

# DIGITAL CLASSROOMS PLAN

The intent of the District Digital Classroom Plan (DCP) is to provide a perspective on what the district considers to be vital and critically important issues relating to digital learning implementation, the improvement of student performance outcomes, and how progress in these areas will be measured. The plan shall meet the unique needs of students, schools and personnel in the district as required by 1011.62(12) (b), F.S.

#### Part I. DIGITAL CLASSROOMS PLAN - OVERVIEW

The Digital Classrooms Plan is designed to integrate the technology and digital learning foci found in the District Strategic Plan, the District Technology Plan and the District Improvement Plan in such a way to support our technology mission and accomplish our technological vision so that students become lifelong learners who can skillfully use technology to support life skills and process skills such as: flexibility, adaptability, critical thinking, problem solving, and collaboration, which are essential to success in our rapidly changing information age.

#### 1.1 District Technology Mission and Vision Statements

The mission of the Bradford County School System is to provide an educational program for our students, which encompasses full access to the technology and skills that they will need to succeed in school and to become productive citizens in the 21<sup>st</sup> century.

Our vision is that technology will be used throughout our schools as we acquire new and exciting ways to meet the needs of all our students and to enhance student outcomes. In our classrooms, teachers will be confident and knowledgeable about the range of technology tools that can assist them in making effective choices in designing learning experiences. Supported by accessible technology and professional development, teachers will develop and share authentic and engaging learning activities that require students to hone problem-solving skills.

1.2 <u>District Profile</u> - Relevant factors influencing the district's implementation of technology.

Bradford County School District (BCSD) is located in rural northeast Florida. The main employers are the prison system and BCSD, and both are experiencing

decreases in jobs. The BCSD free and reduced lunch rate is 66% and many students start school with a below average language development and numeracy experiences. The student demographic breakdown is as follows: Caucasian – 74%, African-American 22%, Hispanic – 1%, Other – 3%, ESE including speech - 43%.

1.3 <u>District Team Profile</u> - The following is the contact information for each member of the district team participating in the DCP planning process.

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#### 1.4 Planning Process

The Technology Committee developed guidelines for the development, implementation, monitoring and evaluation of the Bradford County School District 2014-2019 Technology Plan. The committee will also assist in the implementation of the activities, goals and objectives of the Digital Classrooms Plan. The plan consists of a comprehensive program that effectively uses technology to help students meet or exceed the state academic content standards in all core content areas including Language Arts, Mathematics, Science and Social Studies along with the English Language Development standards.

The District Lead Team participated in the development of the Digital Classrooms Plan. They support the educational technology goals that provide guidance in addressing the district's technology needs. The plan also provides a clear focus to enhance the district's curricular program and improve school community technology skills needed to effectively implement the use of technology in the classroom, computer labs, and/or library media centers. This will require that we train and empower our teachers in instructional technology methods which will ensure a seamless integration of technology in all curriculum areas. Technology curricular goals are included in each School Improvement Plan for student achievement.

#### 1.5 Multi-Tiered System of Supports (MTSS)

Bradford County School District's MTSS is comprised of core principles that represent recommended MTSS practices (Mellard, 2003). These principles represent systems that must be in place to ensure effective implementation of MTSS systems and establish a framework to guide and define the practice.

- 1. Use scientific, research-based interventions/instruction. The critical element of MTSS systems is the delivery of scientific, research-based interventions with fidelity in general, remedial and special education. This means that the curriculum and instructional approaches must have a high probability of success for the majority of students. Since instructional practices vary in efficacy, ensuring that the practices and curriculum have demonstrated validity is an important consideration in the selection of interventions. Schools should implement interventions, monitor the effectiveness, and modify implementation based on the results.
- 2. Monitor classroom performance. General education teachers play a vital role in designing and providing high quality instruction. Furthermore, they are in the best position to assess students' performance and progress against grade level standards in the general education curriculum. This principle emphasizes the importance of general education teachers in monitoring student progress rather than waiting to determine how students are learning in relation to their same-aged peers based on results of state-wide or district-wide assessments. DECISION POINTS: Graphable data determined during the times the team meets to review the progress of the measurable objectives.

The data collected during **TIER I** progress monitoring of 'at-risk' students helps teams make informed decisions at the classroom and grade group level. This data provides a picture of the students' performance and rate of growth (i.e., progress) so as to identify instructional and curricular changes to be made so that every student reaches proficiency on targeted skills. Students who do not reach a proficiency level at TIER I will need more strategic interventions. Schools shall implement an **early warning system** to identify students who need additional support to improve academic performance and stay engaged in school. The early warning system must include a process to monitor the following early warning signs:

- Attendance Identify students who have the following traits:
  - Have an attendance rate below 90 percent, regardless of whether absence is excused, unexcused or a result of out-of-school suspension;
  - o Have 15 or more unexcused absences the prior year;
  - Are absent 5 days per 9-weeks or any 45 day period.

Schools will contact any student who misses two consecutive days,

 Identify students who have one or more suspensions, whether in school or out of school, and two or more referrals

- Identify students who have a **Course failure** (including Ds) in English Language Arts or mathematics,
- Identify students who have a **Level 1** score on the statewide, standardized assessments in English Language Arts or mathematics. Also track those scoring level 2.

When a student exhibits two or more early warning indicators a school-based MTSS team formed for the purpose of implementing the requirements of this paragraph shall convene to determine appropriate intervention strategies for the student. The school shall provide at least 10 days' written notice of the meeting to the student's parent, indicating the meeting's purpose, time, and location, and provide the parent the opportunity to participate.

The decision to advance to TIER II is based upon an analysis of the progress monitoring data and a determination of a lack of progress at TIER I. Lack of progress is defined as the rate of improvement, that is not sufficient for the student to become proficient with state standards by the end of the school year without provision of additional interventions. This is why accurate data collection and graphing is essential to track the rate of a student's progress. A holistic approach is needed when determining possible causes of the failure to progress such as medical conditions, family crisis, or other traumatic life changes that may impact the student's classroom performance. If these events are short-term, the team may decide to keep the student in TIER I and provide other supports to address the immediate needs of the student. In very rare cases, some students are significantly below TIER I and TIER II peers, indicating a need for **TIER III** intensity in order for the student to make progress. The Student Success Team will make this determination when reviewing the student's individual needs.

The use of Performance Matters and the Focus Student Learning Management Systems are digital tools that support data analysis of students in all tiers.

**3.** Conduct universal screening/benchmarking. School staff conducts universal screening in all core academic areas. Screening data on all students can provide an indication of an individual student's performance and progress compared to the peer group's performance and progress. These data form the basis for an initial examination of individual and group patterns on specific academic skills (e.g., identifying letters of the alphabet or reading a list of high frequency words) as well as behavior skills (e.g., attendance, cooperation, tardiness, truancy, suspensions, and/or disciplinary actions). Universal screening is the least intensive level of assessment completed within a MTSS system and helps educators and parents identify students early who might be "at-risk." Since screening data may not be as reliable as other assessments, it is important to use multiple sources of evidence in reaching inferences regarding students "at risk."

**4.** Use a multi-tier model of service delivery. A MTSS approach incorporates a multitiered model of service delivery in which each tier represents an increasingly intense level of services associated with increasing levels of learner needs. The School Board of Bradford County has adopted a three-tier approach.

In a MTSS system, all students receive instruction in the core curriculum, supplemented by strategic and intensive interventions when needed. Therefore, all students, including those with disabilities, may be found in TIER I (with the exception of profoundly disabled students). Important features, such as universal screening, progress monitoring, fidelity

of implementation and problem solving occur within each tier. The use of Performance Matters and the Focus Student Learning Management Systems are digital tools that support data analysis of students in all tiers.

**5. Ongoing Professional Development.** The Bradford County school District Professional Development System supports lesson study. Lesson Study is conducted in all schools with an embedded focus on data analysis and differentiated instruction.

6. Resources Specific to Students with Disabilities (SWD). The Bradford County School District is committed to reaching all learners, regardless of their abilities. Students with disabilities require accommodations and modifications, and our staff is devoted to utilizing flexible ways to present information such as digital books (using I-Pads), text-to-speech applications, and specialized software. They also provide students with various ways to express themselves in order to increase active engagement in different settings and situations. In addition, assistive technology devices are available for students with disabilities to participate, communicate, and learn more effectively in the classroom. An assistive technology device is any item, piece of equipment, or product system, whether acquired commercially off the shelf. modified, or customized, that is used to increase, maintain, or improve the functional capabilities of a child with a disability. The district employs a variety of assistive technology devices to augment, supplement and compliment the educational process for students with special needs. The Local Assistive Technology Team identifies assistive technology needs on a case-by-case basis, and teachers have access to a laptop or desktop computer in the classroom, which in many cases is connected to an interactive board. All computers have the ability to activate the "Accessibility Options" built in to the Microsoft and Mac operating system. On the higher-grade levels, students have access to a collaborative global community of learners, using tools such as online learning, podcasts, wikis, social networking, etc. Some of the most common hardware assistive technologies that you will find in the classroom include: iPads, timers, switches, large screen monitors, track balls, SOLO program, and Earobics program.

7. Other Federal Resources - iReady Math, Discovery Streaming, and Achieve 3000

## Part II. DIGITAL CLASSROOMS PLAN – STRATEGY

## STEP 1 – Need Analysis:

Districts should identify current district needs based on student performance outcomes and other key measurable data elements for digital learning.

- A) Student Performance Outcomes p 6
- B) Digital Learning and Technology Infrastructure p 7
- C) Professional Development p 7-9
- D) Digital Tools p 9-11
- E) Online Assessments p 11
- F) Goal Setting p 12
- G) Strategy Setting p 13-17

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### A. Student Performance Outcomes Needs Analysis

Districts shall improve classroom teaching and learning to enable all students to be digital learners with access to digital tools and resources for the full integration of the Florida Standards.

Studer	nt Performance Outcomes (Required)	Baseline (FCAT	Target	Year for Target to
<u>1. Scho</u>	ool Grade Model	2014)		be Achieved
1.	ELA Student Achievement	49%	59%	2019
2.	Math Student Achievement	45%	55%	2019
3.	Science Student Achievement	47%	57%	2019
4.	ELA Learning Gains	65%	75%	2019
5.	Math Learning Gains	60%	70%	2019
6.	ELA Learning Gains of the Low 25%	66%	76%	2019
7.	Math Learning Gains of the Low 25%	60%	70%	2019
8.	Overall, 4-year Graduation Rate (4 Year 13)	68%	78%	2019
9.	Acceleration Success Rate (Performance 13)	100%	Maintain	2019
Studer Provid	nt Performance Outcomes (District ed)	Baseline (2014)	Target	Year for Target to be Achieved
1.	Meet state % of students achieving level 4-5 FCAT/FSA Reading (DSP)	23.4%	25%	2015
2.	Meet state % of students achieving level 4-5 FCAT/FSA Math (DSP)	13.4%	15%	2015
3.	AMO Target Reading	59%	63%	2015
4.	Af. Am	43%	49%	2015
5.	Hispanic	51%	57%	2015
6.	White	64%	68%	2015
7.	SWD	42%	48%	2015
8.	Ec Disadvantaged	54%	59%	2015
9.	AMO Target Math	57%	61%	2015
10.	Af. Am	44%	50%	2015
11.	Hispanic	47%	53%	2015
12.	White	60%	65%	2015
13.	SWD	40%	47%	2015
14.	Ec Disadvantaged	51%	57%	2015

Infrast	tructure Needs Analysis (Required)	Baseline	Target	Date for
				be
				Achieved
				(year)
1.	Student to Computer Device Ratio	1:3	1:1	2019
2.	Count of student instructional desktop computers meeting specifications	700	1000	2018
3.	Count of student instructional mobile computers (laptops) meeting specifications	400	1500	2018
4.	Count of student web-thin client computers meeting specifications	0	0	n/a
5.	Count of student large screen tablets meeting specifications	350	950 (k-2)	2018
6.	Percent of schools meeting recommended bandwidth standard	0%	100%	2018
7.	Percent of wireless classrooms (802.11n or higher)	80%	100%	2016
Infrast	ructure Needs Analysis (District	Baseline	Target	Date for
Provid	led)			Target to
				be
				Achieved (year)
8.	Percent of network switches meeting recommended standards	60%	100%	2016
9.	Percent of buildings meeting recommended wiring standards	50%	100%	2018

### B. Digital Learning and Technology Infrastructure Needs Analysis

#### C. Professional Development – Needs Analysis

The Bradford County School District will work to provide instructional personnel and staff with access to opportunities and training to assist with the integration of technology into classroom teaching. Master Inservice Plan components include the following and can be located at <a href="http://www.nefec.org/mip/">http://www.nefec.org/mip/</a> :

- Technology in the Classroom 3-007-001
- Technology Applications 3-404-001
- Assistive Technology in the Classroom 3-100-001
- Technology for Student Success Assistive Technology 3-100-003
- Technology for Student Success An Introduction 3-100-004
- Instructional Technology in the ESE Classroom 3-105-001

The online module *Technology and the Common Core* includes the following courses:

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- Assessment in 21st Century Classrooms
- Project-Based Approaches
- Thinking Critically with Data
- Educational Leadership in the 21st Century
- Collaboration in the Digital Classroom
- Designing Blended Learning

The Bureau of Standards and Instructional Support will assist our efforts to develop well-integrated educational technology. District-level professional development on a wide range of topics will be included:

- effective instructional design and associated software
- software and hardware to support individualized instruction
- integration of classroom instruction with resources from the Local

Instructional Improvement Systems (LIIS)

Profe (Req	essional Development Needs Analysis uired)	Baseline (Estimated)	Target	Year for Target to be Achieved
1.	Average Teacher technology integration via the TIM	Entry	Adaption	2019
2.	Average Teacher technology integration via the TIM (Elementary Schools)	Entry	Adaptation	2019
3.	Average Teacher technology integration via the TIM (Middle Schools)	Entry	Adoption	2019
4.	Average Teacher technology integration via the TIM (High Schools)	Entry	Adaptation	2019
5.	Average Teacher technology integration via the TIM (Combination Schools)	Entry	Adoption	2019
Profe (Dist	essional Development Needs Analysis rict Provided)	Baseline	Target	Year for Target to be Achieved
6.	Learning Management System – Mapping, Lesson Planning, Student Lessons and Assessment	Entry	Adoption	2019
7.	Digital Instructional Materials Use	Entry	Adoption	2017
8.	TIMs	Entry	Adoption	2019
9.	Leadership TIM Look-Fors	Entry	Adoption	2018

Professional development will be available in person at the regional, consortium, and district levels, by synchronous video-conferencing, or by asynchronous broadcast via web or U-Stream.

## 1. Technology Integration Matrix Needs Analysis

District Estimate of Current Technology Integration

Entry Level	80 %
Adoption Level	15 %
Adaptation Level	5 %
Infusion Level	0 %
Transformation Level	0 %
Total	100%

## D. Digital Tools Needs Analysis

Digi Ana	ital Tools Needs Iysis (Required)	What	Baseline	Target	Date for Target to be Achie ved (year)
1.	Implementation status of systems that enable teachers and administrators to access information about benchmarks and use it to create aligned curriculum guides.	CPalms, Focus LMS	Partially implemented	Will work to implement and employ	August 2015
2.	Implementation status of a system that provides teachers and administrators the ability to create instructional materials and/or resources and lesson plans.	CPalms, Focus LMS	Partially implemented	Will work to implement and employ	August 2015
3.	Implementation status of a system that supports the assessment lifecycle	Performance Matters, Focus LMS	Partially implemented	Will work to implement and employ	Current

	from item creation, to assessment authoring and administration, and scoring.				
4.	Implementation status of a system that includes district staff information combined with the ability to create and manage professional development offerings and plans.	Navigator Plus Track	Partially implemented	Maintain system	Current
5.	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.	Focus - SIS	Fully implemented	Will continue to support and employ in classrooms	Current
6	Implementation status of	Performance	Fully	14/:11	0
0.	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.	Matters	implemented	continue to support and employ in classrooms	Current

8.	Implementation status of	CPalms,	No seamless	No plans to	n/a
	a system that includes or	Focus SIS and	system in	address at	
	seamlessly shares	LMS	place	this time	
	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				
0	Implementation status of	Focus SIS	Fully	\\/;!!	Current
9.	implementation status of	1 0003 010	implemented	continue to	Current
	a system that provides		implemented	support and	
	secure, role-based			employ	
	access to its features			in	
	and data for teachers,			classrooms	
	students, parents,				
	district administrators				
	and technical support.				

## E. Online Assessments

Onlin	e Assessments Needs Analysis (Required)	Baseline	Target	Date for Target to be Achieved (year)
1.	Computer-Based Assessment Certification Tool completion rate for schools in the district (Spring 2014)	Fully	Fully	n/a
2.	Computers/devices required for assessments (based on schedule constraints)	Partially	Fully	December 2016
	Online Assessments Needs Analysis (District Provided)	Baseline	Target	Date for Target to be Achieved (year)
1.	Increase CBT efficiency at BMS	Partially	Fully	December 2015
2.	Increase labs by 3 at BHS	Partially	Fully	December 2016

### F. Goal Setting

We will accomplish our vision by creating classroom environments that allow all learners equal access to interact and collaborate successfully. We believe that the use of technology as a part of the curriculum should focus on supporting higher-level learning, problem solving, critical thinking skills, and collaboration.

The Bradford County School District has identified three long-term goals for integrating technology into all aspects of the educational system. These goals will guide the technology planning process and the implementation of the plan during the duration of this plan.

These goals are:

- 1. Increase access to technology for K-12 students, staff and parents.
- 2. Effectively integrate technology into the curriculum aligned with the Florida Standards (FS) content and performance standards at the appropriate level of complexity.
- 3. Provide ongoing staff development for the implementation and use of technology.

The goals were derived by merging the core strategies found in the Bradford County School District's Strategic Plan (DSP) and District Technology Plan (DTP) as indicated:

- In the DSP teachers will have access to instructional technology, which correlates to the infrastructure, hardware, technical support, and software acquisition goals of the DTP.
- In the DSP goals to have teachers effectively utilize instructional technology so that the percent of students achieving levels 3-5 will meet the state average is supported by the DTP goal of technology integration and immersion as a basic component of classroom curriculum.
- In the DSP teachers will effectively utilize instructional technology to support the DTP goal of implementation of a curriculum management and lesson plan development system.
- In the DSP the goal to have percent of students achieving levels 4 and 5 meet the state average will be supported by DSP strategy of increasing teachers' understanding of the Marzano domains which correlates to the high effect, research- based methods that support DTP goal of creation of 21<sup>st</sup> century learning environment for teachers.
- Both the DSP and DTP have identified the need to support effective utilization for instructional technology through high quality, ongoing professional development for teachers to effectively utilize technology resources for: authentic, project based learning for the development of higher order thinking for complex Florida Standards and Marzano Design Questions 3-4, implementation of the Focus Learning Management System, and effective use of digital instructional materials.

## G. Strategy Setting

To achieve our goals for technology, we will focus on several strategies.

GOAL 1: Increase access to technology for K-12 students, staff and parents

**STRATEGY**: Purchase materials for development of infrastructure, digital devices, and Student and Learning Management Systems

- 1. Student computing We will ensure that every student has access to a computing device when they need it with devices and policies differentiated by level and learner needs, to ensure access to information, increased collaboration, and multiple forms of student expression of learning.
- Staff computing We will provide all staff with the appropriate technology needed for high quality planning, instruction, and data use, as well as collaborative learning, including mobile computing for teachers and school administrators.
- Networks, servers and bandwidth We will upgrade our networks, servers and bandwidth so that students and staff can access resources when and where they need them.
- 4. Student information systems We will improve our student data systems to help students and staff tailor learning based on students' strengths and needs.
- 5. Support for all We will provide students, staff, and families with high-quality technical support and strategies for authentic engagement.

**MEASUREMENT:** The plan includes deliberate preparation, implementation, and monitoring phases to ensure each project's success. We will also track implementation metrics so we know how the plan is serving our students, staff, and families. Thoughtful and innovative use of technology is a key tool for our district as we stay focused on providing the very best instruction to every student.

**TIMELINE:** By phasing in projects strategically over five years, we can learn from each other and from emerging best practices, build on our successes, spread out up-front costs, and address key challenges that arise.

<u>GOAL 2:</u> Effectively integrate technology into the curriculum aligned with the Florida Standards (FS) content and performance standards at the appropriate level of complexity.

STRATEGY : District-Wide Lesson Study : Day 1

Overview – Brief review of summer SEEC and agreement of summer ground rules. Establish group norms specific to individual groups.

- > Data Review Includes any pertinent data for the individual teams.
- Goal Setting This includes Identification of the Florida Standard strands/domains and clusters for the group focus.
- Embedded Areas to keep in mind as focus is chosen Rigor, High Order Questioning, Differentiation, Marzano Tracking Student Progress, Lesson Segment Addressing Content and Enacted on the Spot, Collins (3-12) or Core Connections Writing (K-2).
- Research Test Specification/Sample Items, High Effect Strategies, Assessment, Tracking Student Progress
- Resources CPalms, Marzano's Learning Map and Art and Science of Teaching, Collins' Improving Student Performance, Lewis' Core Connections Manual and Resources

#### Day 2

- Lesson Plan Development Based on the chosen focus area teacher's will collaboratively develop lessons for their grade or content. Include formative assessment with the end in mind (summative assessment).
- Embedded Areas Rigor, High Order Questioning, Differentiation, Marzano Tracking Student Progress, Lesson Segment Addressing Content and Enacted on the Spot, Collins (3-12) or Core Connections Writing (K-2).
- Select Grade Level Standard Choose grade level and standard(s) that will be used for lesson scripting. Applies to groups that have multiple grade levels only.
- Script Observation Lesson The group collaboratively scripts the one lesson chosen for observation.
- Data Collection Decide on artifacts to collect. Choose tools for data collection and assign roles. Anticipate student social-emotional and academic behaviors.
- Who Does Lesson Implementation? The teacher chosen to teach will teach the lesson scripted by the group. Remaining group members will be assigned data collection duties.

#### Day 3

Review of Scripted Lesson- Group will review scripted lesson and data collection duties.

- Implementation of Scripted Lesson Instruction of lesson with others observing and collecting data.
- Debrief Analyze collected data
- Reflection Discussion of student learning, teacher learning, and pedagogical content learning.
- Generate Ideas to Adjust Instruction those observing tweak their lesson for implementation.

#### **Next Steps**

- Implementation of lesson all implement individualized lessons and collect student artifacts with coaching support and/or follow-up as needed.
- > Reflection Analyze student artifacts and reflect on implications
- Grade/Department Team Meeting teachers bring student artifacts and share reflection.
- Discuss next steps implementation and coaching

**MEASUREMENT:** Successful completion of lesson study in all school. School visits, agendas and sign-in sheets are evidence. Increase in district progress monitoring scores. Increase in district FSA scores by 2016. Students will meet the state proficiency level.

**TIMELINE:** Completion May 2015. Continued implementation with DQ 4 technology focus in 2015-2016 at BHS, BMS and BUTC.

**<u>GOAL 3</u>**: Provide ongoing staff development for the implementation and use of technology.

**STRATEGY:** To develop requisite instructional capabilities for developing, delivering, evaluating and maintaining instructional materials the district shall develop or contract for services to implement professional development activities that:

- Supports teachers in the use of digital devices to teach using digital instructional materials,
- Supports development digital content using instructional design techniques with digital devices,
- Supports employment of technology in the content areas using production, communications, and assessment software,

• Develops educational technology leadership and management emphasizing cross-curricular development, department level management and supervision, and school level evaluation of digital instruction.

The Bradford County School District believes that educator professional learning is an ongoing and constantly evolving part of teaching in the 21st Century. In order to prepare our students to succeed in school as well as in the workforce, we understand that educators must be prepared to integrate and interact with technology to inspire students to create and learn. We also understand that educators possess different levels of knowledge and integration with technology in their classroom. Before professional learning will take place, we will assess the current level of technology integration. Options for professional learning will then be selected based on needs identified by district leadership with a focus on educators in the Entry and Adoption level. Leadership for a technology initiative is imperative for the success of this initiative and administrators will have opportunities to participate in professional learning with a focus on systemic improvement.

1) Chromebook Pilot Project – 1 teacher at each level is selected to receive a classroom set and be trained to use Chromebook. These teachers agree to participate in train-the-trainer process.

2) Through the Digital Professional Development Grant the BCSD will provide expert conversations on effective integration of digital recourses and the use of TIM:
-Work with NEFEC to coordinate experts through multi-district collaboration
- Share Expert Conversation dates with all instructional administration and teachers
-Provide inservice points to educators doing follow-up activities

3) Training for leaders and teachers on the TIM matrix

-Purchase access to TIM content and resources

-Work with NEFEC to provide TIM training

-Provide inservice points to educators doing follow-up activities

4) Summer Digital Academy:

-Development of Digital Content (Intel and/or Learning.Com)

-Use of Focus Learning Management System (LMS) software

-Educational technology leadership and management

-Work with NEFEC to provide Digital Content Training

-Work with Focus and teacher leaders to provide Focus LMS training

-Purchase technology devices for teacher training on implementation of digital content and the LMS

-Provide inservice points to educators doing follow-up activities for digital PD

Strategy	Summary	NEFEC Supports
1. Support for the evaluation of classroom integration using the Technology Integration Matrix (TIM)	Use TIM to grow implementation of digital content through training, evaluation, and expert conversations (#4).	NEW: Professional Learning for teachers and leaders on the matrix and coordination of expert conversations
4. Expert's Conversations on Digital Learning	Enlist experts for conversations on effective integration of digital resources and the use of the TIM (#1).	NEW: Coordinate experts through multi-district collaboration
<ul> <li>7. Pilot and summer professional development aligned with:</li> <li>a) Developing Digital Content</li> <li>b) Employing technology in the Content Areas</li> <li>c) Educational technology leadership and management</li> </ul>	Professional learning for both teachers and principals, specific to instructional design and developing digital content and assessments	CURRENT: Learning.com, Intel, CPALMS NEW: PD in the development of digital content through Learning.com, blended learning and/or consultant Leadership training on supervision of the development and implementation of digital instruction

- Personnel will be introduced to and collaborate on effective strategies during contractual meetings (common planning, grade level and department meetings), PLCs and in-service days
- Online collaborative environment that allows for the sharing of resources with colleagues
- Online tutorials and webinars will be identified for personnel
- Feedback will be provided to stakeholders from district administrative walkthroughs

**MEASUREMENT:** Pilot project training occurs in November 2014. Observe classrooms for level of implementation. Expert Conversations conducted January ongoing 2015. Summer Academy with TIMs, LMS and Project Based Learning by August 2015.

**TIMELINE:** TIMELINE: Completion August 2015. Continued implementation with DQ 4 technology focus in 2015-2016 at BHS, BMS and BUTC.

#### Part III: Digital Classrooms Plan – Allocation Proposal

The DCP and the DCP Allocation must include five key components as required by s.1011.62(12)(b), F.S. In this section of the DCP, districts will outline specific deliverables that will be implemented in the current year that are funded from the DCP Allocation. The five components that are included are:

- A) Student Performance Outcomes p18-19
- B) Digital Learning and Technology Infrastructure p19-23
- C) Professional Development p24-25
- D) Digital Tools p25-26
- E) Online Assessments p27

This section of the DCP will document the activities and deliverables under each component. The section for each component include, but are not limited to:

- <u>Implementation Plan</u> Provide details on the planned deliverables and/or milestones for the implementation of each activity for the component area. This should be specific to the deliverables that will be funded from the DCP Allocation.
- <u>Evaluation and Success Criteria</u> For each step of the implementation plan, describe processes for evaluating the status of the implementation and once complete, how successful implementation will be determined. This should include how the deliverable will tie to the measurement of the student performance outcome goals established in component A.

Districts are not required to include in the DCP the portion of charter school allocation or charter school plan deliverables. In s. 1011.62(12)(c), F.S., charter schools are eligible for a proportionate share of the DCP Allocation as required for categorical programs in s. 1002.33(17)(b).

Districts may also choose to provide funds to schools within the school district through a competitive process as outlined in s. 1011.62(12)(c), F.S.

#### **A) Student Performance Outcomes**

Districts will determine specific student performance outcomes based on district needs and goals that will be directly impacted by the DCP Allocation. These outcomes can be specific to a individual school site, grade level/band, subject or content area, or district wide. These outcomes are the specific goals that the district plans to improve through the implementation of the deliverables funded by the DCP Allocation for the 2014-15 school year. Enter the district student performance outcomes for 2014-15 that will be directly impacted by the DCP Allocation below:

Student Performance Outcomes		Baseline	Target
1	FSA ELA Student Achievement	49%	51% - 2015
2	FSA Math Student Achievement	45%	47% - 2015
3	Science Student Achievement	47%	49% - 2015

4	ELA Learning Gains	65%	67% - 2015
5	Math Learning Gains	60%	62% - 2015

#### B) Digital Learning and Technology Infrastructure

State recommendations for technology infrastructure can be found at <u>http://www.fldoe.org/BII/Instruct\_Tech/pdf/Device-BandwidthTechSpecs.pdf</u>. These specifications are recommendations that will accommodate the requirements of state supported applications and assessments.

Implementation Plan for B) Digital Learning and Technology Infrastructure:

Infrast	tructure Implementation				
	Deliverable	Estimated	Estimated	School/	Outcome
		Date	Cost	District	Section A)
B.1.	Purchase and install switching equipment	June 2015	\$114,000	<u>Schools:</u> -BHS/BMS/ BUTC	Switching equipment installed
		June 2016	\$152,000	-Elementary	
B.2.	Upgrade network wiring infrastructure	By June of each year ending June 2019	\$75,000 per year	BHS SSE BUTC, BE, HE LE, BMS SE	Wiring upgraded in 100% of schools listed

## **NEFEC DCP Infrastructure Evaluation**

for the Bradford County School District 9/18/2014

Evaluators:

Ethan Caren, Senior Information Technology Analyst David Beckner, Senior Information Technology Analyst

Bradford County is targeting Bradford High School in their 2014-15 Digital Classroom Plan. This infrastructure evaluation is based upon the condition of the district's infrastructure as of the summer of 2014.

## **Bandwidth:**

Bradford County's intersite network topology is a star configuration with all sites connecting back to the county office. As such, their single Internet connection is shared amongst all devices and users on the network from all sites.

<u>Current:</u> Bradford's current Internet connection is a 100 Mbps connection through Windstream. This current bandwidth to the internet gives Bradford a bandwidth to student ratio of 29.3 Kbps per student. This is well below the 100Kbps recommended by FLDOE (<u>http://www.fldoe.org/BII/Instruct\_Tech/pdf/Device-BandwidthTechSpecs.pdf</u>).

<u>Future Plans</u>: Bradford plans to upgrade Internet bandwidth this year to 200 Mbps through Century Link. This increase yields a bandwidth to student ratio of 58.5 Kbps. Bradford suffers from a problem common to the rural school districts in that they are not able to purchase bandwidth that is not available in their area.

## Internal and Intersite Network:

<u>Current:</u> Bradford County has been working on upgrading their internal switching network to managed Cisco devices. There are still many unmanaged network devices which will be replaced over time, but almost all of the switching is able to provide 1 Gbps to the desktop.

A weak point of Bradford County's internal network is the Trillion wireless site-to-site links connecting the outlying schools: Southside, Lawtey, Hampton, and Brooker. For example, the 50 Mbps wireless connection to Lawtey Elementary School supplies only 208 Kbps per student, well short of the recommended 1000 Kbps recommended by FLDOE.

## Internal Wireless Network:

<u>Current:</u> Bradford County uses Cisco wireless access points exclusively throughout the district. With a total of 135 AP's, 110 of which are in instructional areas, this yields a student to AP radio ratio of 31 to 1. This is short of the recommended of 10-15 to 1 (<u>http://www.fldoe.org/bii/instruct\_tech/pdf/Wireless-Tech-Specs.pdf</u>). However, the current number of AP's in Bradford County is adequate for the number of wireless devices currently in use on the network.

<u>Future Plans</u>: Bradford plans on adding 38 additional Cisco AP's to the 32 that they have in place at Bradford High School this year and prior to adding additional wireless devices at the school.

## Technology Staff:

<u>Current:</u> The Technology staff of the Bradford County School District consists of a team of four full time personnel at the District level. This consists of two Computer Technicians and two Network Administrators, one of which shares MIS duties with Focus. The two computer technicians share responsibilities at each of the nine sites in the district. With 2,994 devices, this equates to 1,497 devices per full time Tech. **Note:** This ratio only includes computer devices and does not account for many other devices for which the two Techs are responsible: document cameras, projectors, smart boards, printers, voip phones, etc.

### Summary:

Page 20 Board Approved 12/8/14 Bradford's primary need is to upgrade the intersite wireless connections to the outlying schools. However, the ability to do so is dependent upon the bandwidth being offered through Trillion or another vendor. Bradford County has adequate switching throughout the district, but they have a need to increase the Access Point Density to provide a lower student to radio ratio across the network. Bradford does have plans to do this before adding more devices to the network at Bradford High School.

One often overlooked need as school districts approach a one to one ratio of computers to students is having the staff to manage and support the devices. Not only does the ratio of number of devices per tech increase with one to one, but so does the need for the immediacy of support. In a traditional setting, it's acceptable for a computer problem to wait until the ticket queue allows a tech to get to the problem. A couple of days or a week is not uncommon. However, if technology is the focal tool for instruction during a one to one scenario, a single student's computer problem has to be addressed immediately. Bradford has a need for added computer support prior to moving toward a one to one scenario.



Bradford County School District Network Topology

St	udent Instructional Compu	ters - Bradford Count	y School Dis	strict			
	Devices Eligib	le for Online Testing		Devices In	eligible for Online	Testing	
	Desktops	Laptops/Netbooks/ Chromebooks	Tablets 9.5" or above	Tablets less than 9.5"	Other Wireless Devices	Other Wired Devices	Total:
	809	458	200	0	58	770	2295

http://www.fsassessments.com/wp-content/uploads/2014/06/FL\_System\_Requirements\_for\_Online\_Testing\_07-08-2014.pdf

Total Instructional Computers eligible for Online Testing	
Total Non-Student Computers:	699
Total Computers:	2994
Total Student Population:	3419
Total Staff Population:	
Total Classrooms:	
Total Number of Instructional Access Point Radios:	
Total Number of Full Time IT Staff:	4
Total District Bandwidth (Mbps):	100

		Recommended By FLDOE
Ratio of Students per Student Instructional Computers:	1.49	
Ratio of Students per Online Testing Approved Computers:	2.33	
Ratio of Kilobits per Second of Bandwidth per Student:	29.25	100Kbps*
Ratio of Kilobits per Second of Bandwidth per Person:	23.74	
Ratio of Kilobits of Bandwidth per Total Devices:	33.40	
Ratio of Wireless Devices per Access Point Radio:	6.51	
Ratio of Students per Instructional Access Point Radio:	31.08	10 - 15**
Ratio of Access Point Radios per Classroom:	0.45	
Ratio of Devices per Full Time IT Staff:	748.50	

*FLDOE Bandwidth per Student:	http://www.fldoe.org/BII/Instruct Tech/pdf/Device-BandwidthTechSpecs.pdf
**FLDOE Students per Access Point Radio:	http://www.fldoe.org/bii/instruct_tech/pdf/Wireless-Tech-Specs.pdf

#### **C)** Professional Development

The Bradford County School District will work to provide instructional personnel and staff with access to opportunities and training to assist with the integration of technology into classroom teaching. Master Inservice Plan components include the following and can be located at <u>http://www.nefec.org/mip/</u>:

- Technology in the Classroom 3-007-001
- Technology Applications 3-404-001
- Assistive Technology in the Classroom 3-100-001
- Technology for Student Success Assistive Technology 3-100-003
- Technology for Student Success An Introduction 3-100-004
- Instructional Technology in the ESE Classroom 3-105-001

Profes	ssional Development Implementa	ation			
	Deliverable	Estimated Completion Date	Estimated Cost	School/ District	Outcome from Section A)
C.1	80% of district K-12 content area teachers participate in the Summer Digital Academy training on TIM, digital content and Focus Learning Management System.	June 2015	\$70,000	District	Sign-in sheets indicate 80% of district content area teachers trained
C.2	90% of the district instructional administrators participate in Summer Digital Leadership Training on TIM, digital content and Focus Learning Management System.	June 2015	\$1,000	School	Sign-in sheets indicate 90% of district content area teachers trained
C.3	Expert Conversations	Ongoing beginning Fall 2014	\$4000	District	Documented schedule of Expert Conversations

Evaluation and Success Criteria for C) Professional Development:

Describe the process that will be used for evaluation of the implementation plan and the success criteria for each deliverable. This evaluation process should enable the district to monitor progress toward the specific goals and targets of each deliverable and make mid-course (i.e. mid-year) corrections in response to new developments and opportunities as they arise.

Professional I	Professional Development Evaluation and Success Criteria				
Deliverable	Monitoring and Evaluation and	Success Criteria			
(from above)	Process(es)				
C.1.	NEFEC will evaluate the needs give feedback based on FLDOE state requirements.	The deliverables will help bring BCSD closer to compliance in meeting state requirements			
C.2.	Teacher's participate in the Technology Perceptions and Usage Survey (TUPS)	20% increase in TUPS scores in 2015			
C.3.	Expert Conversations	Participation in 80% of Expert Conversations sessions			

#### **D)** Digital Tools

Digital Tools should include a comprehensive digital tool system for the improvement of digital learning. Districts will be required to maintain a digital tools system that is intended to support and assist district and school instructional personnel and staff in the management, assessment and monitoring of student learning and performance.

Digital tools may also include purchases and activities to support CAPE digital tools opportunities and courses. A list of currently recommended certificates and credentials can be found at: <u>http://www.fldoe.org/workforce/fcpea/default.asp</u>. Devices that meet or exceed minimum requirements and protocols established by the department may also be included here.

Implementation Plan for D) Digital Tools:

Digita	I Tools Implementation				
	Deliverable	Estimated Completion Date	Estimated Cost	School/ District	Outcome from Section A)
D.1.	Laptops	September 2014	2014-2015 Pilot \$80,000 2015- 2019 \$240,000/ year	2014-15 Pilots 1/school BUTC, SSE, BHS, BMS. 2015-17 BHS Science, Other 2017- 2019 BMS	Utilized by students and teachers

D.2.	Desktops	2014-19	\$60,000/ year	Teacher's or Labs for CBT: BHS, BMS, BUTC SES/SSE LE/HE/BE	Installed
D.3	Focus SIS	2014	\$15,000/ year	District	Utilized by teachers and students
D.4	Focus LMS	2016	\$19,000/ year	District	Utilized by teachers and students
D.5	CPalms	2015	n/a	District	Utilized by teachers
D.6	Performance Matters	2014	\$20,000	District	Utilized by teachers

Evaluation and Success Criteria for D) Digital Tools:

Describe the process that will be used for evaluation of the implementation plan and the success criteria for each deliverable. This evaluation process should enable the district to monitor progress toward the specific goals and targets of each deliverable and make mid-course (i.e. mid-year) corrections in response to new developments and opportunities as they arise.

Digital Tools	<b>Evaluation and Success Criteria</b>	
Deliverable	Monitoring and Evaluation and	Success Criteria
(from above)	Process(es)	
D.1.	Hardware and software usage reports	90% utilization and 99% uptime
D.2.	Hardware and software usage reports	90% utilization and 99% uptime
D.3.	Hardware and software usage reports	90% utilization and 99% uptime
D.4.	Hardware and software usage reports	90% utilization and 99% uptime. Reduced cost of copy paper purchase 40%.
D.5.	Curriculum Maps in place	100% of content area maps in CPalms
D.6.	Data in Performance Matters	100% of the appropriate data available for
	used by teachers	teachers in the system

#### E) Online Assessments

Technology infrastructure and devices required for successful implementation of local and statewide assessments should be considered in this section. In your analysis of readiness for computer-based testing, also examine network, bandwidth, and wireless needs that coincide with an increased number of workstations and devices. Districts should review current technology specifications for statewide assessments (available at <u>www.FLAssessments.com/TestNav8</u> and <u>www.FSAssessments.com/</u>) and schedule information distributed from the K-12 Student Assessment bureau when determining potential deliverables.

Online	Assessment Implementation				
	Deliverable	Estimated Completion Date	Estimated Cost	School/ District	Outcome from Section A)
E.1.	Increase lab efficiency at BMS with computer replacement	December 2015	In Digital Tools	Bradford Middle	Updated lab
E.2.	Increase labs at BHS by 3	December 2016	In Digital Tools	Bradford High	3 new labs

Implementation Plan for E) Online Assessments:

Evaluation and Success Criteria for E) Online Assessments:

Describe the process that will be used for evaluation of the implementation plan and the success criteria for each deliverable. This evaluation process should enable the district to monitor progress toward the specific goals and targets of each deliverable and make mid-course (i.e. mid-year) corrections in response to new developments and opportunities as they arise.

Online Assess	Online Assessment Evaluation and Success Criteria				
Deliverable	Monitoring and Evaluation and	Success Criteria			
(from above)	Process(es)				
E.1.	Computers/devices required for assessments (based on schedule constraints)	Labs completed and updated			
E.2.	Computer-Based Assessment Certification Tool completion rate for schools in the district	Fully compliant with CBT Certification			