater	Yes
Mozilla Firefox	Yes
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.

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

Google Drive (Docs, Sheets, Slides)
 Microsoft Office
 Google Classroom
 i-Ready
 Khan Academy

Instructional Technology Plan - Annually - 2016

Software and IT Support

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

- Gale-Cengage
- Opposing Viewpoints
- Grolier's Encyclopedia
- InfoTrac Newsstand
- Country Watch

8. Does the district have a Parent Portal?

Yes

8a. Check all that apply to the Parent Portal if the response to question eight is "Yes."

- Attendance
- Homework
- Student Schedules
- Grade Reporting
- Transcripts
- Other

8b. If 'Other' was selected in question eight (a), please specify the other feature(s).

Teacher comments.
 Next year class registration.
 School contact information.
 School announcements.

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

9a. Please specify if the response to question nine was "Other".

Email newsletter.

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.

Title	Number of Current FTEs
Network Administrator	0.90
Computer Administrator	1.00
Computer Technology Assistant	0.70
	2.60

Instructional Technology Plan - Annually - 2016

Curriculum and Instruction

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

- Continue with online student management system to improve communication with the district and our families. In order to address certain difficulties, we are transitioning from PowerSchool to SchoolTool.
- We use Google Classroom to enable teachers to provide work digitally and limiting paper-based assignments, which are more easily lost.
- Increasing internet connection to allow more online multimedia resources, more differentiated instruction, and more individualized instruction. More bandwidth will also allow for more collaboration among teachers and students. To this end, we are increasing the Internet connection from 100Mbps to 200Mbps for the 2016-2017 school year.

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

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

The district tech plan includes the following:

- providing assistive technology for disabled students
- providing professional development on assistive technology for staff.

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

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

The district's plan does not prevent the support that 504 and IEP documents recommend. Furthermore, it establishes a baseline for student computer access that makes it easier to fulfill those recommendations. For example, the plan will increase the extent of the wireless networking.

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

4a. 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).

The district's Pupil Services Department has access to a variety of technology that it deploys to Special Education and English Language Learner students as needed. Additionally, these students have access to technology in the classrooms, media centers, and computer labs equal to all other students.

Instructional Technology Plan - Annually - 2016

Professional Development

F. Professional Development

Instructional Technology Plan - Annually - 2016

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.

Topic	Description	Audience	Method of Delivery
Assistive Technology Options	Make faculty aware of assistive technology options which are already in use so they can be aware of the options when they are a good fit for a student's needs.	Special Education faculty and staff	Small group conference. As-needed instruction, based on when and which students are identified as having additional needs.
Collaborative Student Work	Make faculty aware of available tools for students to work in groups, hand in work electronically, distribute materials to students electronically, etc. Focus on time saving techniques, student group projects, making students and faculty more productive by making materials available regardless of time or place.	Teachers	Conferences. On request coaching.
Locating Resources	Finding good resources, such as online videos that cover useful content in an effective way, original sources for history topics, etc.	Teachers	Conferences. On request coaching.
The Networked Class	Introduce faculty to tools for distributing materials to students and receiving work from students. Focus on time saving techniques to make making materials available regardless of time or place and reduce dependency on the availability of printers.	Teachers	Conferences. On request coaching.
Individualized Instruction	Using technology to deliver individualized feedback. Includes LMS and collaboration tools.	Teachers	Conferences. On request coaching.
Differentiated Instruction	Using technology to deliver variations in the same lesson in order to improve student understanding.	Teachers	Conferences. On request coaching.
School-Home Connection	Using tools such as the student management system to improve communication with parents without increasing teacher workload. This includes grades, attendance, future homework assignments, and classroom hand-outs.	Teachers, Office Staff, School Administrators	Conferences. On request coaching.

Instructional Technology Plan - Annually - 2016

Professional Development

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
Network Administrator	0.10
Computer Tech. Assistant	0.30
	0.40

Instructional Technology Plan - Annually - 2016

Technology Investment Plan

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.	Wi-Fi	145,000	One Time	<input type="checkbox"/> BOCES Co-Ser Purchase <input type="checkbox"/> District Operating Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Material Aid <input type="checkbox"/> Instructional Resources Aid <input checked="" type="checkbox"/> Smart Schools Bond Act <input type="checkbox"/> Other
2.	Laptops	272,500	Both	<input type="checkbox"/> BOCES Co-Ser Purchase <input checked="" type="checkbox"/> District Operating Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Material Aid <input type="checkbox"/> Instructional Resources Aid <input checked="" type="checkbox"/> Smart Schools Bond Act <input type="checkbox"/> Other
3.	Network Cabling	325,000	One Time	<input type="checkbox"/> BOCES Co-Ser Purchase <input type="checkbox"/> District Operating Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Material Aid <input type="checkbox"/> Instructional Resources Aid <input checked="" type="checkbox"/> Smart Schools Bond Act <input type="checkbox"/> Other
4.	Server/Network Software	15,000	One Time	<input type="checkbox"/> BOCES Co-Ser Purchase <input checked="" type="checkbox"/> District Operating Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Material Aid <input type="checkbox"/> Instructional Resources Aid <input type="checkbox"/> Smart Schools Bond Act <input type="checkbox"/> Other
5.	Other	200,000	One Time	<input type="checkbox"/> BOCES Co-Ser Purchase <input type="checkbox"/> District Operating Budget <input type="checkbox"/> District Public Bond <input type="checkbox"/> E-Rate <input type="checkbox"/> Grants <input type="checkbox"/> Instructional Material Aid <input type="checkbox"/> Instructional Resources Aid <input checked="" type="checkbox"/> Smart Schools Bond Act

Instructional Technology Plan - Annually - 2016

Technology Investment Plan

	Anticipated Item or Service	Estimated Cost	Is Cost One-time, Annual or Both?	Funding Sources May choose more than one source
				<input type="checkbox"/> Other
Totals:		957,500		

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

The district will be reviewing what equipment is needed in classrooms to improve lectures and presentations. This includes but is not necessarily limited to replacing projectors, document cameras, speakers, VCR/DVD/Bluray players, and wireless video streaming devices (e.g. Apple TV, Chromecast, etc.)

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

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 already provides all teaching faculty with a touch-screen chromebook that can convert into a tablet. Some teachers also receive Mac or Windows laptops, dependent upon the needs of their curriculum. This level of service will be maintained in the foreseeable future. We are also examining different options and methods for one-to-one deployments in grades 3 through 12. Options being explored include built in 3G or 4G radios as well as locked-down hotspots that only those computers are allowed to use. These options are currently only being considered for those students who's families can't afford Internet access of their own.

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

- Home
- Community
- None

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

Public library. Several local businesses including McDonalds and a convenience store named "Smart Stop."

Instructional Technology Plan - Annually - 2016Instructional Technology Plan Implementation

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 2015

- Make PD sessions on instructional technology available to faculty.

Fall 2015

- Introduce a Technology Special in K-5.
- Technology Committee begins research on options for classroom AV upgrades and solicits feedback from faculty members.

Late 2016

- Update Technology Special in K-5 to include new technology literacy curriculum benchmarks.
- Finalize a vertically aligned technology literacy curriculum across K-12, including what skills each teacher can expect their students to have at the beginning of the school year and benchmarks for measuring those skills.
- Begin BYOD access for faculty and staff, to gain feedback for the purpose of informing PD.

Summer 2017

- Upgrade wired network to reduce single points of failure, thus safeguarding against a widespread outage in the event of equipment failure.
- Upgrade wireless network to support new growth in 1:1 and BYOD initiatives, including the 400 new devices for the high school 1:1 initiative in the fall.
- Install new classroom AV equipment, per Technology Committee's research throughout 2015 - 2017.

Fall 2017

- Make PD sessions for faculty to prepare for 1:1 device roll out.

Spring 2018

- Begin roll out of 1:1 devices in two grades.

Instructional Technology Plan - Annually - 2016

Monitoring and Evaluation

J. Monitoring and Evaluation

- 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.**

The district's Technology Committee members will solicit feedback from the faculty and administration by way of semi-annual surveys. These surveys will be designed to identify technical issues, professional development needs, potential trainers, and potential modifications to the execution of this plan.

Committee members are also encouraged to solicit feedback from their peers. Such feedback might not appear through more formal channels, but could alert the committee to an issue that requires investigation.

The Technology Committee will meet roughly every 4-8 weeks throughout the school year to review feedback from surveys and peer discussion and discuss strategies to address concerns in the areas of professional development and technical issues that the surveys bring to light.

- Please fill in all information for the policies listed below.**

	URL	Year Policy Adopted
Acceptable Use Policy -- AUP	http://www.cairodurham.org/policy/computer-network-system-education-policy	2006
Internet Safety/Cyberbullying*	http://www.cairodurham.org/policy/internet-safety-policy	2015
Parents' Bill of Rights for Data Privacy and Security	http://cairodurham.org/data-privacy	2015

Instructional Technology Plan - Annually - 2016

Survey Feedback

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.**

(No Response)

Instructional Technology Plan - Annually - 2016

Appendices

Appendices

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

(No Response)