# **TECHNOLOGY PLAN: NEEDS ASSESSMENT**

In order to ensure that all students have the skills and capacity to solve the complex problems facing society today and in the future, Arizona's strategic long-range technology plan makes a series of recommendations that guide efforts to enhance student learning through technology, prepare educational professionals and provide continued development throughout their careers, develop leaders with the skills and philosophy to support an educational process facilitated by technology, and provide the framework that supports a technology-enable learning process.

Long Range Strategic Goals
Transforming Education: Enabling Learning for All Arizona Students
The Arizona Long-Range Strategic Educational Technology Plan, 2009

The state technology committee made strategic recommendations for the following interrelated components: 1) Student Learning, 2) Leadership, 3) Preparation and Development of Educators, and 4) Infrastructure. Your Needs Assessment is a tool for you to evaluate your current realities in regard to these four components, as well as determining a list of the necessary needs your LEA has which will assist you with aligning your educational technology goals, strategies, and action steps with the Arizona technology plan. A summary of the recommendations and goals for each of the four components can be found throughout this Needs Assessment.

#### LEA INTRODUCTION:

Briefly introduce and describe your school district or charter school.

The Chinle Unified School District #24 is located in northern Apache County, near the geographic center of the Navajo Nation. The District has seven schools and is the one of the largest districts in Northern Arizona. Due to a lack of economic development, the area is characterized by high unemployment and low-income rates among the majority of the people.

Curriculum integration in the Chinle public schools has some excellent successes and glaring failures. The quality and consistency of the curriculum is primarily dependent upon individual school leadership. It is even more dependent on the time the leadership takes to concentrate on making sure what is taught matches intended goals and the state standards that are targeted in each lesson are being taught using the best proven, researched methods available. Because of work in past summers, curriculum alignment in some subjects meets district stated objectives. In other subjects, or in other grade levels, various teachers teaching different sections of the same course may deliver completely unmatched material! This becomes of greatest importance when students transfer classes or must retake a course of study.

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# **ARIZONA TECHNOLOGY INTEGRATION:**

Arizona's definition for fully integration technology is "LEAs who have embedded appropriate technology to support student learning across all curricular areas."

The U. S. Department of Education requires states to report the number of LEAs who have fully integrated technology.

Using the matrix below, self-assess the current reality of technology integration for your LEA. Please use the scoring rubric included in the matrix, and the final calculation and status of implementation at the end of the matrix.

Components	Developing (1 point)	Approaching (2 points)	Fully Integrated (3 points)	LEA Self- Assessment Score
Staff Technology Proficiency	No instrument(s) are available or utilized for assessing the level of technology proficiency of staff members.	One or more instruments are made available for staff to assess their level of technology proficiency.	An LEA utilizes a specific instrument(s) to assess the level of technology proficiency for staff.  An LEA has identified expectations/standards for the level of technology proficiency of staff and provided professional development for staff members to meet the expected level of proficiency.	1
2009 Educational Technology Standard	No specific curriculum resources with educational technology standard performance objectives are available and/or no alignment with educational technology standard performance objectives has occurred for any grade levels.	Some curriculum resources with identified educational technology standard performance objectives are provided for one or more content areas and/or grade levels.  Some alignment of Educational Technology Standard performance objectives with other core content areas may be evident across one or more grade levels.	Educational Technology Standard performance objectives have been aligned with other core content areas across all grade levels.  Curriculum resources are available to assist teachers with implementing instructional activities that have educational technology standard performance objectives embedded.	1
Classroom Integration of Technology	No instrument(s) are made available for assessing how effective a teacher is integrating technology in his or her classroom.  Technology in the classroom is almost exclusively used by the teacher.	One or more instruments are made available for teachers to self-assess how effectively technology is being integrated in their classroom.  Teachers use a variety of technologies to enhance instruction. Student use of technology occurs occasionally and is generally for research, presenting information, and creating some text and multimedia products.	An LEA utilizes a specific instrument(s) to regularly assess how effectively a teacher integrates technology into their classroom.  Teachers and students utilize technology daily to explore content, communicate and collaborate on real-world problems, provide real-time data of student progress and to assist teachers and students in individualizing a student's learning experiences.	1

Components	Developing (1 point)	Approaching (2 points)	Fully Integrated (3 points)	LEA Self- Assessment Score
Professional Development/ Instructional Support	No professional development or instructional support on the use of technology is offered.	Professional Development on the use of technology in the classroom is offered.  Instructional support for the effective use of technology is available for some teachers through instructional coaches or curriculum resources.	Professional Development is offered based on needs identified from Staff Technology Proficiency and Classroom Integration of Technology Assessments.  Professional Development is provided for content areas/grade levels on effective technology integration strategies and the use of curriculum resources available for educator's specific grade level and/or content area.  Coaches are available at each school site to assist teachers with implementing strategies for effectively integrating technology in the classroom.	2
Availability of Technology	Classrooms have 1-2 computers. Additional computers may be available in computer labs.	Classrooms include some additional instructional technology hardware (projector, interactive whiteboard, electronic response systems, document cameras, etc.) to assist with instruction. Classrooms have at least 1-2 computers and may have access to additional computers through computer labs and/or mobile carts.  Wireless access to the Internet is available in some schools.	Classrooms include a wide variety of instructional technology hardware (projector, interactive whiteboard, electronic response systems, document cameras, digital cameras, digital camcorders) to assist with instruction.  Students have access to individual computing devices that can access the Internet.  Wireless access to the internet is available campus-wide across all	3
Technology Funding/ Technology Support	LEA maintains a technology support staff to computer ratio of 1 person per 750 computers or greater.  Technology funding provides for a computer replacement cycle of 6 years or longer.	LEA maintains a technology support staff to computer ratio of 1 person to between 400-750 computers.  Technology funding provides for a computer replacement cycle between 4 and 6 years.	schools.  LEA maintains a technology support staff to computer ratio of 1 person to 400 computers or less.  Technology funding provides for a computer replacement cycle of 4 years or less.	3
Comprehensive LEA Technology Integration Status	Developing - total 6–9 points	Approaching - total 10–15 points	Fully Integrated - total 16–18 points	11

# **STUDENT LEARNING:**

The challenge for our education system is to leverage the learning sciences and modern technology to create engaging, relevant, and personalized learning experiences for all learners that mirror students' daily lives and the reality of their futures. In contrast to traditional classroom instruction, this requires that we put students at the center and empower them to take control of their own learning by providing flexibility on several dimensions. A core set of standards-based concepts and competencies should form the basis of what all students should learn, but beyond that students and educators should have options for engaging in learning: large groups, small groups, and work tailored to individual goals, needs, interests, and prior experience of each learner. By supporting student learning in areas that are of real concern or particular interest to them, personalized learning adds to its relevance, inspiring higher levels of motivation and achievement.

Transforming American Education: Learning Powered by Technology National Educational Technology Plan (Draft), 2010

#### **Long-Range Strategic Goals:**

All learners will:

- have access to authentic learning activities appropriate to their development whenever and wherever they need.
- use appropriate strategies and technology to collaborate, construct knowledge and develop solutions to real-world problems.
- communicate effectively with global audiences.

Long Range Strategic Goals Transforming Education: Enabling Learning for All Arizona Students The Arizona Long-Range Strategic Educational Technology Plan, 2009

#### **CURRENT REALITY:**

#### Select your implementation level for each recommendation in the columns provided.

Summary of Recommendations for the Local Education Agencies: AZ Long-Range Strategic Ed Tech Plan, 2009	Already Implemented	Currently Implementing	Planning for Implementation	Not Implementing
Provide district policies, curriculum, and resources to ensure that every student has the tools for an individualized, collaborative, and authentic learning experience.	·	In Progress		
Select and deploy a variety of technology-based tools to provide differentiated instruction for every child by monitoring student assessment and suggesting developmentally appropriate content.	Galileo Achieve 300. Compass.			
Embed the <i>Arizona Educational Technology Standard</i> within the curriculum at each grade level.		In Progress		
Select and utilize local, commercial, and open source digital content, aligned to state standards, to provide online access to specialized, rigorous, dual enrollment, credit recovery, and remedial courses.		In Progress		

Summary of Recommendations for the Local Education	Already	Currently	Planning for	Not
Agencies: AZ Long-Range Strategic Ed Tech Plan, 2009	Implemented	Implementing	Implementation	Implementing
Provide curriculum and resources that ensure personal				
safety for students in a digital world and policies that	EIS signed			
specify expectations of appropriate behavior and rules	$\mathrm{sh}^{\mathrm{eet}}$			
for students, parents, staff, and teachers.				

Describe the current level of technology integration into curriculum areas and the method of technology integration.

Achieve 3000 and Galileo; Compass learning available, but not training for integration into all Perkto 6 grades.

KidBiz/Galileo 2<sup>nd</sup> and 6<sup>th</sup> grade, they will use data to guide curriculum supplemental R+M k-1

What is the current level of technology literacy and how do you measure **student** technology literacy?

Achieve 3000 (2-6) no Pre-k-1 | Star (2-6) under Save the children programs.

How are you developing and using innovative strategies for delivering curriculum through the use of technology (consider items such as distance learning technologies, online learning, and other e-learning systems)?

CES- Smart boards but not connection to a strategic lesson plan, and curriculum integration.

CDC-Smart Boards, no initiative for training even though the training is offer by IT department.

MVES-Interactive boards (3-6) classrooms, no initiative for usage in the classroom neither a plan to use with curriculum integrating technology and learning together for the students.

All CUSD users have access to the internet, applications, and their files via Access Points WI-FI.

# How are you using technology to promote increased parental involvement and student engagement?

Power School for parents

Achieve 3000 for students

These 2 applications can be access via the internet if the students have or have a PC, Smartphone.

How are you using technology to increase authentic learning, increased collaboration and communication skills, and problem-solving **by students**?

All Schools at CUSD # 24 has access to 6 computers per classroom and a laptop checked out to the teacher to enhance her or he's teaching Skills plus. All these PC's have access to the internet and all application open to the schools except these prohibited by CIPA filters. These PC's are capable to handle a 100mps connected via LAN added to that access to encrypted Wireless access for their

BYOD, IPods, and Smartphone's. There is also infrastructure to deliver Video in demand, long distance learning and Virtual tours using devices designed for that purpose. And last all School are equip with a minimum of 2 computer labs with access to the internet and all application open for students.

#### Additional student learning current realities--

All application use to help the student learn is web base, they can access if they have access to the internet from home. Our vendors are required to have a product via WEB BASE to help us and our student's access to their needs and learning. Other plan is to bring technology to the student by providing an I pad from k-6 and a special laptop designed for students from 6 to 12 grades on one to one services.

#### STUDENT LEARNING NEEDS:

After reflecting on your current realities and the Arizona Long-Range Strategic Educational Technology Plan, please include a bulleted list for any **student learning** items or issues that are needed.

- All principals must participate and follow the requirement on allowing teachers to increase their knowledge with local and requested Staff development offer on needs.
- Principals must participate on creating lesson plans on curriculum integration with technology to enhance learning on students
- Principals must support more time on the computer for students, by designing curriculum requiring students to be allowed to spend more time in computers for research and projects requiring help from the internet.
- Principals, coaches' and mentors must agree on a single line of requirement to allow students base on lesson plan to have access on a computer for research.
- All participants in educating CUSD student must be trained on all services offer to the students that will include software applications and others.
- Students need more time accessing their computers.
- Student need a professional and resourceful keyboarding program.
- Students need to be train how to use the School local email System.
- Staff development for the teachers to allow student more time in computers.
- Principal, coaches' and Staff developer do follow up's constantly on projects.
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# **LEADERSHIP:**

#### **Long-Range Strategic Goals:**

All leaders will:

- model, implement, and assess appropriate technology use at all levels of the teaching and learning process.
- have access to the appropriate tools and resources to guide instructional and administrative practice.
- implement a dynamic technology planning process that expands curricular and instructional opportunities to students.
- provide opportunities for sustained, relevant, timely and effective professional development

Long Range Strategic Goals Transforming Education: Enabling Learning for All Arizona Students The Arizona Long-Range Strategic Educational Technology Plan, 2009

#### **CURRENT REALITY:**

#### Select your implementation level for each recommendation in the columns provided.

Summary of Recommendations for the Local Education	Already	Currently	Planning for	Not
Agencies: AZ Long-Range Strategic Ed Tech Plan, 2009	Implemented	Implementing	Implementation	Implementing
Develop and implement a comprehensive Strategic Technology Plan, tied to the district's strategic plan and school improvement plans, that ensures the instructional and administrative use of technology at the classroom, library, campus, and district level.				Not in place
Adopt the Consortium for School Networking's (CoSN) CTO Skills Framework for the hiring and evaluation of Chief Technology Officers.				Not in place
Develop incentives for new and veteran educators to become technologically literate.				Not in place
Include community input into the planning and support for the integration of technology into teaching and learning.				Not in place
Coordinate the use of electronic data in district planning to support research-based decision-making focused on student success.				Not in place
Participate in collaboration with representatives from PreK-12, Higher Education, parents, businesses and community to share planning resources and services.				Not in place
Support and encourage leaders to attend and present at local/state/national educational technology conferences.				Not in place

List and describe the current uses of technology to support your administrators and their responsibilities (district, school-based, student achievement, and teacher effectiveness) in the chart below. (add additional rows as needed)

Technology Resource	Activity
Web base Attendance	Student attendance / Reporting ADE
Phone System	Communication/Safety
Email System	Communication/ collaboration/paperless
Check Out Devices	Remote access
Wireless Network	Access to the internet anywhere in campus
Computer Labs /WI-FI	For entire class research and WI-FI option
Video Conference Devices	Virtual tours, video conference, long Dis Learning.
Internet	www world wide web research access
Web Base Applications	Compass, Ar and others for extra curriculum notes.
SharePoint/FTP server	File share

Describe how administrators promote and evaluate the effective use of technology by teachers.

Very little or no support, only for achieve 3000 and Galileo are Superintendent Initiative and support, sets 40 activities and goals.

School varies by school site.

Describe the roles site-based LEA administrators play in the types and quantity of technology that are available to their staff and students.

- No Technology implementation is monitored at school sites.
- \_Some School sites LEA require technology integration on lesson plans.
- \_When training is offered by IT staff and inviting these in need will not show up.
- \_ Not Follow ups by Principals is done.

#### Additional leadership current realities--

- \_ Not observation of classroom in how technology is used by leadership.
- \_Not current installation on adopted text resources still has no software application.
- \_Not integration on curriculum with technology is mandate by leadership.
- \_Not Technology plan is in place per school campus.

#### **LEADERSHIP NEEDS:**

After reflecting on your current realities and the Arizona Long-Range Strategic Educational Technology Plan, please include a bulleted list for any **leadership** items or issues that are needed.

- Leadership needs a self assessment in technology knowledge.
- Leadership needs train constantly on a minimal 50% of all apps hosted by District.
- Leadership will request subordinates the same requirements and knowledge on technology
- Leadership will do follow ups on technology progress and observations.
- Leadership must agree that there is this issue and must be taking some consideration above other projects.
- Staff development with administrators and teachers.
- Training in how to use technology.
- Understand technology and what it can do and vice versa.
- Leadership needs to request, mandate teachers to use technology.
- Communicate issues more frequently using E-mail, phone, Page System, Videos to staff.

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# PREPARATION AND DEVELOPMENT OF EDUCATORS:

Just as leveraging technology can help us improve learning and assessment, the model of 21st century learning calls for using technology to help build the capacity of educators by enabling a shift to a model of connected teaching. In such a teaching model, teams of connected educators replace solo practitioners and classrooms are fully connected to provide educators with 24/7 access to data and analytic tools as well as to resources that help them act on the insights the data provide.

Transforming American Education: Learning Powered by Technology National Educational Technology Plan (Draft), 2010

#### **Long-Range Strategic Goals:**

All educators will:

- complete their initial preparation with the pedagogy, practical knowledge and skills to use technology to enhance every student's learning.
- have access to research-based professional development opportunities whenever and wherever they need.

Long Range Strategic Goals Transforming Education: Enabling Learning for All Arizona Students The Arizona Long-Range Strategic Educational Technology Plan, 2009

#### **CURRENT REALITY:**

Select your implementation level for each recommendation in the columns provided.

Summary of Recommendations for the Local Education	Already	Currently	Planning for	Not
Agencies: AZ Long-Range Strategic Ed Tech Plan, 2009	Implemented	Implementing	Implementation	Implementing
Prepare administrators and district professional				
development personnel to conduct consistent				
observations of classroom use of technology using a				
technology integration observation form to determine			Planning	
levels of technology integration and effective use of				
technology that incorporates this observation into all				
formal professional evaluation.				
Develop and maintain funding models and budgets that				
support participation in statewide, technology			Planning	
professional development opportunities for all teachers			Tailling	
and administrators.				
Develop and maintain professional learning				
communities that use appropriate technology to			Planning	
support learning and reflection by instructional			Fiaming	
personnel.				
Develop and maintain partnerships with Higher				
Education to pilot new instructional strategies for		In Place		
integrating technology.		ASU		
		1130		

Summary of Recommendations for the Local Education	Already	Currently	Planning for	Not
Agencies: AZ Long-Range Strategic Ed Tech Plan, 2009	Implemented	Implementing	Implementation	Implementing
Utilize innovative strategies for anytime/anywhere				
delivery of ongoing professional development,				
including online and other distance learning models			Planning	
and digital content delivery services to meet the				
diverse and personal learning needs of all educators.				
Provide instructional coaches and mentors to support				
technology integration efforts to improve learning in			Planning	
core curriculum areas.				
Provide professional development on the impact of				
non-compliance with district policies regarding the use				
of technology and include compliance with these			Planning	
policies as a component of teacher evaluation and				
observation instruments.				
Use grants and, where possible, district funds to host				
and cosponsor regional and statewide technology			Planning	
symposia and training that promote the sharing of			1 mining	
instructional strategies and techniques.				
Work with parents and higher education to develop				
opportunities for parents to learn how technology can			Planning	
enhance their child's learning.				

What are the methods used for identifying technology professional development needs for teachers, staff, and administrators?

- \_ Survey taking on schools on what teachers needs help on.
- \_ Staff development offered by the IT department.
- \_Other methods to know that the staff has issues is phone call on a minimal issue with their computer.
- -No using email hosted by the District.
- -Pc's covered on the classroom on walk troughs.
- \_ Devices assigned still on the wrap case.
- \_ New application installed in District will follow with staff development.

List and describe the technology professional development opportunities that are available to **teachers and staff** on the effective integration of technology into the curriculum in the chart below. (add additional rows as needed)

PD Activity	Facilitator or Provider of PD	Frequency of PD Offered
Computer Basics	Sheina Yelowhair	Once a Month
Internet Browsing	Olin Littleman	Once a Month
Microsoft Products	Olin Littleman	Once a Month
E-Mails System	Olin Littleman	Once a Month
Web Applications	Victor Trejo/ Provider	Once a Month
CIPA Filter	Victor Trejo	Once a Month
VoIP Phone System	Glynes Mitchell	Once a Month
Paging System	Glynes Mitchell	Once a Month
Web Site posting	Victor Trejo	Once a Month
SharePoint Posting	Victor Trejo	Once a Month
Wireless Access	Clayton Tsosie	Once a Month
Galileo	Staff Developer	Once a Month
Achieve 3000	Staff Developer	Once a Month
Tech Comm meeting	IT staff	Once a Month

List and describe the technology professional development opportunities that are available to administrators on the effective use and evaluation of technology in the chart below. (add additional rows as needed)

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What incentives are available to LEA teachers, staff, and administrators for participating in technology staff development?

If is over the hours of their contracts will be overtime pay.

How do you measure the effectiveness of the technology professional development offered?

We cannot measure the effectiveness due to the lack of continuity and support from leadership and there is no follow up also due to the bridge between curriculum and an IT department.

#### PREPARATION AND DEVELOPMENT OF EDUCATORS NEEDS:

After reflecting on your current realities and the Arizona Long-Range Strategic Educational Technology Plan, please include a bulleted list for any **professional development** that is needed under each category.

#### • Teachers and Staff

- o Creation and draft of curriculum using technology 80% or more.
- o Create lesson plans with technology embedded, integrated on tools already in place
- o Interactive board bundle with a laptop, projector training
- o Training on Power School for these that are new to this application
- o Microsoft Products (Excel, Word, PowerPoint, Access and others)
- o More Training in how to use School Email.
- o Galileo Training (understanding Data reports, quizzes, assessments etc)
- o Compass learning training on how to create rosters and work with.
- o Training on differentiation with lower school grades.
- Creation of master lesson plans District Wide to be followed by other teachers.

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#### Leadership and Administration

- Development and Understand that technology is an intricate part of curriculum and education
- Effectively using tools in place for communication for all.
- DO follow ups with goals.
- Creation and draft of curriculum using technology 80% or more.
- o Create lesson plans with technology embedded, integrated on tools already in place
- o Interactive board bundle with a laptop, projector training
- Training on Power School for these that are new to this application
- Microsoft Products (Excel, Word, PowerPoint, Access and others)
- More Training in how to use School Email.
- o Galileo Training (understanding Data reports, quizzes, assessments etc)
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- Creation of master lesson plans District Wide to be followed by other teachers.

ARIZONA DEPARTMENT			

# **INFRASTRUCTURE:**

An essential component of the 21st century learning model is a comprehensive infrastructure for learning that provides every student, educator, and level of our education system with the resources they need when and where they are needed. The underlying principle is that infrastructure includes people, processes, learning resources, policies, and sustainable models for continuous improvement in addition to broadband connectivity, servers, software, management systems, and administration tools. Building this infrastructure is a far-reaching project that will demand concerted and coordinated effort.

Transforming American Education: Learning Powered by Technology National Educational Technology Plan (Draft), 2010

#### **Long-Range Strategic Goals:**

The goals for learners, leaders, and educators will be achieved through an infrastructure that provides:

- secure and reliable anytime/anywhere access to a variety of current and emerging technologies.
- just-in-time assistance to support the use of technology for administration, teaching and learning.
- policies and procedures that ensure equitable access to all users.

Long Range Strategic Goals Transforming Education: Enabling Learning for All Arizona Students The Arizona Long-Range Strategic Educational Technology Plan, 2009

#### **CURRENT REALITY:**

Select your implementation level for each recommendation in the columns provided.

Summary of Recommendations for the Local Education	Already	Currently	Planning for	Not
Agencies: AZ Long-Range Strategic Ed Tech Plan, 2009	Implemented	Implementing	Implementation	Implementing
Develop and implement new strategies and practices for the funding, purchase and support of technology infrastructure and services.	Implemente d on old tech plana new one is on the works			
Provide a 1:1 learning environment for 6th-12th grade students and at least a 3:1 ratio for students below 6th grade. (ETAC has avoided using "computer to student ratios" because other digital learning devices, i.e. net books or smart phones, might describe these ratios)			Planning on implementati on	
Maintain an internal wide area network that provides connections from the district to each school and between schools of at least 100 Mbps per 1,000 students/staff within the next one to four years and at least 1 Gbps per 1,000 students/staff within the next five to seven years. (Adapted from High-Speed Broadband Access for All Kids)	Done on 100mps/50 0 studentswi ll work on 1gbps on 1000 students			

Summary of Recommendations for the Local Education	Already	Currently	Planning for	Not
Agencies: AZ Long-Range Strategic Ed Tech Plan, 2009	Implemented	Implementing	Implementation	Implementing
Provide and maintain an infrastructure for communications with parents and community members, including year-round anytime/anywhere access to school news, educational resources, and data.	Done using a Wi-fi System installed in all campuses and also planning for an update to accommoda te the BYOD			
Utilize technologies that are environmentally safe and can be used to ensure the safety of students (i.e. surveillance and emergency warning systems).	Done, CUSD # 24 has CCTV Cameras District wide managed via IP.			
Provide and maintain an infrastructure for online grading and assessment systems that are standards based and allow access to student performance data to students, parents, and appropriate district personnel.			Planning for implementati on	
Develop strategies, resources, and best practices that facilitate anytime/anywhere access to digital learning resources and activities by all students within the district. This includes secure access to network resources and ensuring that critical technology applications and data can be recovered in a timely manner.	Done has stated with Encrypted Wi-Fi access and data secure and back up			
Provide funding and release time for support staff from districts of common size, interests, and technologies to meet and share best practices in infrastructure support.			Planning for implementati on	

Describe your network configuration (the amount and type of network connections to the Internet, to individual schools, and within each school) and utilization (the type of network or connectivity that is being used, network configuration, and the current level of utilization.).

CUSD Networks is designed with Security at the highest due to its finance system operated locally and encrypted. The network is designed to self contain on virus breakdowns using class A subneting in Vlans and for escability in the future. The Chinle community has 5 schools and the administration building, the 5 schools are home runs with 48, 96, 24 Single mode Fiber Links to main MDF's and except for the Chinle High School, the other 4 schools has a main MDF and 5 IDF's with SM fiber links also. The High School has and MDF with 11 IDF's also all SM fiber links. The 5 core MDF's is linked to our Telco or Server farm redundantly to main DNS Server, Firewalls, Routers and Filters for CIPA compliance. This campus is capable of speeds from 100mps to 1000mps locally and reaching the Internet on 50 mps planning to increase to 100 near future. The 2 remote Schools (Manyfarms Public School and Tsaile Public Schools) are linked via Metro Ethernet with 25mps serial connection via Router and also on the local remote school have a main MDF and 5 IDF identical settings with Chinle Schools on single mode fiber links.

Describe the current level of access to technology resources (computers, cell/smartphones, interactive whiteboards, student responders, digital cameras, and other technology):

#### • Students have access

- Computer labs
- Each classroom has 6 actives PC's
- Internet Access
- o I pads
- o BYOD access (IPods. Smart phone, wireless tablets, laptops)
- o laptops
- o Interactive boards
- Long distance devices (BNI, Polycom, Tandberg and Skype (local video camera on device)for virtual tours
- o Encrypted Wi-Fi
- o School Email System.
- Network printers

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#### Each teacher in the district has

- Internet Access
- o I pads (some)
- o BYOD access (IPods. Smart phone, wireless tablets, laptops)
- Assigned laptops (some)
- Interactive boards (some)
- Long distance devices (BNI, Polycom, Tandberg and Skype (local video camera on device)for virtual tours
- o Encrypted Wi-Fi access
- School Email System access.
- Network printers
- Assigned PC
- o Phone in the classroom

- 5 to 6 PC's in the classroom Computer labs **Paging System Applications from Microsoft** 0 Administrators have **Internet Access** I pads 0 Assigned laptops Long distance devices (BNI, Polycot, Tandberg and Skype (local video camera on device) for virtual tours **Encrypted Wi-Fi access** 
  - School Email System access.

  - Network printers
  - Assigned PC
  - Phone in the Office
  - Computer labs
  - Paging System
  - **Applications from Microsoft**

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Indicate what role, if any, that E-Rate has played or will play in maintaining or expanding LEA infrastructure.

For the past 6 to 9 years, The District has worked with several entities which include SLD, ASFB, Consortiums and other grants to improve and enhance to 1 gig to 10 gig mps locally and the performance of our Internet Services, backbone infrastructure (copper, fiber and Wi-FI) and devices use to have our networks works. In 2003 and 2004 school year the CUSD # 24 invested with its own budget purchasing all devices includes Switches, Routers, Firewalls, Content engines and other devices. Many of these same devices are still in place and supporting our CUSD schools but at some point these devices have an end life and will no longer be supported by either Smart net or other maintenance support structures.

According to our prior technology plan our devices should have a life span between 5 and 6 years. Our IT department will work on how we can replace all these devices, essentially our entire internal network and LAN structure, for newer, more current devices using SLD and other programs and State funds or local funds. CUSD has or will update all its network devices (switches) to a more modern standard and apply for funds via SLD and other programs to replace, repair and maintain the many functions including video, voice, data, paging system, internet services, POE, Wi-Fi AP's and others.

List and describe the technology infrastructure for department procedures in the chart below. (business needs, HR, district communication, transportation, state reporting requirements, etc.) (add additional rows as needed)

Department/Service	Technology Infrastructure/System Used
Business/Inventory/Purchasing/HR/Depts	Visions and hosted by CUSD #24 IT Department
District Communication	CUSD E-mail; VoIP Phone system
Student Information System (Required for state reporting)	Power School from Piersen
Transportation	RTA
Food Services	NutraKids hosted by CUSD
Special Education	Power School

List and describe staffing levels versus devices/infrastructure needing support in the chart below. (add additional rows as needed)

Device/Infrastructure Component	Number of Devices	Number of Support Positions	
Networking	216 POE Switches 180 AP WI-FI VoIP Services 577	1 technician	
Servers/Systems (Email, SIS, Finance, etc.)	66 Phy / 22 Virtual Servers/2cm/2Unity/2A SA firewalls.	1 technician	
Workstations/Software	4202 WS/ 338 laptops Ipads 47	5 technician	
Other Devices (printers, projectors, document cameras, interactive white boards, etc.)	687 Net Prin/VCarts 23/	1 technician	

#### **INFRASTRUCTURE NEEDS:**

After reflecting on your current realities and the Arizona Long-Range Strategic Educational Technology Plan, please include a bulleted list for any **infrastructure** that is needed under each category (Hardware, Software, and Staffing).

#### Hardware

- Need and update from and aging 220 PoE Cisco network switches installed in 2004 district wide.
- o Replace 21 edge Server, or School DNS, DHCP, Terminal Services.
- o Update the 188 and add more AP's District wide.
- UPS power Source on each IDF with a 6KVA capable UPS and MDF with an 8KVA capable UPS added to the network for management.
- o Install more Power Conditioners on IDF's and MDF's that needs one.

	0	ManyFarms and Tsaile Public Schools needs a 150amps generator each to sustain continuity on their telco services in black outs, winter etc
	0	Fiber termination tools
	0	
	0	
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	0	
	0	
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	0	
•	Softwa	are
	0	Cisco works to help manage and ping point Switches with issues, failures and corrupted with an enable SMTP trap for alerts.
	0	An application to help us migrate from windows XP to Windows 7 professional.
	0	An application to help clone, install, repair infected PC's or laptops
	0	Assessment application for teacher, students including administrators.
	0	CUSD cloud for instant access to apps.
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•	Staffin	ng en
	0	Need one staff per school or 1 per 500 workstations.
	0	Staff developer with license to teach.

0	Front office receptionist.
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Technology Plans: If you apply for Priority 2 Services through the E-rate program, you must submit this Needs Assessment to TechPlans@azed.gov as one part of your technology plan. The Arizona Department of Education (ADE) will review the technology plan for accuracy and compliance.

Detailed records of all submissions (and accompanying documents) must be retained by the school district or charter school and made available for review or audit upon request.