HARDEE DISTRICT SCHOOLS DIGITAL CLASSROOM PLAN

The intent of the Hardee School District Digital Classroom Plan (DCP) is to provide a perspective of the technology needs of our school district in the 21st century. Technological advances have had an on-going and direct impact on the lives of our students and their families. Today's technologies, however, have the greatest potential for impact as they have made the world a smaller, more competitive, and demanding environment in which to live. Careers that will rely on the skills promulgated by these new technologies will require students to be creative, critical and analytical thinkers

Technology is now so imbedded in the lives of our students that they think not in terms of what technology they use, but in terms of the activity technology enables. Students indicate that they want instructors who are comfortable enough with technology to use it much as they would a textbook. Essentially, today's students have grown up using digital technology.

This digital classroom plan is driven by the needs of today's generation of students. Creating learning opportunities that are rich with educational content, and are connected to a multitude of resources that offer our students opportunities to utilize technology in a unique and valuable manner, is the ultimate goal of the Hardee School District.

Part l: Digital Classroom Plan – Overview

While the act of learning is something that will never change, the tools and resources used by both the instructor and the learner have in the past and will continue to evolve over time. With today's digital environment, students live a media-rich, connected, and mobile lifestyle which provides them the opportunity to often produce content as much as they are consumers of content. Given this, it is no surprise that students have an expectation that the learning environment will mirror this digital age. There appears to be a disconnect, however, between what students expect and what schools deliver. The Hardee School District recognizes the weight of this disconnect and acknowledges that the connection between technology engagement and achievement is vital to the overall success of the district.

Student, teacher, and parent access to the Hardee School District's educational technology resources will be significantly expanded over the next five years with a strong emphasis being placed on the implementation of mobile computing devices and twenty-four hour a day access. An increase of wireless access will allow mobility of learning. Mobility is seen to be one of the more transformative movements in education by "positioning teachers as coordinators in a collaborative, project-based learning environment rather than lecturers in the front of the classroom." The increase in wireless access will allow interactive digital content throughout the

classroom allowing personalized instruction and immediate feedback to the teachers of student learning.

Textbook publishers have been moving toward a digital curriculum. For the past several textbook adoptions additional educational materials have been available on publisher web sites. Learning games, assessments, review materials and special projects have become popular with both teachers and students. Interactive digital textbooks will link each student to various online resources, either provided or vetted by the publisher which will develop an increase in student awareness and interest. Instead of simply reading a textbook, sensory elements will take the student on new and innovative learning adventures. Students will actually interact with their textbooks. Instead of answering several questions at the end of a reading section and waiting until the next day for the teacher to correct them, students will now respond to the questions digitally and have immediate feedback.

With the addition of the digital classroom, teachers will be able to transform their classroom into a more engaging, interactive and collaborative environment. Students and teachers will be engaged in interactive information presentations, content synthesis and collaborative learning. Assessment, evaluation and feedback will all be integrated into daily lessons. A digital classroom is more conducive for teachers to be more flexible and responsive to individual student's needs. Students can now be involved in student-centered project-based learning while collaborating not only with their classmates but with students from other classrooms within their school and also around the globe. To make the digital classroom room a reality in the Hardee County School District, significant planning, training, coordination and district funds will be required.

1.1: District Technology Mission, Vision, Core Belief and Goals

Mission: Technology in education is a teaching and learning tool, that when used effectively, will support and help transform how we interact, produce and seek personal growth and enjoyment. We expect effective, competent, and purposeful use of technology by administrators, teachers, and students to establish seamless integration of technology on a daily basis throughout the curriculum and extracurricular activities.

Vision: The changes in our world have introduced an urgent need to teach students skills that transcend across all curricular areas. The 21st century classroom will ensure that technology is an integral and ubiquitous part of a flexible and relevant environment. Students will be challenged to use technology and information resources responsibly and to think critically and creatively to solve problems effectively and efficiently.

Core Beliefs for Educational Technology:

- Engagement and learning increase with the use of technology

- ❖ Technology supports differentiation of learning
- ❖ Active participation and contributions to the learning process increase with the use of technology
- ❖ Project and inquiry-based learning experiences are enhanced with the use of technology
- ❖ Technology skills are best learned in context through project and inquiry-based learning
- ❖ Technology supports broader collaboration opportunities both locally and globally
- ❖ 21st century communication requires fluency in the use of technology

Technology Focus: The Hardee School District's technology focus is to utilize cutting-edge technology that supports learning. This definitive goal drives our students, families, teachers, and administrators to embrace a visionary plan. Our plan concentrates on ideas for how the classroom will look in the future and how all learners will thrive in a global society. A critical component of the plan will be to create a multimedia-rich environment of learning. The plan also addresses the idea that cutting-edge, innovative technology integration is futile unless a comprehensive plan is in place for ongoing professional development that meets the needs of all of our learners. Professional development will be essential so that the integration of technology in teaching and learning is seamless and based on best practices. The following eight goals specify how the school district will support the integration of technology in teaching and learning.

Focus #1: Curriculum Integration: Improve student academic achievement through the use of technology in elementary and secondary schools

- ➢ Implementation of new Information, Communication and Literacy curriculum (ICT)
- ➢ Participate in curriculum reviews to ensure the integration of technology throughout all curriculum areas
- ➢ Require teachers to design and implement classroom lessons featuring technology skills
- ➢ Improve student technology literacy
- ➢ Refine and build on the successful integration of technology skills through each grade level
- ➢ Ensure that teachers have a common planning time to collaboratively plan to meets the needs of the curriculum
- ➢ Provide teachers with a toolbox of mini-lessons, graphic organizers and benchmark assessments on technology skills
- ➢ Continue to incorporate high-quality digital resources
- ➢ Continue and complete implementation of the interactive board system
- ➢ Explore and adopt open source and open content Curricular resources and online textbook materials
- ➢ Infuse technology to improve achievement in reading and writing through the use of digital storytelling, multimedia, and other resources

Focus #2: Ensure that all educators are proficient in the use and integration of technology and ongoing professional development activities are provided

- Train administrators on a technology integration evaluation instrument for classroom observations and walk-throughs
- Develop and implement a technology assessment for administrators and teachers to inform training needs
- Continue to offer a wide range of district-wide technology training opportunities
- Develop e-learning means of training to support user group or individualized professional training

Focus #3: Equitable Access: Ensure that all schools have the capacity, infrastructure, staffing and equipment to meet stringent academic needs

- Explore, pilot and implement flexible access to mobile devices such as laptops, handhelds and Netbooks
- Provide availability to classroom sets of digital cameras, video streaming libraries and e-books
- Develop a five-year cycle of replacement and upgrade for desktop and laptop computers
- Increase capacity of school-based staff to trouble-shoot low level hardware and software issues through creation of self-help audio and video clips
- Continue and build upon deployment of district data dashboard for improved single source access to data and assessments
- Explore and pilot access to various documents and resources
- Improve student access to portable and wireless technology devices such as laptops, netbooks, handhelds and classroom performance systems
- Evaluate technology systems and recommend, budget and upgrade systems such as email and student information

Focus #4: Equitable Resources: Ensure that K – 12 resources are available for all students, regardless of race, ethnicity, income, geographical location or disability so they can become technologically literate by the end of their public school career

- Explore, pilot, and implement research-based software to support reading and writing skills including but not limited to the RTI initiative
- Identify and standardize compatibility issues of diverse technologies
- Continue implementation of student technology assessments
- Create and monitor each student not achieving attainable goals on high stakes testing

Focus #5: Evaluation: Develop a continuous process of evaluation and accountability for the use of educational technology as a teaching and learning tool and as a measurement and an analysis tool for student achievement

- Continually evaluate the success and progress of the Digital Classroom Plan
- Monitor assessment data and review curriculum initiatives to ensure alignment standards
- Utilize a tracking system to monitor usage of computers and software
- Continue enforcement of security procedures including password security and internet filtering

Focus #6: Funding: Develop a schema of current and future financing requirement to support the Digital Classroom Plan

- Fully pursue funding avenues through e-rate, grants, capital and operating funds
- Explore additional grant opportunities and alternative sources of funding
- Explore the possibility of purchasing a variety of low-cost computing devices

1.2: District Profile

Hardee County is a small, rural, conservative community located in central Florida. The major cities are Bowling Green, Wauchula (county seat), and Zolfo Springs. According to the 2010 census report, the population of Hardee County is 27,731 with 18,037 living in unincorporated parts of the county. Hardee County has a diverse population with 47.6% White, 43.1% Hispanic, 7.5% Black, and 1.8% Other. Since the 2000 Census Report, we have had a population growth of 2.94%. Hardee County has a land area of 638 square miles with a population density of 43.5%.

Hardee County has been experiencing a rise in unemployment, declining student enrollment, and continued poverty. According to statewide economic ratings, Hardee County ranks number four in the state poverty rate at 26.1% with the unemployment rate at 10.30%. The median household income is $37,466. The same census showed that 59.9% of residents hold a high school diploma and 7.5% hold a bachelor's or graduate degree.

The main employers for Hardee County residents include the phosphate mines, the district education system, state prison system, governmental offices, and a rehabilitative facility for patients with head injuries. Hardee County supports fifty-six recognized Protestant and Catholic churches. The Hardee County School Board has eight schools; five elementary schools, one junior high school, one senior high school, and one alternative school. In the fall of 2006, the school district opened a new school facility which houses both Hilltop Elementary School and Hardee Junior High School. This K–8 facility is the district's first new school since 1981. The district has a total of 5,323 students.

Hardee District Schools Student Enrollment (October 1, 2014)

Hardee Senior High School	1,320 Students
Hardee Junior High School	1,237 Students
Hilltop Elementary School	368 Students
Wauchula Elementary School	762 Students
North Wauchula Elementary School	575 Students
Bowling Green Elementary School	462 Students
Zolfo Springs Elementary School	583 Students
Pioneer Career Academy	16 Students

The Hardee County School District student population is comprised of 44% White, 48% Hispanic, and 8% Black. In compliance with the No Child Left Behind requirement, North Wauchula Elementary, Zolfo Springs Elementary and Hardee Senior High School are Prevent Schools and Hardee Junior High School is a Focus School.

Hardee District Schools have a high mobility rate as a result of our migrant student population. All five of the elementary schools and the junior high school are Title One schools. The district's free and reduced lunch rate is among the highest in the state with a county average of 82%. The rates are as follows:

Hardee Senior High School	72%
Hardee Junior High School	85%
Hilltop Elementary School	94%
Wauchula Elementary School	77%
North Wauchula Elementary School	81%
Bowling Green Elementary School	93%
Zolfo Springs Elementary School	85%
Pioneer Career Academy	94%

Great effort has been to recruit and retain the very best educators and employees as well as allocate personnel and resources where they will impact our students. With a limited tax base, Hardee County is highly dependent on state and federal funding for revenues. Up to this point, the district has been able to minimize impact on classrooms by reductions in other areas. The district has successfully met the class-size amendment and keeping pace with our immediate needs.

The Superintendent of Schools and the five school board seat are elected positions. The superintendent and school board enjoy a positive and collaborative relationship. The school board is Master Certified through the Florida School Board Association and receives workshops and training from the School Board attorney on a regular basis. The superintendent is in his second term and is a respected, highly knowledgeable and experienced leader who is fully

certified by the Florida Association of District School Superintendents (FADDS) and is currently in his forty-first year as a public school educator. He has served as a principal for twenty-seven years as well as numerous other district positions. The Hardee District School System employs eight district administrators and fourteen school-based administrators. The district employs 391 instructional staff members and 284 support personnel.

1.3: District Team Profile

Title/Role	Name:	Email/Phone:
Information Technology District Contact	Todd Markel	tmarkel@hardee.k12.fl.us 863-773-9058 (Ext. 229)
Curriculum District Contact	Marie Dasher	mdasher@hardee.k12.fl.us 863-773-9058 (Ext. 238)
Instructional District Contact	Sherri Albritton	salbritton@hardee.k12.fl.us 863-773-9756 (Ext. 201)
Finance District Contact	Greg Harrelson	gharrelson@hardee.k12.fl.us 863-773-9058 (Ext. 217)
District Leadership Contact	Bob Shayman	bshayman@hardee.k12.fl.us 863-773-9058 (Ext. 212)
Systems Analyst	Adam Williams	awilliams@hardee.k12.fl.us 863-773-9058 (Ext. 239)
MIS Administrative Assistant	Kim Williams	kwilliams@hardee.k12.fl.us 863-773-9058 (Ext. 208)
Director: South Florida State College	Teresa Crawford	teresa.crawford@southflorida.edu 863-773-3081
Director of Professional Development	George Kelly	gkelly@hardee.k12.fl.us 863-773-9058
Land Lease Manager – Mosaic Corporation	Paul Samuels	paul.samuels@mosaicco.com 773-3443
Vice President: Wauchula State Bank	Thomas Trevino	ttrevino@hardee.k12.fl.us 863-773-4151
Director of Adult Education	Mike Wilkinson	mwilkinson@hardee.k12.fl.us 863-773-3173
Principal: Hardee Junior High	Doug Herron	dherron@hardee.k12.fl.us 863-773-3147
Principal: Bowling Green Elementary	Kathy Clark	kclark@hardee.k12.fl.us 863-375-2288
Assistant Principal: Wauchula Elementary School	Jessica Gray	jgray@hardee.k12.fl.us 863-773-3141
School Board Member	Jan Platt	plattjan@yahoo.com 863-773-3033
School Board Member	Mildred Smith	m.smith@hardee.k12.fl.us 863-773-3551

ELA Department Head: Hardee Senior High School	Linda Shayman	lshayman@hardee.k12.fl.us 863-773-3181 (Ext. 250)
Social Studies Teacher: Hardee Senior High School	Kerry Fitzgerald	kfitzgerald@hardee,k12.fl.us 863-773-3181

The Digital Classroom Plan Advisory Committee was developed to support the implementation of this educational technology initiative. The task of this committee is to develop, recommend, implement, support and communicate the Digital Classroom Plan to all stakeholders. The committee's responsibilities include the following:

- Revise the Digital Classroom Plan as needed
- Encourage and support innovative technology use and practices
- Assess the technology needs and concerns of staff
- Explore and recommend the implementation of emerging technologies
- Explore and apply to grant opportunities related to technology needs
- Communicate technology needs to potential funding entities
- Define professional development needs of the district
- Encourage and support professional development and training for all employees
- Utilize research-based information in all work related to instructional technology

1.4: Planning Process

The Hardee School District has developed a Digital Classroom Plan Advisory Committee to carry out the aforementioned mission, vision, core values, and goals as it relates to technology in the classroom. The committee used these resources and a variety of other resources to align to the state-supported initiative. During the initial phase of the authoring process, individuals responsible for the coordination of key areas of technology provided information to the Deputy Superintendent for inclusion into the plan. These individuals included representatives from instructional and media, ESOL, assistive technology, adult literacy, instructional management systems, curriculum integration, school-based personnel, parents, business and community leaders. Information provided was utilized to develop the foundation for the Digital Classroom Plan and a correlating priority of technology needs.

The Digital Classroom Plan committee took safeguards to ensure that the Superintendent's leadership team had consistent involvement in the development of the plan. The Superintendent has reviewed the authoring team's final draft and provided additional input. A draft of this plan was provided to School Board members and approved at a regularly scheduled board meeting on September 25, 2014. Following approval, the final Digital Classroom Plan will be submitted to the Florida Department of Education on or before October 1, 2014.

1.5: Multi-Tiered System of Supports (MTSS)

The Hardee School District uses the problem solving/response to intervention (RTI) method of developing and implementing instruction and interventions based on a three-tiered model. Our RTI model integrates core instruction (Tier I), supplemental instruction/interventions (Tier II), and intensive interventions (Tier III). The procedures for conducting required general education interventions are specified in our RTI Plan. Procedures below are documented along with interventions, activities, meetings and appropriate personnel.

Tier I: Core instruction provided to all students and the utilization of the general education staff to observe, take and analyze student data to evaluate the effectiveness of the core instruction. Data is used to identify students that are not responding adequately to core instruction. A decision is made by the school RTI/Problem Solving Team which includes but is not limited to school administration, academic coaches, guidance counselors and teachers to determine if adjustments to the core instruction are necessary or supplemental instruction is indicated for some students based on universal screening and other assessment data.

Tier 2: Supplemental instruction/interventions are managed by the School RTI/Problem Solving Team. If academic or behavioral concerns are indicated by the data, a team meeting is held with parent involvement to review the current data and interventions, plan additional interventions, obtain consent for screening as necessary, and obtain social/developmental history data when appropriate. Intervention plans are formalized in writing and screenings are conducted subsequent to consent as appropriate. Designated personnel implement interventions which include frequent progress monitoring. Post intervention measures are recorded on appropriate forms. Parents are notified of a follow-up meeting to discuss observations, review results of interventions and review rate of progress to determine if the student is making adequate gains and should return to core instruction. If adequate progress is not being made, the team makes a decision to modify Tier 2 interventions or increase intensive interventions.

Tier 3: Intensive interventions are managed by the RTI/Problem Solving Team and must include ESE district or student services district level staff. Parents are invited to a meeting where the team reviews all documentation from Tiers 1 and 2 and develops targeted intensive interventions for academic concerns. When there is a behavior concern, a review of the available data will determine if additional information is needed to identify the problem, why it is occurring, and interventions to implement. Designated personnel implement interventions which include at least weekly progress monitoring to determine the effectiveness of the intervention. Post intervention measures are recorded on appropriate forms. Parents are notified of a follow-up meeting to discuss results of interventions and review rate of progress to determine if the student should return to core instruction based on student progress, continue and/or modify Tier 2 or Tier 3 interventions.

The required Hardee County School District procedures, policies and forms and the RTI/Problem Solving Team procedures shall be followed. Our philosophy is one of prevention through intervention versus a refer-test model. Persons who may refer a student to the RTI/Problem Solving Team include parent, teacher, ESE Director and the school administrator.

If one of the following is identified while following the RTI/Problem Solving procedures, the team will determine that an initial evaluation is necessary.

(1) The student shows a negative response to all interventions attempted.

(2) The student exhibits a positive response to interventions, but progress halts or the student regresses when the Tier 3 interventions are faded (the frequency, duration and intensity of the interventions are decreased). In this scenario, the intensity of the interventions required to maintain satisfactory progress is significantly above what the general education setting can provide.

Referrals for students suspected of having speech sound, fluency, or voice disorders, the problem-solving team may determine that general education interventions are not appropriate. The student's problem-solving team should make this decision on an individual basis.

A parent who has a student who wants to request an evaluation shall contact the ESE Director (responsible person) who shall assist the parent in completion of the referral packet by providing forms and suggestions when discussing the case.

The Hardee County School District takes very seriously its obligations to locate, identify and evaluate out-of-school children who may be disabled. We have a long tradition of emphasis on early identification and programming. Through the Child Find component of FDLRS, a student may be referred for evaluation by the district, by phone or letter as a follow-up to child find efforts, i.e. screenings. Likewise, any agency may refer a student to the ESE Director for consideration of referral. The referral packet is subjected to a case review for compliance and quality.

A parent who is home schooling a student may request an evaluation by contacting the ESE Director (responsible person) who shall assist the parent in completion of the referral information and providing the parent with information regarding evaluations provided by the school district through the child find process.

Part II: DIGITAL CLASSROOM PLANS – STRATEGY

Step I – Needs Analysis

The LEA will improve student proficiency in reading and math for all subgroups to include migrant and homeless students by using the FLDOE's Instructional Review Elements as the standard by which the LEA and schools will operate.

- All DA schools will ensure that students engage in accountable talk to show, tell, explain and prove reasoning during modeled instruction and guided practice.
- All DA schools will incorporate collaborative structures to increase student achievement. Each DA school will create a Collaborative Structure calendar to indicate which structures will be used in each content area and or grade level.
- A common board configuration will be observed by the District DA Team as they complete onsite observations and the assistant principal will provide documentation to support implementation to include checklists or the configuration used at the school.
- Each school principal will meet with the academic coach and the FCAT classroom teachers bi-monthly to monitor and re-direct as necessary the instructional focus and ensure that interventions and strategies implemented to provide remediation for deficient students and enrichment for proficient teachers.
- Literacy coaches will train or continue to follow-up with classroom teachers in questioning strategies that are designed to promote critical, independent and creative thinking while requiring students to compare, classify, analyze, induce, investigate and inquire
- DA school teachers will receive technical assistance in planning for high-quality and rigorous instruction. The district resource intervention teacher will provide technical assistance in unpacking standards, Webb's Depth of Knowledge, cognitive complexity and scoring rubrics. The resources teacher will meet with teachers in small groups or content areas to provide explicit and intensive training and assistance to teachers. The concentration for this assistance will be for FCAT grades.
- DA schools will follow instructional pacing guides that are aligned to the standards in reading, math, science and social studies. Articulation groups have been organized from representatives of each elementary school who will meet with the resource teacher to further develop the plans. The district resource teacher will meet with the assistant principals to monitor the pacing guides
- DA schools will develop and implement lesson plans using a research-based lesson format that promotes a gradual release of responsibility
- The literacy coach will provide differentiated professional development and follow-up in concept mapping, KWL charts, vocabulary, reciprocal teaching and comprehension strategies which will include predicting, questioning, clarifying and summarizing. The participants will be the teachers of the DA schools who need additional professional development or technical assistance.

- ❖ Students in DA schools will increase writing proficiency by writing science lab reports, utilizing science lab journals that include the components of the scientific method (grades 5 & 8) in science, working through word problems that are incorporated into every math lesson and all homework sets.
- ❖ The DA principal will monitor the implementation of FCIM including data analysis, focus calendars, focus lessons, focus mini-assessments and remediation and enrichment
- ❖ The LEA provides teachers with guidance and modeling in the classroom designed to improve instruction while to the coaching cycle. The participants will be the teachers of the DA schools who require additional coaching as identified by the school administrative team

Student Performance Outcomes	**Baseline**	**Target**	**Date for Target to be Achieved (Year)**
ELA Student Achievement	48%	63%	2015
Math Student Achievement	51%	67%	2015
Science Student Achievement	46%	50%	2015
ELA Learning Gains of the Low 25%	65%	68%	2015
Math learning Gains of the Low 25%	55%	58%	2015
Overall 4-Year Graduation Rate	65.2% (2012-2013)	68%	2015
Acceleration	55% (2012 – 2013)	60%	2015

Highest Student Achievement

Research-based strategies will be used to integrate technology into curriculum and instruction to improve student academic achievement. The process of curriculum integration increases the degree to which instructional technology is embedded within teaching and learning and mirrors our curriculum development process. Our belief is that the integration of technology into instruction must be synchronized with the creation of curriculum and teaching methodology. To create a separate process for the development of technology integration moves toward the idea of

technology as a curricular “add-on.” To alleviate this discrepancy, the school district has adopted the following guidelines:

- Adoption of specific content and skill standards
- Construction of curriculum through the use of curriculum mapping software
- Development of assessments that measure the degree to which learners understand the curriculum
- Identification of instructional methods meeting the needs of learners which includes the integration of technology
- Consideration of environmental and learning needs including interventions, classroom culture and student culture

In a sincere effort to improve student achievement across the curricula including technology literacy of all learners, an integrated curriculum will include the following teaching strategies:

- Students construct knowledge through a variety of processes such as social networking, human interaction and differentiated learning environments
- Students will select from a variety of tools, processes and information sources that will enhance their own learning
- Staff and students will engage in responsible and appropriate behaviors when utilizing technology
- Technology tolls will be made available for all students on an equitable basis and will help in eliminating barriers for all learners
- Curriculum will be designed to offer more global opportunities for creative and collaborative problem solving
- Students will access a collaborative global community of learners using tools such as online learning, podcasts, wikis and social networking
- Innovation will be utilized in partnership with community resources such as local industries to keep current with global technology needs
- All school district entities will share the same vision for the integration of technology in teaching and learning
- The school district will have structures in place to support innovative practices that increase student and staff engagement. These innovations will be continuously assessed and supported
- Students and staff will have access to curricular materials and resources
- Teachers will become facilitators as students are provided opportunities for increased ownership of their own learning
- Creative thinking will be encouraged through the use of technology
- Students will understand and apply problem-solving conventions within systems, applications and the learning of new technologies
- Students will demonstrate knowledge after locating, organizing, analyzing, evaluating and synthesizing information from a variety of sources

Quality Efficient Services

Infrastructure Needs Analysis	Baseline	Target	Date for Target to be Achieved (Year)
Student to computer device ratio	1.63	1:1	2018-2019
Count of student instructional desktop computers meeting specifications	1932	2100+	2015-2016
Count of student instructional mobile computers (laptops) meeting specifications	645	750+	2015-2016
Count of student web-thin client computers meeting specifications	50 Chromebooks	600+ Chromebooks (potentially most growth projected here)	2016-2017
Count of student large screen tablets meeting specifications	650	700+	2015-2016
Percent of schools meeting recommended bandwidth standard	0	100%	2017-2018
Percent of wireless classrooms (802.11n or higher)	95%	100%	2015-2016

Skilled Workforce and Economic Development

Although the ultimate responsibility for the integration of information skills and computer skills rests with the media specialists and technology professionals, an effective instructional program relies on their collaboration with teachers, administrators, students, support staff, and parents all working together to support desired outcomes for student achievement. This collaboration impacts teaching and learning by supporting the instructional process through planning, implementation and evaluation. Instructional units developed through collaboration expand classroom walls to encompass the media center, computer labs and other outside resources. In implemented in a correct manner, students are destined to become self-directed lifelong learners, complex thinkers, quality producers, collaborative workers and community contributors. Additional strategies tied to a successful technology matrix include:

Models the integration of technology in all curriculum areas

- Developing strong instructional partnerships with classroom and special area teachers by working together to plan and implement instruction and to evaluate instructional outcomes
- Using the best available models of instruction, collaboration, and cooperative learning
- Searching for lesson plans and successful teaching models in other schools, districts, conferences and in professional literature

Facilitates school participation in technology programs and activities

- Promotes media and technology developments through regular electronic newsletters, PTO and SAC presentations, school websites and family night programs

Conducts staff development in the area of technology integration

- Ensure that staff development is relevant to the classroom setting
- Provide a variety of staff development opportunities
- Provide time to learn, practice and incorporate new skills into classroom instruction
- Create an ongoing calendar of staff development opportunities tailored to meet assessed staff development needs
- Provide follow-up through re-teaching, one-on-one tutoring, troubleshooting, modeling and other forms of support

Collaborates with the media specialist to provide leadership in the use of instructional technology resources to enhance learning

- Collaboration should be evident in all areas of the school environment
- The media specialist and instructional technology facilitator works closely with teachers, administrators, students and support personnel
- Stakeholders must be involved in the planning, implementation and evaluation of an instructional program infused with both media and technology

Follows a plan for professional development and actively seeks out opportunities to grow professionally

- Media specialist and instructional technology facilitator participate in ongoing professional growth activities to support the school's needs and identify best practices

Implements best practices related to technology use in the school program based on research, pilot programs and state and national standards

- Design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners

- Apply current research on teaching and learning with technology when planning learning environments and experiences
- Identify and locate technology resources and evaluate them for accuracy and suitability
- Plan for the management of technology resources within the context of learning activities
- Plan strategies to manage student learning in a technology-enhanced environment

Works with the principal and school leadership team to provide access to technology resources and services of the technology facilitator at point of need

- Flexible access allows any student, teacher or staff member to access resources when needed
- Focus is to provide resources for support, enhance teaching and learning which will in turn impact student achievement

Works with teachers and technology staff in the selection of resources that are compatible with the school technology infrastructure

- Facilities can contribute to or detract from the teaching and learning opportunities
- Ability to access information through various media formats is essential

Assists with planning the design of technology infrastructure to provide information resources to the school community as needed

- Utilize the school technology facilities and resources to implement classroom instruction
- Follow procedures and guidelines used in planning and purchasing technology resources
- Participate in professional development opportunities related to the management of school facilities, technology resources and purchases

Promotes family, business and community partnerships that supports the academic success, career readiness and general well-being of all students

- Vision of media and technology programs reflect the instructional mission of the school district
- A vital component of these programs is to assume leadership for communicating the vision of the programs within the school and the community
- Keep community members apprised of program developments

Adheres to and communicates all laws and guidelines, including copyright and plagiarism pertaining to the distribution and ethical use of technology resources

- Model and teach legal and ethical practice related to technology use
- Apply technology resources to enable and empower learners with diverse backgrounds, characteristics and abilities

- Identify and use technology resources that affirm diversity
- Promote safe and healthy use of technology resources

Assists in maintaining hardware, software and network infrastructure

- The technology facilitator works with members of the technical staff to assure proper use of hardware, software and network devices
- The technology facilitator models appropriate behavior when using network resources and adheres to district standards when installing or removing programs, setting up workstations and configuring peripherals

Serves as the school contact when addressing hardware and software issues

- Technology facilitator should be the first point of contact when addressing hardware and software issues within the school
- Technology facilitator should work in conjunction with other staff members to create procedures for reporting and correcting hardware and software issues

Technology facilitators will contribute to the shared vision for campus integration of technology

- Uses the school's technology facilities and resources to implement instruction
- Apply strategies for and knowledge of issues related to managing the change process in schools
- Apply effective group process skills
- Lead in the development and evaluation of the technological planning and evaluation

Leads in the ongoing evaluation of the effectiveness of the instructional technology program

- Apply technology in assessing student learning of subject matter using a variety of assessment techniques
- Use technology resources to collect and analyze data, interpret results and communicate findings to improve instructional practice and maximize student learning
- Apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication and productivity

Approximate TIM integration levels:

Entry	65%
Adoption	23%
Adaptation	8%
Infusion	2%
Transformation	2%

Professional Development Needs Analysis	Baseline	Target	Date for Target to be Achieved (Year)
Average teacher technology integration via the TIM	Entry	Transformation	2018-2019
Average teacher technology integration via the TIM (Elementary Schools)	Entry	Transformation	2018-2019
Average teacher technology integration via the TIM (Middle Schools)	Entry	Transformation	2018-2019
Average teacher technology integration via the TIM (High Schools)	Entry	Transformation	2018-2019
Average teacher technology integration via the TIM (Combination Schools)	Entry	Transformation	2018-2019

Seamless Articulation and Maximum Access

No industry or organization can remain competitive today without making comprehensive use of technology as a matter of course in all of its operations and school systems are no different. All students require a robust education and a different type of education most students are receiving today. The vision of learning that we embrace focuses on teaching students to become critical thinkers, problem solvers, innovators, effective communicators and self-directed learners. This vision responds to the demands for citizens who are globally aware, civically engaged and who are economically and financially literate and fluent in information, media and technology skills. Employers, educators and the general public strongly believe that students must be

proficient in 21st century skills such as these to succeed in society. Educational technology must be utilized comprehensively to develop proficiency in 21st century skills, to support innovative teaching and learning and to create robust educational support systems.

Utilizing technology comprehensively to develop proficiency in 21st century skills

In a 21st century education system, technology must be used comprehensively and purposefully to support students in mastering the full range of what they need to learn; core subjects, 21st century themes and 21st century skills.

- Videoconferencing supports core subjects and 21st century skills
- Competing and collaborating online to build knowledge and skills
- Instant messaging turns chatting into learning
- Laptops help students prepare for 21st century challenges

Utilizing technology comprehensively to support innovative teaching and learning

In a 21st century education system, technology must be used comprehensively and purposefully for supporting how students learn with innovative teaching and learning practices

- Builds conceptual understanding of core content
- Addresses misconceptions
- Fosters inquiry and investigation
- Applies knowledge and skills to interdisciplinary challenges
- Creates and transforms knowledge for meaningful purposes
- Collaborates with others
- Engages and motivates students
- Differentiates instruction to meet individual needs
- One-to-one computing engages students and boosts achievement
- Supports personalized instruction
- Distance learning offers different types of learning experiences

Utilizing technology comprehensively to create robust educational support systems

In a 21st century education system, technology must be used comprehensively and purposefully to create robust education support systems for standards and assessments, curriculum and instruction, professional development and professional learning communities and educational administration

- Adoption of district, state and national technology standards
- Utilizing technology to make informed educational decisions

- ❖ Handheld technology assists educators in analyzing student achievement
- ❖ Networked education transforms teaching and learning

Digital Tools Needs Analysis	Baseline	Target	Date for Target to be Achieved (Year)
Implementation status of a system that enables teachers and administrators to access information about benchmarks and use it to create aligned curriculum guides	Partially implemented	Will work to implement and employ	2017-2018
Implementation status of a system that provides teachers and administrators the ability to create instructional materials and/or resources and lesson plans	Partially implemented	Will work to implement and employ	2017-2018
Implementation status of a system that supports the assessment lifecycle from item creation to assessment authoring, administration and scoring	Fully implemented	Will continue to support and employ in classrooms	2015-2016
Implementation status of a system that includes district staff information combined with the ability to create and manage professional development offerings and plans	Partially implemented	Will work to implement and employ	2017-2018
Implementation status of a system that includes comprehensive student information that is used to inform instructional decisions in the classroom for analysis and for communicating to students and parents about classroom activities and progress	Partially implemented	Will work to implement and employ	2017-2018
Implementation status of a system that leverages the availability of data about students, district staff, benchmarks, courses, assessments and instructional resources to provide new ways of viewing and analyzing data	Partially implemented	Will work to implement and employ	2017-2018
Implementation status of a system that houses documents, videos, and information for teachers, students, parents, district administrators and technical support to access when they have questions about how to use or support the system	Partially implemented	Will work to implement and employ	2017-2018
Implementation status of a system that includes or seamlessly shares information about students, district staff, benchmarks, courses, assessments and instructional resources to enable teachers, students, parents and district administrators to use data to inform instruction and operational practices	Partially implemented	Will work to implement and employ	2017-2018

Implementation status of a system that provides secure, role-based access to its features and data for teachers, students, parents, district administrators and technical support	Partially implemented	Will work to implement and employ	2017-2018

Quality Efficient Services

Online Assessments Needs Analysis	Baseline	Target	Date for Target to be Achieved (Year)
Computer-based assessment certification tool completion rate for schools in the district (Spring, 2014)	100%	100%	2014-2015
Computers/devices required for assessments (based on schedule constraints)	1250	1500+	2016-2017

STEP 2: District Goals

Technology Goal #1: Mobile Student-centered Computing: All learners will have access to technology at in any location and in a one-to-one computing environment

Purpose: A one-to-one computing environment encourages creativity and innovation, facilitates communication and collaboration, supports research and access to digital content, increases critical thinking and problem solving opportunities and promotes the proper use of information and technology.

Technology Goal #2: Interactive Multimedia Capable Peripherals: All learners will have access to technology that allows for consumption and interaction with a variety of information and multimedia

Purpose: Interactive visual and audio peripherals enhances teaching and learning, facilitates a dynamic and engaging presentation of curriculum and supports learning styles within the 21st century classroom.

Technology Goal #3: Professional Development: Professional Development will be a top priority

Purpose: The purpose of professional development is to ensure the success of the integration of technology in teaching and learning. Technology's value is not merely in its inherent capabilities but in its impact on teaching and learning. Additionally, the integration helps to close the digital, generational and cultural divides often evident between teachers and students. Closing this divide will enhance delivery and affirmation of the curriculum. Collaboration amongst colleagues in an ongoing professional development structure inspires innovation and collegiality. Professional development supports individual growth which is a component of the Hardee School District.

Technology Goal #4: Electronic Resources: Electronic sources and tools to create such resources must be readily available to support a 21st century teaching and learning environment

Purpose: As the widespread use of the Internet has informed and connected people, the availability of electronic resources will support the collaborative component of teaching and learning. Electronic resources must be readily available for all learners to access the increasing wealth of on-demand information. Additionally, technology tools for the creation of electronic resources must also be readily available for all learners. Creating and sharing resources fosters a collaborative learning environment.

Technology Goal #5: Bring Your Own Technology (BYOT): All learners will be encouraged, supported and empowered to apply their personally-owned technology in teaching and learning

Purpose: Encouraging and supporting BYOT will increase opportunities to integrate technology. Encouraging a BYOT learning environment helps expedite the attainment of our goal of creating a 1:1 computing environment. Allowing learners to use their own technology will promote a sense of empowerment in teaching and learning.

Technology Goal #6: Curriculum Integration: Technology will be integrated into all K-12 curricula. Instructional stakeholders will contribute to developing and updating technology-integrated curriculum pacing guides and resources. Teachers will regularly integrate technology as defined within their respective curriculum.

Purpose: To provide students, parents and teachers with clearly defined goals in all grade level and content area curricula and to promote and support contributions to curriculum due to the ongoing growth and emergence of viable technologies.

Technology Goal #7: Online Learning: Online learning will allow for the delivery of, access to, and interaction with content in a convenient way that will promote learning

Purpose: The purpose of online learning is to allow for the implementation of a more relevant and individualized education for students

Technology Goal #8: Innovation: Innovation in the best practices of technology integration will be supported and encouraged

Purpose: Cultivating and maintaining an environment that provides structural support to be creative and innovative contributes to improvement of test scores, collegial learning across the district, creating an opportunity for action research and providing incentives for professional growth and learning

Step 3: Strategies (Theory of Action)

Technology Goal #1: Mobile Student-centered Computing: All learners will have access to technology at in any location and in a one-to-one computing environment

Observable Teacher Behaviors:

- Teachers support access to digital resources and technology tools
- Teachers encourage creative thinking and innovation when constructing knowledge
- Teachers facilitate communication and collaboration in virtual environments
- Teachers regularly facilitate student access to digital content and multimedia
- Teachers capitalize on digital resources to promote critical thinking and problem solving
- Teachers model the proper use of information and technology

Observable Student Behaviors

- Students access digital resources and technology tools when needed
- Students are motivated to think and work creatively and to be innovative in constructing knowledge and solutions to problems
- Students communicate and collaborate with peers in virtual environments
- Students access digital content for the informational and research purposes
- Students utilize technology to think critically and solve problems
- Students demonstrate the proper use of information and technology to construct and demonstrate knowledge
-

Technology Goal #2: Interactive Multimedia Capable Peripherals

Observable Teacher Behaviors

- Teachers regularly deliver a variety of engaging information and multimedia content
- Teachers enhance instruction through the integration of various forms of information and multimedia content
- Teachers are empowered to facilitate student-centered and differentiated instruction related to best practices in teaching and learning

Observable Student Behaviors

- Students interact with digital information and multimedia on a regular basis
- Students engage in the dynamic presentation of content
- Students enhance their communication skills through the use of digital information and multimedia content
- Students are empowered to demonstrate their knowledge and process of understanding using digital information multimedia content
- Students apply skills in using interactive multimedia to extend their knowledge
- Students are inspired to construct knowledge and collaborate with their peers

Technology Goal #3: Professional Development

Observable Teacher Behaviors

- Teachers participate in professional development that is based on grade level/content area standards and technology standards
- Teachers, attend, apply and sustain skills and practices learned in ongoing professional development
- Teachers define a purpose and apply action research methodologies when exploring technology
- Teachers strive to problem solve and troubleshoot technical issues
- Teachers collaborate to construct knowledge and share ideas
- Teachers use technology for inquiry-based learning to foster critical thinking
- Teachers facilitate and inspire student learning and creativity
- Teachers design and develop digital age learning experiences and assessments
- Teachers model digital age work and learning
- Teachers promote and model digital citizenship and responsibility
- Teachers engage in professional growth and leadership

Observable Student Behaviors

- Students demonstrate creativity and innovation using technology
- Students collaborate and communicate using technology
- Students conduct research and gather information using technology
- Students engage in inquiry, project, and problem-based learning
- Students model digital citizenship and the proper use of technology

Technology Goal #4: Electronic Resources

Observable Teacher Behaviors

- Teachers regularly access, create and manage digital resources for teaching and learning
- Teachers participate in a collaborative environment with colleagues both within and outside the district
- Teachers increasingly rely on digital resources more than paper resources

Observable Student Behaviors

- Students access electronic resources for information and research
- Students store and retrieve the information they have gathered while researching
- Students access and interact with digital books, textbooks, and class resources
- Students access course management modules or online versions of their classrooms
- Students use electronic books to build electronic knowledge bases that are accessible

Technology Goal #5: Bring Your Own Technology (BYOT)

Observable Teacher Behaviors

- Teachers model, support, and encourage the appropriate use of personally-owned devices in teaching and learning

Observable Student Behaviors

- Students use technology to enhance their learning including increased interaction amongst peers and teachers

Technology Goal #6: Curriculum Integration

Observable Teacher Behaviors

- Teachers demonstrate awareness and knowledge of their respective technology integrated curriculum
- Teachers contribute to their respective curriculum pacing guides to maintain technology relevancy
- Teachers demonstrate knowledge of and the use of technological resources and tools
- Teachers demonstrate pedagogical practices related to technology integration
- Teachers demonstrate the blending of content, pedagogy and technology
- Teachers model the use of appropriate technology for a specified task or problem
- Teachers share and collaborate with colleagues to improve technology integration and teaching and learning

Observable Student Behaviors

- Students will be aware of the instructional purpose of using technology in learning
- Students use technology in productive ways to improve learning

Technology Goal #7: Online Learning

Observable Teacher Behaviors

- Teachers work within a flexible schedule to meet the needs of online learning
- Teachers facilitate the online learning environment from offsite locations
- Teachers facilitate classroom activities in an online learning environment
- Teachers will be accessible to students at times beyond the typical school day

Observable Student Behaviors

- Students work within a flexible schedule to meet their personal needs
- Students participate in the online learning environment from offsite locations
- Students access teacher assistance beyond the typical school day
- Students are engaged in learning
- Students are empowered to take pride of ownership in their learning

Technology Goal #8: Innovation

Observable Teacher Behaviors

- Teachers explore, pioneer, and share approaches, tools and methods to improve teaching and learning
- Teachers strive to become proficient in learning technology

Observable Student Behaviors

- Students seek out new methods of critical thinking and expression of learning
- Students contribute to the exploration and sharing of new approaches, tools and methods for learning
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Goal Addressed	Strategy	Measurement	Timeline
(1) Mobile student-centered computing	(1) Increase computing power to a one-to-one ratio (2) Implement laptops, tablet/touch devices and/or handheld computing devices	(1) Learning activities are enhanced (2) Increase in teacher and student engagement (3) Evidence of student empowerment	2015 - 2020
(2) Interactive multimedia capable peripherals	(1) Each classroom will have the means to interact with a computing device (2) All students will have access to interactive response systems	(1) Instruction is enhanced with the integration of digital multimedia content (2) The amount of observable student engagement is increased (3) Increased use of formative assessments	2015 - 2020

		via responders	
(3) Professional Development	(1) PD is relevant, hands-on and convenient for staff (2) PD meets the ever-changing needs of the staff (3) PD is supported by technologies to apply new skills (4) Standards and curriculum drive the intent of the PD	(1) Teaching and learning is enhanced through technology (2) Learners are engaged in the teaching and learning process (3) Learners are empowered in the learning process (4) Student performance on assessments improves	2015 - 2020
(4) Electronic Resources	(1) Provide and support electronic resources (2) Provide and support digital books, textbooks and resources (3) Provide and support electronic tools for the creation of electronic resources	(1) Student performance and reflection on using digital resources	2015 - 2020
(5) Bring Your Own Technology	(1) Develop district criteria to support BYOT (2) Educate stakeholders on the intent of BYOT (3) Make devices available for all students (4) Maintain a network infrastructure and culture	(1) Data from assessments (2) feedback from stakeholders on frequency and effectiveness (3) Measurement of disciplinary referrals and actions	2016 - 2020
(6) Curriculum Integration	(1) Support PD to meet all technology goals (2) Ensure availability and accessibility of technological tools (3) New instructional resources will encompass technology needs (4) Provide training to access and contribute to digital curriculum resources	(1) Bi-annual review of curriculum pacing guides (2) Teacher reflection on performance and goals (3) Attendance records from curriculum review sessions (4) Student reporting on integration of curriculum within classroom	2015 - 2020
(7) Online Learning	(1) Create and support an online learning space such as Moodle, Second Life or another cloud	(1) Improvement of student achievement due to online class work	2018 - 2022

	network		
(8) Innovation	(1) Develop and support a network for innovative practices (2) Provide a formal learning and sharing opportunity (3) Develop a reward program that encourages and supports staff initiatives	(1) Teaching is enhanced through the integration of innovative practices (2) Student engagement correlates to an increase in academic achievement (3) Teachers and students are empowered to apply technology in innovative methods	2015 - 2020

Part III. Digital Classroom Plan – Allocation Proposal

A) Student Performance Outcomes

Student Performance Outcomes	Baseline	Target
Increase graduation rates at Hardee High School	55%	60%
Increase district ELA student achievement to meet AMO target	48%	63%
Increase district math student achievement to meet AMO target	51%	67%
Increase district ELA learning gains	62%	65%
Increase district Math learning gains	57%	60%
Increase district science student achievement	46%	50%

B) Digital Learning and Technology Infrastructure

There is one element of technology that remains consistent; it is continually changing. Technology has evolved at an incredibly rapid pace in the last two decades. From an instructional perspective, technology resources and tools offer both students and teachers educational opportunities that were not possible even ten years ago. These resources and resources include laptops, mobile phones, handheld devices and tablets and communication

tools. These technological resources can help make learning rigorous and relevant to our students.

Technological infrastructure must be affordable, abundant, adaptable and equitable. The Hardee County School District currently possesses significantly less bandwidth than is actually needed. Sufficient broadband coverage throughout the school district must be added and at an affordable cost to ensure the success of digital learning in the future. Elements that should be addressed as quickly as possible include the following:

- Improved infrastructure should include support for multiple devices including devices brought in by students
- Infrastructure should support any platform or application
- Financial and staff resources should support not only the infrastructure but also the learners who depend on its performance
- Infrastructure should include both wireless and wired options as no single solution will meet the needs of all applications
- Infrastructure extends beyond hardware to include software applications as well

Infrastructure Implementation	Estimated Completion Date	Estimated Cost	School/District	Outcome from Section "A"
Purchase access points to increase wireless capabilities and density capabilities for mobile devices and any needed controller licensing to manage APs	6/2015	$100000	District	
Increase WAN capabilities to closer match DOE suggested bandwidth between sites.	6/2015	Waiting on updated contract pricing.	District	

Infrastructure Evaluation and Success Criteria

Deliverable (From Previous Table)	Monitoring and Evaluation and Process	Success Criteria
Wireless access points	District IT monitoring	Increased wireless density capabilities.
Increased bandwidth between schools and district office	District IT monitoring	Increased available bandwidth

C) Professional Development

Professional development is widely recognized as one of the most important elements contributing to the success of technology implementation and to effect change in teaching and learning. The implementation and integration of technology into the learning process occurs through an active professional development program that targets teachers, administrators, teaching assistants and other support personnel. The purpose of the Hardee School District's professional development is to provide personnel responsible for teaching and learning with an increase in knowledge and skills designed to improve instruction and increase student learning.

Professional development is strategically planned and reflective of system-wide goals, individual school goals and needs and personal professional growth and development. The professional development promotes inquiry, discourse, networking and collaboration. It is the primary goal of professional development to improve instruction and student learning ultimately creating an environment that fosters achievement of high standards.

We need to ensure that participants engage in meaningful professional development activities that are in line with the goals set forth in their school improvement plan. It is imperative that participants select activities that will improve student learning and ultimately improve test scores. Current research indicates that in order to truly change classroom practice, teacher need to have time to learn new strategies, try them out in their classrooms, and then return to reflect on how the instruction affected student performance. It is expected that those who decide to try this approach will incorporate what they learn in to their daily teaching routine.

Guidelines for systematic professional development for the appropriate use of technology will include but not be limited to the following:

- Utilize a system for conducting assessments of technology-related skills and pedagogical technology knowledge
- Based on the needs assessment data, determine the professional development and training requirements including any prerequisite skills and sequential professional development series that might be required related to teaching and learning
- Embed technology practices and standards into professional development provided by various school and departments
- Allocate time for professional development that includes the integration of technology for student learning
- Increase the amount of online professional development offered by various schools and departments
- Use research-based practices to identify and develop professional development, trainings, topics of interest, or other solutions. Adopt approaches to increase the effectiveness of professional development in improving teacher skills and practices.

- ❖ Develop and implement a marketing strategy around professional development related to technology.
- ❖ Coordinate professional development services to improve focus at the school level, reduce duplication of effort and effectively integrate funding streams to address district priorities.

Deliverable	Estimated Completion date	Estimated Cost	School/District	Outcome from Section "A"
Additional PD for instructional staff based on results from RTTT PD75k Grant after custom needs reports generated by Millennium Tech group to ensure progressive use of TIM-o tool and effective classroom application	6/2015	$35,000+	District	

Professional Development Evaluation and Success Criteria

Deliverable (from above)	Monitoring and Evaluation Process	Success Criteria
Effective use of TIM-o tool to move toward the digital classroom. Educators gaining ideas, and bridging gaps to progressively move farther into the digital classroom	District level and school level evaluations.	Increasing the use of effective digital tools in the classroom

D) Digital Tools

The digital classroom is more than electronic textbooks and productivity tools. Utilizing technology in the classroom means inventing or adopting new learning environments that work better for students and teachers. A digital classroom implies a shift to an online environment for a majority of a student's day which in turn gives some control to the student over the pace, path, time and location of learning.

The implementation of the blended classroom is about bringing to life fundamental shifts in teaching and learning. The goal of the digital classroom is to personalize learning using up-to-date technology and expand learning opportunities in the context of the Common Core and other emerging standards and technology requirements.

Implementing the digital classroom is a complex program of work requiring integrated plans around teaching and learning, information technology, finance, human capital and communications. A phased-in plan requires professional management and the commitment of school and district leadership. A commitment to measurement and improvement suggests that plans will be adjusted as lessons are learned and new tools are developed.

Implementation for Digital Tools

Deliverable	Estimated Completion Date	Estimated Cost	School/District	Outcome from Section "A"
Currently using other funding for digital tools	N/A	N/A	N/A	N/A

Evaluation and Success Criteria for Digital Tools

Digital Tools	Monitoring and Evaluation and Process	Success Criteria
Currently using other funding for digital tools	N/A	N/A

E) Online Assessments

Technology is a key component in preparing for online assessments. Technology personnel must consider and manage several factors including devices, connectivity, training and technical support. It is also imperative that technical and instructional staff be properly trained and familiarized with the online testing environment. The following information is intended to provide baseline guidance when assessing and managing the technical factors necessary for successful online assessment administration:

- Network performance
- Current assessment bandwidth considerations
- Network environment
- Device compatibility and configuration
- Personnel readiness

Network performance is vital and should be the initial starting checkpoint. Once the network demonstrates necessary reliability, the results should then be compared to the baseline bandwidth requirements suggested by the online assessment provider. Setting the stage with an optimally configured network environment is also crucial along with comparing all devices being

considered for assessment delivery to the minimum hardware specifications and configuration guidelines. It is essential that technical staff, teachers, administrators and students take the recommended steps to prepare for online assessments including deployment strategies, training and participating in provided practice assessment.

The following information includes several tools that may be utilized as each key factor is addressed. Requirements and guidelines will change over time making it essential to reference updated information and adjust accordingly.

Network Performance:

- Internet/Main connection: bandwidth should be monitored and adjusted as necessary using the same 70% usage assessment.
- WAN/LAN connections: Using the 70% rule, WAN and LAN connections should be continually monitored to identify any potential connectivity issues.
- Desktop connection: NCREN's Network Diagnostic Tool is suggested for use when testing the reliability and operational status of devices and network connection.

Current Assessment Bandwidth Considerations:

- Consider Home Base Technical Requirements for Summative Assessments
- Consider dynamic Learning Maps

Network Environment: Complete the following network environment checks:

- Browser restraints and compatibility
- Plug-ins such as Java and others as specified
- Firewall restrictions
- Filtering and blocking rules
- Connection
- Content managing/proxy servers – caching is not allowed due to security constraints and should not be deployed during online assessments
- Confirm component loading and functionality prior to test administration. Do not perform upgrades during the testing window

Device Compatibility and Configuration: Fundamental factors when choosing devices:

- Features support instructional goals and practices
- Adaptability
- Portability
- Durability, including battery life if applicable
- Productivity and keying capabilities
- Peripheral hardware integration and compatibility
- Wireless management

- Adjustable screen resolution
- Sustainable price point
- Life-cycle maintenance
- Future retrofit/upgrade options

Personnel, Staff and Student Readiness:

- Conduct basic troubleshooting workshops for all staff administering the online assessment
- Designate and place technical support personnel on alert during assessment periods
- Complete appropriate online assessment tutorials including all technology and instructional staff as well as students

Online Assessment Implementation

Deliverable	Estimated Completion Date	Estimated Cost	School/District	Outcome from Section "A"
Purchase 200+ additional Chromebooks for use by students in 1:1 learning and for digital assessments	6/2015	$80000+	District (secondary sites)	

Evaluation and Success Criteria for Online Assessments

Deliverable	Monitoring and Evaluation and Process	Success Criteria
200+ Chromebooks	AUP & District evaluation	Setup and delivery for student use.