Digital Classrooms Plan

For

Osceola District Schools

September 16, 2014

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Part I: DIGITAL CLASSROOMS PLAN – OVERVIEW

1.1   District Mission and Vision Statements

District Vision:
The School District of Osceola County will outperform all other districts in the state of Florida.

District Mission:
Education which inspires all to their highest potential.

Technology Vision:
The School District of Osceola County will provide technology-rich environments as a key to relevant education, encouraging lifelong learning for all students.

Technology Mission:
Promote the effective use of technology to improve student achievement.

1.2   District Profile

Osceola County encompasses an area of Central Florida that has undergone significant change in recent years. The United States Census estimates Osceola County's population at 298,504 residents for 2013. Bouts of explosive growth over the last few decades have resulted in an increase of 177% from the population of 107,728 in 1990. Many factors and events have shaped the county since its founding in 1887, but the arrival of Walt Disney World surely represents one of the most-defining milestones. These sprawling, nearby theme parks and resorts transformed Osceola County from a small, rural community with a population of 25,267 in 1970 to the ever-changing community it is today.

Osceola County is a 1,506 square mile area that serves as the south/central boundary of the Central Florida greater metropolitan area. Although officially considered suburban in nature, an urban area in the northwest quadrant dominates Osceola County's geography. This area adjoins Polk, Orange, and Lake Counties and includes most of Osceola's population. It encompasses the communities of Poinciana, Buenaventura Lakes, Celebration, and unincorporated areas ranging from Narcoossee and Harmony in the northeast to Campbell City and Intercession City in the southwest to Deer Run and St. Cloud Manor in the southeast.

Not surprisingly, because of the county's proximity to numerous tourist attractions, scores of county residents work within the hospitality and service fields for minimum wage. Income statistics reflect the low-paying jobs many people hold. Based on the 2012 United States Census estimate, the median household income is $44,887, well below the national median of $53,046. An estimated 16.0% of adults and 26.0% of children ages 5-17 live below the poverty level. A significant 70.2% of the student population qualifies for the free/reduced lunch program. According to the United States Department of

Labor's Local Area Unemployment Statistics for November 2013, Osceola County's unemployment rate remains high at 6.6%.

One of the most-interesting county characteristics is Osceola's racial and ethnic diversity. The most-recent racial/ethnic data available (2013-2014 school year) reflects the diversity of the District's 56,880 students. The distribution of students among the major race groups is 73% White, 14% Black, 6% American Indian or Alaskan, 3% Asian, and 4% Multiracial. And well over half (57%) of students are part of the Hispanic ethnic category. The District's culturally diverse community represents 107 countries and involves use of 97 different languages. Accordingly, a significant portion of the student population (26%) is classified as "English Language Learners" (ELL) in 2013-2014.

Overall, in spite of various gains, students' 2014 Florida Comprehensive Assessment Test (FCAT) and End of Course (EOC) results show a pattern of achievement that consistently falls below state averages. For reading, 56% of the District's elementary school students scored Level III or above, while the state average is 58%. Similarly, 54% of the District's middle school students and 48% of the District's high school (grades 9 and 10) students scored Level III or above in reading, but the state reports higher averages of 58% for middle school and 54% for high school. In mathematics, percentages of the District's students achieving Level III or greater are 50% for elementary school and 41% for middle school. Once again, state averages were higher with 59% for elementary school and 52% for middle school. The Spring 2014 Algebra 1 EOC Assessment results indicate that 39% of the District's high school students passed, while the state's average was 46%. On the science portion of FCAT, 52% of the District's elementary school students scored Level III or above compared to the state average of 54%. The District's percentage for middle school students was 42%, well below the state average of 49%. According to the Spring 2014 Biology EOC Assessment data, the state's average of high school students who passed was higher at 58% than the District's average of 43%.

The District's post-secondary institution, Technical Education Center Osceola (TECO), works closely with secondary students, offering a variety of courses and certifications (such as CNA, LPN, LEO, EPA, MOUS, A+, Network +, MCP, and MCSA) to make Osceola students job-ready upon graduation. The District's graduation rate was 78.06% for the 2012-2013 school year. Once again, Osceola County has a higher graduation rate than the state average of 75.6%. Osceola County also continues to have a lower dropout rate (.8%) than the state average (2%).

A tremendous 82.5% of high school completers reported plans to seek further formal education in some capacity. Several continuing education opportunities are available locally. TECO offers a number of post-secondary, job-preparatory programs for adults; courses support a variety of career choices, and examples include Practical Nursing, Legal Administrative Specialist, Business Computer Programmer, Culinary Arts Practitioner, Law Enforcement Officer, Automotive Service Technician, Residential/Commercial Electrician, and Residential/Commercial Plumber. Adult Learning Center Osceola (ALCO) offers ESOL, Adult Basic Education, and GED

Preparation and Testing for adults. In addition, Valencia College and Johnson University have campuses in Osceola County.

Population increases exert the most influence on Osceola's situation. County agencies struggle to effectively address the growth. The student enrollment is now 56,084, which equals an increase of 211% from 18,054 in 1990. As of November 2012, the District employs 6,628 staff members (including 160 administrators, 3,480 instructional personnel, and 2,998 professional support personnel). The county has public transportation, a One-Stop Center, and a number of non-profit community organizations prepared to offer assistance with food, shelter, employment, medical health, education, and legal services. To meet the needs of students, teachers, and families, the District maintains partnerships (and memorandum agreements) with a myriad of local organizations. Examples of these collaborating entities include the city/county governments and Education Foundation - Osceola County, Community Vision, Inc., Osceola County Council on Aging, Osceola County Health Department, Park Place Behavioral Health Care, Florida Department of Juvenile Justice, and American Red Cross.

1.3   District Team Profile

Title/Role	Name:	Email/Phone:
Information Technology District Contact	Russell Holmes	holmesr@osceola.k12.fl.us 407-870-4050
Curriculum District Contact – Elementary Curriculum & Instruction	Dr. Lissette M. Brizendine	brizendl@osceola.k12.fl.us 407-870-4849
Curriculum District Contact – Middle School Curriculum & Instruction	Michael Allen	allenmi@osceola.k12.fl.us 407-870-1400
Curriculum District Contact – High School Curriculum & Instruction	Dr. Michael R. Akes	akesmich@osceola.k12.fl.us 407-870-4901
Instructional District Contact	Dr. Mel Pace	paceterr@osceola.k12.fl.us 407-870-4669
Finance District Contact	Todd Seis	seist@osceola.k12.fl.us 407-870-4823
District Leadership Contact	Angela Marino	marinoa@osceola.k12.fl.us 407-518-2934

1.4   Planning Process

Upon receipt of the Commissioner's memorandum concerning the Digital Classrooms Plan, the District established a committee of 21 stakeholders from which the wide range of information needed to develop a plan could be gathered. The names and titles of the committee members are listed in Appendix B.

The first committee meeting was held on August 18, 2014, with the purpose of reviewing the requirements, the guidance document, and the template to assign areas of responsibility. Subsequently, each group completed the Needs Analysis for their respective areas. On August 25, 2014, the committee met to review the Needs Analysis for each area and make comments and adjustments.

On August 28, 2014, the committee met to complete the Goal Setting and Strategy sections of the plan.

On September 3, 2014, the committee met to review and finalize the plan, including making the determination as to the allocation of funds for the most direct impact on digital content delivery and online assessments; therefore, improving student performance outcomes.

The plan was presented to the District Technology Committee on September 5, 2014. This committee is comprised of District staff, school-based administrators, a representative for teachers and support staff, and parents.

The plan was presented to the Executive Leadership Team for approval on September 8, 2014.

The plan was presented to the Board for approval on September 16, 2014.

1.5   Multi-Tiered System of Supports (MTSS)

Data-based problem solving is the foundation of the Multi-Tiered System of Support (MTSS) in the District of Osceola County. Data is gathered from various sources including: state assessments (FSA, FCAT and EOC), quarterly assessments (District Platform assessments), and progress monitoring (STAR Reading, Math, and Early Literacy). Data analysis takes place at the District and school level. The District allocates funds for specific areas after identifying trends. Reading Coaches are allocated for each school in the District in order to support Literacy within the core instruction (Tier 1). In addition, Reading Coaches also oversee reading and writing interventions for Tier 2 and Tier 3. After reviewing tests results, many of the schools have also been allotted Math Coaches and Learning Resources Specialists. Again, the role of these individuals is to support Tier 1 instruction and guide and oversee interventions for Tier 2 and Tier 3.

Another critical position at each school is the Multi-Tiered System of Support Coach. Currently, there is an individual at each school that is responsible for leading an MTSS Team. This individual leads the school in the problem-solving process and analyzing data to meet the academic and behavioral needs of all students. The MTSS structure for the District is captured on a flow chart for a unified understanding of the process (Appendix D). Within the District of Osceola County, there are three specific teams to support this process.

The first layer of support is at the District level with the District Leadership Team. This team is comprised of: Coordinator of School Improvement and MTSS, Assistant Superintendents of Curriculum & Instruction, Director of Exceptional Education, Director of Multi-Cultural Education, Director of Student Services, and Supervisor of Psychological Services. This group meets each month to review the health of the MTSS process. The Leadership Team decides on the direction and goals of the Multi-Tiered Systems of Support at the District level.

The next layer of support is a group of MTSS Regional Leaders. This group includes: Coordinator of School Improvement and MTSS, Supervisor of Psychological Services, four school psychologists, and five school site MTSS Coaches. These individuals meet at least bi-monthly to review the directional path of the Leadership Team and to support the MTSS coaches within the schools. Each of the Regional Leaders is assigned school site based MTSS Coaches to support. These leaders help support the goals of the District and help communicate these goals to the individual school sites. This Regional Team meets to problem solve specific needs for regions and level specific needs. They are also available for the school coaches to contact as the need arises.

In addition to these two teams, there are three meetings a year held for all MTSS Coaches. The MTSS process is supported at each school with a site based MTSS Coach. The MTSS Coach leads a team that includes an administrator, psychologist, instructional coaches, teachers, and other additional staff as needed in the problem solving process. Progress Monitoring is reviewed for all Tiers. This process is ongoing throughout the year. Tier 1 data is reviewed at least quarterly by the team. Tier 2 data is analyzed on a monthly basis so that changes can be made if student progress is not evident. Tier 3 data is reviewed bi-monthly so that the team can make informed decisions. Recently, a new student record system was put into place by the District that allows students' tiered information to be readily available for appropriate identification of tiered specific information. This information will be helpful for all instructors to differentiate instruction for all students at all levels.

Although there is a system in place, there is continued support through professional development. Over the summer, there was a two day workshop held for each level to look at school-wide data for academics and behavior. All schools attended with at least five staff members. All schools participated with administrative teams. These teams included administrators, MTSS coaches, reading and math coaches, school psychologists, and additional members that the principal of the school selected. The District funded this event. The deliverables for this event were the Continuous Improvement Management System (CIMS) goals and a Tier 1 behavioral plan for all schools. These documents will continue to be tweaked throughout the year. Reflective visits will take place by the Assistant Superintendents to check the fidelity of the action plans stated within these documents.

The District of Osceola County will continue to utilize the problem solving process to improve the implementation of the Multi-Tiered Systems of Support.

Part II: DIGITAL CLASSROOMS PLAN – STRATEGY

STEP 1 – NEED ANALYSIS:

A) Student Performance Outcomes

Student Performance Outcomes (Required)	Baseline	Target	Date for Target to be Achieved *(year)*
1. ELA Student Achievement	55%	58%	2015
2. Math Student Achievement	52%	55%	2015
3. Science Student Achievement	54%	57%	2015
4. ELA Learning Gains	67%	70%	2015
5. Math Learning Gains	65%	68%	2015
6. ELA Learning Gains of the Low 25%	68%	71%	2015
7. Math Learning Gains of the Low 25%	64%	67%	2015
8. Overall, 4-year Graduation Rate	78.1%	80.1%	2015
9. Acceleration Success Rate**	93%	95%	2015

**Acceleration success is defined as the percentage of 8th grade students who passed the Algebra 1 EOC, out of the total number of 8th grade students who took the Algebra 1 EOC.

The School District of Osceola County has developed long term goals that addresses the five components of the state provided metrics. In analyzing the AMO data for 2013-2014, the greatest disparity is found between our *English Language Learners* and *Students with Disabilities* populations. The math proficiency for the District is at 52%, our ELL students are at 35%, while our SWD are at 26%. For reading, the District's percent proficiency is at 55%, our ELL students are at 34% and our SWD are at 24%. This is an area of District focus and equitable access to technology is a priority.

Increasing student achievement, as well as preparing our students to be College and Career Ready is the District's number one goal. Adding CTE courses such as Gaming and Digital Design in several of our high schools will expand the opportunities students have to obtain industry certification in a high needs area. One of our identified high needs areas is in the areas of mathematics. The addition of Algebra 1A provides our Level 1 students with additional support that integrates a technology component into the curriculum. This component will aid teachers with progress monitoring, identifying deficiency in skills, and providing the remediation of those skills. Establishing a STEM sturdy District is another goal for the upcoming school year. Strengthening the cross curricular integration between the areas of STEM, summer institutes, as well as providing vertical articulation, from elementary to post-secondary are some initiatives the School District of Osceola County has taken to fortify the areas of science, technology,

engineering, and math initiatives. Another digital tool that will aid in student performance outcomes is Achieve 3000. This is an online tool that provides Lexile leveled articles for our struggling readers. This year's goal is to increase the percent of student completing two or more articles per week with at least 75% proficiency.

In an effort to use technology to increase student achievement, the District will expand the Bring Your Own Device Network (BYOD). The BYOD initiative will have three levels of implementation. In the first level, all students can bring devices, but cannot connect to the student BYOD Network. In the second level, students can bring in devices and only connect to the student BYOD network from identified locations on the campus. In the third level, students can connect to the student BYOD network from all areas of the campus. The District will also develop a plan for 2014-15 to add student computer workstations that meet minimum specifications for computer-based assessments and digital learning, and increase student computer stations from 28,876 to 31,763 an increase of 10%. The District will continue with implementation of our new Local Instructional Improvement System (LIIS) and Student Information System (SIS) which will include: full implementation of our new Teacher Evaluation System using True North Logic, full implementation of the Professional Learning Management System using True North Logic, full implementation of FOCUS including: the Student Information System, Scheduling, Parent/Student Portal, all State Reporting, and begin pilot testing for the curriculum modules and the assessment platform. Our FOCUS system will help identify areas of need in order to target support. The 2014-2015 school year is year two of a five year plan to refresh all teacher laptops. This will provide teachers with current technology in which they can utilize in the classrooms. This school year, the District will begin upgrading the infrastructure in order to support Digital Learning throughout all campuses. Focus will be on security and replacing end of life equipment at all campuses with greatest need being funded first.

With the increase in students and teachers using technology, we have also increased the need to train on Cyberbullying. The resource staff will provide a minimum of three regional designee training sessions on Bullying and Cyberbullying. The resource staff will offer Bully Prevention Parent Nights at select elementary schools. The District will continually offer online Child Abuse Reporting training throughout the year.

To ensure continuity in E-rate compliance and funding for discounted telecommunications services, Internet access, and internal connections, the District has developed a comprehensive Student Internet Safety Training plan. The plan contains four major components: (1) Internet safety lessons conducted by English Language Arts teachers – three lessons in grades K-8 and four lessons in grades 9-12, (2) monthly Internet safety videos, (3) customized desktop for all student computers with Internet safety tips, and (4) participation in Digital Learning Day.

One of the uses we have initiated this year is the use of our FOCUS system in tracking post-secondary plans for our students. The utilization of this Digital Tool will aid in providing targeted resources and support to our student body. As our student population increase, the use of portables to accommodate our increased population has also increased. Having all new portables equipped with the technology infrastructure, as well as installing short throw projectors that turn whiteboard into interactive boards is a goal we are working to achieve. Although this is a temporary solution, students should have the same level of digital access while utilizing these structures.

The School District of Osceola County has expanded its online assessment platforms. The District has purchased STAR Renaissance Reading for K-12 and STAR Renaissance Math for K-8. This online assessments will aid in progress monitoring our students in the areas of reading and math. In an effort to prepare our students with the demands of online testing, we have incorporated the use of the FLDOE Item Bank Test Platform, as well as our in house PCG system. With these tools, we can use computers, IPads, or clickers as a means for assessment delivery.

Research suggests that students with disabilities require greater consistency and intensity of instruction. Students with disabilities can be fatigued and frustrated with the challenges of their academics so individualized pacing and instructional practices should be employed. A variety of instructional presentation should be provided – increase visuals, hands on, cooperative grouping, use of technology can provide supports needed; Software available for students who cannot read – Voice to text, Write Out Loud, Read Alouds, and use of Smart Technology. There is a greater need to emphasize behavior management to include teaching students positive self-management skills. Close, frequent monitoring and feedback on progress is required, along with curriculum accommodations.

Scheduling of students and utilizing time efficiently are barriers. The largest barrier is the "intensive intervention" time not being delivered.

Students with disabilities required greater access to the general curriculum and technology available. Specific, targeted scheduling is required to ensure that they are in classroom environments that provide support facilitation in the area of disability. Teachers of students with disabilities are required to be the intervention specialist, individualizing instructional practices for each student.

The District piloted professional development and flexible scheduling at targeted schools. To meet the needs of all students with disabilities, this pilot will be expanded to more schools to include more specific expectations of staff working with students with disabilities.

The ESE Department in addition to providing various assistive technology, has also supported the District' Technology Plan since 2007 by purchasing projectors, document cameras, and interactive white boards.

The District provides a variety of resources and programs to meet the needs of the District's English Language Learners (ELL). Currently, 26% of the student population is classified as English Language Learners.

The District has purchased "InSync Education" for all ELL students, families, and teachers. This online, academic resource provides access to thousands of fun, academic activities to use in class or at home. There are activities on test prep, next grade readiness, and college & career readiness. Users have the ability to log-in from any computer or mobile device with Internet access and search resources by grade level (K-12) or subject area (Math, Science, Social Studies & Language Arts). Users can read or listen to the resources in multiple languages, including English, Spanish, or Haitian Creole.

Project F.A.S.T. (Families and Schools Together!) provides ELL students the opportunity to extend their learning at home, by providing netbook computers with English language acquisition and subject area software. Project F.A.S.T. computer users will have access to Rosetta Stone Language program and access to the web-based program Parentsk12.com. Through this program, parents of ELL and immigrant students were able to assist their children's academic achievement by using resources and activities in English, Spanish, or Creole, according to the parent preference. Academic resources offered to parents served as tools for homework help in Language Arts, Math, Science, and Social Studies. Resources will emphasize the different aspects of the American culture and important social issues. ELL students and immigrant youth in grades 9-12 and their parents will be able to access career and technical education resources, as well as citizenship and life skills activities.

A+Rise is a compilation of research-based instructional strategies and tools aligned to the WIDA Standards for English Language Learners. A+ Rise strategies provide teachers with explicit, step-by-step instructions for activities and strategies that meet the linguistic and academic needs of ELLs at all levels as they learn content. Title III District Resource Specialists provide continuous support for A+Rise successful implementation.

Using our First Class email/communication software, conference folders are available to all District personnel, administrators, teachers, coaches, and paraprofessionals to enhance communication. The conference folders include research-based best practices, instructional program models, instructional strategies, educational websites, cultural resources and District/school/student disaggregated data to help improve instruction for our ELL students.

Students in the School District of Osceola County represent over 100 different countries and speak over 100 languages. The Multicultural Education Department provided cultural awareness professional development for the Paraprofessionals, Guidance Counselors, and Instructional personnel. Over 200 participants were able to view culture through a different perspective.

The District offers Dual Language Programs using both One-Way (enrichment/development) and Two-Way (enrichment/immersion) models. For 2014-2015 school year, Highlands Elementary and Neptune Middle are using the One-Way Program while Deerwood Elementary, Kissimmee Elementary, Ventura Elementary, Thacker Avenue Elementary for International Studies, and Westside K-8 are using the Two-Way Program.

B) **Digital Learning and Technology Infrastructure**

Infrastructure Needs Analysis (Required)		Baseline	Target	Date for Target to be Achieved *(year)*
1.	Student to Computer Device Ratio	2.76	1.0	2020
2.	Count of student instructional desktop computers meeting specifications	16,374	20,374	2016
3.	Count of student instructional mobile computers (laptops) meeting specifications	3,849	7,698	2016
4.	Count of student web-thin client computers meeting specifications	693	693	2015
5.	Count of student large screen tablets meeting specifications	0	0	N/A
6.	Percent of schools meeting recommended bandwidth standard	100%	100%	2015
7.	Percent of wireless classrooms (802.11n or higher)	13%	100%	2017
Infrastructure Needs Analysis (District Provided)		Baseline	Target	Date for Target to be Achieved *(year)*
8.	LCD Projectors	100%	7 year refresh	2022
9.	Teacher Laptops	100%	5 year refresh	2019
10.	Document Camera – core classrooms	100%	7 year refresh	2023
11.	Interactive board/projector	85%	100%	2016
12.	Audio amplification	33%	100%	2018
13.	Upgrade cabling at 16 schools: Boggy Creek Elementary, Celebration K-8, Discovery Intermediate, Gateway High, Horizon Middle, Kissimmee Elementary, Kissimmee Middle, Lakeview Elementary, Michigan Avenue Elementary, Narcoossee	Cat 5	Cat 6	2018

	Middle, Parkway Middle, Pleasant Hill Elementary, Poinciana High, Reedy Creek Elementary, St. Cloud Middle, and Thacker Avenue Elementary for International Studies			
14.	Upgrade switches in IDF/MDF from 10/100 Mbps to 1Gbps at 30 schools: Adult Learning Center, Bellalago Academy, Celebration K-8, Celebration High, Central Avenue Elementary, Chestnut Elementary School for Science and Engineering, Cypress Elementary, Deerwood Elementary, Flora Ridge Elementary, Gateway High, Harmony Community, Harmony High, Hickory Tree Elementary, Highlands Elementary, Horizon Middle, Koa Elementary, Lakeview Elementary, Liberty High, Michigan Avenue Elementary, Narcoossee Elementary, Narcoossee Middle, Neptune Elementary, Neptune Middle, Osceola School for the Arts, Partin Settlement Elementary, Pleasant Hill Elementary, St. Cloud Elementary, St. Cloud Middle, Sunrise Elementary, and Thacker Avenue Elementary for International Studies	10/100 Mbps	1 Gbps	2018
15.	Provide additional access points to provide adequate wireless coverage at 17 schools: Central Avenue Elementary, Chestnut Elementary School for Science and Engineering, Cypress Elementary, Deerwood Elementary, Flora Ridge Elementary, Hickory Tree Elementary, Kissimmee Elementary, Lakeview Elementary, Michigan Avenue Elementary, Neptune Elementary, Partin Settlement Elementary, Pleasant Hill Elementary, Poinciana Academy of Fine Arts Elementary, St. Cloud Elementary, Sunrise Elementary, Thacker Avenue Elementary for International Studies, and Ventura Elementary	30%	100%	2018
16.	Replace end-of-life core switches at 10 facilities: Neptune Middle, St. Cloud Middle, Horizon Middle, Celebration High, Partin Settlement Elementary, Hickory Tree	0%	100%	2015

	Elementary, Lakeview Elementary, Celebration K-8, Gateway High, and District Complex Building 2000.			
17.	Obtain services of a network architect to review current network structure; develop a comprehensive plan to update/modify current network structure to meet the future needs of the District	0%	100%	2016
18.	Replace core switches & related equipment (i.e. load balancer) at three core sites (Alpa, Bravo, and Charlie) to increase capacity to handle expanded bandwidth and wireless upgrades	0%	100%	2015
19.	Network Security Upgrades – Arbor Scrubbing Solution	0%	100%	2015

Computer based testing capacity is a priority for all stakeholders in the District. To support the online learning environment during the scheduled assessments, the District has requested increases in bandwidth capacity three times in the past two years from its Internet Service Provider (ISP). At this time, the Metro Ethernet (ME) is in the process of upgrading capacity to 400 Mbps at each school with estimated completion of October 31, 2014. The District currently has 1000 Mbps of Internet access with plans to increase to 2000 Mbps after equipment upgrades at the District Data Center.

The capacity of each school's infrastructure equipment (switches, cabling, and access points) and the on-site equipment owned and configured by the ISP are two of many determining factors when the District contemplates increasing bandwidth throughput to the student desktops or wireless devices. The District is trending toward the future in planning for bandwidth capacity upgrades, but there is much to be done. Schools that are unable to support future bandwidth requirements because of obsolete infrastructure equipment have been identified.

The District received grant funds for correcting bandwidth deficiencies in five schools and two charter schools in 2014. In addition, one charter school and one District school benefitted from this funding for infrastructure upgrades. The funding support of the Universal Service Administrative Company's E-rate program for infrastructure has certainly been scarce, though the District has made application each funding year.

Several recommendations for upgrades to the District's network have been made as a result of third-party evaluations (see Appendix C). To protect the security of our network and minimize DDoS attacks, our ISP has recommended the use of their Arbor Peakflow SP Threat Management System. Additionally, the District's network was recently evaluated by Presidio Networked Solutions. As a result, five recommendations were made: upgrade the District's web filtering capability, create a Firewall redundancy, upgrade core sites, upgrade border gateway protocol layer 3 switch, and upgrade the District's DMZ switch.

C) Professional Development

Professional Development Needs Analysis (Required)		Baseline	Target	Date for Target to be Achieved *(year)*
1.	Average Teacher technology integration via the Technology Integration Matrix (TIM)	Entry – 20% Adoption – 45% Adaptation – 25% Infusion – 7% Transformation – 3%	Entry – 10% Adoption – 30% Adaptation – 40% Infusion – 12% Transformation – 8%	2017
2.	Average Teacher technology integration via the TIM – (Elementary Schools)	Entry – 25% Adoption – 45% Adaptation – 17% Infusion – 9% Transformation – 4%	Entry – 15% Adoption – 33% Adaptation – 30% Infusion – 15% Transformation – 7%	2017
3.	Average Teacher technology integration via the TIM – (Middle Schools)	Entry – 18% Adoption – 50% Adaptation – 21% Infusion – 9% Transformation – 2%	Entry – 10% Adoption – 22% Adaptation – 45% Infusion – 15% Transformation – 8%	2017
4.	Average Teacher technology integration via the TIM – (High Schools)	Entry – 20% Adoption – 48% Adaptation – 22% Infusion – 8% Transformation – 2%	Entry – 10% Adoption – 20% Adaptation – 47% Infusion – 15% Transformation – 8%	2017
5.	Average Teacher technology integration via the TIM – (Combination Schools)	Entry – 25% Adoption – 40% Adaptation – 20% Infusion – 6% Transformation – 2%	Entry – 25% Adoption – 30% Adaptation – 30% Infusion – 10% Transformation – 5%	2017
Professional Development Needs Analysis (District Provided)		**Baseline**	**Target**	**Date for Target to be Achieved *(year)***
6.	District Master In-service Plan technology components meeting new criteria of High Quality	0%	100%	2015

	Master In-service Plan (HQMIP) components			
7.	Teacher self-assessment of technology skills on 2014 Professional Development annual needs assessment – percentage classified as "expert"	3%	10%	2017
8.	Teacher self-assessment of technology skills on 2014 Professional Development annual needs assessment – percentage classified as "Advanced"	28%	35%	2017
9.	Teacher self-assessment of technology skills on 2014 Professional Development annual needs assessment – percentage classified as "Intermediate"	59%	50%	2017
10.	Teacher self-assessment of technology skills on 2014 Professional Development annual needs assessment – percentage classified as "Beginner"	7%	4%	2017
11.	Teacher self-assessment of technology skills on	3%	1%	2017

	2014 Professional Development annual needs assessment – percentage classified as "Novice"			

In order to provide instructional personnel and staff access to opportunities and training to assist with the integration of technology into classroom teaching, data was collected through a variety of sources including the annual Professional Development Needs Assessment, a teacher technology professional development survey conducted by the Media & Instructional Technology Department, and review of documents such as the District's Master In-service Plan.

The annual needs assessment conducted by the Professional Development Department, surveys employees and utilizes the data to determine District professional development needs. Results of the survey are used in-house and distributed to District professional developers and the Professional Development Evaluation Committee for feedback and to analyze the data for future professional development courses. The data from this needs assessment indicates staff members need and want training opportunities to assist with the integration of technology into classroom teaching.

Although not new to our District, the Technology Integration Matrix (TIM) has not been used as part of the "look-fors" by school administrators. The baseline data for TIM in the table below is an estimate of the percentage of teachers at the various levels of technology integration into the curriculum based on interviews with administrators and District resource teachers combined with informal classroom observations by the Director of Media & Instruction and the Supervisor of Instructional Technology.

As a Race to the Top District, Osceola has applied for the $75,000 Professional Development for Digital Learning Grant. Our grant proposal includes the support for the evaluation of classroom integration using the TIM. An outside technology coach consultant will provide leadership training on the matrix, teacher training on the matrix for selected schools, evaluation of selected classrooms using the matrix, the purchase of the TIM evaluation tools for District-wide use, and expert conversations focused on effective methods of incorporating web-based digital resources into the students' learning environment. The outside technology coach consultant will work with school leaders to guide and monitor the feedback to teachers on deepening quality implementation of digital learning in the classroom. The use of the Technology Integration Matrix or any other measurements for this grant shall NOT be used to evaluate individual teachers and shall be separate from any of the District's employee evaluation systems. A copy of the TIM can be reviewed at http://fcit.usf.edu/matrix/matrix.php. The sole purpose of the Matrix shall be to collect data to analyze and to determine professional development needs for entire schools, not individual teachers. All data collected using the Matrix shall remain confidential. The District may consider permitting teachers to use the matrix to

self-assess their technology needs and collect the data (within the parameters listed above) for comparison to administrators' measurements.

The participant implementation agreements related to the purposes of this grant shall NOT be used to evaluate individual teachers and shall be separate from any of the District's employee evaluation systems.

The participant implementation agreements shall address issues arising in school-wide needs analyses and be supported by school level, not individual teacher level, monitoring and feedback processes that support educator growth related to digital learning.

The current District Master In-service Plan (MIP) components have been reviewed and there is a need to revise the current technology components and create technology components to meet the new criteria of High Quality Master In-service Plan (HQMIP) components. Currently, there is no HQMIP component correlating to "school leadership 'look-fors' on quality digital learning process in the classroom." In addition, there are gaps in the current technology components to address: (1) educator capacity to use available technology, (2) instructional lesson planning using digital resources, and (3) student digital learning practices.

D) Digital Tools

Digital Tools Needs Analysis (Required)		Baseline	Target	Date for Target to be Achieved *(year)*
1.	Implementation status of a system that enables teachers and administrators to access information about benchmarks and use it to create aligned curriculum guides. (PCG, FOCUS, IMS, CPALMS)	Partially implemented	Will work to implement and employ	2016
2.	Implementation status of a system that provides teachers and administrators the ability to create instructional materials and/or resources and lesson plans. (PCG, FOCUS, IMS, CPALMS)	Partially implemented	Will work to implement and employ	2016
3.	Implementation status of a system that supports the assessment lifecycle from item creation, to assessment authoring and administration, and scoring. (PCG, FOCUS, IMS, IBTP)	Partially implemented	Will work to implement and employ	2016

4.	Implementation status of a system that includes District staff information combined with the ability to create and manage professional development offerings and plans. (PGS)	Fully Implemented	Will continue to support and employ in classrooms	2016
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. (PCG, FOCUS, STAR, ACHIEVE 3000, FLKRS, REFL)	Partially implemented	Will work to implement and employ	2016
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. (PCG, FOCUS, PGS, IMS)	Partially implemented	Will work to implement and employ	2016
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. (PCG, FOCUS, PGS, IMS, FC, SDOC)	Fully Implemented	Will continue to support and employ in classrooms	2016
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. (PCG, FOCUS, IMS, FC, SDOC)	Partially implemented	Will work to implement and employ	2016
9.	Implementation status of a system that provides secure, role-based access to its features and data for teachers, students, parents, District	Fully Implemented	Will continue to support and employ in classrooms	2016

Digital Tools Needs Analysis (District Provided)		Baseline	Target	Date for Target to be Achieved *(year)*
	administrators, and technical support. (PCG, FOCUS, IMS)			
10.	Implementation status of a system of curriculum delivery that provides middle school students with the opportunity to engage in learning industry specific software that meet the CAPE Digital Tools educational guideline. (ICT, STEM)	No system in place	Will work to implement and employ	2016
11.	Implementation status of a system of curriculum delivery that provides middle school students the opportunity to develop interest in high skill, high wage careers through the investigation of career pathways and college readiness. (FLC, STEM)	Partially Implemented	Will work to implement and employ	2016

Systems Explanations and Usage

FOCUS - Focus systems are fully integrated, web-based systems that provide support for all the day-to-day requirements of managing the School District. Our SIS Solution allows educators to create, store, and track any form of data including demographic data, scheduling, transcripts, attendance, disciplinary issues, and more.

PGS- My Professional Growth System or "MyPGS" combines professional learning and performance evaluations into an interactive forum.   MyPGS will enhance the learning experience by customizing professional development to an individual's identified needs.

IMS (PCG) -The EdPlan™ Instructional Management System (IMS) provides access to the data needed to drive instruction and support at the District and state level. IMS tools in use include Assessment Management, which is a one-stop shop for managing assessments at the District and campus level and promoting day-to-day success in the classroom, as well as Curriculum Management, which allows educators to collaborate and develop content to meet the needs of the learning population, along with extensive analysis capabilities with which to identify academic gaps.

RENAISSANCE (STAR) – Reading and Math assessments include skills-based test items and in-depth reports for screening, instructional planning, progress monitoring, and standards benchmarking. Educators have immediate access to skill-specific, actionable data to target instruction and practice, select students for intervention, and predict state-test performance.

ACHIEVE 3000 - Web-based differentiated instruction using nonfiction content and real-time Lexile assessment.

FirstClass (FC) - FirstClass is the Osceola District email system that also serves a repository of conference folders for educators, for example, Curriculum Area Standards, pacing guides, focus guides, test blueprints, and teacher resources.

Osceola District Homepage (SDOC) - The District homepage contains K-12 information for parents, students, and teachers. The Sharepoint site (currently under development) will provide an organized format with Curriculum Area Standards, pacing guides, focus guides, test blueprints, and teacher resources.

CPALMS- CPALMS is Florida's collaborative platform that connects education stakeholders, researchers, subject matter experts, practicing professionals, and professional organizations to Collaborate, Plan, Align, Learn, Motivate, and Share (CPALMS) instructional/educational resources and interactive tools that support standards-driven instruction. CPALMS is Florida's official source for the standards, course information, assessment information, and serves as the dissemination platform for professional development and digital resources.

FLKRS- The purpose of the Florida Kindergarten Readiness Screener (FLKRS) is to gather information about a child's overall development and address each student's readiness for kindergarten based on the Florida Early Learning and Developmental Standards for Four-Year-Olds. The FLKRS is also used to calculate VPK Provider Kindergarten Readiness Rate, which measures how well a VPK provider prepares 4-year-olds to be ready for kindergarten based on the standards.

IBTP - Item Bank and Test Platform (IBTP), a statewide secure system which allows Florida educators to search the item bank, export test items, and generate assessments.

Reflective Visits Feedback Form (REFL) –This document is used during Reflective visits at the schools to capture observed data (learning goals, pacing, instructional techniques, grouping, etc.) and provide immediate and pertinent feedback to administration in the form of trends observed.

ICT Essentials (ICT) – is a suite of 10 courses designed for teachers to infuse the use of technology into their subject area, to engage students with specific and appropriate technologies, and to empower their students with technological skills necessary for either educational or career pursuits. ICT Essentials spans; Information Technologies, Communications Technologies, and Media Technologies.

Florida Choices (FLC) - is an online college and career readiness tool sponsored by the FLDOE for the purpose of developing student interest in career pathways and planning for college and careers through interest inventory surveys, online planning tools, and career search options.

Defined STEM (STEM) – combines a unique set of real-world themed resources to create a 21st century learning platform. The common core aligned performance tasks, literacy tasks, and real-world videos enable students to see the relevance of K-12 topics through real-world themes. Each resource allows students to apply concepts in simulated scenarios that increase student engagement and performance preparing them for college and 21st century careers.

E) Online Assessments

Online 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)	100%	100%	2015
2. Computers/devices required for assessments (based on schedule constraints)	5,904	7,079	2017
Online Assessments Needs Analysis (District Provided)	**Baseline**	**Target**	**Date for Target to be Achieved *(year)***
3. Mobile laptop carts required for assessments (based on schedule constraints)	29	76	2017
4. Mobile access points required for assessments (based on schedule constraints)	29	76	2017

To continue the District's readiness for online assessments, the District has implemented multiple changes and upgrades to the network and student devices. The operating systems on all student computers have been migrated from Windows XP to Windows 7. Twenty-nine computer carts with access points were purchased along with 479 laptops for computer-based-testing (CBT) in order to fill gaps at schools that needed additional computers for testing. The District will continue to expand the number of mobile computer carts for online assessments to accommodate expanded testing requirements. Although the primary use of the carts are for online assessments, the carts will be used for classroom instruction when not required for online assessments.

Looking to the future, the District provided six million dollars in funding to upgrade the wireless systems at all middle and high schools to the next generation of wireless

technology, 802.11ac. The projected completion date for the wireless upgrade is December 31, 2014. Plans are being developed to upgrade the wireless systems at the remaining schools.

Starting in 2013-2014 school year, the District began the process to upgrade the network bandwidth from schools to core sites and the District connection to the Internet. By June 2014, the plan is to have all schools with a 400 Mbps connection to the assigned core site, an increase from 1 Gbps to 2 Gbps connection from the core sites to the District, and an increase from 1 Gbps to 2 Gbps connection from the District to the Internet. The District's Internet Service Provider is in the process of upgrading equipment and fiber connections to accommodate the increases. The District's equipment at the core sites and the District Data Center will need upgrades prior to the changes in the connection speeds.

Prior to the commencement of CBT, the school-based test coordinators and computer technicians attended training on the technical issues surrounding the administration and support of CBT. Student computers used for CBT are re-imaged and the deployment of TestNav is accomplished through Group Policy. All tests are downloaded and cached prior to the opening of the assessment window.

During CBT, the District creates a CBT Hotline Center to troubleshoot all problems. Members of the hotline team include: the District's supervisor of testing, a network specialist from the infrastructure group, and a network specialist from the computer support group. The team logs all inquiries and solutions to develop knowledgebase of solutions for faster resolution of problems.

STEP 2 – Goal Setting:

Highest Student Achievement
- o Increase student achievement in every school as measured by statewide assessments.

Seamless Articulation and Maximum Access
- o All students will have opportunities for industry certifications and will be prepared to enter postsecondary with the skills necessary to succeed.

Professional Development
- o All teachers will have opportunities for professional development to develop skills for implementing digital learning into the curriculum.

STEP 3 – Strategy Setting:

Goal Addressed	Strategy	Measurement	Timeline
Highest student achievement	Create an infrastructure that supports the needs of digital learning and online assessments	• Increase bandwidth in all schools • Purchase core switches at 10 facilities • Upgrade cabling to Cat 6 at 16 schools • Upgrade MDF/IDF switches at 30 schools from 10/100 Mbps to 1 Gbps • Upgrade core switches and related equipment at three core sites	2014 and ongoing
Highest student achievement	Supply teachers and students with high quality digital content aligned to the Florida standards	• Purchase Instructional Materials in digital format • Purchase digital resources for continuous anytime/anywhere access	2014 and ongoing
Highest student achievement	Continue support of an integrated digital tool system to aid teachers in providing the best education for each student	• Full implementation of Local Instructional Improvement System (LIIS)	2016
Seamless Articulation and Maximum Access	Increase industry certification programs	• Number of students enrolled in programs and receiving certificates	2015 and ongoing
Seamless Articulation and Maximum Access	Increase student participation in vertically articulated STEM and CTE courses/programs	• Number of students enrolled in programs at all levels	2015 and ongoing
Seamless Articulation and Maximum Access	Improve college and career readiness	• Number of students with a postsecondary plan • Number of students participating in accelerated courses (Dual Enrollment, Advanced Placement, International Baccalaureate) • Increased graduation rate	2015 and ongoing

Professional Development	Provide year-round Professional Development in a variety of formats	Professional Development Reports	2015 and ongoing
Professional Development	Funding stipends, registration fees for conferences for Professional Development	Professional Development Reports	2015 and ongoing
Professional Development	Participate in Professional Development for Digital Learning project (Appendix A)	Project deliverables	2015
Professional Development	Update HQMIP technology components	New/revised technology and digital learning PD components adopted in the District's HQMIP	2015

Although funding support of the Universal Service Administrative Company's E-rate program for infrastructure has certainly been scarce, the District has completed E-rate applications for each funding year.

Part III: DIGITAL CLASSROOMS PLAN – ALLOCATION PROPOSAL

A) Student Performance Outcomes

Student Performance Outcomes	Baseline	Target
1. ELA Student Achievement	55%	58%
2. Math Student Achievement	52%	55%
3. Science Student Achievement	54%	57%
4. ELA Learning Gains	67%	70%
5. Math Learning Gains	65%	68%
6. ELA Learning Gains of the Low 25%	68%	71%
7. Math Learning Gains of the Low 25%	64%	67%
8. Overall, 4-year Graduation Rate	78.1%	80.1%
9. Acceleration Success Rate**	93%	95%

B) Digital Learning and Technology Infrastructure

Infrastructure Implementation					
	Deliverable	Estimated Completion Date	Estimated Cost	School/District	Outcome from Section (A)
B.1.	Arbor Scrubbing Solution	December 2014	$44,000.00	District	1, 2, 3, 4, 5, 6, 7, 8, and 9
B.2.	Load Balancer	December 2014	$160,000.00	District	1, 2, 3, 4, 5, 6, 7, 8, and 9
B.3.	Equipment replacements at the Alpha core site	December 2014	$354,000.00	District	1, 2, 3, 4, 5, 6, 7, 8, and 9
B.4.	Equipment replacements at the Bravo and Charlie core sites	December 2014	$108,000.00	District	1, 2, 3, 4, 5, 6, 7, 8, and 9

Brief description of other activities	Other funding source
Uninterrupted Power Supply replacements for Data Center, MDFs, and IDFs at the District and school levels	District Funds
Data Storage upgrade for Compellent System	District Funds
Server upgrades at the District and school levels	District Funds
Upgrades to Bravo and Charlie core sites to create Data Center redundancy and reduce points of failure	District Funds
Voice Gateway	District Funds
Upgrades to Core/Edge/Wireless switches at schools	District Funds

Call Accounting Software	District Funds

Infrastructure Evaluation and Success Criteria		
Deliverable (from above)	Monitoring and Evaluation and Process (es)	Success Criteria
B.1. Arbor Scrubbing Solution	Using current network monitor tools, the District will monitor network security in conjunction with monitoring by the Internet Service Provider (ISP)	No network intrusions
B.2. Load Balancer	Using current network monitor tools, the District will monitor network efficiency	Increased network efficiency and decreased interruptions to state and local online assessments
B.3. Equipment replacements at the Alpha core site	Using current network monitor tools, the District will monitor network efficiency	Increased network efficiency and decreased interruptions to state and local online assessments
B.4. Equipment replacements at the Bravo and Charlie core sites	Using current network monitor tools, the District will monitor network efficiency	Increased network efficiency and decreased interruptions to state and local online assessments

C) Professional Development

Professional Development Implementation					
	Deliverable	Estimated Completion Date	Estimated Cost	School/District	Outcome from Section (A)
C.1.	Reference Appendix A: Race to the Top Professional Development for Digital Learning Grant (TAPS 15T63)	June 2015	$75,000	District	1, 2, 3, 4, 5, 6, 7, 8, and 9

Brief description of other activities	**Other funding source**
Provide year-round professional development in a variety of formats such as: face-to-face instruction, online courses, hybrid courses, and classroom modeling/coaching	District Funds

Funding stipends and registration fees for conferences for professional development	District Funds
Update HQMIP technology components	District Funds

Professional Development Evaluation and Success Criteria			
Deliverable (from above)		Monitoring and Evaluation and Process(es)	Success Criteria
C.1.	Reference Appendix A: Race to the Top Professional Development for Digital Learning Grant (TAPS 15T63)	Reference Appendix A	Reference Appendix A

Note: The District submitted a proposal for the Race to the Top Professional Development for Digital Learning grant (reference Appendix A).

D) Digital Tools

Brief description of other activities	**Other funding source**
Supply teachers and students with high quality digital content aligned to the Florida Standards by purchasing instructional materials in digital format and other digital resources for continuous anytime/anywhere access	District Funds and Categorical Funds (Instructional Materials) from the State
Continue support of an integrated digital tool system (Local Instructional Improvement System – LIIS) to aid teachers in providing the best education for each student	Initial Funding through Race to the Top; District Funds used to sustain/support LIIS
Increase industry certification programs	District Funds
Increase students participating in vertically articulated STEM and CTE courses/programs	District Funds
Improve college and career readiness	District Funds

E) Online Assessments

Brief description of other activities	**Other funding source**
Purchase mobile computer carts with access points to increase capacity for online testing and classroom instruction	District Funds
Purchase peripheral equipment (headphones/microphones) for selected assessments (i.e. World Languages)	District Funds