

# **Broward County Public Schools DIGITAL CLASSROOM PLAN**

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

# General introduction/background/District technology policies:

#### 1.1 District Mission and Vision statements:

**Vision**: Broward's vision statement is, "Educating today's students to succeed in tomorrow's world." This statement vividly describes our ideal environment and outcomes—a picture of the future we want to create. It inspires, energizes, and provides a long-term view that concentrates on the future.

*Mission Statement:* Broward County Public Schools (BCPS) is committed to educating all students to reach their highest potential. Broward's mission statement defines our purpose—why we exist and what we do to achieve our vision. It provides direction and focus, and helps guide all goals and decisions. It reminds us why we do the work we do.

Over the last two years, Broward County Public Schools took major steps to create a vision for Digital Education and to define key vital and critically important steps to improve student performance outcomes through the integration of digital tools, resources and instructional strategies. The following is a summary of the steps taken and links to key documentation that further describes both the strategic direction and implementation priorities.

The District Strategic Plan (2012-2015): Goal One of the strategic plan, High Quality Instruction, specifically states that, "As we move toward new standards, today's student must demonstrate independence; build strong content knowledge; respond to varying demands of audience, task, purpose, and discipline; comprehend as well as critique; value evidence; use technology and digital media strategically and capably; and understand other perspectives and cultures." (p. 10). A key tactic to achieving this goal is to integrate 21st century skill development into every student's learning path. In addition, Goal 2 (Continuous Improvement) and Goal 3 (Communication) rely on the effective use of technology for both the collection and analysis of student achievement data and the continuous and timely communication to all key stakeholders in the Broward education community. Web link to plan:

#### http://www.browardschools.com/About-Us/Strategic-Plan/home

The current strategic plan delineates student performance targets in math, reading and science based on FCAT student achievement results. Broward recognizes that with the state's adoption of the new FSA assessment, all school districts will need to establish new student performance baselines. Accordingly, BCPS will re-calibrate its strategic goals and objectives and update its strategic plan once FSA assessment data are available.

Broward County Public Schools Technology Strategic Plan (January 2014): Through extensive stakeholder involvement, the district developed and the Board approved a multi-year technology plan that provides a road map for the deployment of technology over the next three to five years. The plan describes the key technology objectives that support the District's strategic

goals, assesses where the District is today, and prioritizes strategic initiatives and technology investments. This plan was developed over a three-month period and was based on extensive interviews with internal and external school district stakeholders, two district-wide surveys to teachers and students, and internal user survey and workshops with the Technology Advisory Council and the Information and Technology Strategic Planning Advisory staff. Because of the extensive stakeholder input obtained to develop the technology strategic plan, the Digital Classrooms Plan used this data and input to focus on the improvement of student performance outcomes.

http://www.broward.k12.fl.us/erp/itsupport/docs/Strategic\_Plan/I&T%20Strategic%20Plan\_Updated%2004302014.pdf

Digital and Personalized Learning Projects: Starting in May 2013, Broward County Public Schools began implementing a personalized learning project called "Digital 5" to (1) maximize learning outcomes for all students, (2) personalize instruction for the wide differentiation of learners, (3) increase student engagement and collaboration, and (4) enable students to perform real-world, complex learning experiences in multiple settings. Broward County Public Schools rolled out 1:1 devices in 27 elementary school 5<sup>th</sup> grade classrooms as the vehicle to (1) drive more rigorous, purposeful, and differentiated student learning, and (2) enable teachers to expand their impact by creating online resources, using technology to free them up to focus on differentiating for all learners, transform approaches to distilling rigorous and purposeful curricula, and streamline data management. Students were given access to copious high-quality opportunities to acquire knowledge and demonstrate mastery, with students controlling the place, pace, and path of instruction. Due to the initial success of this project, which has received national recognition, the project expanded in the 2014 to 2015 school year to include a suite of projects that address students in grades K-12. These projects are the focus of the Digital Classroom Plan, which will support the continuation of these implementations for all students.

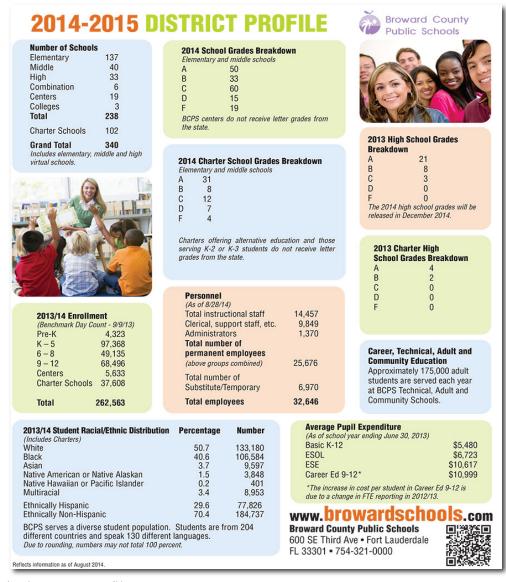
General Obligation Bond: On November 4, 2014, Broward County voters approved a General Obligation Bond (GOB) referendum that provides critically needed funding for Broward students. Funding from the GOB is enabling Broward to address safety, music, art, athletics, renovations and technology (SMART BOND). In terms of technology, the GOB has approximately \$80 million dollars to enable Broward to address infrastructure and digital devices needs over the next five years. This funding is significant and will enable Broward to transform its classrooms to digital learning environments that are both connected and interconnected to a rapidly changing, highly mobile, global world.

The above combined policies, plans and funding sources, along with the funds made available through the FLDOE Digital Classroom Plan will enable Broward to implement a comprehensive, long reaching plan of action aligned with student achievement and college and career readiness goals.

#### 1.2 District Profile:

Broward County Public Schools (BCPS) is the sixth largest public school system in the United States and the second largest in the state of Florida. BCPS is Florida's first fully accredited school system since 1962. BCPS has over 260,000 students and approximately 175,000 adult students in 238 schools, centers and technical colleges, and 102 charter schools. BCPS serves a diverse student population. Students are from 204 different countries and speak 135 different

languages. To stay current about BCPS, follow us on Twitter (@Browardschools) like us on Facebook and download the free Broward County Public Schools mobile app.



#### 1.3 District Team Profile:

Title/Role	Name:	Email/Phone:
District Leadership Contact	Brian Kingsley, Acting	Brian.kingsley@browardschools.com
	Chief Academic officer	
Information Technology District	Ed Hineline, Director,	Ed.hineline@browardschools.com
Contact	Business Applications	
Curriculum District Contact	Lynne Oakvik,	Lynne.oakvik@browardschools.com
	Curriculum Supervisor,	
	Library Media	
Instructional Technology District	Jeanine Gendron, Senior	Jeanine.gendron@browardschools.com
Contact	Process Analyst	
Finance District Contact	Oleg Gorokhovsky,	Oleg.gorokhovsky@browardschools.com
	Director, Budget	

## 1.3 Planning Process:

As previously stated, Broward underwent an extensive planning process centered around the effective integration of technology district-wide in support of the strategic goals of high quality instruction, continuous improvement and communication in January 2014. The data and recommendations from this plan are an essential part of the Digital Classroom Plan. With the development of the technology component of the General Obligation Bond (GOB), Broward completed an extensive needs assessment, which included an analysis of facilities, infrastructure, and computing device needs of every school. This data, along with the Technology Readiness Inventory (TRI) data collected in conjunction with the FLDOE, enabled Broward to determine very specific school needs related to the integration of technology into daily classroom practice. In conjunction with this process, Broward has a standing Digital Projects Team and a Digital Projects Steering Committee with representation from key stakeholders including the Office of Academics, the Office of School Performance and Accountability, the Information and Technology Department, Talent Development and key vendor partners. These committees provide input into the digital curriculum, digital classroom tools, professional learning and curriculum and technical support initiatives. This team meets weekly to plan and implement the extensive digital learning projects currently underway and projected in Broward and that are essential to the success of the District Strategic Plan, the District Technology Strategic Plan and the vision for digital learning in Broward County Public The Digital Projects Team is lead by the Office of Academics and includes representatives from the mathematics, science, literacy, ESOL and ESE departments, which provide direction in the instructional use of digital resources to support student achievement targets. Input into this plan and actual data presented was obtained from members of the digital projects team, along with other staff members as needed. Technology business partners are also members of the digital project team. The Digital Project Team provided input into the Digital Classroom Plan and, combined with the prevailing initiatives, projected initiatives and anticipated needs, lead to the development of the final Digital Classroom Plan being submitted to the FLDOE for approval. To obtain external stakeholder input into the Digital Classroom Plan, the Broward Technology Advisory Committee has discussed the Digital Classroom Plan at each of its monthly meetings since September 2014.

#### 1.4 Multi-Tiered System of Supports (MTSS):

Broward is implementing an evidence-based model of instruction that uses data-based problem solving to integrate academic and behavioral instruction and intervention called the *BEST Blueprint*. BEST (Beyond Expected Student Targets) is a collaborative program that connects the work of the Office of Academics, the Office of School Performance and Accountability and the Office of Talent Development and led by the Superintendent and Senior Leaders to create the following best practices:

- A focused and authentic professional learning community (PLC) process that focuses on student data to improve instructional practice
- An embedded high quality RtI process that establishes and ensures that early and appropriate interventions and progress monitoring are in place
- Optimal internal/external relationships to engage municipalities, business partners and on-profit organizations in educating students

• Scaling up of BEST practices in all schools

This comprehensive program is a unified effort to align student achievement expectations, provide real time data collection through common formative and summative assessments, examine on a monthly basis evidence of instruction and use professional learning communities for teacher collaboration around student data, and provide differentiated support to principals and teachers aligned to individual school student needs. The BEST Blueprint will provide essential data on a regular and ongoing basis needed to support the effective implementation and direction of the Digital Classroom Plan and the continuous improvement of Broward's digital initiatives.

#### 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
- B) Digital Learning and Technology Infrastructure
- C) Professional Development
- D) Digital Tools
- E) Online Assessments

#### **Highest Student Achievement**

**Student Performance Outcomes:** 

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.

Student	Performance Outcomes (Required)	Baseline FCAT % Proficient (2013-2014)	Target FSA % Proficient (2014-2015)	Date for Target to be Achieved (year)
1.	ELA Student Achievement	59%	Baseline Year – 2015*	N/A
2.	Math Student Achievement	61%	Baseline Year – 2015*	N/A
3.	Science Student Achievement	55%	Baseline Year – 2015*	N/A
4.	ELA Learning Gains	68%	Baseline Year – 2015*	N/A
5.	Math Learning Gains	67%	Baseline Year – 2015*	N/A
6.	ELA Learning Gains of the Low 25%	66%	Baseline Year – 2015*	N/A
7.	Math Learning Gains of the Low 25%	62%	Baseline Year – 2015*	N/A
8.	Overall, 4-year Graduation Rate	2011 - 71.6%	90%	2019**
		2012 - 76.4%		
		2013 – 75.3%		
		2014 - 74.2%		

<sup>\*</sup> BCPS cannot establish a definitive target until baseline results on the FSA are available. The district will recalibrate its strategic goals and objectives and update its strategic plan once FSA assessment data are available.

<sup>\*\*</sup>The overall graduation rates for the past three years are provided on the attached Focus on Graduation Success chart. The District, in its Strategic Plan had targeted a 90% overall graduation rate by 2015. As shown on the chart, the traditional high schools have nearly obtained that goal as of the 2013-14 school year with 88.7%. The district is continuing to strive towards a 90% overall graduation rate by 2019 with targeted 4 percentage point overall annual increases.

9. I Acceletation Success Nate 1 0970 1 7270 1 2	9.	72%   2016	Acceleration Success Rate 69%
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	*Average Acceleration Points earned by BCPS high schools from Florida School Grades Report.			
Student 1	Performance Outcomes (BCPS Provided)	Baseline	Target	Date for Target to be Achieved
1.	Increase percentage of Fifth grade students in the Digital 5 Personalized Learning initiative performing at FSA Proficiency levels in mathematics, reading and science.	Baseline Year - 2015	Baseline Year – 2015*	N/A
2.	Increase access to learning management system to targeted D5 and Digital Infusion students and teachers for instruction, assessment and progress monitoring.	35%	80%	2018
3.	Increase percentage of targeted fifth grade elementary students with basic keyboarding skills.	20%	50%	2017
4.	Increase percentage of targeted D5 and Digital Infusion students meeting digital literacy standards as defined by ISTE national standards.	35%	60%	2017

<sup>\*</sup> BCPS cannot establish a definitive target until baseline results on the FSA are available. The district will recalibrate its strategic goals and objectives and update its strategic plan once FSA assessment data are available.

# **Quality Efficient Services**

Technology Infrastructure:

Districts shall create a digital learning infrastructure with the appropriate levels of bandwidth, devices, hardware and software.

Infrastructure Needs Analysis (Required)		Baseline (2013-2014)	Target	Date for Target to be Achieved (year)
1.	Student to Computer Device Ratio	5:1	2:1	2018
2.	Count of student instructional desktop computers meeting specifications*	17,200	N/A	N/A
3.	Count of student instructional mobile computers (laptops) meeting specifications*	47,500	110,000	2018
4.	Count of student web-thin client computers meeting specifications	N/A	N/A	N/A
5.	Count of student large screen tablets meeting specifications	4,000	N/A	N/A
6.	Percent of schools meeting recommended bandwidth standard	54%	100%	2018
7.	Percent of wireless classrooms (802.11n or higher)	54%	100%	2018
Infrastr	ucture Needs Analysis (District Provided)	Baseline	Target	Date for Target to be Achieved (year)
8.	Wireless Network Upgrades	76%	100%	2018

9.	Core Infrastructure Upgrades	Infrastructure	Infrastructure	2018
		supporting	supporting	
		aggregate WAN	aggregate WAN	
		Bandwidth @	Bandwidth @	
		60 gbps.	250 gbps.	
		Internet service	Internet service	
		@ 10 gbps.	@ 40 to 80 gbps.	

<sup>\*</sup>This number identifies those devices meeting the current minimum technical specifications identified by the FLDOE for both instruction and online assessment.

Note: The BOND will enable BCPS to reach a 3.5:1 student to computer ratio in all schools with devices that meet the minimum technical specifications identified by the FLDOE.. Additional funding sources will assist BCPS to attaining a 2:1 ratio, which is the FLDOE target for online assessment.

#### **Skilled Workforce and Economic Development**

Professional Development:

Instructional personnel and staff shall have access to opportunities and training to assist with the integration of technology into classroom teaching.

Average integration should be recorded as the percent of teachers at each of the 5 categories of the Technology Integration Matrix (http://fcit.usf.edu/matrix/) for the levels of technology integration into the classroom curriculum. The Technology Integration Matrix (TIM) illustrates how teachers can use technology to enhance learning for K-12 students. The TIM incorporates five interdependent characteristics of meaningful learning environments: active, constructive, goal directed (i.e., reflective), authentic, and collaborative (Jonassen, Howland, Moore, & Marra, 2003). The TIM associates five levels of technology integration (i.e., entry, adoption, adaptation, infusion, and transformation) with each of the five characteristics of meaningful learning environments. The TIM:

- Provides a framework for defining and evaluating technology integration
- Sets a clear vision for effective teaching with technology
- Gives teachers and administrators a common language for setting goals
- Helps target professional development resources effectively

On an annual basis, schools report through the Florida Innovates Technology Resources Survey the status of their teacher's progress towards the integration of technology into classroom instruction based on the TIM and identify percentages of teachers who are at the following levels of integration.

- Entry: The teacher begins to use technology tools to deliver curriculum content to students.
- Adoption: The teacher directs students in the conventional and procedural use of technology tools.
- Adaptation: The teacher facilitates students in exploring and independently using technology tools.
- Infusion: The teacher provides the learning context and the students choose the technology tools to achieve the outcome.
- Transformation: The teacher encourages the innovative use of technology tools. Technology tools are used to facilitate higher order learning activities that may not have been possible without the use of technology.

See Attachment 1: The Technology Integration Matrix Table of Teacher Descriptors

Baseline data reported below is from the October 2014 FLDOE Florida Innovates Survey results.

Profes	sional Development Needs Analysis (Required)	Baseline (2014-2015)	Target	Date for Target to be Achieved (year)
1.	Average Teacher technology integration via the	EN=35	EN=15	2018
	TIM	AD=10	AD=15	
		ADA=35	ADA=50	
		INF=10	INF=10	
		TRAN=10	TRAN=10	
2.	Average Teacher technology integration via the	EN=40	EN=10	2018
	TIM (Elementary Schools)	AD=10	AD=10	
		ADA=30	ADA=60	
		INF=10	INF=10	
		TRAN=10	TRAN=10	
3.	Average Teacher technology integration via the	EN=40	EN=10	2018
	TIM (Middle Schools)	AD=10	AD=10	
		ADA=30	ADA=60	
		INF=10	INF=10	
		TRAN=10	TRAN=10	
4.	Average Teacher technology integration via the	EN=20	EN=10	2018
	TIM (High Schools)	AD=20	AD=10	
		ADA=40	ADA=60	
		INF=10	INF=10	
		TRAN=10	TRAN=10	
5.	Average Teacher technology integration via the	EN=35	EN=10	2018
	TIM (Combination Schools)	AD=10	AD=10	
		ADA=35	ADA=60	
		INF=10	INF=10	
		TRAN=10	TRAN=10	
Profes	sional Development Needs Analysis (District	Baseline	Target	Date for Target
Provid				to be Achieved
	,			(year)
6.	Personalized learning (Digital 5) Project: Needs	EN= 30	EN=5	2017
	Analysis based on project goals	AD=30	AD=10	
		ADA=30	ADA=70	
		INF-10	INF=10	
		TRANS=0	TRAN=10	

## **Seamless Articulation and Maximum Access**

## Digital Tools:

Districts shall continue to implement and support a digital tools system that assists district instructional personnel and staff in the management, assessment and monitoring of student learning and performance.

Digital	Digital Tools Needs Analysis (Required)		Target	Date for Target
				to be Achieved
				(year)
1.	Implementation status of a system that enables	Partially	Fully	2018

	teachers and administrators to access information about benchmarks and use it to create aligned curriculum guides.	Implemented	Implemented	
2.	Implementation status of a system that provides teachers and administrators the ability to create instructional materials and/or resources and lesson plans.	Partially Implemented	Fully Implemented	2018
3.	Implementation status of a system that supports the assessment lifecycle from item creation, to assessment authoring and administration, and scoring.	Partially Implemented	Fully Implemented	2018
4.	Implementation status of a system that includes district staff information combined with the ability to create and manage professional development offerings and plans.	Fully Implemented	Fully Implemented	N/A
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.	Partially Implemented	Fully Implemented	2018
6.	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.	Fully Implemented	Fully Implemented	N/A
7.	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	Fully Implemented	2018
8.	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	Fully Implemented	2018
9.	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	Fully Implemented	2018
Digital	Tools Needs Analysis (District Provided)	Baseline	Target	Date for Target to be Achieved (year)
10.	Implementation of a district standard Learning Management System to support K-12 instruction that is integrated with digital curriculum, assessments, professional learning, and reporting systems.	Partially Implemented	Fully Implemented	2018

# **Quality Efficient Services**

Online Assessment Readiness:

Districts shall work to reduce the amount of time used for the administration of computer-based assessments.

Online assessment (or computer-based testing) will be measured by the computer-based testing certification tool and the number of devices available and used for each assessment window.

Online Assessments Needs Analysis (Required)		Baseline (2013-2014)	Target	Date for Target to be Achieved (year)
1.	Computer-Based Assessment Certification Tool completion rate for schools in the district (Spring 2014)		100%	N/A
2.	Computers/devices required for assessments (based on schedule constraints)*	47,500	110,000	2018

<sup>\*</sup>This number identifies those devices meeting the current minimum technical specifications identified by the FLDOE for both instruction and online assessment.

Note: The BOND will enable BCPS to reach a 3.5:1 student to computer ratio in all schools with devices that meet the minimum technical specifications identified by the FLDOE.. Additional funding sources will assist BCPS to attaining a 2:1 ratio, which is the FLDOE target for online assessment.

#### **STEP 2 – Goal Setting:**

#### **District Goals:**

Broward County Public Schools has identified three major and overarching goals for the district as established in the District Strategic Plan. These goals guide and direct the academic and operational direction for the school district and support the district vision and mission. The Broward goals are provided in this document along with a link to the web site: <a href="http://www.browardschools.com/About-Us/Strategic-Plan/Goal">http://www.browardschools.com/About-Us/Strategic-Plan/Goal</a>. While the overarching district goals of high quality instruction, continuous improvement and communications reflect Broward's strategic vision, the current strategic plan delineates student performance targets in math, reading and science based on FCAT student achievement results. Broward recognizes that with the state's adoption of the new FSA assessment, all school districts will need to establish new student performance baselines. Accordingly, BCPS will re-calibrate its strategic goals and objectives and update its strategic plan once FSA assessment data are available.

**GOAL 1: High Quality Instruction:** Improve student performance by focusing on raising academic rigor in teaching and learning among staff and students, and preparing students and staff for global competitiveness.

College and Career Readiness:

Graduation Success: Increase four-year graduation rate to 90% by 2015\*.

Early Childhood (Grade 3):

Middle School Readiness:

High School Readiness:

\*The 90% graduation rate by 2015 target was established in 2012. The attached Focus on Graduation Success chart shows that the traditional high schools have nearly obtained that goal as of the 2013-14 school year with a 88.7% graduation rate. The district is continuing to strive towards a 90% overall graduation rate by 2019 with targeted four (4) percentage point overall annual increases.

- **GOAL 2: Continuous Improvement:** Align resources and develop an organized structure that supports operational effectiveness and efficiency to implement the District's priorities focused on improving student achievement and business processes.
- **GOAL 3:** Effective Communication: Increase the effectiveness of internal and external communication with stakeholders to improve the District's image and develop marketing initiatives that will lead to greater understanding and trust among the District, community and school board.

Special Areas of Focus Identified in the District Strategic Plan:

- 1. Exceptional Student Education
- 2. Gifted and Talented Student Initiative
- 3. English for Speakers of Other Languages (ESOL)
- 4. Black Males and the Achievement Gap
- 5. Early Childhood Education

# Broward Technology Strategic Plan Goals Aligned to District Goals of High Quality Instruction, Continuous Improvement and Effective Communication

Technology will support **Goal 1: High-Quality Instruction** by:

- 1. Providing the technology that enables the transformation of teaching and learning through personalized learning
- 2. Providing technology to ensure effective and continuous provision of professional development through online, blended and face-to-face options designed to deliver learning opportunities that integrate technology, curriculum and pedagogy
- 3. Maintaining a consistent and sustainable baseline standard of technology infrastructure and support in every school that is accessible by every student and is continually updated
- 4. Meeting the specialized technical requirements of District education programs such as magnet schools, ESE programs, ESOL/ELL programs, Virtual Schools, Adult Education, Career Technical Education and STEM
- 5. Providing access to the breadth and depth of student information and instructional decision-making data maintained at the classroom level, school-level and District-level in a user friendly and secure manner
- 6. Developing and maintaining close collaborative relationships between academic and I&T operational areas

#### Technology will support Goal 2: Continuous Improvement by:

- 1. Increasing District-wide productivity through increased administrative efficiency enabled by reliable technology systems to all schools and within al departments
- 2. Providing departments, parents, students, and the community user-friendly access to student and administrative data and information to positively impact administrative and academic decision-making at all levels within the District
- 3. Supporting District-wide operational resiliency through effective security practices, disaster preparedness and business continuity planning
- 4. Building and utilizing effective project management practices to ensure timely, cost-effective and quality deployment of academic, administrative and technological projects

5. Assessing and aligning I&T staff resources, partnerships and third party contracts to facilitate timely delivery and support of technology initiatives

Technology will support **Goal 3: Effective Communication** by:

- 1. Ensuring a reliable and secure core communications infrastructure for the District telephony, data networks, video, and web services
- 2. Providing a technology platform that supports community engagement and collaboration (this includes parent engagement and education, business partnerships and community relationships)
- 3. Supporting innovative use of technology for District-wide communication, e.g., use of social media and social collaboration platforms
- 4. Deploying a platform for the communication of student and administrative data and information to those that need it
- 5. Providing technology tools that enable robust but user friendly analytics

**STEP 3 – Strategy Setting:** 

	STRAT	TEGIES	
Goal Addressed	Strategy	Measurement	Timeline
High Quality Instruction (Elementary)	Continue to implement the <b>Digital 5 Personalized Learning Project</b> until all 5 <sup>th</sup> grade students and teachers are included in this 1:1 initiative.  **Baseline: 69 schools in 2014-2015. Total schools = 140	<ul> <li>Capital Budget Plan and GOB are aligned to purchase digital devices for students and teachers in this project.</li> <li>Project is fully implemented by 2016-2017 school year.</li> <li>All program components are budgeted including professional learning, learning management system, and digital curriculum content.  Measurement: Outside Evaluation by 3<sup>rd</sup> party evaluator. Goals focused on increasing student engagement, increasing achievement in math and reading.</li> </ul>	• 2015-2016: Additional     36 schools added to the     Digital 5 initiative     • 2016-2017 school year:     Additional 35 elementary     schools will be     implementing the Digital 5     program.     • 2016-2017: Goal met of     all elementary schools     having a Digital 5     program.
High Quality Instruction (Middle and High)	Continue to roll out digital devices for the classroom in conjunction with the adoption of new Florida Standards aligned digital curriculum. Program name is: <b>Digital Infusion</b> Status: 2014-2015: Grade 6 Math, ELA and Intensive Reading Grade 7, 8 – ELA Grade 9, ELA, Intensive	Capital Budget Plan and GOB are aligned to purchase digital devices for this project.  • Continue to purchase instructional materials in digital format.  •Ensure digital curriculum is accessible through Broward learning management systems.  • Professional learning is aligned to project goals	• 2015-2016: Continue to add content areas including world languages, math, science and social studies     • 2016-2018: Continue to add content areas including world languages, math, science and social studies.

STRATEGIES				
Goal Addressed	Strategy	Measurement	Timeline	
	Reading Grade 10: Intensive Reading	Measurement: FSA student achievement results in ELA, Reading and Math (baseline year – 2015)		
High Quality Instruction and Continuous Improvement	Continue to upgrade the infrastructure to support the expanding needs of digital learning and online assessment.	Bandwidth amount     Wireless access for all classrooms     Measurement: Utilization reports from Network     Operations Center (NOC)	2014-2019	
High Quality Instruction	Meet the specialized technical requirements of District education programs such as magnet schools, ESE programs, ESOL/ELL programs, Virtual Schools, Adult Education, Career Technical Education and STEM.	Collaboration between Information and Technology and Academics is structured and regular.     Academic program needs are met.     Measurement: GOB, Capital Budget Plan, Professional Learning Plan and Academic Plan are collaboratively developed and implemented	2015-2019	
High Quality Instruction	Professional learning related to digital and personalized learning initiatives is available through online, blended and face-to-face options. Professional learning communities support digital learning initiatives	Professional learning is regularly scheduled and accessible to Broward teachers. Professional Learning Communities are providing opportunities for teachers to collaborate and share best practices on digital learning.  Measurement: Classroom observations show digital learning instructional strategies are evident.  Student work reflects the use of digital tools for learning.	2014-on-going	
High Quality Instruction, Continuous Improvement and Communication	Procure and populate Broward learning management system with digital curriculum, focused units of study, aligned assessments, and exemplary unit and lesson plans aligned to Florida Standards.	Standardize on a learning management system for K- 12 as evidenced by selected Learning Management System.     Milestones and targets in LMS implementation plan are met.	2014-2015: Selection 2015-2016: LMS Pilot 2016-2018: Implementation	
Continuous Improvement	Provide additional	•Single Sign on integration	2015-2016: Integration	

STRATEGIES					
Goal Addressed	Strategy	Measurement	Timeline		
	resources to integrate single sign on applications through the selected Learning Management System.	work complete and in alignment with learning management system implementation plan.	strategy and planning including selection of vendor 2016-2018: Implementation		
High Quality Instruction, Continuous Improvement and Communication	Procure consultant services from an IT consultant to assist with the needs assessment and implementation of the Learning Management System project, including teacher professional learning.	Milestones and targets in consultant services agreement are met.	August 2015: Consultant Service Contract is completed.		

#### Part III. DIGITAL CLASSROOMS PLAN - ALLOCATION PROPOSAL

Broward's DCP will focus on the following components in alignment with its District Strategic Plan, District Technology Strategic Plan and General Obligation Bond (GOB) plan. All of the components below will be comprehensively addressed, although the funding available through the DCP allocation will focus on areas that are not funded through either the GOB or the capital budget.

- A) Student Performance Outcomes
- B) Digital Learning and Technology Infrastructure
- C) Professional Development
- D) Digital Tools
- E) Online Assessments

The following section will provide more information on:

- Implementation Plan Details on the planned deliverables and/or milestones for the implementation of each activity for the component area specific to the deliverables that will be funded from the DCP Allocation.
- Evaluation and Success Criteria Process for evaluating the status of the implementation and once complete, how successful implementation will be determined aligned to the student performance outcome goals established in component A.

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

The student performance outcomes below are aligned to 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.

	Student Performance				
Studen	t Performance Outcomes	Baseline	Target		
1.	Increase percentage of fifth grade students in the Digital 5 Personalized Learning initiative performing at FSA Proficiency levels in mathematics, reading and science.	Baseline Year - 2015	Baseline Year – 2015*		
2.	Increase access to learning management system to targeted D5 and Digital Infusion program students and teachers for instruction, assessment and progress monitoring.	35%	80%		
3.	Increase percentage of targeted fifth grade elementary students with basic keyboarding skills.	20%	50%		
4.	Increase percentage of targeted D5 and Digital Infusion program students meeting digital literacy standards as defined by ISTE national standards.	35%	60%		

<sup>\*</sup>BCPS cannot establish a definitive target until baseline results on the FSA are available. The district will recalibrate its strategic goals and objectives and update its strategic plan once FSA assessment data are available.

# B) Digital Learning and Technology Infrastructure

Broward's strategy is based on a recognition that in order to provide all of the support mechanisms involved in personalized learning, the transition from print to digital resources, and the increased use of online assessment, the district needs to increase the capacity, the reliability and the quality of the user experience for all network resources. To achieve this objective, expenditures will be made on goods and services that build the connections all the way from the Internet to the end user device in the classroom. More specifically, attention is being paid to upgrading bandwidth capacity on its Internet and WAN circuits, expanding the core network infrastructure that manages and interconnects that traffic, and upgrading both wired and wireless network services in our schools. The plan to achieve this engages a variety of departments, technology solutions and funding streams including district capital and operational expenditures, a newly passed community bond initiative and eRate support where available.

Infras	structure Implementation				
	Deliverable	Estimated Completion Date	Estimated Cost	School/ District	Outcome from Section A)
B.1	Ensure higher bandwidth wireless access in all classrooms by moving an all 802.11N or 802.11AC standard by installing one access point in every classroom (doubling current density)	2017-2018	Funded with GOB/District Capital Budget/eRate resources	All classrooms in Broward County	Outcome 1,2,3,4
B.2	Upgrade LAN network equipment where needed to support new wireless access points and to ensure a 2 gbps. Campus backbone.	2017-2018	Funded with GOB/District Capital Budget/eRate resources	All campuses in Broward County	Outcome 1,2,3,4
B.3	Upgrade all WAN circuits to 1 gbps to the district's network core.	2016-2017	Funded by district operational	All campuses in Broward County	Outcomes 1,2,3,4

			funds and eRate		
			support.		
B.4	Upgrade core network electronics to	2017-2018	Funded with	District	Outcomes
	manage the district's WAN/Data		GOB/District		1,2,3,4
	Center/Internet convergence.		Capital		
			Budget/eRate		
			resources		
B.5	Upgrade bandwidth provisioning on	2017-2018	Funded by	District	Outcomes
	the district's Internet circuits to an		district		1,2,3,4
	estimated 40 to 80 gbps based on		operational		
	utilization analysis.		funds and eRate		
			support.		

If no district DCP Allocation funding will be spent in this category, please briefly describe below how this category will be addressed by other fund sources.

Brief description of other activities	Other funding source
Activities described above.	Funding sources described above.

Infrastructur	Infrastructure Evaluation and Success Criteria				
Deliverable	Monitoring and Evaluation and	Success Criteria			
(from above)	Process(es)				
B.1.	Routine reporting and analysis of network traffic data obtained from the district's Network Operations Center (NOC)	<ul> <li>Network availability at levels greater than 99.9%</li> <li>Applications and online services perform at high quality levels.</li> <li>Customer experience as shown by satisfaction surveys indicates highly satisfactory levels.</li> </ul>			
B.2.	Routine reporting and analysis of network traffic data obtained from the district's Network Operations Center (NOC)	<ul> <li>Network availability at levels greater than 99.9%</li> <li>Applications and online services perform at high quality levels.</li> <li>Customer experience as shown by satisfaction surveys indicates highly satisfactory levels.</li> </ul>			
B.3.	Routine reporting and analysis of network traffic data obtained from the district's Network Operations Center (NOC)	<ul> <li>Network availability at levels greater than 99.9%</li> <li>Applications and online services perform at high quality levels.</li> <li>Customer experience as shown by satisfaction surveys indicates highly satisfactory levels.</li> </ul>			
B.4.	Routine reporting and analysis of network traffic data obtained from the district's Network Operations Center (NOC)	<ul> <li>Network availability at levels greater than 99.9%</li> <li>Applications and online services perform at high quality levels.</li> <li>Customer experience as shown by satisfaction surveys indicates highly satisfactory levels.</li> </ul>			
B.5.	Routine reporting and analysis of network traffic data obtained from the district's Network Operations Center (NOC)	<ul> <li>Network availability at levels greater than 99.9%</li> <li>Applications and online services perform at high quality levels.</li> <li>Customer experience as shown by satisfaction surveys indicates highly satisfactory levels.</li> </ul>			

# C) Professional Development

Broward's professional learning program that supports digital learning is implemented through a series of strategies that facilitate the teacher's commitment to continuous professional improvement. The BCPS professional learning system, as outlined in the Master In-service Plan, is aligned to the Standards established by Learning Forward, the national professional learning organization and the Third Cycle-Florida Professional Development System Evaluation Protocol from the FLDOE. The BCPS PL System also aligns to any relevant Florida Statutes and State Board of Education Rules. The collective vision is to "develop employees to improve performance." In relation to the infusion of digital learning, the academics and talent development departments supports teacher professional learning for all teachers leading to the creation of personalized learning environments that support all student needs, including ESE and ESOL students. To achieve the digital learning vision, BCPS addresses the following:

- School leadership "look-fors" on quality digital learning processes in the classroom
- Educator capacity to use available technology
- Instructional lesson planning using digital resources
- Student digital learning practices

The following links provides an overview of the BCPS Master In-service Plan and the individual Innovation Configuration documents that specifically supports digital learning.

http://www.broward.k12.fl.us/talentdevelopment/html/ic masterplan.html

http://www.broward.k12.fl.us/talentdevelopment/news/mp\_ic/Digital\_Learning\_Curriculum\_Integration.pdf

http://www.broward.k12.fl.us/talentdevelopment/news/mp\_ic/Technology\_Systems\_Operations.pdf

http://www.broward.k12.fl.us/talentdevelopment/news/mp\_ic/Digital\_Person\_Learn.pdf

Implementation Plan for C) Professional Development:

School Facilitator Model to support Learning Management System Implementation: The DCP funds allocation will be used to provide stipends for one teacher for each BCPS school to be the professional learning facilitator for that site.

	PROFESSIONAL DEVELOPMENT IMPLEMENTATION					
		Deliverable	Estimated	Estimated Cost	School/	Outcomes
			Completion		District	1,2,3,4
			Date			
C	C.1	Provide stipends for teachers to complete professional learning and to develop curriculum content for LMS content repository. 232 facilitators for LMS project (one per school).	September 2018	\$120,000	District	Outcomes 1,2,3,4

While the DCP will partially support professional learning, other on-going activities are addressed below

Brief description of other activities	Other funding source
Expert conversations on digital learning through live-	PD for Digital Learning Grant (TAPS Number 15AT63).
streamed and interactive webinars. Experts are Broward	
teachers or principals with proven success in leading and	
implementing digital learning in Broward schools and	
classrooms. Focus is to create a professional social and	

learning network.	
Professional Learning directly aligned to project	School budgets for substitutes as needed.
implementation and targeted to the needs of the project.	
For example, Digital 5 and Digital Infusion Projects.	
Professional Learning Communities focused on student	N/A
achievement.	

Evaluation and Success Criteria for C) Professional Development:

Professional Development Evaluation and Success Criteria				
Deliverable	Monitoring and Evaluation and	Success Criteria		
(from above)	Process(es)			
C.1.	School Facilitators will monitor	Documentation of teacher movement on the		
	professional learning implementation	Technology Integration Matrix (TIM) from baseline		
	at each school site.	level to next level on the scale.		

# D) Digital Tools

Implementation Plan for D) Digital Tools:

Broward will use its DCP allocation to procure a standard Learning Management System (LMS) for K-12 students and teachers. The LMS is a key digital resource in a personalized learning environment as it provides individual student and teacher access to instructional content, communication and collaboration tools, and assessments that can be customized and directed to meet individual student needs, including ESE and ESOL students. The LMS will meet digital learning platform specifications as defined by key stakeholders, and guide the integration of digital curriculum content. The vision is to have a standard learning object repository of instructional applications, instructional frameworks, unit and lesson plans, activities and assessment items aligned to Florida Standards. From this searchable repository, teachers and students will have access to educational content that has been vetted by curriculum experts to meet content quality standards.

Through a district LMS Task Force and in conjunction with purchasing procurement processes, Broward will select the appropriate LMS along with a content repository to meet the K-12 personalized learning vision of providing each student with access to their own learning system. The selected LMS will incorporate Universal Design principles to ensure that students with disabilities can access and use the system as part of their educational program.

The funds from the DCP will be used to procure the LMS, a content repository, implementation services and professional learning for teachers needed for effective implementation. Currently, there is a gap in available funding for the purpose of procuring an LMS. Therefore, this strategy would be an appropriate way to leverage these funds and align with the implementation plans for the GOB and capital budget.

	DIGITAL TOOLS IMPLEMENTATION				
	Deliverable	Estimated	Estimated	School/	Outcome
		Completion	Cost	District	from
		Date			Section A)
D.1.	Procure a standard LMS for K-12	2015-2016	\$1,000,000 (yearly fee)	District	Outcomes 1,2,3,4
D.2	Procure consultant services to assist with comprehensive planning including a professional learning and technical support plan	2015-2016	\$280,000	District	Outcomes 1,2,3,4
D.3	Procure a content repository system to be used in conjunction with the LMS	2015-2016	\$600,000 (yearly fee)	District	Outcomes 1,2,3,4
D.4	Pilot selected LMS	2015-2016		District	Outcomes 1,2,3,4
D.5	Roll-out LMS to all schools based on implementation schedule	2017-2018		District	Outcomes 1,2,3,4

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	Digital Tools Evaluation and Success Criteria				
Deliverable	Monitoring and Evaluation and	Success Criteria			
(from above)	Process(es)				
D.1.	RFP process is used to select LMS for BCPS	Selection of LMS is completed by June 2015			
D.2.	Consultant contract scope of work milestones, goals and objectives.	Contract milestones and goals are met by targeted dates.			
D.3.	Documentation and management of the piloting of LMS including installation, professional learning, content integration, support and lessons learned.	Successful piloting of LMS			
D.4.	Seamless integration of LMS and content repository system. Digital content and student data is integrated in an efficient and timely manner.	Content repository system is selected and aligns to LMS.  Digital content integration process is effective.			
		Project is delivered on time and on schedule.			

## E) Online Assessments

Supporting online assessment is an important aspect of providing personalized learning environments in all Broward classrooms that seamlessly provide digital devices for instruction and assessment. Broward's strategy is to comprehensively monitor the essential components needed for a reliable and consistent student experience throughout the testing process whether it occurs throughout the school year or during the identified state testing timeframes. To achieve

successful implementation of online assessments, both technology infrastructure and digital devices are prioritized. The GOB is directly focused on improving both of these components and includes the improvement of the network, bandwidth, wireless infrastructures along with acquiring more digital devices for instruction and assessment. Broward regularly reviews the FLDOE current technology specifications for statewide assessments and aligns its implementation plans to attaining these specifications. Broward is not requesting to use Digital Classroom Plan (DCP) funds for online assessment, as other funding sources are available.

Implementation Plan for E) Online Assessments:

ONLINE ASSESSMENT IMPLEMENTATION							
	Deliverable	Estimated	Estimated	School/	Outcome		
		Completion	Cost	District	from		
		Date			Section A)		
E.1	Computer-based Testing Readiness	February	N/A	District	Outcome 1		
	Certification	2015					

If no district DCP Allocation funding will be spent in this category, please briefly describe below how this category will be addressed by other fund sources.

Brief description of other activities	Other funding source
Continue to procure digital devices to support online	GOB, Capital Budget, Operating Budget
assessment.	
Continue to update the network, bandwidth and wireless	GOB, Capital Budget, Operating Budget
infrastructures to meet FLDOE technology	
specifications.	

Evaluation and Success Criteria for E) Online Assessments:

Online Assessment Evaluation and Success Criteria				
Deliverable	Monitoring and Evaluation and	Success Criteria		
(from above)	Process(es)			
E.1.	Computer-Based Assessment	100% Readiness		
	Certification Tool completion rate for	100% Completion		
	Broward schools.			