Technology Planning Tool

School Districts, Consortia or Charter Schools who apply for technology funding through any Federal grant program, NM Technology Act funds, or E-rate, are required to have developed a comprehensive, three-year plan, which outlines how the District/Charter intends to utilize and integrate educational technology.   This plan must be approved by the Public Education Department (PED) of the State of New Mexico.

Technology Plan for Gadsden Independent School District

PLAN TERM: Begins: July 1, 2013   Ends: June 30, 2016

The submitting district/charter (check all that apply)

☒   is compliant with the provisions of the Children's Internet Protection Act (CIPA).

☐   will be CIPA compliant by <insert date>   Keep in mind that your district is not eligible for funding if they are not CIPA Compliant

☒   will apply for ERATE discounts for the current fiscal Year

The DISTRICT/Charter's comprehensive technology plan must be approved by the local school board prior to submission to the Public Education Department.

Date the plan was approved by the local School Board: <insert date>

Please attach Board meeting minutes

Approved by:

_____

Signature of Superintendent or Authorized School Official   Date of Signature

Printed Name and Title:

Efren Yturralde   Superintendent

District Technology Coordinator/Contact

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VISION AND MISSION STATEMENTS

Vision Statement

The Gadsden Independent School District will have environments that create digitally literate students, promote inventive thinking, effective communication, and engage students in instruction designed to teach the skills and knowledge needed to be productive in the 21st Century.

Mission Statement

The Gadsden Independent School District will increase the capacity of:

- Teachers to provide instruction that will prepare students for the 21st century; and
- The district's infrastructure to improve service and increase technology access.

TECHNOLOGY COMMITTEE

The Technology Committee should represent all stakeholders. Development of the technology plan and implementation of the plan should enable parents, educators, students and community members to benefit from the investment in technology and all should have representation on the committee.

Member	Title	Constituency Represented
Calixto Arzaga	Director of Technology	District Office
Susan Yturralde	Executive Director, Curriculum & Instruction	District Office
Rosa A. Hood	Director, Secondary Program Support	District Office
Jeanne Fields	Director, Federal Programs	District Office
Gema Salcedo	Administrative Intern	Early College HS
Tomas Diego, III	Instructional Coach	Elementary K-6
Leslie Jackson	Coordinator, Literacy & Intervention Programs	District Office
Lupita Chavez	Coordinator	Human Resources
George Manriquez	District Instructional Specialist	Mathematics
Agustin Garcia	Computer Lab teacher	Elementary Schools
Edmundo Duran	Counselor	Elementary Schools
Nick Wohlgemuth	Assistant Principal	High Schools
Marco A. Perales	Computer Tech	Technology-District Office
Jose Reyes	Instructional Specialist	Bilingual Education Dept.
Katreena Arroyo	Student	High Schools
Julie Mendoza	Student	Elementary Schools

The New Mexico Educational Technology Bureau in collaboration with the New Mexico Council on Technology in Education has adopted the federal guidance for technology planning. To meet requirements for funding, the Gadsden Independent School District technology plan must include the following:

Strategies

Technology broadens the range of students' choices as they learn. Students use technology tools to find information, collect, organize and interpret data, and present results. Technology also offers teachers options for adapting instruction to special student needs. The following strategies are used by the schools to improve academic achievement and teacher effectiveness.

1) To improve the academic achievement as measured against Common Core State Standards, Benchmarks, and Performance Standards, including technology literacy, of all students attending schools served by the Gadsden Independent School District:

Strategy 1: Increase achievement for all students by engaging in standards based content instruction integrated with technology and language literacy.

- Align curriculum for grades K-12 to insure integration of digital literacy skills
- Implement standards-based, assessment driven instructional units that integrate content instruction with technology.

Strategy 2: Implement technology based intervention programs to increase achievement for struggling learners.

- Use disaggregated student achievement data, and Student Assistance Team information to identify struggling learners.
- Implement academic intervention plans to address gaps in student performance on content standards and benchmarks, and credit recovery process.

Strategy 3: Use technology tools and software to collect, organize, analyze, disaggregate, and report student achievement data.

- Data Driven Classroom and short-cycle assessments provide student performance data to Inform curriculum and instruction decisions, and practices.

Strategy 4: Implement technology to support learning styles and meet the needs of all learners in the district.

- Technology facilitates developmentally appropriate learning experiences by providing information in a variety of ways (visual, auditory) and at a variety of levels.
  - Fast Math
  - First in Math
  - Read 180
  - Achieve3000
  - Lexia
  - Reading Coach
  - Imagine Learning/Imagine Learning Español

2) To improve the capacity of all teachers in schools served by the Gadsden Independent School District to integrate technology effectively into curriculum and instruction:

Strategy 1: Provide research-based professional development to increase teacher/administrator capacity to integrate content area instruction with technology.

- Provide professional development to teacher cohorts to learn the process for successful integration of content area instruction with language literacy and technology.
- Establish an internal grant system to award computers and other instructional technologies to teachers who are committed to implementing instruction integrated with technology in their content area
- Establish a District Technology Committee to oversee campus technology purchases to ensure District compatibility

- Establish a cohort of Instructional Technology Coaches who will serve each campus in order to increase capacity in the use of instructional technology

Strategy 2: Provide professional development to train administrative and support staff to use software systems to improve services, increase efficiency and accuracy.
- Maintain the use of software systems that improve administrative services, increase efficiency and accuracy such as the use of Web-EPSS, Power School, PD 360, and Data Driven Classroom.
- Maintain a professional development schedule to provide training to new employees and update skills of returning employees.

Strategy 3: Create and maintain school conditions that support and encourage teachers as they work to develop basic technology skills and integration strengths.
- Block time provides periods for professional development, collegial sharing, curriculum planning and teacher experimentation.

Strategy 4: The goals and expectations of the district/schools support with teachers in their integration efforts.
- The teacher evaluation systems and hiring practices are aligned with the system technology goals which support technology integration into the curriculum.

Goals

Gadsden Independent School District aligns its goals with the goals of the New Mexico Public Education Department and the New Mexico Council on Technology in Education:

Professional Development
- Our administrators and teachers will participate in online professional development (Webinars) to acquire instructional strategies and pedagogy necessary to facilitate learner-centered, standards-based curricula that integrate the use of technology tools.

- Our administrators, teachers and staff will participate in professional development to acquire the tools and skills needed to analyze student achievement data through Data Driven Classroom and MAPS.
- Our teachers, administrators, and staff will participate in professional development opportunities necessary to advance the technical skills required to promote online communication among students, teachers, administrators, parents, and community members.

Student Technology Literacy

- Our students will develop technology literacy through the use of telecommunications to collaborate, publish, edit and interact with peers, experts, and other audiences.
- Our students will use technology research tools to locate, evaluate, and collect information from a variety of resources.
- Our students will use technology resources for solving problems, collecting data and making informed decisions in technology-infused mathematics, science, social studies, and language arts classes.
- Computer literacy is important in both instruction and **assessment.** Our students will be competent in computer literacy in order to participate effectively in the PARCC assessments scheduled for the 2014-15 school year.
- Early College High School will continue to use IPADs for interactive math proofs, reading eBooks, and viewing documents and maps and social studies.

Computer Access

- A ratio of one workstation to every student will be established in each school in the district within the next five years in order to ensure access for learners to write and publish across the curriculum.

Curriculum Development and Integration

- Our teachers will incorporate the use of technology tools such as word-processing hardware and software into the classroom in order to facilitate the writing process, promote creativity, and increase accessibility to text content.

- Geometry Sketch Pad
- Tinker Plots
- Fathom
- Microsoft Office 2010
- Fast Math
- First in Math
- Imagine Learning and Imagine Learning Espanol

Academic Achievement Improvement Strategies

- To improve student academic achievement through the use of technology in elementary schools and secondary schools.

- To assist every student in crossing the digital divide by ensuring that every student is technologically literate by the time the student finishes the sixth grade, regardless of the student's race, ethnicity, gender, family income, geographic location, or disability.

    - The students will be provided with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching.

Steps to Increase Accessibility

- Student learning has significantly improved, using appropriate technologies, leading to high achievement in Public Education Department adopted content standards.
    - Teachers will design or adapt relevant learning experiences incorporating digital tools and resources to promote student learning and creativity.
    - Engage students in exploring real-world issues and solving authentic problems using digital tools and resources.
    - Promote student reflection using collaborative tools to reveal and clarify students' conceptual understanding and thinking, planning and creative processes.

- Educators have the capacity to establish student centered, technology enhanced learning environments that result in increased student performance and economic viability.
- K-12 students and educators in Gadsden Independent School District will have affordable, universal access to high speed, robust telecommunications, and schools optimized for technology.
- Funding is available to support planning, implementing and assessing initiatives for integrating technology into learning classrooms and schools.

Steps to increased accessibility – *a description of the steps the Gadsden Independent School District will take to ensure that all students and teachers have increased access to technology. The description must include how the Gadsden Independent School District will use Ed. Tech. funds 1) to help students in high-poverty and high-needs schools, or schools identified for improvement or corrective action under section 1116 of Title I, and 2) to help ensure that teachers are prepared to integrate technology effectively into curricula and instruction. Section 1116 of Title I may be accessed on-line at:*
http://www.ed.gov/legislation/ESEA02/pg2.html#sec1116.

Infrastructure for Technology

- Current Students per computer ratio: 3 elementary students per computer
  2 middle School students per computer
  2.5 High School Students per computer

  GISD Will keeps adding computers to get the goal of one student per one computer district wide.
- Teacher per computer ratio: One computer per teacher
- 5 - 7 years Replacement Cycle: Computer replacement established for service life of the unit or an evaluation is made by Technology Department recommending replacement.
- Internet Access: Internet is in all rooms on all campuses; limited bandwidth to each classroom over the local area network access for students and teachers learning.

Network Operation Center (NOC) shares a DS3 100mbps Internet Access Line to all 22 schools. Gadsden applied for an Internet Access port upgrade of 1gbps on Erate 16 Fiscal Year 2013-2014.

- Gadsden has been looking into upgrading bandwidth to Broadband network access for the past 5 years through Erate applications for Qwest-Metro Optical Ethernet (QMOE), Wireless Broadband internet access and applied for the Broadband Technology Opportunities Program (BTOP) in collaboration with Dona Ana County, City of Las Cruces, Las Cruces Public Schools and more; for a 1gbps (1000mbps) fiber connection among school sites. Gadsden applied for a dark fiber network broadband of 1gbps speed on Erate 16 Fiscal Year 2013-2014.

- Wide Area Network with Windows Server Active Directory connecting with Fiber between buildings and 100mb Ethernet with Cat5 and Cat6 to the end user equipment.

- Wireless Access Network district wide. Currently Gadsden is installing a more robust wireless access system in all 22 schools. The new Ruckus wireless system supports a scalable solution for internet services. This system will support current Network access infrastructure and will support a potentially fast expanding network (Broadband Access Network).

- Each school site has limited access to data, video, voice and internet access from NOC at T1 (1.5mbps) line service. High Schools have 6 T1's (9mbps), Middle Schools have 3 T1's (4.5mbps), and Elementary Schools have 2 T1's (3mbps).

- Distance Learning: Web-based/on-line learning; satellite based learning over video distribution network; and two-way distance learning will be improved with the acquisition of 1 Gb Broadband network access.

- Wide Area Network/Local Area Network (WAN/LAN): All campuses connected to WAN sharing multiple district-wide resources, in school site level robust LAN with 100mb that allows for resources such as, but not limited to, video streaming and desktop teleconferencing; access to network resources for students and teachers.

- Other technologies: Fully equipped classrooms with technology to enhance student instruction readily available, including all the above as well as new and emerging

technologies such as iPADs, Smart Boards, Document Cameras, and VOIP telephony. Currently we have a combination of PBX and limited Voice over IP phone system, Gadsden is currently upgrading GAC, High Schools, and Middle Schools to a fully VOIP with funds from Erate 14 fiscal year 2010-2011 and already applied for 16 Elementary Schools VOIP upgrade on Erate 16 fiscal year 2013-2014 application.

- Two T1's with internet access for TeleHealth communication for Chaparral and Gadsden High Schools Health Based Centers.

- School Messenger, a parent notification system to promote phone, email, social media and RSS feed communication with parents, students, faculty and staff. The RSS feed feature of School Messenger is being integrated with the District Web site to inform parents, faculty, staff and the community of emergency events (lockdowns, closures, delayed openings and re-openings) occurring at the schools.

- Improve District Web site to cater more information for parents and the community. Gadsden will continue training faculty and staff on Web 2.0 tools offered by eChalk Web hosting Services in its effort to improve pedagogy through user-generated content online. Gadsden will also continue offering eChalk email services for high school students to improve teacher-student communication.

- Light Speed

Secure perimeter protection to cover students under required CIPA regulation. Perimeter protection to include web/spam filter internet content and firewall technologies hardware and software capable of protecting the computer assets from latest vulnerabilities and subscription services for relevant Internet threats such as malware, spyware, virus, protocol control.

Gadsden is also deploying My Big Campus (MBC) as a service for teachers and students to safely engage one another online. MBC allows student to view educational content hosted on YouTube. My Big Campus is integrated with the GISD network and Light Speed system (Web filter) filtering policies to ensure

sharing and safe access while providing reporting to enforce District's acceptable use policies.

- Throughout all Erate years funding we will have implemented, maintained, and improved the backbone technology infrastructure and adding more schools every year.

Meeting the Needs of All Gadsden Independent School District 1) *to help students in high-poverty and high-needs schools, or schools identified for improvement or corrective action under section 1116 of Title I,*

- Appropriate accommodations made for any student qualifying for Special Education or have a 504 plan in place.
- Install software programs that will read text from the computer screen to the students, increase readability, voice recognition, and other varieties of adaptations to make it possible for students with disabilities to use technology.
- Provide ongoing proficiency training and education to students and teachers to use the computers, software, applications, etc.
- Use disaggregated student achievement data using student information system (Data Driven Classroom), and Student Assistance Team to identify struggling learners.
- Create and implement academic intervention plans and software to address gaps in student performance on content standards and bench marks and credit recovery process (Read 180, E2020, Imagine Learning, Achieve3000, First in Math, Imagine Learning Espanol, Lexia, Reading Coach, and Fast Math).
- Expand technology capacity to support e-learning distance education; and other new technologies with the acquisition of fiber Broadband internet access.

2) To help ensure that teachers are prepared to integrate technology effectively into curricula and instruction.

- The use of an electronic student database management system will allow educators to monitor assessment scores, attendance, assignments, etc. more efficiently and effectively (Power School and Data Driven Classroom) to increase student achievement and Parent involvement with the Power School Parent Portal.
- Use of Power School (Student Information System) to store and organize data for easy distribution and analysis.
- Provide training to educators to develop inter-class curricula and projects utilizing the Internet, Microsoft applications, and other technologies to increase student learning.
- Provide training in educational technology encouraging educators to develop and deliver rich, diverse class instruction that includes multimedia and authoring software equipping them for them to achieve as student learners.
- Establishment of an Instructional Technology Coach for each campus to provide consistent professional development and support throughout the school year.

Promotion of curricula and strategies that promote technology integration – *a description of how the Gadsden Independent School District will identify and promote curricula and teaching strategies that integrate technology effectively into curricula and instruction, based on a review of relevant and current research, leading to improvements in student academic achievement, including a timeline.*

The integration of technology into curricula, instruction, assessments are critical to help students succeed in school today and in the workplace tomorrow.

- Increase teacher capacity to integrate technology with content area instruction and increase student capacity to use technology to learn and respond. Instruction will be aligned with the Common core State Standards, Benchmarks, and Performance Standards for all content areas.
- In core area instruction, grades K-12, the emphasis is on content instruction integrated with language literacy and technology. The goal is to expand the number of computers to each classroom through net books, laptops, and/or iPADs.

- The major technology tool within the district that is integrated with content instruction is the computer but the district also supports the use of media-technology to enhance learning, increase productivity, and promote creativity.
    - Exploring the use of iPADs for electronic Text Books school year 2013-2014
    - Graphing Calculators for all High School and middle school Math Teachers (currently in use)
    - Document Cameras currently in use in all math classes at middle school and 2 high school classes.
    - DualBoards to expand and enhance classroom lessons
- E-Learning – currently using computer based instruction software to serve as credit recovery, remediation, and digital learning
    - IDEAL New Mexico
    - Edgenuity (Formerly known as E2020)
- Data Driven Classroom maintains an information infrastructure and technology that supports and facilitates accurate data collection, entry and storage. This data enables teachers to make decisions regarding student achievement (currently in use).
- Intervention programs used to increase student achievement (all are currently in use).
    - Fast Math
    - First in Math
    - Read 180
    - Achieve3000
    - Lexia
    - Reading Coach
    - Edgenuity (formerly Education 2020)
    - Imagine Learning and Imagine Learning Español
- Use open-content, web-based collaborative models for the educational content that will serve both as core text as well as provide an adaptive environment for learning.

Professional development – *a description of how the Gadsden Independent School District will provide ongoing, sustained professional development for teachers, principals, administrators, and school library media personnel to promote the effective use of technology in the classroom or library media center.*

- K-12 Staff will take advantage of Professional Development offered by Campus Instructional Technology Coach framework
- K-12 Staff utilize the professional development webinars
- K-12 Staff are trained to access and use Data Driven Classroom to make instructional decisions and align assessments to the standards.
- Enable new collegial relationships and professional learning communities among staff.
- K-12 Staff/school personnel are trained to access and use Power School, our student database management system.
- Provide workshops and other opportunities to train teachers, principals, school library media personnel, and administrators in hardware knowledge; software evaluation and implementation; web page fundamentals; technology integration, including Microsoft Office, integrated lesson plans, instructional technology, and the implementation of electronic portfolios.
- Campus Instructional Technology Coaches will provide ongoing professional training to campus teachers to teach the process for successful integration of content area instruction with language literacy, mathematics, and technology, enabling teachers to develop and deliver rich, diverse class instruction and understand the benefits of technology.
- Technology skills are expected of all educators.

Innovative delivery strategies – *a description of how the Gadsden Independent School District will encourage the development and use of innovative strategies for the delivery of specialized or rigorous courses and curricula through the use of technology, including distance-learning opportunities, particularly in areas that would not otherwise have access to such courses or curricula due to geographical distances or insufficient resources*

- Digital learning through Edgenuity
- Establishing Campus Instructional Coaches
- Developing in-house professional development plans to promote technology literacy and educational technology competencies.
- Professional Development involving the use of educational and productivity software in the classroom.
    - Microsoft Office
    - Fast Math
    - Read 180
    - Acheive300
    - First in Math
    - Imagine learning and Imagine Learning Español
    - Lexia
    - Edgenuity (formerly Education 2020)
    - Reading Coach
- Support the use of online technologies for the postings of assignments and the presentation of student outcomes.
- Encouraging participation in dual-credit courses offered through Dona Ana Community College.
- Encouraging educator participation in the use of Open Content in the classroom.
- Promoting the use of web sites to supplement classroom curriculum and offering the delivery of instruction in engaging ways through use of projection systems and/or interactive whiteboard technologies.

- Developing online courses as another avenue for individuals seeking alternative course offerings. The online curricular offerings should be challenging, relevant, and aligned with state standards for student learning.
  - Teachers will be skilled in the subject matter, learning theory, technologies, and learning pedagogies appropriate for content area and the online environment.
  - The students will be actively engaged in the learning process and interact on a regular basis with the teacher and online classmates.
  - Assessment will provide opportunities for students to reflect on their own learning and work quality during the course, and give students the opportunity to demonstrate mastery of the course content.
  - Accountability assessments that inform students, educators, policymakers, and the public whether New Mexico students are on track toward college or career readiness based on the Common Core Standards (PARCC)
  - Technical assistance will be available whenever needed by students or teachers.
- The establishment of wireless wide area network for all campuses.

Parental involvement – *a description of how the Gadsden Independent School District will use technology effectively to promote parental involvement and increase communication with parents, including a description of how parents will be informed of the technology used.*

- Gadsden Independent School District Web Site contains featured links to pages specifically for parents, community and students.
- Parental awareness of GISD phone/email system is provided that includes features such as 24-hour attendance line (School Messenger Parent Notification web hosted solution).
- Parent/community meetings that give parents access to programs such as Career Cruising, registration, student progress and computer classes.
- The development of online technologies for the posting of assignments and making those sites available to parents through the Power School Parent Portal.
- Training for parents in the use of Power School.

- Promoting email communication between parents and professional staff.

Collaboration with adult literacy service providers – *a description of how the district Technology Plan will be developed in collaboration with adult literacy service providers, where adult literacy service providers are available.*

- Community Liaisons are placed at each region of the school district to increase parent and community involvement in the schools. A strand within this plan provides opportunities for parents to receive increased access to adult literacy education.
- Family Literacy Centers will be established in each region of the District. A Family Literacy Center exists in one of our areas and has been very successful. These centers have computers available where parents are given classes on how to navigate through the technology.

Accountability measures – *a description of the process and accountability measures that the GADSDEN INDEPENDENT SCHOOL DISTRICT will use to evaluate the extent to which activities funded through Educational Technology are effective in:*

- Integrating technology into curricula and instruction, increasing the technology capacity of teachers, and enabling students to demonstrate proficiency against the Common Core State Content Standards, Benchmarks and Performance Standards.
- Providing students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching.
- Assisting students in passing the Standards Based State Mandated Assessments, short cycle assessments and teacher-made and curricular assessments, which will be proven by their test scores.
- Improving the proficiency of educators using and teaching the new technologies.

Supporting resources – *a description of the supporting resources, such as services, software, other electronically delivered learning materials, on-line assessments, and print resources that will be acquired to ensure successful and effective uses of technology.*

- Software and Operating Systems
  - Microsoft Operating Systems
    - Windows Server 2008
    - Windows 7
    - Windows 8
  - Microsoft Exchange Server 2010
  - Mac OS-X Operating System
  - Linux Operating System
  - Microsoft Office Professional Suite
  - Adobe Professional Suite
  - MAP Testing
  - Data Driven Classroom
  - Power School
  - STARS reporting
  - General educational software
  - Teacher-selected applications
  - Destiny-Follett
  - Discovery Education Video Streaming
  - Textbook Tracker Inventory
  - Online Textbooks
  - Infinite Visions Human Resources & Finance system software
- Hardware
  - Servers
  - Appliance based firewall
  - Routers
  - Layer 3 managed network switches

- o   Network Printers and multi-purpose printers (copier, fax, scanner, printer)
- o   Telecommunications Systems (phone, voicemail)
- o   Monitors
- o   Video and Audio production equipment
- o   Security/Surveillance Camera System district wide
- o   Wireless Access Network district wide

- Services
  - o   Cellular Service for Operations
  - o   Online Software as a Service (Power School)
  - o   District Website Hosted and Student Email accounts
  - o   Telecommunications (OC3, DS3, T1, PRI, phone service, and long distance)
  - o   District wide dark fiber network broadband 1gbps speed
  - o   Internet access for faculty/staff
  - o   Internet access for students
  - o   Basic Maintenance on Erate-able Technology Infrastructure
- Professional Development and Educational Support
  - o Regional Educational Technology Assistance (RETA)
  - o International Society for Technology in Education (ISTE)
  - o New Mexico Society for Technology in Education (NMSTE)
  - o Association for Educational Communications and Technology (AECT)
  - o Innovative Digital Education and Learning (IDEAL-NM)
  - o District supported technology professional development
  - o Edgenuity (Digital Learning)
  - o CIM Technology Solutions
  - o Local institutions of higher education
  - o New Mexico Public Education Department