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VOLUSIA COUNTY SCHOOLS

Digital Classroom Plan

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The intent of the Volusia County School District Digital Classroom Plan (DCP) is to provide a perspective on what the district considers being vital and critically important in relation digital learning implementation, the improvement of student performance outcomes, and how this progress will be measured. This plan meets the unique needs of students, schools and personnel in the district as required by s.1011.62(12)(b), F.S.

Part I. DIGITAL CLASSROOMS PLAN - OVERVIEW

A. District Mission and Vision

> ***Through the individual commitment of all, our students will graduate with the knowledge, skills, and values necessary to be successful contributors to our democratic society.***

Volusia's mission is to provide our schools with the technology tools, digital materials and professional development necessary to support a fundamental redesign of instruction with the goal of creating a student-centric public school system that accelerates learning toward college and career readiness. The implementation of blended learning models will create multiple paths to personalize student learning to achieve academic outcomes. This includes, but is not limited to, an interdisciplinary approach to learning through real-world STEM applications. Our vision is to unify the way of work for all district stakeholders to contribute to the shift toward online assessments, digital instructional materials and acceleration toward graduation for the next generation learner. By establishing a clear vision for all, the mission of higher student achievement will be realized. A unified district vision will provide the opportunity to develop schools that are more productive for students and teachers by personalizing education, ensuring that the right resources and interventions reach the right students at the right time.

Volusia's operational definition of blended learning is "a formal education program in which a student learns in part through online delivery of content and instruction with some element of student control over time, place, path, and/or pace; and at least in part at a supervised brick and mortar location away from home; and, the modalities along each student's learning path within a course or subject are connected to provide an integrated teaching experience" (Clayton Christensen Institute for Disruptive Innovation).

Compared to high-access environments, which simply provide devices for every student, our District aims to transform teaching to support the innovative and active use of technology to improve student outcomes, enhance overall system productivity and enable next generation learners to compete in the new economy.

B. District Profile

Volusia County, Florida, is bordered on the west by the historic St. Johns River and by the Atlantic Ocean to the east. Roughly the size of Rhode Island, Volusia is situated 50 miles northeast of Orlando, 60 miles north of the Kennedy Space Center, and 89 miles south of Jacksonville.

With a population of approximately 500,000 people (2014 estimate), Volusia County is ranked the 11th largest county in Florida. Volusia is home to a diverse range of ages with approximately 21.5% of the population age 65 or older and 18% under 18 (2012). The median age is 45.3 years. According to the U.S. Census Bureau (2010), there are over 197,382 households throughout the county with a median income (2012) of $44,169 and a per capita income (2011) of $24,536. Among Volusia residents age 25 or older, 87.5% graduated from high school (2007-2011) and 20.8% have obtained a bachelor's degree (2007-2011). As the largest employer in the county, Volusia County Schools employs approximately 7,300 full and part-time personnel, including more than 4,400 teachers who are highly skilled professionals, with nearly 42% having a master's degree or higher. Although tourism is a significant contributor to Volusia County's economy, services, including education and health care are the primary industry.

The School District of Volusia County enjoys a state and national reputation for providing commendable and competitive educational opportunities for its students. The district's proactive commitment to excellence is illustrated by its early implementation of a distinguished array of rigorous academic programs that are recognized locally and nationally for the early and continuous use of instructional technology.

The District continues to form significant partnerships with entities that promote the enhancement of student achievement. Examples include Professional Development Schools in partnership with local universities such as Embry Riddle Aeronautical University, Bethune-Cookman University, the University of Central Florida, Stetson, and the Career Connection with Daytona State. An example of a strong industry partnership is one with the Ford Foundation.

In October 2012, the Volusia County Economic Development Department estimated Volusia's unemployment rate to be 8.4%, slightly above the national average of 7.5%. However, the unemployment rate fell to 5.7 percent in April of 2014, showing some improvement with positive changes in the economy.

Volusia County Schools is the 13th largest school district in the state (by enrollment) with 89 schools and more than 61,000 full-time equivalent students. Two area superintendents supervise principals and schools across the District. Volusia County Schools offer a wide variety of educational programs to all ages. In addition to the many programs offered in traditional school settings, the District also operates several alternative education sites for students with behavioral and/or special needs and physical or emotional limitations. The English for Speakers of Other Languages (ESOL) program imparts specialized instructional techniques for students who speak a foreign language. Volusia earned district accreditation from the Southern Association of Colleges and schools in 2004 and again in 2010.

In summary, the School Board of Volusia County offers a comprehensive and rigorous K-12 curriculum designed to meet the needs of all students. This comprehensive curriculum includes both core and specialized programs and services, and is aligned with state standards. In addition, Volusia County provides certified art, music, guidance, media and physical education teachers at all schools. Additional demographics and statistics can be found on Volusia's Statistic's website.

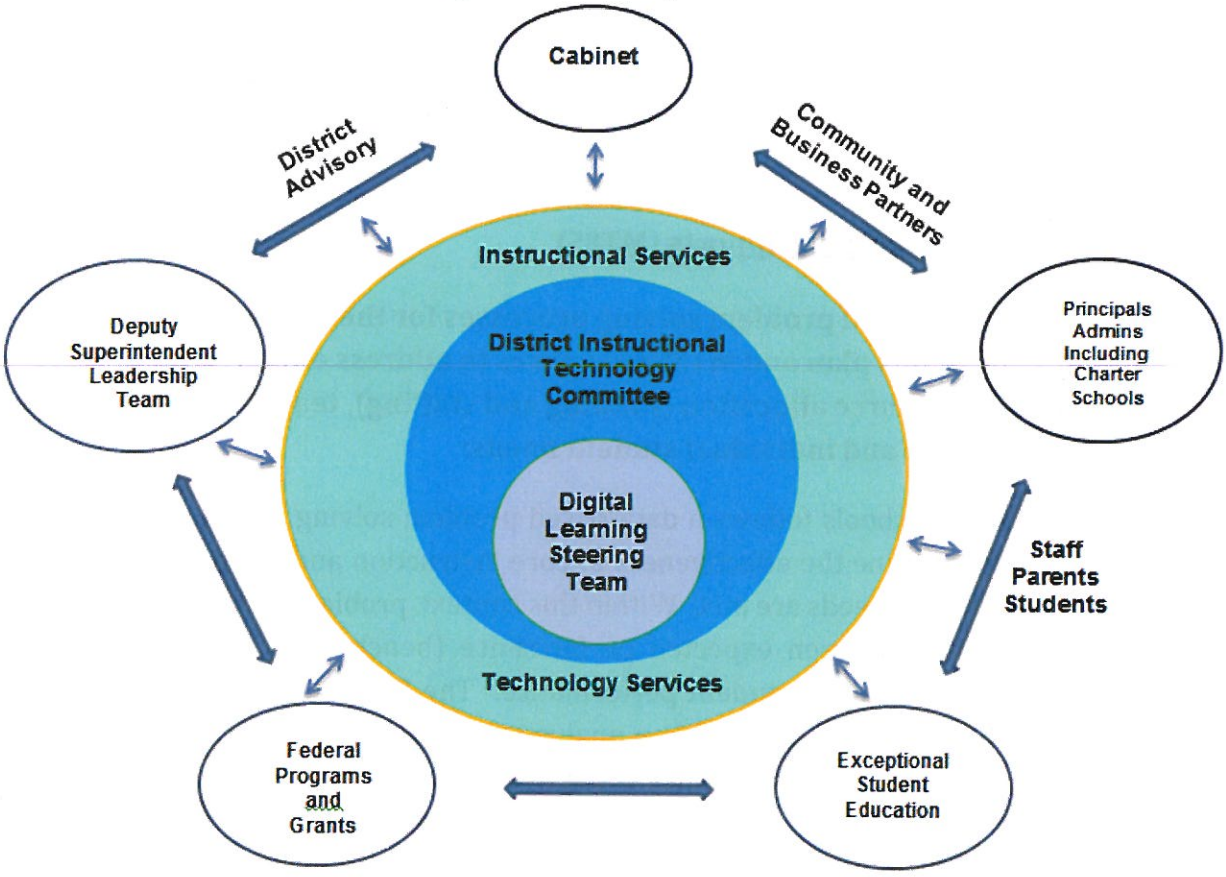
C. District Steering Team

Title/Role	Name:	Email/Phone:
Deputy Superintendent, Instructional Services	Jim Tager	jrtager@volusia.k12.fl.us (386) 734-7190 ext. 20697
Executive Director, Technology Services	Dr. Don Boulware	dpboulwa@volusia.k12.fl.us (386) 734-7190 ext. 20114
Director, K-12 Curriculum Services and School Improvement	Barbara Head	BHead@volusia.k12.fl.us (386) 734-7190 ext. 20657
Coordinator, Learning Technologies	Jessica Levene	JLLevene@volusia.k12.fl.us (386) 734-7190 ext. 20451
Coordinator, Secondary Curriculum Services and School Improvement	Dr. Kati Dyer	kbdyer@volusia.k12.fl.us (386) 734-7190 ext. 20529
Coordinator, Career and Technical Education	Kelly Amy	KLAMY@volusia.k12.fl.us (386) 734-7190 ext. 20641
Coordinator, Volusia Online Learning	Dr. Melissa Carr	mcarr@volusia.k12.fl.us (386) 734-7190 ext. 38393
Coordinator, K-5 Curriculum Services	Lyndi Geopfert	llgoepfe@volusia.k12.fl.us (386) 734-7190 ext. 20670
Coordinator, Race To The Top	Chris Yahn	clyahn@volusia.k12.fl.us (386) 734-7190 ext. 20655
Coordinator, Office of Professional Development and Support	Dr. Karen Beattie	klbeatti@volusia.k12.fl.us (386) 734-7190 ext. 20547

D. Planning Process

The District steering team, listed above and jointly headed by Jim Tager, Deputy Superintendent, and Dr. Don Boulware, Executive Director, Technology Services, meets bimonthly to collaborate and develop the process and implement implementation of this plan. All members were responsible to extend communications for input to their respective departments and staff.

The extended team is the District Instructional Technology Committee (DITC), comprised of representatives from each curriculum services department, ESE, learning technologies, Title 1, and professional development. This team, headed by Dr. Karen Beattie, gathers input from the school administrators, providing communications through the monthly principal and assistant principal PLCs. School administrators communicate with staff and parents through online discussion boards, newsletters, surveys and parent-school meetings and workshops.



Rhonda McPherson, Manager, Charter Schools, coordinated the feedback and support of the District's charter schools.

Charter schools were first notified of the Digital Classroom Plan requirements on August 16th, and participated in a break-out session of the Principal's Meeting on September 4th. The draft was sent to principals on September 15th for input and feedback. Several Q&A sessions were held and charter schools had an option to support the District DPC or create their own plan for funding based on FTE.

Throughout the development of the plan, members accessed formal and informal surveys from parents, community members, business partners and staff, to understand the identified needs. Examples of surveys include: Parent Climate Surveys, Staff Climate Surveys, PD teacher surveys, and CTE business and Community surveys. Link to District Advisory Council.

Volusia has recently passed the half-cent sales tax referendum. A Citizen Oversight Committee is already formed to assist with the technology acquisitions and the Volusia Tech Council and the Daytona Chamber will provide guidance throughout the process.

The team reviewed current research and best practices that include the integration of technology in all areas of the curriculum, ESOL and special needs including students with disabilities. Link to Volusia's Communication Plan

E. Multi-Tiered System of Supports (MTSS)

Volusia's data-based problem solving processes for the implementation and monitoring of this plan and MTSS structures to address effectiveness of core instruction, resource allocation (funding and staffing), teacher support systems, and small group and individual student needs:

Volusia County Schools follows a data-based problem solving model which enables the District to determine the effectiveness of core instruction and to ensure that individual and group student needs are met. Within this context, problem identification determines the discrepancy between expected performance (benchmarks, standards, behavioral expectations) and actual student performance. The District utilizes a decision making rubric as the foundation for problem analysis that guides educators to determine if the academic or behavioral discrepancy is likely a result of ineffective core instruction or if curricular, environment or learner variables are causal factors. Intervention implementation is based on both a standard protocol approach coupled with more individualized supports as needed. Response- to intervention ensures that data demonstrate effectiveness and level of supports needed to sustain growth. The District's MTSS framework is predicated on this problem solving model. Data derived from problem solving determine what resources (i.e., personnel, programs materials, digital

tools and technology, professional development, funding) are needed to meet the needs of students.

Increasingly, digital resources are utilized for both core instruction and for tiered interventions and supports in order to meet the unique needs of individual students as well as groups of students as identified through data-based problem solving.

Leadership systems in place to monitor the District's MTSS and Digital Classroom Plan (DCP):

The District MTSS leadership team is comprised of representation from Instructional Services, ESE/Student Services, Professional Development, Technology Services, Testing and Accountability, and other departments as needed.

Problem solving, which has been facilitated by DAPPS (District Action Planning and Problem Solving), has served to identify areas of specific need. A focus of this process has been the identification of existing resources to ensure a match between resources and student need as identified by data trends. Inherent in this system of strategic resource mapping are the identification of digital resources. In addition, program evaluation of blended learning is conducted to ensure that the appropriate digital supports are matched to student need.

Professional development and other infrastructure and implementation issues are also identified and monitored. Furthermore, a leadership team specific to the development and monitoring of the DCP has been identified and addresses the needs of the plan within a framework of tiered supports.

The data sources and management systems used to access and analyze data to monitor the effectiveness of supports being offered to each tier:

Effectiveness of core instruction (i.e., Tier 1) is identified as 80% of students meeting academic expectations. Data sources used for determination included prior state data (i.e., FCAT, EOC and FAIR) as well as district level data sources (e.g., interim assessments). The eduphoria! system is being utilized as the data system to manage student data with reports being disaggregated to determine patterns of need.

Furthermore, the District screens all elementary students for behavioral indicators through the electronic report card. Data is disaggregated at the class, school, district, race and gender levels to determine intervention needs at the group and individual level for Tier 2 and 3 supports.

The electronic Problem Solving Team system is a platform for determining how many students by teacher and grade level at each school need targeted supports, further indicating effectiveness of core instruction and need for tiered supports.

Lastly, the Volusia's Early Warning System provides school based data in Excel which enables Volusia and school leaders to identify both school trends and individual students in need of targeted supports and interventions. Data gleaned from the Early Warning System identify those students who may benefit from student engagement strategies and credit retrieval which in many cases would involve digital learning opportunities.

Plan to support staff's understanding of MTSS and build capacity in data-based problem solving which will assist with the implementation of the DCP:

Various means are used to support educators in their understanding of MTSS and data-based problem solving:

- Annual training and follow-up support has been provided to teachers by school psychologists on data-based problem solving.
- Training modules, which convey a consistent message, are available to all educators through the Volusia's webpage.
- An internet site dedicated to MTSS has been developed and contains district specific training modules, student engagement strategies, academic and behavioral interventions.
- Early Warning System support links to the state MTSS site, and will include information regarding blended learning within a multi-tiered system of supports. This site will be updated regularly to provide teachers with the most updated empirical resources regarding MTSS and digital tools to support positive student outcomes.
- Volusia support is provided to schools through the Differentiated Accountability liaisons who respond to specific questions and needs including data-based problem solving, MTSS and digital learning.

Part II. DIGITAL CLASSROOMS PLAN –STRATEGY

STEP 1 – Need Analysis:

Volusia County School District's Strategic Plan represents a commitment to the students of Volusia County Schools and supports five broad goals with action steps under each goal.

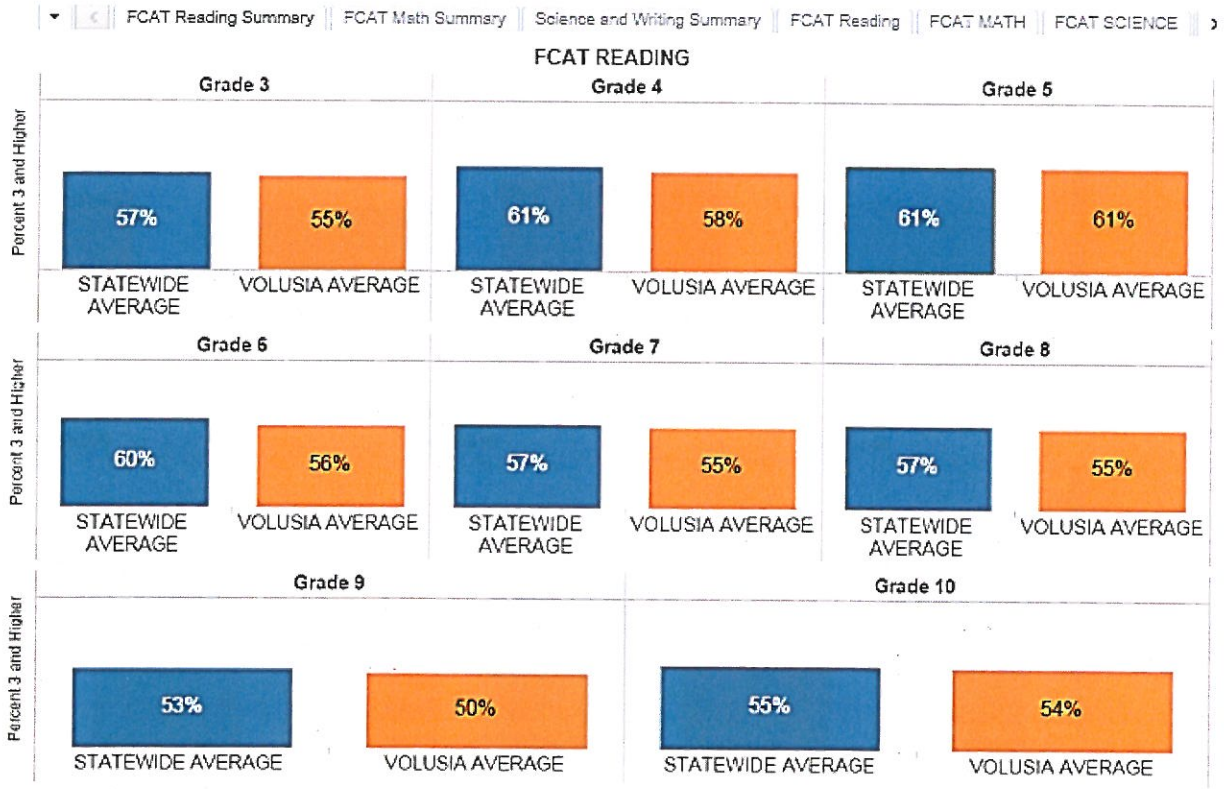
Data based on the Indicators of Progress is used to determine success in meeting each goal.

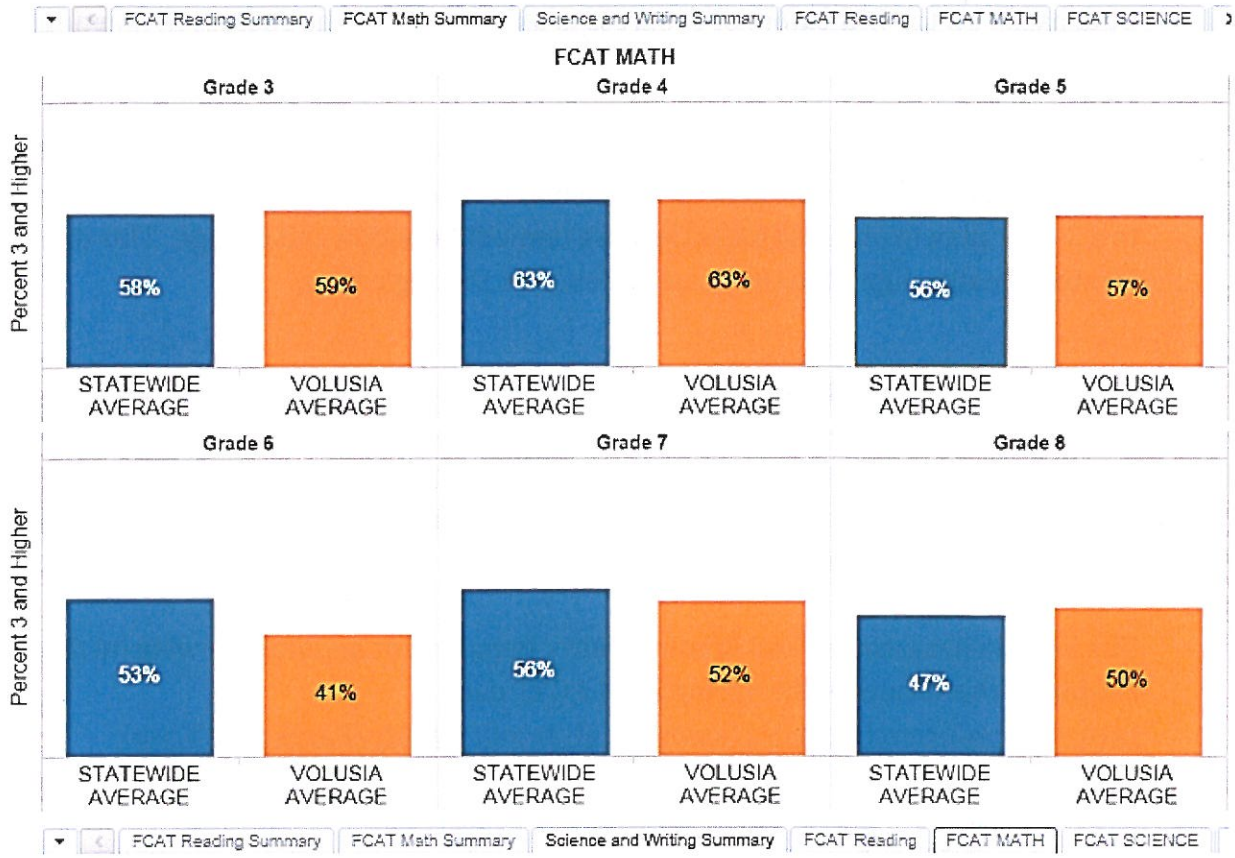
As Volusia developed the strategic plan, stakeholder groups asked for fewer, more focused goals with specific actions for each one. The plan was moved from a 5-year plan to a 3-year plan in order to focus on more immediate action and change. This digital plan is intentionally aligned to the goals of Volusia's Strategic Plan.

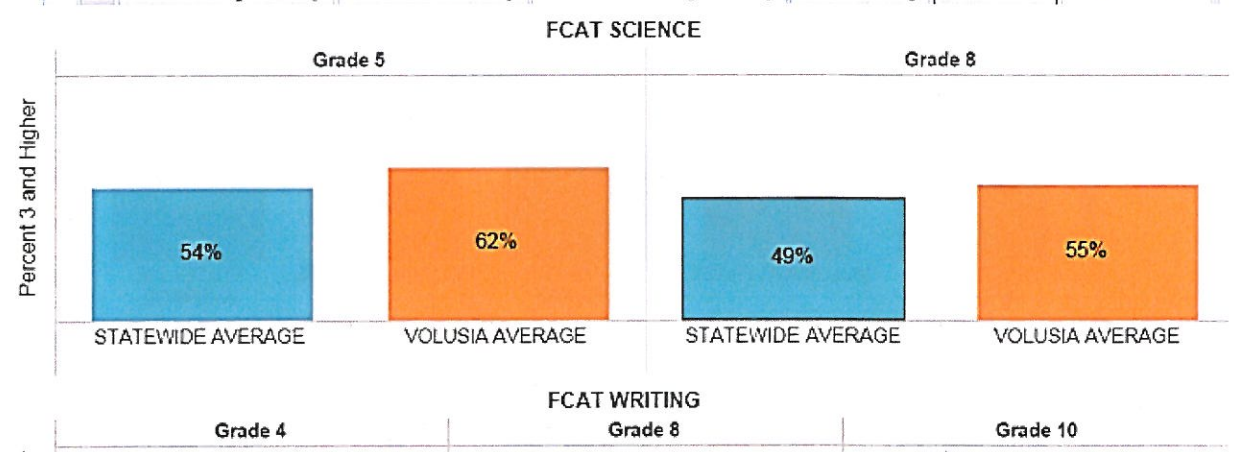
A. Student Performance Outcomes

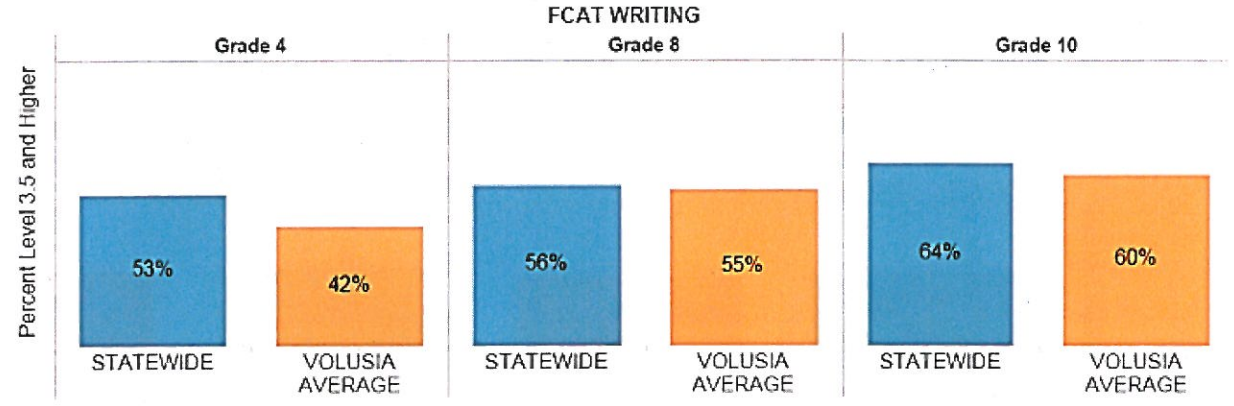
Volusia County School District shall improve classroom teaching and learning to enable all students to be digital learners with access to digital tools and resources for the full integration of the Florida Standards.

The Volusia Assessment and Accountability Department maintains a website that simplifies the results of the Spring 2014 FCAT data: http://myvolusiaschools.org/assessment-accountability/Pages/FCAT.aspx




FCAT Reading Summary
FCAT Math Summary
Science and Writing Summary
FCAT Reading
FCAT MATH
FCAT SCIENCE
FCAT MATH
Grade 3
Grade 4
Grade 5
Percent 3 and Higher
58%
59%
63%
63%
56%
57%
STATEWIDE AVERAGE
VOLUSIA AVERAGE
Grade 6
Grade 7
Grade 8
53%
41%
56%
52%
47%
50%


FCAT Reading Summary
FCAT Math Summary
Science and Writing Summary
FCAT Reading
FCAT MATH
FCAT SCIENCE
FCAT SCIENCE
Grade 5
Grade 8
Percent 3 and Higher
54%
62%
49%
55%
STATEWIDE AVERAGE
VOLUSIA AVERAGE


FCAT WRITING
Grade 4
Grade 8
Grade 10
Percent Level 3.5 and Higher
53%
42%
56%
55%
64%
60%
STATEWIDE
VOLUSIA AVERAGE

Data from **Annual Measurable Objectives (AMOs) for Schools, Districts and the State:** http://schoolgrades.fldoe.org/

District	Reading % Scoring Satisfactory 2014	Target AMO Reading	Math % Scoring Satisfactory 2014	Target AMO Math	Learning Gains Points for Low 25% Reading, 2013-14	Learning Gains for Low 25% Math, 2013-14	Graduation Rate, 2013	Writing % Satisfactory 2014	Target AMO Reading, 2015	Target AMO Reading, 2016	Target AMO Reading, 2017	Target AMO Math, 2015	Target AMO Math, 2016	Target AMO Math, 2017
FLORIDA	58	68	61	66			76	58	71	75	79	70	74	78
VOLUSIA	56	67	59	63	64	59	68	53	71	74	78	67	71	75

Student Performance Outcomes (Required)		Baseline	Target	Date for Target to be Achieved *(year)*
1.	ELA Student Achievement	56%	67%	2014-2015
	** Reading – Grades 3-10	56%	67%	2014-2015
	** Writing – Grades 4, 8, 10	53%	56%	2014-2015
2.	Math Student Achievement	59%	63%	2014-2015
3.	Science Student Achievement	59%	62%	2014-2015
4.	ELA Learning Gains	56%	74%	2016-2017
5.	Math Learning Gains	59%	71%	2016-2017
6.	ELA Learning Gains of the Low 25%	64%	67%	2014-2015
7.	Math Learning Gains of the Low 25%	59%	67%	2014-2015
8.	Overall, 4-year Graduation Rate	68%	85%	2015-2016

Additional Performance Data

Targets for Florida's Race to the Top Project and the data verified by the Florida DOE on Volusia's progress.

State Goals for the Class of 2015:

For the every 100 incoming high school freshmen in 2011-12

- 85 will graduate from high school in 2015
- Of the 85 students who graduate, 63 (or 74%) will go on to college by 2017
- Of the 63 students who went on to college, 44 (or 70%) will earn at least a year's worth of college credit by 2019

High School Graduating Class of:	2005 Baseline	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Graduation Rate	59	59	60	63	66	68	69	72	76	80	85
College Going Rate	58	58	60	61	62	63	64	65	67	71	74
College Credit Earning Rate	63	63	64	64	64	65	65	66	67	68	70
Percent of 9th Graders Who Eventually Earn at Least a Year's Worth of College Credit	22	22	23	25	26	27	29	31	34	39	44

Volusia's Targets and Actual Data in highlighted in Red.

High School Graduating Class of:	2005 (Baseline)	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Graduation Rate	60	59	57	59	59	6564	7162	7567	7968	83	87
College Going Rate	55	56	59	6059	6062	6061	6157	63	68	73	78
College Credit Earning Rate	60	6061	6066	6065	6263	6459	66	68	70	72	74
Percent of 9th Graders Who Eventually Earn at Least a Year's Worth of College Credit	20	2020	2022	2123	2223	2523	29	32	38	44	50

This data comes from the DIAP (District Improvement and Assistance Plan) for the 2014-2015 School Year - **Needs Assessment for Targeted Student Subgroups**

Reading

Annual Measurable Objectives (AMOs) - Students scoring at or above Level 3 on FCAT 2.0, or scoring at or above Level 4 on FAA

Group	2013 Target %	2013 Actual %	Target Met?	2014 Target %
All Students	63%	56%	No	67%
American Indian	65%	49%	No	69%
Asian	78%	73%	No	81%
Black/African American	43%	34%	No	49%
Hispanic	56%	48%	No	60%
White	70%	63%	No	73%
English language learners	41%	30%	No	47%
Students with disabilities	37%	22%	No	43%
Economically disadvantaged	55%	47%	No	60%

Mathematics

Annual Measurable Objectives (AMOs) - Students scoring at or above Level 3 on FCAT 2.0, or scoring at or above Level 4 on FAA

Group	2013 Target %	2013 Actual %	Target Met?	2014 Target %
All Students	58%	57%	No	63%
American Indian	55%	49%	No	60%
Asian	82%	83%	Yes	84%
Black/African American	42%	35%	No	48%
Hispanic	52%	48%	No	57%
White	64%	64%	Yes	68%
English language learners	43%	36%	No	48%
Students with disabilities	37%	25%	No	43%
Economically disadvantaged	51%	47%	No	56%

Volusia is creating a systematized process for increasing engagement in learning, and expects that student achievement and graduation rates will increase in all subgroups.

Resources Available to Support the Goal

- **Personnel:** Community Assessment Team; Volusia Leadership Team; Instructional Services Specialists; Title 1 TOAs, School-Based Coaches; Area Superintendents; Office of Professional Development & Support Specialists; ESOL Coordinator; Differentiated Accountability Region 2 Team; School Administration; Title I Intervention Teachers; Behavioral Support Staff

- Funds: SAI Funds; Reading FEFP Funds; Volusia Budgets; Title I Funds; Title II Funds; Title III Funds; Race to the Top (5th year amendment); SIG 1003(g)

B. Digital Learning and Technology Infrastructure

Volusia County School District will create a digital learning infrastructure with the appropriate levels of bandwidth, devices, hardware and software.

The data in the following table is taken from the Technology Readiness Inventory (TRI). Link to 2013-2014 District Technology Resource Inventory

Technology Infrastructure				
Infrastructure Needs Analysis (Required)		**Baseline**	**Target**	**Date for Target to be Achieved *(year)***
1.	Student to Computer Device Ratio	5.12:1	2:1	2018-19
2.	Count of student instructional desktop computers meeting specifications	7191	14,000	2018-19
3.	Count of student instructional mobile computers (laptops) meeting specifications	4741	9,500	2018-19
4.	Count of student web-thin client computers meeting specifications	0	10,000	2018-19
5.	Count of student large screen tablets meeting specifications	3521	15,000	2018-19
6.	Percent of schools meeting recommended bandwidth standard	100	100	2014-15
7.	Percent of wireless classrooms (802.11n or higher)	98	100	2014-15

C. Professional Development

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

- Professional Development will be evaluated based on the level of current technology integration by teachers into classrooms. This measures the impact of the professional development for digital learning into the classrooms. The Technology Integration Matrix (TIM) is found at: http://fcit.usf.edu/matrix/matrix.php. This was recently purchased through RTTT funds Year 5.

- Average integration is recorded as the percent of teachers at each of the 5 categories of the TIM for the levels of technology integration into the classroom curriculum: Entry, adoption, adaptation, infusion, and transformation.

Professional Development				
Professional Development Needs Analysis (Required)		**Baseline** (Estimated until baseline data – Fall, 2014)	**Target**	**Date for Target to be Achieved** *(year)*
1.	Average Teacher technology integration via the TIM	Entry (25) Adoption (40) Adaption (20) Infusion (10) Transform (5)	Entry (15) Adoption (20) Adaption (30) Infusion (20) Transform (15)	2017-2018
2.	Average Teacher technology integration via the TIM (Elementary Schools)	Entry (25) Adoption (40) Adaption (20) Infusion (10) Transform (5)	Entry (15) Adoption (20) Adaption (30) Infusion (20) Transform (15)	2017-2018
3.	Average Teacher technology integration via the TIM (Middle Schools)	Entry (25) Adoption (40) Adaption (20) Infusion (10) Transform (5)	Entry (15) Adoption (20) Adaption (30) Infusion (20) Transform (15)	2017-2018
4.	Average Teacher technology integration via the TIM (High Schools)	Entry (25) Adoption (40) Adaption (20) Infusion (10) Transform (5)	Entry (15) Adoption (20) Adaption (30) Infusion (20) Transform (15)	2017-2018
5.	Average Teacher technology integration via the TIM (Combination Schools)	Entry (25) Adoption (40) Adaption (20) Infusion (10) Transform (5)	Entry (15) Adoption (20) Adaption (30) Infusion (20) Transform (15)	2017-2018
6.	Purchase (TIM) Tools and provide training for administrators and teachers; use as diagnostic and needs analysis for 2015-16 year.	Establish Districtwide Baseline	Administer Tools	2014-2015

D. Digital Tools

Volusia County School District will continue to implement and support a digital tools system that assists instructional personnel and staff in the management, assessment and monitoring of student learning and performance.

A key component to digital tools is the implementation and integration of a digital tool system that assists instructional personnel and staff in the management, assessment and monitoring of student learning and performance.

Digital Tools				
Digital Tools Needs Analysis (Required)		**Baseline**	**Target**	**Date for Target to be Achieved *(year)***
1.	Implementation status on systems that enables teachers and administrators to access information about benchmarks and use it to create aligned curriculum guides. (eduphoria!)	Partially implemented	Will work to implement and employ	2015-2016
2.	Implementation status of a system that provides teachers and administrators the ability to create instructional materials and/or resources and lesson plans. (eduphoria!)	Partially implemented	Will work to implement and employ	2015-2016
3.	Implementation status of a system that supports the assessment lifecycle from item creation, to assessment authoring and administration, and scoring. (eduphoria!)	Partially implemented	Will work to implement and employ	2015-2016
4.	Implementation status of a system that includes district staff information combined with the ability to create and manage professional development offerings and plans. (MyPGS)	Fully implemented	Will continue to support and employ in classrooms	2012-2013

Digital Tools Needs Analysis (Required)		Baseline	Target	Date for Target to be Achieved *(year)*
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. (eduphoria!)	Partially implemented	Will work to implement and employ	2015-2016
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. (eduphoria!)	Partially implemented	Will work to implement and employ	2015-2016
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. (Volusia Sharepoint)	Partially implemented	Will work to implement and employ	2015-2016
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. (VIMS / Parent Portal)	Partially implemented	Will work to implement and employ	2015-2016
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. (eduphoria!)	Partially implemented	Will work to implement and employ	2015-2016

These are the added metrics for the measurement of CAPE (Career and Professional Education) digital tools.

CAPE Digital Tools				
CAPE Digital Tools Needs Analysis		**Baseline**	**Target**	**Date for Target to be Achieved *(year)***
1.	Elementary – CAPE Digital Tool Certificates	Partially implemented	Will work to implement and employ	2015-2016
2.	Middle School – CAPE Digital Tool Certificates and Industry Certifications	Partially implemented	Will work to implement and employ	2015- 2016
3.	High School – CAPE Industry Certifications	Fully implemented	Expand industry certification opportunities Increase student achievement on industry certification exams to 75% pass rate	2015-2016 2015-2016

E. Online Assessment Readiness

Volusia County School District will work to reduce the amount of time used for the administration of computer-based assessments. Online assessment (or computer-based testing) is measured by the computer-based testing certification tool and the number of devices available and used for each assessment window.

Online Assessment Readiness				
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)	Fully implemented	Will continue to support and employ in classrooms	2013-2014
2.	Computers/devices required for assessments (based on schedule constraints)	Fully implemented	Will continue to support and employ in classrooms	2013-2014
3.	Continue to follow DOE guidelines and procedures to support the state-wide assessment	Partially implemented	Will work to implement and employ	2015-2016

STEP 2 – Goal Setting:

The goals listed below are taken from the District's Strategic Plan.

- **GOAL 1:** Implement a comprehensive curriculum driven by Florida Standards.
- **GOAL 2:** Increase achievement for each and every student by ensuring access to rigorous programs, addressing diverse educational needs, and providing access to technology.
- **GOAL 3:** Promote an emotionally, intellectually and physically safe environment for all students and staff.
- **GOAL 4:** Foster an environment that promotes ongoing professional development and improved job performance for all teachers and staff.
- **GOAL 5:** Communicate with all stakeholders through various media to promote collaboration, parent involvement and community partnerships.

The following Volusia data sources, Volusia plans, and documents were used to ensure that all goals, objectives, and strategies are strategically aligned to the Volusia Digital Classroom Plan and the Volusia Strategic Plan.

A. Student Performance Outcomes (Volusia Goal Areas 1, 2)

- Volusia Assessment Site - myvolusiaschools.org/assessment-accountability/
- District/School Accountability Reports - schoolgrades.fldoe.org
- Florida School Improvement Plans - https://www.floridacims.org/

B. Digital Learning and Technology Infrastructure (Volusia Areas 1, 2, 3, 4, 5)

- A tight integration of technology goals (District Technology Plan)
- Volusia Technology Sharepoint - myvolusiaschools.org/technology-services/
- Florida Innovates – Surveys - http://www.flinnovates.org/
- Technology Integration Matrix (TIM) is found at: fcit.usf.edu/matrix

C. Professional Development (Volusia Goal Area 4)

- PD Online System – MyPGS - https://volusia.truenorthlogic.com/
- Volusia Professional Development Manual – 2013-2014
- Professional Development for Digital Learning – Grant
- Volusia Master Inservice – Components – 2013 – 2014

D. Digital Tools (Volusia Goal Areas 1, 2, 5)

- Volusia Instructional Management System - VIMS / Parent Portal
- Role-based online access to instructional applications, Office 365 with web sharing and storage, online texts for teachers and students, and links to Volusia-approved resources – VPORTAL (single-sign-on) - https://vportal.volusia.k12.fl.us/
- Career and Technical Connection - http://www.career-connection.org/
- Industry Certification - http://www.certiport.com/portal/

E. Online Assessments (Volusia Goal Areas 1, 2)

- Volusia Online Assessment System - eduphoria!
- Volusia Online Learning - volusiaonlinelearning.com/

STEP 3 – Strategy Setting

Volusia County School District has outlined high-level digital learning and technology strategies that will help achieve Volusia's goals.

District Strategies			
Goal Addressed	**Strategy**	**Measurement**	**Timeline**
A. Student Performance Outcomes	Revise the curriculum to include the ISTE technology literacy standards: Year 1 – Grades 4,5 Year 2 – Gr 2-3, 6-8 Year 3 – All grades	Access to curriculum maps online and technology-based lessons linked in eduphoria!	2014-2015 2014-2015 2015-2016 2017-2018
	Track student progress of technology standards embedded in project-based instruction	Manage reporting of student performance on technology literacy assessment in grades 4-5 and at Atlantic High, documenting best practices	2014-2015
	Provide rigorous and relevant technology-based lessons linked to FL Standards and ISTE Standards	Florida state assessments and Volusia local assessments	2014-2017

Goal Addressed	Strategy	Measurement	Timeline
B. Digital Learning and Technology Infrastructure	Continue BYOT implementation to all schools, evaluating and updating wireless access to all classrooms	Evaluation of Technology Infrastructure and Resources through FL Innovates Reporting	2014-2015
	Continue implementation of blended learning verified classrooms	Annual fulfillment of online graduation requirement for each high school graduate	2014-2016
	Increase the student to computer ratio, starting with grades 4-5, and Atlantic High (through SIG grant)	Completion of yearly Technology Resources Survey – district and all schools	2014-2017
	Monitor the Atlantic High SIG Grant for best practices of digital learning and technology infrastructure	Collaboration with Atlantic High on grant goals, activities and evaluation	2014-2016
C. Professional Development	Train teachers on curriculum map revisions (FL Digital Learning PD grant)	TIM Tool Reporting of Teacher Technology Skills	2014-2016
	Train staff in blended learning as an instructional shift and technical training related to online platforms and technology	Blended Learning Verification tool	2014-2017
	Support school-based PLCs, online courses, and subscriptions, focused to increase knowledge and technology skills	Based on results of TIM reporting, PD reports of courses, sections, and rosters	2014-2016
	Use DOE resources through FL School Leaders - Learning Links	PLCs – documentation, Deliberate Practice Plans (DPPs)	2014-2016

Goal Addressed	Strategy	Measurement	Timeline
D. Digital Tools	Provide 5th grade teachers and students with access to IC³ certification coursework, integrated in the curriculum	Certiport rosters and reports	2014-2015
		TIM Tools (to be implemented this year)	2014-2015
	Encourage coursework through Lynda.com	Lynda.com reports	2014-2015
	Manage CAPE Digital Assessments	IC³ and CAPE Industry Certifications	2014-2017
E. Online Assessments	Continue to monitor state assessment requirements in relation to the student to computer ratio of workstations meeting the assessment specifications.	Florida assessments	2014-2017
		Technology Infrastructure and Resources Surveys	2014-2017

In addition, Atlantic High School, Volusia County, was awarded a School Improvement FFY13 SIG COHORT 3 Grant. Volusia commits to implementing the Transformation model fully for three years starting in 2014-15.

Areas of Focus

Volusia used the 8-step planning and problem-solving process in the District Improvement and Assistance Plan (DIAP) to address the needs of the SIG-targeted schools in the five Areas of Focus.

Goals that contain strategies that Volusia has identified are:

- ***Area of Focus 1:*** Design and implement school wide a multi-tiered system of supports
- ***Area of Focus 2:*** Identify and implement a Florida Standards-based instructional program
- ***Area of Focus 3:*** Determine how to promote the continuous use of student data to inform and differentiate instruction to meet the academic needs of individual students
- ***Area of Focus 4:*** Establish schedules and implement strategies that provide increased learning time
- ***Area of Focus 5:*** Provide staff ongoing, high quality, job-embedded professional development as well as ongoing, intensive technical assistance

School	Indicator	Annual Targets		
		2014-15	2015-16	2016-17
4941 - Atlantic High School	Reading Proficiency - FCAT 2.0 (%)	60.0	65.0	70.0
4941 - Atlantic High School	Math Proficiency - FCAT 2.0 (%)	60.0	65.0	70.0
4941 - Atlantic High School	4-Year Federal Uniform Graduation Rate (%)	73.0	76.0	80.0

Part III. DIGITAL CLASSROOMS PLAN - ALLOCATION PROPOSAL

The Digital Classroom Plan allocation includes the five key components as required by s.1011.62(12)(b), F.S. In this section of the DCP, Volusia outlines specific deliverables that will be implemented in the current year that are funded from the DCP Allocation. The five components that are included are:

A. Student Performance Outcomes (Volusia Goal Areas 1, 2)
B. Digital Learning and Technology Infrastructure (Volusia Areas 1, 2, 3, 4, 5)
C. Professional Development (Volusia Goal Area 4)
D. Digital Tools (Volusia Goal Areas 1, 2, 5)
E. Online Assessments (Volusia Goal Areas 1, 2)

Volusia County School District's funding allocation is **$743,467**. The District has included charter schools in the DCP deliverables and allocations (s. 1011.62(12)(c), F.S., - charter schools are eligible for a proportionate share of the DCP Allocation as required for categorical programs in s. 1002.33(17)(b)) The charter schools were given an option to collaborate on the Volusia DCP or submit their own plan for an equitable allocation based on FTE funding. (One charter submitted a plan for funding based on the approved allocation formula and the plan was approved. All other charter schools are submitting under the district DCP plan.)

Funds for this DCP allocation will be used to purchase the Universal District License Model for Volusia County, participating at a Level 2, which is total eligibility for all middle and high school students. This also includes the IC3 Program for all 5th graders, which is very exciting. This program is described in Appendix C. The cost of this license is $185,083. (Appendix B.)

The remainder of the funds is allocated to purchase workstations for use in all 4th and 5th grade classrooms district-wide, distributed per FTE. The distribution spreadsheet, which includes charter schools, is found in Appendix D.

A. Student Performance Outcomes

Volusia determined specific student performance outcomes based on Volusia needs and goals that are directly impacted by the DCP Allocation. These outcomes are the specific goals that Volusia plans to improve through the implementation of the deliverables funded by the DCP Allocation for the 2014-15 school year.

Student Performance Outcomes			
Student Performance Outcomes		**Baseline**	**Target**
1.	Increase the percentage of students achieving learning gains in reading by 3%	56%	59%
2.	Increase the percentage of students achieving learning gains in math by 3%	59%	62%
3.	Increase the ELA Learning Gains of the Lowest 25% by 5%	64%	69%
4.	Increase the ELA Learning Gains of the Lowest 25% by 5%	59%	64%
5.	Increase the industry certification rate	67%	75%
6.	Increase the Overall, 4-year Graduation Rate	68%	85%

B. Digital Learning and Technology Infrastructure

Implementation Plan for Digital Learning and Technology Infrastructure:

Digital Learning / Infrastructure Implementation					
	Deliverable	**Estimated Completion Date**	**Estimated Cost**	**School/ District**	**Outcome from Section A)**
B.1	Purchase and deploy mobile devices for student use in grade 4 and 5 classrooms Purchase courseware to Improve digital literacy skills, including on keyboarding skills.	12/01/14 12/01/14	$558,384.00 Instruction Funds	All elementary schools, including charter schools	Outcomes 1,2,3,4 Outcomes 1,2,3,4
B.2	Professional and Technical Services for Installation	12/01/15	$30,000	All elementary schools	

Evaluation and Success Criteria for Digital Learning and Technology Infrastructure:

This evaluation process will 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.

Infrastructure Evaluation and Success Criteria		
Deliverable (from above)	**Monitoring and Evaluation and Process(es)**	**Success Criteria**
B.1.	Administrator and staff surveys	100% of the administrators and teachers will respond that the laptops and carts were successfully configured and are now scheduled and used by students.

Volusia County School District intends to use a portion of the DCP allocation for the technology and infrastructure needs area B. s.1011.62(12)(b), F.S. requires a third-party evaluation of the results of the District's technology inventory and infrastructure needs.

A third party initial evaluation was completed through contracted services, paid for through the Race to the Top Project, Year 5, Q1, MOU 14. The evaluation is included in Appendix E.

C. Professional Development

Implementation Plan for Professional Development:

This plan includes a process for scheduling the delivery of the Volusia's Master Inservice Plan (MIP) components on digital learning , and identifies other school-based processes that will provide on-going support for professional development on digital learning.

Volusia's professional development plan will have as its foundation the teacher training for CAPE Digital Tool Certifications via IC3 Spark and IC3 as part of the District Universal License. http://www.certiport.com/PORTAL/

Professional Development Implementation					
	Deliverable	**Estimated Completion Date**	**Estimated Cost**	**School/ District**	**Outcome from Section A**
C.1.	School teams will participate in professional development to revise curriculum maps to include Digital Literacy standards – Grades 4, 5	December 31, 2014	$48,622. (FL DOE PDAP Grant)	Volusia	Outcomes, 1,2,3,4
C.2.	School teams will participate in professional development (school-based facilitators) on the implementation of revised curriculum maps and the Digital Literacy standards, including specific use on instructional technology.	January 31, 2015			Outcomes, 1,2,3,4
C.3.	Teachers of grades 4 - 5 will participate in professional development on the revised curriculum maps, Digital Literacy tools, including specific use of instructional technology and the Digital Tool Certificates as purchased through the Universal License, specifically IC³ Spark.	March 1, 2015	$12,658. (FL DOE PDAP Grant)	Volusia	Outcomes, 1,2,3,4, 5
C.4.	Teachers of grades 6 – 8 will participate in professional development on the revised curriculum maps Digital Literacy tools, including specific use of instructional technology and the Digital Tool Certificates as purchased through the Universal License, specifically IC³ Spark (grade 6), IC³ (grades 7-8)	Grade 6 – 8 June 30, 2015	6 – 8 Perkins DOE PDI	Volusia	Outcomes, 1,2,3,4, 5
C.5.	Teachers of grades 8 – 12 will participate in professional development on the implementation of Industry Certifications as purchased through the Universal License	Grades 8 – 12, June 2015	Perkins DOE PDI	Volusia	Outcomes, 1,2,3,4, 5, 6

Other funding sources:

Brief description of other activities	Other funding source
Teachers of grades 4 - 5 will participate in professional development aligned with MIP specific to the implementation of Digital Tool Certificates as purchased through the Universal License	DOE Professional Development for Digital Learning

Evaluation and Success Criteria for Professional Development:

This evaluation process will enable the Volusia to monitor progress toward the specific goals and targets of each deliverable and make mid-course (i.e. mid-year) corrections in response to new developments and opportunities as they arise.

Professional Development Evaluation and Success Criteria		
Deliverable (from above)	**Monitoring and Evaluation and Process(es)**	**Success Criteria**
Other fund source	Revised Curriculum Maps with embedded digital literacy, grades 4 - 5 Calendar of PD Walk-throughs Volusia's PD Implementation and Evaluation Evidence	Establishment of a baseline of student success on Digital Tool Certificate for the 2014-2015 school year
C.1.	Revised Curriculum Maps with embedded digital literacy, grades 4 - 5 Calendar of PD Walk-throughs Volusia's PD Implementation and Evaluation Evidence	Establishment of a baseline of student success on Digital Tool Certificate for the 2014-2015 school year
C.2.	Calendar of PD Walk-throughs Volusia's PD Implementation and Evaluation Evidence	Industry Certification reporting which is submitted to DOE annually

D. Digital Tools

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

Digital tools will include purchases and activities to support CAPE digital tools opportunities and courses. A list of currently recommended certificates and credentials can be found at: http://www.fldoe.org/workforce/fcpea/ A link to the Volusia Career and Technical information can be found at: http://www.career-connection.org/

Industry Certification: http://www.certiport.com/Portal/

Implementation Plan for Digital Tools:

Digital Tools Implementation					
	Deliverable	**Estimated Completion Date**	**Estimated Cost**	**School/ District**	**Outcome from Section A)**
D.1.	Provide keyboarding to support curriculum in grades 3-5	December, 2014		Ele Schools	Outcomes 1,2,3,4
D.2.	Offer CAPE digital tool certifications via IC3 Spark and IC3 as part of the district Universal License	June 30, 2015	Included in district licensing for 1 year	Volusia	Outcome 5
D.3.	Offer expanded CAPE industry certification opportunities as part of the district Universal License	June 30, 2015	$185,083	Volusia	Outcome 5

Evaluation and Success Criteria for Digital Tools:

This evaluation process enables Volusia's CTE Department to monitor progress toward the specific goals and targets and make mid-course (i.e. mid-year) corrections in response to new developments and opportunities as they arise.

Digital Tools Evaluation and Success Criteria		
Deliverable	**Monitoring and Evaluation and Processes**	**Success Criteria**
D.1.	Reporting completed through Certiport to look at progress toward earning Digital Tool Certificates and Industry Certifications	Increase from 67% to 75% passing rate for students to earn either Digital Tool Certificates or Industry Certifications

E. Online Assessments

Technology infrastructure and devices required for successful implementation of local and statewide assessments are considered in this section. The analysis of readiness for computer-based testing includes an analysis of the network, bandwidth, and wireless needs that coincide with an increased number of workstations and devices.

The district reviewed current technology specifications for statewide assessments www.FSAssessments.com/) and schedule information distributed from the K-12 Student Assessment Bureau.

Online Assessment Implementation					
	Deliverable	**Estimated Completion Date**	**Estimated Cost**	**School/ District**	**Outcome from Section A)**
E.1.	Review assessment schedule and analysis of network logs to determine strategies to ensure appropriate bandwidth during testing windows	December, 2014	Established contracts	Volusia	Outcome 1,2,3,4,5
E.2.	Increase the student to computer (meeting assessment specs) ratio in grades 4-5	December, 2014	$558,384	Elementary schools, including charters	Outcome 1,2,3,4

Online Assessment Implementation	
Brief description of other activities	**Other funding source**
Increase the student to computer ratio (computers meeting assessment specifications)	Capital Outlay, SIG Grant – Atlantic High

Evaluation and Success Criteria for Online Assessments:

This evaluation process will enable the district to monitor progress toward the specific goals and targets of each deliverable and make mid-course (i.e. mid-year) corrections in response to new developments and opportunities as they arise.

Online Assessment Evaluation and Success Criteria		
Deliverable (from above)	**Monitoring and Evaluation and Process(es)**	**Success Criteria**
E.1.	Monitor Technology Infrastructure and Resources Surveys	Increase student to computer ratio to meet goal of 2:1 computing districtwide

APPENDIX

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C. IC³ Description – for all 5th Grade Students....36
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QUOTE SHEET

NO: 08252014
DATE: August 25, 2014

TO: Kate Vandervoort
Volusia County Schools
200 N Clara Ave
Deland, FL 32720

Contact Phone:
Main Phone: +1 **(386) 734-7190**

SALES CONTACT			QUOTE GOOD UNTIL	TERMS
Scott Stoddart			Sept 15, 2014	TBD

QUANTITY	DESCRIPTION	UNIT PRICE	AMOUNT
1	Universal District License Model for Volusia County Participation Level 2. Est. Total Students is 3,980 for all high schools and middle schools in the district Provide access to every Certiport program to every middle school and high school within their district. (ACA,MOS,ACU,IC^3,HPATA,MTA,QBCU) Provide access to the IC^3 Spark program to every 5th grade student within their district – added bonus for this pilot year Assign student inventory packs, as needed in any school across the district. Six exams in each student pack. Unlimited practice tests to the students for each program Manage all reporting at the district level **** The district representative needs to formally notify Certiport of their intent to participate by August 31, 2014 with the Intent to Offer document **** A final purchase order must be submitted to Certiport no later than September 15, 2014 by the district ** All Certification exams and licenses expire one year from purchase date and no extensions, no refunds or exchanges	$185,083.00	$185,083.00
		SUBTOTAL	$185,083.00
		SALES TAX	
		Estimation of SHIPPING & HANDLING	$0.00
		TOTAL DUE	**$185,083.00**

Please email purchase order to Scott Stoddart scott.stoddart@pearson.com

Certiport and FACTE Special Offer Intent to Participate

Effective August 1, 2014 – August 31, 2014

New Certiport District Universal License Offer

(Customized Pricing – All Programs for All Schools – See your Territory Manager)

Certiport has announced a new District Universal License. This license is being rolled out as a pilot program for the FY14-15 school year. While all districts may apply to participate, not every district will be selected to participate in the license program this year. Pricing to participate in the new District Universal License is customized to each district and based on their historical utilization of Certiport products, the current amount the district is spending today, and the number of students the district wants to serve in the next school year. To learn more about the license and related pricing please visit our Certiport FACTE Sessions and meet with your Certiport Territory Manager.

The Complete Microsoft MOS Certification Solution Offer

Microsoft IT Academy + Microsoft MOS Cert License (500 Pack) + GMetrix Site License

We, Volusia County Schools would like to participate in the following program:

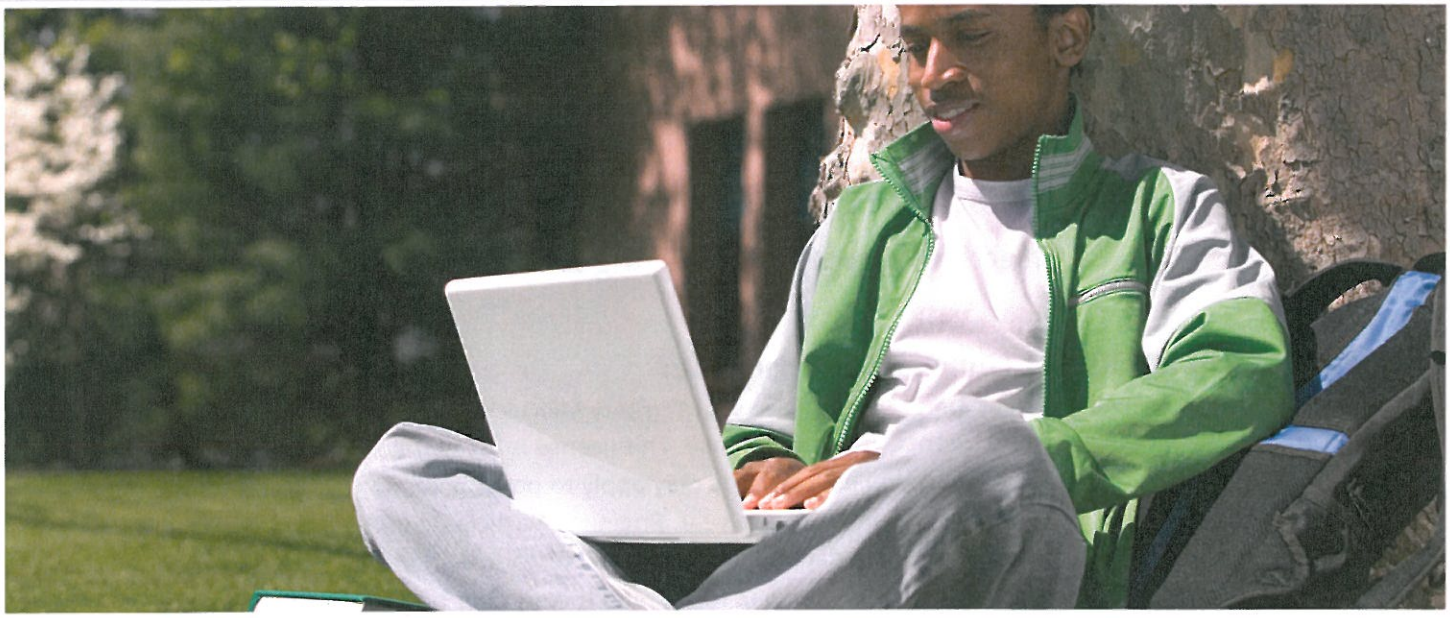
x	**New Certiport District Universal License Offer**
	The Complete Microsoft MOS Certification Solution Offer # of ITA Sites _____
x	**Universal Voucher With Microsoft IT Academy Program, # of IT Academy Sites 17**
	Microsoft IT Academy Program Only , # IT Academy Sites _____

Important Note: A school or district may only access these offerings and related pricing through FACTE. Schools or Districts must notify both FACTE and Certiport in writing by August 31, 2014 of their interest to participate in these offers.

IMPORTANT EXAM RETAKE/REFRESH NOTICE: At the request of state leadership in Florida, Certiport has changed its retake policies and has removed the unlimited exam refresh on all licensing and voucher products. Please discuss this with your authorized Certiport Territory Manager at the Certiport Booth.

Signature: Kate Vanderwood Date: 8/26/14

Title: CTE Specialist



Demand for computer and database professionals is expected to increase much faster than all other occupations (37%) through 2016. Fueling this demand is the growth of information networking, the expansion of client-server environments, and the need for computer specialists to use their knowledge and skills in a problem-solving capacity.

(Source: Bureau of Labor Statistics)

Key Applications

The IC³ Global Standard 4 Certification is comprised of three individual examinations:

- Computing Fundamentals
- Key Applications
- Living Online.

The Key Applications examination covers popular word processing, spreadsheet and presentation applications and the common features of all applications to help you learn faster, work smarter, and present yourself better.

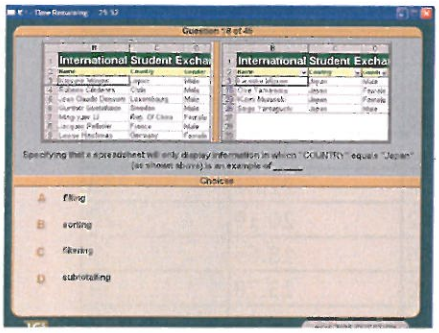
OBJECTIVES

Common Program Functions.

Today's programs have many common functions to help you learn faster and get more out of them. This domain helps you understand those common functions as well as ways you can use various programs to accomplish common tasks. You'll learn how to start and exit an application, modify interface elements, and utilize various sources of online help. You'll also discover how to perform common functions for file-management, editing and formatting, and printing and outputting.

- Be able to start and exit an application, identify and modify interface elements and utilize sources of online help
- Perform common file-management functions
- Perform common editing and formatting functions

IC³ INTERNET AND COMPUTING CORE CERTIFICATION



Sample question:
"Specify that a spreadsheet will only display information in which "COUNTRY" equals "Japan" (as shown above) is an example of _____"

- Perform common printing/outputting functions

Word Processing Functions.

Modern word processors let you do more than create informative documents. They enable you to create live data, collaborate with others, and control access to your valuable information. This domain focuses on the elements of a well-organized document; formatting text and documents, and the ability to use word-processing tools to automate processes such as document review, security and collaboration.

- Be able to format text and documents including the ability to use automatic formatting tools
- Be able to use word-processing tools to automate processes such as document review, security and collaboration

Spreadsheet Features.

Today's spreadsheets effectively capture, organize, and display data from budgets to statistics to inventory and so on. They also include a wide array of formulas and functions that automatically calculate, sort, and process information. This domain teaches you how to build and use a spreadsheet efficiently. Among other valuable skills, you'll learn how to sort and manipulate data using formulas and functions, create simple but effective charts, and draw conclusions based on tabular data and charts.

- Be able to modify worksheet data, structure and formatting
- Be able to sort data, manipulate data using formulas and functions, and create simple charts

Communicating with Presentation Software.

In the past, presentation software was only used for large audiences. Now, laptops, inexpensive projectors, and Internet technology advances have made presentation software a staple of modern communication in the classroom and at work and around the world. In this domain, you'll learn how to design, manage and modify presentations and identify different ways presentations are distributed.

- Be able to create and format simple presentations

IC³ INTERNET AND COMPUTING CORE CERTIFICATION
GLOBAL STANDARD 4

Learn more about IC³ Certification.
Visit **www.certiport.com/ic3**
or call today at **1-800-488-9371**

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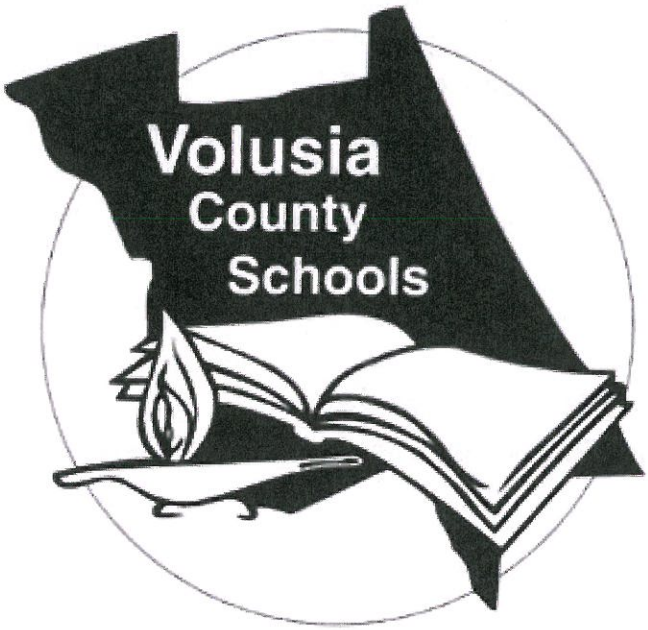
Elementary Schools	Students per Grade 4	5	TOTAL	Cost per School	$750 per (approx)	Approx Distribution
BLUE LAKE ELEMENTARY	100	94	194	11795.2	15.73	16
BURNS SCIENCE AND TECH CHARTER	36	38	74	4499.2	6.00	6
CHAMPION ELEMENTARY	81	87	168	10214.4	13.62	14
CHISHOLM ELEMENTARY	82	57	139	8451.2	11.27	11
CITRUS GROVE ELEMENTARY	132	130	262	15929.6	21.24	21
CORONADO BEACH ELEMENTARY	43	67	110	6688	8.92	9
CYPRESS CREEK ELEMENTARY	135	151	286	17388.8	23.19	23
DEBARY ELEMENTARY	141	138	279	16963.2	22.62	23
DELTONA LAKES ELEMENTARY	131	118	249	15139.2	20.19	20
DISCOVERY ELEMENTARY	116	114	230	13984	18.65	19
EDGEWATER PUBLIC	83	87	170	10336	13.78	14
ENTERPRISE ELEMENTARY	73	89	162	9849.6	13.13	13
FOREST LAKE ELEMENTARY	122	121	243	14774.4	19.70	20
FREEDOM ELEMENTARY	127	106	233	14166.4	18.89	19
FRIENDSHIP ELEMENTARY	74	58	132	8025.6	10.70	11
HOLLY HILL SCHOOL	82	82	164	9971.2	13.29	13
HORIZON ELEMENTARY	86	135	221	13436.8	17.92	18
INDIAN RIVER ELEMENTARY	95	109	204	12403.2	16.54	17
IVY HAWN CHARTER SCHOOL OF ART	44	44	88	5350.4	7.13	7
LONGSTREET R. J. ELEMENTARY	66	66	132	8025.6	10.70	11
MANATEE COVE ELEMENTARY	134	118	252	15321.6	20.43	20
MARKS GEORGE W. ELEMENTARY	98	80	178	10822.4	14.43	14
MCINNIS LOUISE S. ELEMENTARY	57	49	106	6444.8	8.59	9
ORANGE CITY ELEMENTARY	100	115	215	13072	17.43	17
ORMOND BEACH ELEMENTARY	33	43	76	4620.8	6.16	6
ORTONA ELEMENTARY	28	38	66	4012.8	5.35	5
OSCEOLA ELEMENTARY	65	85	150	9120	12.16	12
OSTEEN ELEMENTARY	80	103	183	11126.4	14.84	15
PALM TERRACE ELEMENTARY	82	76	158	9606.4	12.81	13
PATHWAYS ELEMENTARY	112	118	230	13984	18.65	19
PIERSON ELEMENTARY	92	79	171	10396.8	13.86	14
PINE TRAIL ELEMENTARY	111	123	234	14227.2	18.97	19
PORT ORANGE ELEMENTARY	87	62	149	9059.2	12.08	12
PRIDE ELEMENTARY	102	88	190	11552	15.40	15
READ-PATTILLO ELEMENTARY	63	66	129	7843.2	10.46	10
READING EDGE ACADEMY	38	33	71	4316.8	5.76	8
SAMSULA ACADEMY	32	32	64	3891.2	5.19	5
SMALL TURIE T. ELEMENTARY	61	62	123	7478.4	9.97	10
SOUTH DAYTONA ELEMENTARY	123	107	230	13984	18.65	19
SPRUCE CREEK ELEMENTARY	124	112	236	14348.8	19.13	19
STARKE EDITH I. ELEMENTARY	59	51	110	6688	8.92	9
SUGAR MILL ELEMENTARY	98	97	195	11856	15.81	16
SUNRISE ELEMENTARY	81	82	163	9910.4	13.21	13
SWEETWATER ELEMENTARY SCHOOL	108	103	211	12828.8	17.11	17
TIMBERCREST ELEMENTARY	125	143	268	16294.4	21.73	22
TOMOKA ELEMENTARY	102	132	234	14227.2	18.97	19
VOLUSIA PINES ELEMENTARY	98	92	190	11552	15.40	15
WESTSIDE ELEMENTARY	79	87	166	10092.8	13.46	13
WOODWARD AVENUE ELEMENTARY	100	95	195	11856	15.81	16
TOTALS	**4321**	**4362**	**8683**	527926.4		**706**

Volusia County School District
Initial Technology Infrastructure and Resources Evaluation



September 1, 2014

Prepared by:

EdTech Consulting, LLC
Winter Springs, FL 32708

Volusia County School District requested an initial technology infrastructure and resources evaluation, concluding on September 1, 2014.

The documents and resources evaluated included:

- 2014-2015 Volusia County School District Technology Plan, approved by the Volusia School Board on June 24, 2014
- 2013 District Technology Resources Inventory Statistical Report – All schools in Volusia County – Summary Information
- 2013-2014 Technology Resources Inventory Statistical Report – Individual Schools
- 2014 Technology Resources – Raw Data – Comparison of Volusia against State Average
- Inventory of Teacher Technology Skills
- Student Tools for Technology Literacy, ST2L Regional and State Summary Data

Commendations:

- ✓ Volusia County School District schools, including charter schools and learning centers, completed the 2013 technology resources inventory requested by the Florida Department of Education. (only one charter school did not submit)
- ✓ Volusia County School District leases a private fiber network consists of a 10 GB redundant ring with four network aggregation points, one at the district data center, where there is currently a 2 GB connection to the Internet. The network aggregation points are geographically placed through the district with point-to-point 1 GB connections to over 70 locations.
- ✓ 98% of all Volusia County School District classrooms meet the Florida DOE specifications for wireless access.
- ✓ The district overall student per instructional computer ratio meeting device specifications (modern computers) is 1 computer for every 5 students (5.12)
    - Elementary Ratio – 6.35
    - Middle School Ratio – 9.52
    - High School Ratio – 3.11

- ✓ Volusia County Schools maintains a comprehensive list of approved software, easily accessible by teachers and students.
- ✓ Volusia has an aggressive BYOT (Bring Your Own Technology) program in over 60% of the schools, with an aggressive goal to be in 100% of the school by December 2015.

Recommendations:

- ❖ The Florida Department of Education promotes the TIM (Technology Integration Matrix) supported through the Florida Center for Instructional Technology (FCIT). This system includes a variety of different data collection tools, quantitative and qualitative, designed to inform decision-making and alignment of resources at the classroom, school, and district levels. The implementation of these tools would provide valuable feedback to the district and would support the monitoring of successful technology integration. These tools include:
    - Technology Uses and Perceptions Survey (TUPS) - This survey is designed to gain a better understanding of how educators use technology in their teaching, their level of experience with technology, and their comfort with and attitudes toward technology. Results from this survey help identify professional development needs at the teacher, school, or larger aggregate levels. Survey sections include: Technology Access and Support; Preparation for Technology Use; Perceptions of Technology Use; Confidence and Comfort Using Technology; Technology Integration; Teacher & Student Use of Technology; and Technology Skills and Usefulness.
    - The Technology Integration Matrix Observation Tool (TIM-O) - This tool is designed to guide principals, teachers, and others through the process of evaluating the level of technology integration within a particular lesson. When completed, the tool indicates a profile for the observed lesson in terms of the Technology Integration Matrix. With multiple observations, the TIM-O helps evaluators get a clear picture of the professional development needs of the teacher to support further technology integration.
    - The TIM Administrative Center gives administrators the ability to upload lists of schools and members, assign observers, administer member passwords, and generate reports. The Administrative Center provides great flexibility in how the TIM-O is used. Reports of all completed observations can be viewed in the Administrative Center or downloaded as a spreadsheet.

					Education		
64 4334	ORTONA ELEMENTARY SCHOOL	225	17	2	Regular Education	Elementary	K-5
64 4436	SPRUCE CREEK HIGH SCHOOL	2726	141	4	REGULAR	ELEMENTARY	9-12
64 4531	SPRUCE CREEK ELEMENTARY SCHOOL	680	55	0	REGULAR	ELEMENTARY	PREK-5
64 4621	SUGAR MILL ELEMENTARY SCHOOL	616	51	0	Regular Education	Elementary	PREK-5
64 4634	OSCEOLA ELEMENTARY SCHOOL	420	34	1	Regular Education	Elementary	K-5
64 4831	PIERSON ELEMENTARY SCHOOL	549	51	0	Regular Education	Elementary	PREK-5
64 4934	PORT ORANGE ELEMENTARY SCHOOL	410	32	2	Regular Education	Elementary	PREK-5
64 4941	ATLANTIC HIGH SCHOOL	1040	71	3	Regular Education	Senior High	9-12
64 4951	SWEETWATER ELEMENTARY SCHOOL	640	49	2	Regular Education	Elementary	PREK-5
64 5037	READ-PATTILLO ELEMENTARY SCHOOL	422	36	2	Regular Education	Elementary	PREK-5
64 5434	RIVERVIEW LEARNING CENTER	13	8	0	Alternative Education	Senior High	6-12
64 5836	SEABREEZE HIGH SCHOOL	1660	89	4	Regular Education	Senior High	9-12
64 6144	TURIE T. SMALL ELEMENTARY SCHOOL	500	36	0	Regular Education	Elementary	K-5
64 6234	SOUTH DAYTONA ELEMENTARY SCHOOL	788	59	0	Regular Education	Elementary	PREK-5
64 6343	SOUTHWESTERN MIDDLE SCHOOL	732	54	0	Regular Education	Middle/Junior	6-8
64 6441	EDITH I. STARKE ELEMENTARY SCHOOL	395	39	1	REGULAR	ELEMENTARY	K-5
64 6633	T. DEWITT TAYLOR MIDDLE-HIGH SCHOOL	1079	77	0	Regular Education	Senior High	6-12
64 6751	DISCOVERY ELEMENTARY SCHOOL	666	55	2	Regular Education	Elementary	PREK-5
64 6761	DELTONA HIGH SCHOOL	1686	96	0	Regular Education	Senior High	9-12
64 6781	TIMBERCREST ELEMENTARY SCHOOL	740	58	0	Regular Education	Elementary	PREK-5
64 6791	GALAXY MIDDLE SCHOOL	1064	70	0	Regular Education	Middle/Junior	6-8
64 6841	SUNRISE ELEMENTARY SCHOOL	511	43	0	Regular Education	Elementary	K-5
64 6851	FRIENDSHIP ELEMENTARY SCHOOL	445	37	2	Regular Education	Elementary	PREK-5
64 6871	VOLUSIA PINES ELEMENTARY SCHOOL	631	54	0	Regular Education	Elementary	PREK-5
64 6881	PINE RIDGE HIGH SCHOOL	1631	114	0	Regular Education	Senior High	9-12
64 6891	THE READING EDGE ACADEMY	319	20	1	Regular Education	Elementary	K-5
64 7621	IVY HAWN CHARTER SCHOOL OF THE ARTS	400	26	0	Regular Education	Combination Elementary & Secondary	K-8
64 7631	BURNS SCIENCE AND TECHNOLOGY CHARTER SCHOOL	350	25	0	Regular Education	Combination Elementary & Secondary	K-8
64 7741	RIVER SPRINGS MIDDLE SCHOOL	1367	85	0	Regular Education	Middle/Junior	6-8
64 7751	FOREST LAKE ELEMENTARY SCHOOL	664	57	1	Regular Education	Elementary	PREK-5
64 7761	DEBARY ELEMENTARY SCHOOL	772	55	0	REGULAR	ELEMENTARY	PREK-5
64 7771	HERITAGE MIDDLE SCHOOL	1212	72	0	Regular Education	Middle/Junior	6-8
64 7781	FREEDOM ELEMENTARY SCHOOL	692	50	0	REGULAR	ELEMENTARY	PREK-5
64 7791	CREEKSIDE MIDDLE SCHOOL	1149	76	0	Regular Education	Middle/Junior	6-8
64 7831	DAVID C HINSON SR MIDDLE SCHOOL	875	59	2	Regular Education	Middle/Junior	6-8
64 7871	SPIRIT ELEMENTARY SCHOOL	680	59	1	Regular Education	Elementary	PREK-5
64 7881	MANATEE COVE ELEMENTARY SCHOOL	735	60	1	Regular Education	Elementary	PREK-5
64 7892	RICHARD MILBURN ACADEMY MIDDLE SCHOOL	92	6	0	Regular Education	Middle/Junior	6-8
64 7921	CYPRESS CREEK ELEMENTARY SCHOOL	749	52	0	Regular Education	Elementary	PREK-5
64 7931	PRIDE ELEMENTARY SCHOOL	570	48	0	Regular Education	Elementary	PREK-5
					Regular		

64 7951	SAMSULA ACADEMY	216	14	3	Education	Elementary	K-5
64 7981	CITRUS GROVE ELEMENTARY	783	61	0	Regular Education	Elementary	PREK-5
64 9810	ELEARNING EAST	31	2	0	Regular Education	Senior High	PREK, 9-12
64 9821	ELEARNING WEST	50	2	0	Regular Education	Senior High	10-12

N: 77

Click here to return to the Statistical Report Menu

2013-2014 District Technology Resource Inventory

64 Volusia

District Final Student FTE Counts	District Total Classrooms
61055.91	3776

Pam Stewart
Commissioner of Education

Internet Service Provider				Number of Wireless Access Points (WAPs) used in a classroom setting	Percent of Classrooms meeting wireless specifications
Primary	Mbps	Secondary	Mbps	351.50	98 %
TWI	248	All	1024		
School District Website					
Not collected on inventory					

District Wide Area Network (WAN) Bandwidth Type	Totally wireless
District Technologies Supported by WAN	• Streaming audio • Streaming video • Two-way teleconferencing
Is District Area Network Owned or Leased by district?	Owned

District Student Instructional Computers Meeting Device Specifications	
Student Instructional Desktop Computers Meeting Specifications:	7191
Student Instructional Mobile Computers (laptops, netbooks, ultrabooks) Meeting Specifications:	4741
Grand Total of Computer Devices Meeting Specifications In All Schools:	11932

District Overall Students per Instructional Computer Ratio that Meet Device Specifications: 5.12

All District Student Instructional Devices by Operating System (meeting specifications and not meeting specifications)						
	Operating System					
	Windows-Based OS	Mac-Based OS	Android-Based OS	iOS-Based OS	Linux-Based OS	Device Totals
Student Instructional Desktop Computers	17657	73			0	17730
Student Instructional Mobile Computers (Laptops, Netbooks, Ultrabooks)	6259	55			0	6314
Student Large Screen Tablets			0	3521		3521
Student Small Screen Tablets						261
Student Other Hand-Held Computer Devices						609
Total Student Devices	23916	128	0	3521	0	
Instructional Device and Instructional Computer Grand Total by OS:						28435

Connectivity			
Number High-Speed Wired Devices		Number High-Speed Wireless Devices	
Desktops	Mobile	Desktops	Mobile
16719	160	999	6154

District Student per Instructional Computer Ratio by School Type for Computers Meeting Device Specifications:	
District Elementary School Students per Instructional Computer	6.35
District Middle School Students per Instructional Computer	9.52
District High School Students per Instructional Computer	3.11

Digital Learning Devices	Number Available
Projection devices that enable classroom viewing of computer signal	4180
Large screen monitor or flat panel capable of video input from computer	100
Interactive white board or interactive projectors	608
Sets of personal response system/clicker technology	905
Digital cameras	296
Digital video cameras	222
Digital scientific probes	660
Digital microscopes	490
Hand-held graphing calculators	4907
Document cameras	2099
Sound enhancement systems	3338
Wireless Interactive Slates	735
MP3 players	36
Digital Pens	202
Smart Tables	0
Webcams	367
Scanners	912
Other:	61

Teacher/Administrative Computers		
	Meeting Specifications	Not Meeting Specifications
Teacher Desktops	57	26
Teacher Mobile Computers (laptop/netbook)	3918	409
Administrative Desktops	468	220
Administrative Mobile Computers (laptop/netbook)	250	23

Percentage of Teacher Training Opportunities Offered by District in the Past Year:	
Administrative and Management Applications	40 %
Basic Computer Skills	10 %
Emerging Technologies in Education	10 %
Hardware and Equipment	10 %
Integration of Technology and Curriculum	10 %
Networking	0 %
Tool-based Applications Beyond Administrative and Management	10 %
No opportunities were offered for technology training	0 %
Training on the technology purchased to teach curriculum	10 %

Percentage of District Schools with a Bring Your Own Device (BYOD) Policy	
47 %	Our school allows students to bring and use personal mobile/hand-held computing devices.
52 %	Our school has a written policy on bringing and using personal mobile/hand-held computing devices.
14 %	Our school has a written policy to NOT allow bringing and using personal mobile/hand-held computing devices.
19 %	Our school is currently developing a policy on bringing and using personal mobile/hand-held computing devices.
23 %	No policy related to the use of personal mobile/hand-held computing devices is being considered at this time.

Does the district apply for E-Rate discounts for Internet Access?	Yes

Technology Resources Inventory

Inventory Management

About
Help
Logout

From the district menu a district administrator can review and approve inventory data from their schools for final submission to the Department of Education. Downloading a comma separated value(csv) file will give the district a record of their school's inventory responses and will allow the district to utilize the data for their own purposes. Click here for help on how to use this page.

Click here to add/delete schools or change their passwords.

Click here for a printable list of schools with passwords.

Click here for a printable status list for your schools.

District Summary

1 schools in your district have not yet begun the Florida Innovates Technology Inventories. Chiles Academy

No schools in your district are awaiting your review and submission to DOE.

77 out of 78 schools in your district have completed the Florida Innovates Technology Inventories and been submitted to DOE.

My District Inventory

Take District Inventory

My schools' Inventory

Review/Submit inventories from your district

2013-2014 Reports
- Technology Resources Inventory Statistical Report (2013)
- Technology Resources View/Print School Inventories (2013)
- Technology Resources District Inventory Statistical Report (2013)

2013-2014 Inventory Data

2013-2014 Inventory Data links will save a file to your hard drive .

Spring Inventory (2014)
- 2014 Spring Inventory

Fall Inventory (2013)
- 2013 Fall School Inventory

2012-2013 Reports
- Technology Resources Survey Statistical Report (2012)
- Technology Resources View/Print School Surveys (2012)
- Technology Resources District Survey Statistical Report (2012)

2012-2013 Survey Data
This link will save a csv file to your hard drive .
- School Survey

2011-2012 Reports
- Technology Resources Survey Statistical Report (2011)

- Technology Resources District Survey Statistical Report (2011)

2011-2012 Survey Data

This link will save a csv file to your hard drive .

School Survey

2010-2011 Reports

- Technology Resources Survey Statistical Report (2010)

Technology Resources View/Print School Surveys (2010)

- Technology Resources District Survey Statistical Report (2010)

2010-2011 Survey Data

This link will save a csv file to your hard drive .

School Survey

2009-2010 Reports

Technology Resources Survey Statistical Report (2009)

- Technology Resources View/Print School Surveys (2009)

Technology Resources District Survey Statistical Report (2009)

2009-2010 Survey Data

This link will save a csv file to your hard drive .

- School Survey

2008-2009 Reports

Florida Innovates Survey Statistical Report (2008)

Florida Innovates View/Print School Surveys (2008)

- Florida Innovates District Survey Statistical Report (2008)

2008-2009 Survey Data

This link will save a csv file to your hard drive .

School Survey

- District Survey (ITS)

District Survey (IS)

2007-2008 Reports

Graphical Report (2007)

- Florida Innovates Survey Statistical Report (2007)

Florida Innovates View/Print School Surveys (2007)

Florida Innovates District Survey Statistical Report (2007)

2007-2008 Survey Data

This link will save a csv file to your hard drive .

School Survey

District Survey (ITS)

- District Survey (IS,LM,IM)

2006-2007 Reports

Graphical Report (2006)

Florida Innovates Survey Statistical Report (2006)

- Florida Innovates View/Print School Surveys (2006)

Florida Innovates District Survey Statistical Report (2006)

2006-2007 Survey Data

These links will save a csv file to your hard drive .

- Administrative Portion (Principals)

Technical Portion - Access to Technology Section only

Technical Portion - all other sections (except Access to Technology)

2005-2006 Reports

- Graphical Report (2005)

Florida Innovates Survey Statistical Report (2005)

Florida Innovates View/Print School Surveys (2005)

- Florida Innovates District Survey Statistical Report (2005)

2005-2006 Survey Data

These links will save a csv file to your hard drive (only schools sent to DOE will be shown).

Administrative Portion (Principals)

- Technical Portion - Access to Technology Section only

Technical Portion - all other sections (except Access to Technology)

- Florida Innovates Survey Results - Fall 2004 Overview
- Florida Innovates View/Print School Surveys (2004)
- Individual school reports
- District to District Comparison Report
- School to School Comparison Report
- District Overview Report
- District to State Comparison Report
- Florida Innovates Survey Statistical Report (2004)

2004-2005 Survey Data

Question Reference for the 2004-2005 survey, click here!

These links will save a csv file to your hard drive (only schools sent to DOE will be shown).

- Technology Admin & Support
- Access to Technology
- Educators & Technology
- Learners & Learning
- Accountability

2003-2004 Reports

- Florida Innovates Survey Results - Fall 2003 Overview
- Florida Innovates View/Print School Surveys (2003)
- Individual school reports
- District to District Comparison Report
- School to School Comparison Report
- District Overview Report
- District to State Comparison Report

2003-2004 Survey Data

Question Reference for the 2003-2004 survey, click here!

These links will save a csv file to your hard drive (only schools sent to DOE will be shown).

- Technology Admin & Support (Questions 1-10)
- Technology capacity (Questions 11-37)
- Educator competency and Professional Development (Questions 38-48)
- Learners and Learning (Questions 49-57F)
- Accountability (Questions 58-61)

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2013 Technology Resources Inventory Statistical Report
All schools in Volusia County

This report contains data from all school types
including Charter & Special schools

Click here to display the schools used in this report

Click here to return to the Statistical Report Menu

Statistical Terms & Abbreviations

N: Number of respondents in the sample
Mean: Mean value for the sample
Med: Median value for the sample
Std Dev: Standard Deviation for the sample
Total: Sum of the values for the sample
N/A: "Not Applicable". Items with this abbreviation had no respondents within the specified scope.

Please note: Percentages are displayed for some response options. The displayed percentage is the percentage of the population that selected that particular option. The population is given for each response because some questions would only have been asked due to reponses given to other questions.

---

1. Indicate the number of desktop and mobile computers available for students using the technical specifications below.

TRI Reference Sheet (Opens in new window)

Specifications*

Platform - PC - Windows

- 1 GHZ or faster processor
- 1 GB RAM or greater memory
- 1024 x 768 screen resolution
- 9.5 inch (10 inch class) or larger screen size measured diagonally
- Windows 7 or higher

Platform - Apple

- 1 GHZ or faster processor
- 1 GB RAM or greater memory
- 1024 x 768 screen resolution
- 9.5 inch (10 inch class) or larger screen size measured diagonally
- Mac OS X 10.7 or higher

* These technical specifications conform to Department of Education technology guidelines (http://www.fldoe.org/BII/Instruct_Tech/pdf/Device-BandwidthTechSpecs.pdf). To be counted as meeting the minimum technical specifications, a computer must meet all hardware requirements and be able to upgrade their operating systems to either Windows 7 or Mac OS 10.7. Computers must be able to connect to the Internet via wired or wireless networks.

1.1 Student Desktop Computers

	Total number of desktops which do not meet the specifications?	Total number of desktops which meet or exceed the specifications?
Library media center	**Total: 1159** Mean: 15.05 Med: 9.5 Std Dev: 16.19	**Total: 892** Mean: 11.58 Med: 0 Std Dev: 23.65
Classrooms (including portables, resource rooms, etc.)	**Total: 6919** Mean: 89.86 Med: 90 Std Dev: 79.63	**Total: 3527** Mean: 45.81 Med: 20 Std Dev: 70.72
Computer labs serving general education	**Total: 1483** Mean: 19.26 Med: 0 Std Dev: 33.34	**Total: 1248** Mean: 16.21 Med: 0 Std Dev: 30.1
Computer labs serving select student populations (i.e., special education, career and technical education, credit recovery, virtual schools, etc.)	**Total: 966** Mean: 12.55 Med: 0 Std Dev: 29.18	**Total: 1524** Mean: 19.79 Med: 0 Std Dev: 51.99

Other student gathering places (i.e., cafeteria)	**Total: 12** Mean: 0.16 Med: 0 Std Dev: 0.63	**N/A**
Student Desktop Totals	**Total: 10539** Mean: 136.87 Med: 122 Std Dev: 125.83	**Total: 7191** Mean: 93.39 Med: 54 Std Dev: 134.58

1.2 Student Mobile Computers
Indicate the number of mobile computers available for student use that meet the specifications above.

	Total number of mobile computers which do not meet the specifications?	**Total number of mobile computers which meet or exceed the specifications?**
Student laptops	**Total: 766** Mean: 9.95 Med: 0 Std Dev: 28.7	**Total: 4633** Mean: 60.17 Med: 31 Std Dev: 72.22
Student netbooks	**Total: 807** Mean: 10.48 Med: 0 Std Dev: 52.18	**Total: 108** Mean: 1.4 Med: 0 Std Dev: 5.34
Student Mobile Totals	**Total: 1573** Mean: 20.43 Med: 0 Std Dev: 58.99	**Total: 4741** Mean: 61.57 Med: 36 Std Dev: 72.16
Grand Total	**Total: 12112** Mean: 157.3 Med: 131.5 Std Dev: 142.8	**Total: 11932** Mean: 154.96 Med: 84 Std Dev: 195.27

N: 77

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2. Please indicate the number of student desktop and mobile computers at your school that use the following types of Internet access. Also indicate the number of computers which are primarily used for online testing.

TRI Reference Sheet (Opens in new window)

Please note the counts must match the information provided in question 1.

2.1 Student Desktop Computer Internet Access

Type of Connectivity	**Total number of student desktop computers with this connectivity** (*Count each computer only once*)	**How many of these computers are used primarily for online testing?**
High speed wired	**Total: 16719** Mean: 217.13 Med: 162 Std Dev: 191.59	**Total: 4309** Mean: 55.96 Med: 30 Std Dev: 56.41
High speed wireless	**Total: 999** Mean: 12.97 Med: 0 Std Dev: 63.54	**Total: 161** Mean: 2.09 Med: 0 Std Dev: 12.18
Dial-up (56/28kbps)	**N/A**	**N/A**
No Internet Connectivity	**Total: 12** Mean: 0.16 Med: 0 Std Dev: 1.36	**N/A**
Student Desktop Totals	**Total: 17730** Mean: 230.26 Med: 166	**Total: 4470** Mean: 58.05 Med: 30.5

	Std Dev: 187.35	Std Dev: 55.64

2.2 Student Mobile Computer Internet Access

Type of Connectivity	Total number of student mobile computers with this connectivity (*Count each computer only once*)	How many of these computers are used primarily for online testing?
High speed wired	**Total: 160** Mean: 2.08 Med: 0 Std Dev: 13.87	**Total: 84** Mean: 1.09 Med: 0 Std Dev: 7.28
High speed wireless	**Total: 6154** Mean: 79.92 Med: 48 Std Dev: 96.63	**Total: 3382** Mean: 43.92 Med: 27.5 Std Dev: 47.95
Dial-up (56/28kbps)	**N/A**	**N/A**
No Internet Connectivity	**N/A**	**N/A**
Student Mobile Totals	**Total: 6314** Mean: 82 Med: 48 Std Dev: 95.91	**Total: 3466** Mean: 45.01 Med: 29.5 Std Dev: 47.51
Grand Total	**Total: 24044** Mean: 312.26 Med: 220 Std Dev: 257.68	**Total: 7936** Mean: 103.06 Med: 70.5 Std Dev: 85.74

N: 77

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3. Indicate the number of teacher or administrative (non-instructional) computers that meet the specifications for each category:

Specifications*

Platform - PC - Windows

- 1 GHZ or faster processor
- 1 GB RAM or greater memory
- 1024 x 768 screen resolution
- 9.5 inch (10 inch class) or larger screen size measured diagonally
- Windows 7 or higher

Platform - Apple

- 1 GHZ or faster processor
- 1 GB RAM or greater memory
- 1024 x 768 screen resolution
- 9.5 inch (10 inch class) or larger screen size measured diagonally
- Mac OS X 10.7 or higher

* These technical specifications conform to Department of Education technology guidelines (http://www.fldoe.org/BII/Instruct_Tech/pdf/Device-BandwidthTechSpecs.pdf). To be counted as meeting the minimum technical specifications, a computer must meet **all** hardware requirements and be able to upgrade their operating systems to either Windows 7 or Mac OS 10.7.

These are computers that students do not have access to.
(Enter "0" if none.)

TRI Reference Sheet (Opens in new window)

	Total number of computers which do not meet the specifications.	Total number of computers which meet or exceed the specifications.
Teacher desktops	**Total: 26** Mean: 0.34 Med: 0 Std Dev: 1.53	**Total: 57** Mean: 0.74 Med: 0 Std Dev: 3.19
Teacher mobile computers (laptop/netbook)	**Total: 409** Mean: 5.31 Med: 0 Std Dev: 13.73	**Total: 3918** Mean: 50.88 Med: 51 Std Dev: 32.38
Administrative desktops	**Total: 220** Mean: 2.86 Med: 0 Std Dev: 4.89	**Total: 468** Mean: 6.08 Med: 5 Std Dev: 7.62
Administrative mobile computers	**Total: 23**	**Total: 250**

(laptop/netbook)	Mean: 0.3 Med: 0 Std Dev: 0.97	Mean: 3.25 Med: 2 Std Dev: 2.86
TOTALS	**Total: 678** Mean: 8.81 Med: 1 Std Dev: 15.42	**Total: 4693** Mean: 60.95 Med: 58 Std Dev: 36.95

N: 77

4. How many student computers do you have running each of the following operating systems (exclude server software)?
Please note: these numbers must match the counts provided in question 1. (Enter "0" if none)

Windows-based PC	Total number of Desktops	Total number of Mobile Computers
Windows XP	**Total: 11748** Mean: 152.57 Med: 141.5 Std Dev: 121.4	**Total: 1788** Mean: 23.22 Med: 0 Std Dev: 60.01
Windows Vista	N/A	**Total: 54** Mean: 0.7 Med: 0 Std Dev: 4.32
Windows 7	**Total: 5909** Mean: 76.74 Med: 32 Std Dev: 126.12	**Total: 4357** Mean: 56.58 Med: 30 Std Dev: 73.55
Windows 8	N/A	**Total: 60** Mean: 0.78 Med: 0 Std Dev: 6.79
Other (list)	N/A	N/A
Windows Totals	**Total: 17657** Mean: 229.31 Med: 166 Std Dev: 186.37	**Total: 6259** Mean: 81.29 Med: 48 Std Dev: 95.95
Mac OS	**Total number of Desktops**	**Total number of Mobile Computers**
Mac OS X 10.6 - (Snow Leopard) or earlier	**Total: 27** Mean: 0.35 Med: 0 Std Dev: 2.94	**Total: 23** Mean: 0.3 Med: 0 Std Dev: 1.62
Mac OS X 10.7 - Lion	N/A	**Total: 2** Mean: 0.03 Med: 0 Std Dev: 0.16
Mac OS X 10.8 - Mountain Lion	**Total: 46** Mean: 0.6 Med: 0 Std Dev: 4.3	**Total: 21** Mean: 0.27 Med: 0 Std Dev: 1.82
Other (list)	N/A	**Total: 9** Mean: 0.12 Med: 0 Std Dev: 0.91
Mac Totals	**Total: 73** Mean: 0.95 Med: 0 Std Dev: 5.73	**Total: 55** Mean: 0.71 Med: 0 Std Dev: 3.06
Linux OS	**Total number of Desktops**	**Total number of Mobile Computers**
Any Release of Linux OS	N/A	N/A

Grand Total	**Total: 17730** Mean: 230.26 Med: 166 Std Dev: 187.35	**Total: 6314** Mean: 82 Med: 48 Std Dev: 95.91

N: 77

5. How are mobile computers (as defined in 1.2) used at your school?
(*Check all that apply*)

6.49%	We don't have any mobile computers for student use.
79.22%	We have mobile computers on a mobile cart that can be used in any classroom.
42.86%	We have mobile computers that are restricted for use by specific classes or grade levels.
3.9%	We have a mobile computer initiative wherein specific classes or grade levels have 24/7 access to mobile computers.
2.6%	We have a mobile computer initiative wherein all students have 24/7 access to mobile computers.
41.56%	We have a mobile computer initiative in which students are allowed to bring their own mobile computers from home to use in school.

TRI Reference Sheet (Opens in new window)

N: 77

6. Bring Your Own Device Policy ("mobile device" is defined in 1.2 / "hand-held computing device" is defined in 8)
(*Check all that apply*)

46.75%	Our school allows students to bring and use personal mobile/hand-held computing devices.
51.95%	Our school has a written policy on bringing and using personal mobile/hand-held computing devices.
14.29%	Our school has a written policy to NOT allow bringing and using personal mobile/hand-held computing devices.
19.48%	Our school is currently developing a policy on bringing and using personal mobile/hand-held computing devices.
23.38%	No policy related to the use of personal mobile/hand-held computing devices is being considered at this time.

If your policy is published on the internet, please provide the url:
N/A

N: 77

7. Which of the following devices are students permitted to bring and use at school?
(*Check all that apply*)

45.45%	Laptop
42.86%	Netbook
48.05%	Tablet/iPad
42.86%	iPod/Zune/MP3 player
48.05%	Cell phone
48.05%	None of the above

N: 77

8. Please indicate the number of hand-held computing devices for students purchased by your school. Indicate whether the student device connects to the Internet.

TRI Reference Sheet (Opens in new window)

Hand-Held Device	# of Devices	Connected to Internet via WiFi or cellular?
Large screen tablets (iPad, Galaxy Tab, and other new generation tablets) *9.5 inch screen size or larger*	**Total: 3521** Mean: 56.79 Med: 20 Std Dev: 55.81	**61.04%**
Small screen tablets (E-Reader, Nook, Kindle, iPad mini, etc.) *Smaller than 9.5 inch screen size*	**Total: 261** Mean: 4.21 Med: 0 Std Dev: 14.24	**11.69%**
iPod Touch or similar	**Total: 1232** Mean: 19.87 Med: 0 Std Dev: 36.87	**33.77%**
Smartphone (BlackBerry, Android, iOS, etc.)	**N/A**	**2.6%**
Other hand-held computing devices (please specify)	**Total: 609** Mean: 9.82 Med: 0 Std Dev: 48.61	**1.3%**
Grand Total	**Total: 5623** Mean: 73.03 Med: 51 Std Dev: 79.47	

19.48%
No hand-held computing devices purchased for use by students in our school.

Large Screen Tablets (*9.5 inch screen size or larger*)	# of Hand-Held Devices with this operating system
Android 4.0 or newer	**N/A**
iPad 2 or newer running iOS 6 or newer	**Total: 3521** Mean: 67.71 Med: 20 Std Dev: 54.53
Windows 8 or newer	**N/A**

N: 77

9. Indicate the number of each of these digital devices available at your school.
(*Enter "0" if none*)

TRI Reference Sheet (Opens in new window)

Mean: 54.29 Med: 50 Std Dev: 32.86	Projection devices that enable classroom viewing of computer signal
Mean: 1.3 Med: 0 Std Dev: 7.34	Large screen monitor or flat panel capable of video input from computer
Mean: 7.9 Med: 1 Std Dev: 12.73	Interactive white board or interactive projectors (Smartboard, SchoolBoard, Promethean, eBeam, Mimio, BrightLink, etc.)
Mean: 11.75 Med: 6.5 Std Dev: 13.42	Sets of personal response system/clicker technology (1 Class set = approximately 25 clickers)
Mean: 3.84 Med: 3 Std Dev: 4.51	Digital cameras (primarily still photos but may take short video clips)
Mean: 2.88	

Med: 2 Std Dev: 3.83	Digital video cameras (video or video/still combination cameras)
Mean: 8.57 Med: 0 Std Dev: 28.85	Digital scientific probes
Mean: 6.36 Med: 0 Std Dev: 16.99	Digital microscopes
Mean: 63.73 Med: 0 Std Dev: 130.78	Hand-held graphing calculators (do not include desktops with graphing calculator software)
Mean: 27.26 Med: 22 Std Dev: 22.73	Document cameras (ELMO, AVerMedia, etc.)
Mean: 43.35 Med: 45.5 Std Dev: 26.62	Sound enhancement systems (Audio Enhancement, Caliphone, etc.)
Mean: 9.55 Med: 0.5 Std Dev: 16.39	Wireless Interactive Slates (Interwrite Pad, Activslate, AirLiner, etc).
Mean: 0.47 Med: 0 Std Dev: 2.93	MP3 players
Mean: 2.62 Med: 0 Std Dev: 12.59	Digital Pens
N/A	Smart Tables
Mean: 4.77 Med: 0 Std Dev: 14.26	Webcams
Mean: 11.84 Med: 3 Std Dev: 22.4	Scanners
Mean: 0.79 Med: 0 Std Dev: 4.49	Other new digital devices purchased in the past year (please specify)

N: 77

10. Approximately, what percentage of your students have the following at home?

	% of students with
A computer (as defined in 1.1 & 1.2) at home	**Mean: 55.55** Med: 55 Std Dev: 24.34
Internet access at home	**Mean: 51.99** Med: 50 Std Dev: 24.78

10.1 How were these percentages determined? *(Check all that apply)*

- **31.17%** Number of parent email addresses provided
- **58.44%** Number of parents signed up for online portal (for grades, attendance, etc.)
- **16.88%** Student poll
- **10.39%** Survey
- Other (please describe)

20.78%

N: 77

Digital Learning Environment

11. What is the total number of classrooms in your school? (A classroom is defined as a room where classes are held at least 50% of the day)
(Enter "0" if none)

Mean: 49.04
Med: 45.5
Std Dev: 29.09

N: 77

12. What is the total number of classrooms in your school that have a high-speed internet connection?

Mean: 49.82
Med: 45.5
Std Dev: 29.81

N: 77

13. Do students at your school use the following types of programs?

	NO	YES
Drill and practice software	5.19%	94.81%
Integrated Learning Systems (ILS; comprehensive software with assessment, diagnostics, and computer-based curriculum)	14.29%	85.71%
Creativity Tools (paint/draw, desktop video, sound-editing, presentation)	25.97%	74.03%
Simulation software (Frog Dissector, Oregon Trail, SimCity)	57.14%	42.86%
Tool-based software (graphic organizers, word processors, spreadsheets, databases, webpage development)	10.39%	89.61%
Research / Reference Tools (Internet, encyclopedias)	1.3%	98.7%
Communication (email, instant messaging)	45.45%	54.55%
Web 2.0 (wikis, blogs)	35.06%	64.94%
Open source productivity suites (e.g., OpenOffice, GNOME Office)	85.71%	14.29%
Content-Specific (e.g., Brainpop)	7.79%	92.21%
Credit Recovery (e.g., PLATO Learning)	62.34%	37.66%
Technology Tutorials (e.g., Atomic Learning)	55.84%	44.16%
Video Streaming (e.g., Discovery Education Streaming, Safari Montage)	7.79%	92.21%

N: 77

Florida's Digital Educators

14. Approximately what percentage of your teachers regularly use technology in the following ways? (*Enter "0" if none*)

	% of teachers regularly using this technology
Administrative tasks (lesson plans, grade book, reports, attendance, benchmark tracking)	**Mean: 98.83** Med: 100 Std Dev: 7.85
Email to other school or district staff	**Mean: 97.01** Med: 100 Std Dev: 13.49
Email to students or parents	**Mean: 79.66** Med: 92.5 Std Dev: 25.99
Web 2.0 Tools (wikis, blogs)	**Mean: 31.45** Med: 27.5 Std Dev: 27.03
Analysis of student assessment information (e.g., FCAT scores)	**Mean: 88.77** Med: 100 Std Dev: 20.92
Video conferencing, Webinars	**Mean: 36.68** Med: 25 Std Dev: 33.59
Webpage publishing	**Mean: 16.65** Med: 10 Std Dev: 21.61
Podcasting	**Mean: 3.69** Med: 0 Std Dev: 10.78
Online Coursework (Moodle, Blackboard, etc.)	**Mean: 60.31** Med: 66 Std Dev: 33.54

N: 77

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15. Please indicate the number of staff who participated in professional development opportunities addressing the integration of technology into the curriculum from July 1, 2012 through June 30, 2013.

Technology integration in the curricula entails the teachers' and students' seamless use of technology as a tool to accomplish a given task in a disciplined study that promotes higher-order thinking skills. (*Enter "0" if none.*)

	# of staff receiving in-service	% of all staff in this category who received in-service
Administrators	**Total: 359** Mean: 4.66 Med: 2 Std Dev: 14.11	**Mean: 83.27** Med: 100 Std Dev: 34.4
Technology Specialists	**Total: 107** Mean: 1.39 Med: 0 Std Dev: 11.32	**Mean: 7.79** Med: 0 Std Dev: 26.8
Library Media Specialists	**Total: 264** Mean: 3.43 Med: 1 Std Dev: 15.77	**Mean: 76.75** Med: 100 Std Dev: 42.09
Teachers	**Total: 3043**	**Mean: 73.27**

	Mean: 39.52 Med: 35.5 Std Dev: 33.38	Med: 100 Std Dev: 36.34

N: 77

Instructional Leadership

16. How do you evaluate student technology literacy*?
(*Check all that apply*)

89.61%	Classroom observation
23.38%	Florida Student Tool for Technology Literacy - ST2L
23.38%	District-developed performance assessments
11.69%	Vendor-developed performance assessments
38.96%	Portfolios
49.35%	Self assessments
48.05%	Surveys
31.17%	Required coursework to address technology literacy skills
3.9%	We do not monitor student literacy in technology

**Technology literacy is the ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information to improve learning in all subject areas and to acquire lifelong knowledge and skills in the 21st century.*

N: 77

17. Estimate what percentage of your teachers are regular users of digital content (primary instructional materials or related resources).
(*Enter "0" if none*)

Mean: 82.87
Med: 90
Std Dev: 21.47

N: 77

18. What do you perceive is the primary barrier to using digital instructional materials in your school?

20.78%	Access to digital delivery devices (i.e., computers, projection devices, handheld devices)
1.3%	Availability of materials
3.9%	Bandwidth/network connectivity issues
0%	Digital curriculum not applicable for our students
28.57%	Funding
12.99%	Need for professional development and instructional support
7.79%	Teacher readiness
9.09%	Technical support
9.09%	Time constraints
6.49%	No barriers

N: 77

19. Which of the following contributions does your school technology program make to parents or the community? (*Check all that apply*)

79.22%	We are making an effort to increase technology awareness. (e.g. PTA presentations, newsletters, web sites, etc.)
75.32%	We offer access to technology at our school.
1.3%	We have partnered with our community to establish technology centers in locations other than the school.
27.27%	We offer hands-on technology training.
7.79%	We have no program to increase awareness or provide access.

N: 77

20. Which of the following best describes the technology access you provide for the community? (*Check all that apply.*)

12.99%	No community or parent access.
42.86%	Community members may access technology on campus during school hours.
20.78%	Community members may access technology during extended-day hours.
64.94%	Parents of our students may access technology on campus during school hours.
20.78%	Parents of our students may access technology during our extended-day program.

N: 77

21. Which of the following methods is your school employing to address Internet safety? (*Check all that apply*)

31.17%	Using vendor-created curriculum
46.75%	Using district-created curriculum
68.83%	Train personnel about topics such as plagiarism, copyright laws, and cyberbullying
50.65%	Distributing informational materials to parents on Internet Safety
54.55%	Providing teachers and parents websites and other resources about Internet Safety
23.38%	Working with law enforcement (including school resource officers) to provide teachers, parents, and students with Internet Safety websites, resources, and training.
90.91%	Internet filtering and monitoring (school or district level).
10.39%	Other (please describe)

N: 77

22. How do you evaluate teacher technology literacy*? (*Check all that apply*)

88.31%	Classroom observation
12.99%	Florida Inventory of Teacher Technology Skills - ITTS
25.97%	District-developed performance assessments
7.79%	Vendor-developed performance assessments

11.69%	Portfolios
45.45%	Self assessment
37.66%	Surveys
1.3%	Other
5.19%	We do not monitor teacher literacy in technology.

**Technology literacy is the ability to responsibly use appropriate technology to communicate, solve problems, and access, manage, integrate, evaluate, and create information to improve learning in all subject areas and to acquire lifelong knowledge and skills in the 21st century.*

N: 77

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23. How is your school using the Technology Integration Matrix? (http://fcit.usf.edu/matrix)

22.08%	Best practice awareness
12.99%	School Improvement planning
15.58%	Teacher observation/evaluation
15.58%	Teacher professional development
6.49%	Technology integration monitoring
2.6%	Other, please specify
63.64%	Our school is not currently using the Technology Integration Matrix (clears other answers)

N: 77

The following information may need to be obtained from your district's Network Administrator

24. Does this school have dedicated Internet bandwidth or does this school share bandwidth (e.g., with other schools, district, etc)?

16.88%	This school has its own dedicated bandwidth.
83.12%	This school shares Internet bandwidth with others. (If shared, please answer question 26)

N: 77

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25. Please indicate the available connection speed (in Mbps) and connection type to the District WAN or school's Internet Service Provider (ISP).

	Speed (in Mbps)
Connected via Fiber	**Mean: 834.08** Med: 1000 Std Dev: 359.56
Connected via Copper	**Mean: 180.79** Med: 0 Std Dev: 1093.3
Connected via Wireless	**Mean: 224.77** Med: 0 Std Dev: 1083.3
Connected via Other (please specify)	N/A

N: 77

26. Who is your Internet Service Provider?

93.51%	District Wide Area Network (WAN)
2.6%	Third Party Internet Service Provider (ISP)
0%	Department of Management Services (DMS / FIRN)
3.9%	Other (please fill in)

N: 77

27. Does your school typically reduce or restrict (or plan to reduce or restrict) other typical bandwidth usage during online assessment testing?

9.09%	No
87.01%	Yes, this school cancels other normal computer or internet usage during online assessment testing
85.71%	Yes, this school restricts other normal internet usage during online assessment testing
87.01%	Yes, this school prioritizes online assessment testing traffic relative to any other internet usage during online assessment testing

N: 77

28. Indicate the total number of Wireless Access Points (WAPs meeting IEEE 802.11n standard or greater) used in a classroom setting.

Mean: 4.56
Med: 2
Std Dev: 9.81

N: 77

29. Percent of total classroom settings in the school that are served by the WAPs in question 28.

Mean: 97.75
Med: 100
Std Dev: 11.36

N: 77

Click here to return to the Statistical Report Menu

Inventory of Teacher Technology Skills

Distinct district completer totals

The numbers below represent the distinct number of users to complete the inventory by classification. "Total Not Classified" are users that have completed the inventory but not the position information survey.

District: Volusia

Report date: 9/8/2014

Total Users:	168
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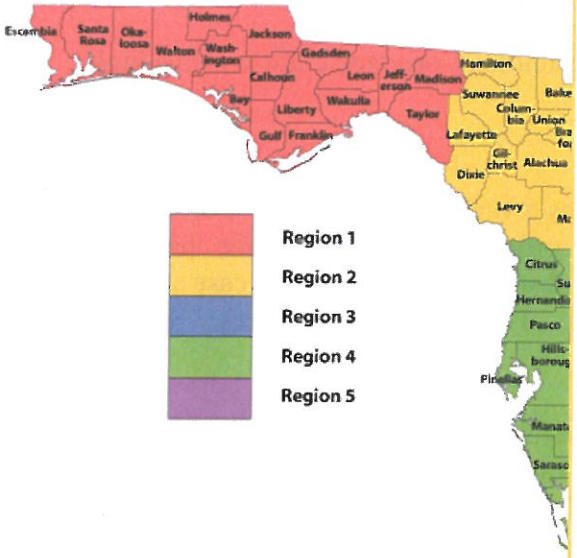
Total Teachers:	145
Total Librarians:	11
Total School Administrators:	0
Total District Personnel:	2
Total Other:	10
Total Not Classified:	0

Student Tool for Technology Literacy

ST2L Regional and State Summary Data



Section Titles

1 - Technology Operations and Concepts
2 - Constructing and Demonstrating Knowledge
3 - Communication and Collaboration
4 - Independent Learning
5 - Digital Citizenship

Statewide Averages

Section 1	Section 2
73%	62%

# of Completers Statewide for Current School Year: 26977

Cumulative Statewide Total: 108722

Click to drag and move window

Region 2 Close

Regional Average:

Section 1	Section 2	Section 3	Section 4	Section 5
78%	67%	72%	68%	83%

Districts	# of completers	
	CUMULATIVE	CURRENT SCHOOL YEAR
Alachua	678	7
Baker	0	0
Bradford	3	0
Clay	744	218
Columbia	832	66
Dixie	240	0
Duval	1753	750
Flagler	930	0
Gilchrist	328	0
Hamilton	160	0
Lafayette	47	0
Levy	0	0
Marion	248	0
Nassau	715	0
Putnam	647	0
Seminole	1702	636
St. Johns	3751	967
Suwannee	1323	0
Union	93	0
Volusia	1826	0

Close

Region 1

Regional Average:

Section 1	Section 2	Section 3	Section 4	Section 5
78%	68%	73%	69%	82%

Districts	# of completers	
	CUMULATIVE	CURRENT SCHOOL YEAR
Bay	1449	0
Calhoun	132	130
Escambia	1040	660
Franklin	170	0
Gadsden	209	0
Gulf	522	0

3. NEEDS ASSESSMENT/GOALS

The Volusia County School District has fostered a technology-oriented culture with a high expectation for quality services.

3.1 Needs Assessment

Needs assessment is an ongoing process and involves a variety of strategies. Formal and informal evaluations include district and school program reviews, outside program evaluations with consultants, data analysis, surveys, observations, interviews, case studies, and assessment tools such as The Florida Technology Resources Survey: www.flinnovates.org/survey.

The Technology Resources Survey solicits responses from K-12 principals about technology and its utilization at their respective schools.

Software and hardware is and will continue to be distributed across the district through a standard distribution methodology. These standards are developed through periodic review and normal evaluation and selection processes.

The software/hardware evaluation/selection and end-user training/support processes are collaborative endeavors by the Instructional Services and School Improvement Services Division and the Technology Services division of the school district. Shared budgetary responsibilities ensure coordination between these divisions in the selection of appropriate and compatible products. These evaluation processes involve representatives from the intended end-user community as well as others who may be affected by the selection process, such as the Facilities Division, if it involves additional services such as electrical or wiring enhancements.

To ensure that all instructional software is appropriate for the intended audience and that the software can be supported by the district, it must be approved using the process displayed in Exhibit E.

Once a product has been approved for purchase or use, it is placed on the "District Approved Software List." The District Approved Software list is located on the Volusia County Website.

Software consists of three levels of support:

- Level 1 - Approved District Strategic Software (supported software)
- Level 2 - Non-Strategic District Recommended Software (supported hardware and compatibility of software)
- Level 3 - Non-Strategic Software - (approved software to be run on current platforms only, no support of software functionality or upgrade paths)

The deployment and day-to-day technical/operational support of the product is provided by the Technology Services division in collaboration with the Professional Development

and the Instructional Services areas of the district. If a product is designated as a core requirement, planning will be undertaken to deliver the product to the target audience.

3.2 Network, Systems, and Data Center Infrastructure

The Volusia County School District has been very progressive in the use of technology and has developed an infrastructure to deliver services equitably to every classroom in the district. Volusia was one of the first districts in the state and nation to initiate a district-wide wiring project that provided network services to every classroom in the district. All classroom teachers, administrators, and appropriate support personnel have access to E-mail and Internet services, the latter of which is secured with a CIPA-compliant web filtering system. Approximately 7,500 active E-mail accounts demonstrate the scope of network availability, and their near-100% uptime demonstrates their reliability. Additionally, every user has access to a variety of administrative and instructional applications such as the Microsoft Office Suite of products. The development of curriculum resources on the Internet has changed the way educators research and gain access to materials to be used in the classroom. Additionally, the district utilizes cellular services to address special and mobile communication requirements.

To support these endeavors, the school district currently leases a private fiber network. This network consists of a 10 GB redundant ring with four network aggregation points, one of which is at the district data center, where there is currently a 2 GB connection to the Internet. The network aggregation points are geographically placed through the district with point-to-point 1 GB connections to 70+ locations.

Today, the district utilizes a variety of commercially available communications services to provide data, voice and video capability across the wide area network. These services include approximately 753 lines of local voice service, a minimum of 76 1-Gbps Ethernet point-to-point connections to remote sites, and two 10-Gbps full duplex Ethernet connections between four cluster sites.

Volusia County Schools has deployed wireless access points to provide Wi-Fi network coverage in all district locations to support the connectivity of laptops and mobile devices. Local and cross-district calls are supported by 100-Mbps and 50-Mbps Ethernet connections and 14 trunks with 322 lines.

For many years the school district has utilized a centralized "Copy Center" for all schools and departments. This service is available as an extension of the wide area network and provides for any user's desktop print requirements. This capability is designed to complement the infusion of electronic media into regular classroom activities and support the conversion of that material, when necessary, into hardcopy. All data center large print jobs are routed to the Copy Center, reducing the need for high speed printing in the data center into an efficient and economical centralized model.

Application Development and Implementation

The Volusia County School District plans to continue to develop and implement software solutions that increase access to student achievement data. Data Warehousing tools and applications are provided on curriculum resources, human capital management, and student services to enhance decision-making at both the school and district levels.

As previously mentioned, a standard distribution methodology is used to distribute software and hardware across the district.

While printers and scanners are not being replaced at the same rate as previously, centralized scanning and printing has been implemented at the school level in order to enhance and support local and district standardized testing initiatives. Scanners and printers are available in media centers or other faculty-accessible high-traffic areas to enhance ease of use and convenience.

Software:
Volusia County Schools maintains a comprehensive list of approved software. The software list covers titles used in K-12 schools, district sites, and all other facilities. The software list is updated with new titles on an ongoing basis as they are approved through the software acquisition process. The list is maintained on the Technology Services website:

http://myvolusiaschools.org/learn-tech/Pages/Approved-Software-and-Apps.aspx

3.3 District Technology Goals

District technology goals are aligned with the U.S. and Florida Department of Education technology plan goals. There are five broad national goals and twelve state goals. The supportive district goals are:

Strategic Long-Term Goals

1. Improve learning opportunities for students through integration of technology into curriculum and instructional practices to increase achievement.
2. Develop and implement strategies to improve communication with parents and community members.
3. Develop applications, processes, and support structures for Race to the Top Initiatives.
4. Support and implement Florida Department of Education computer-based testing initiatives.

5. Enhance district level formative and summative assessment initiatives.
6. Enhance data analysis and reporting capabilities through analytical and data warehousing additions.
7. Develop/provide technology integration training and professional development and enhance access to electronic services.
8. Support, evaluate and coordinate the district's robust technology infrastructure to ensure effective utilization of available services and promote equitable access to technology.
9. Utilize technology to improve business processes and district services in all operational areas.

Short-Term Strategies	National Goals	State Goals	VCS Goals
1.0 LEARNING • Provide individual student accounts • Provide electronic grade book services • Provide web-based collaboration tools for student-student and student-teacher interaction • Support virtual school initiatives	All learners will have engaging and empowering learning experiences both in and outside of school that prepare them to be active, creative, knowledgeable, and ethical participants in our globally networked society.	1. Strengthen student Information and Communication Technology (ICT) skills. 3. Enable opportunities to personalize and extend student learning.	1. Improve learning opportunities for students through integration of technology into the curriculum to increase achievement. 3. Develop and implement strategies to improve communication with parents and community members.
2.0 ASSESSMENT • Implement Florida Department of Education computer-based testing initiatives. • Improve local formative and summative assessment capabilities through	Our education system at all levels will leverage the power of technology to measure what matters and use assessment data for continuous improvement.	4. Ensure utilization of technology based assessments.	3. Support Florida Department of Education computer-based testing initiatives. 4. Enhance district level formative and

utilization of assessment software. • Review assessment and data analysis services to select district standard product. • Implement selected products/services.		8. Enhance access to student data.	summative assessment initiatives. 5. Enhance data analysis capabilities.
3.0 TEACHING • Develop the District Instructional Technology Committee (DITC) to plan district-wide instructional technology learning opportunities. • Select a learning management system for virtual school. • Collaborate with school-based technology teams. • Continue to introduce district and school instructional staff to Local Instructional Improvement System (LIIS) to support classroom instructional activities. • District instructional technology staff attends conferences (FETC) and membership with professional organizations (FCITL).	Professional educators will be supported individually and in teams by technology that connects them to data, content, resources, expertise, and learning experiences that enable and inspire more effective teaching for all learners. 2. Enhance the integration of technology in curricula. 9. Ensure trained instructional technology staff.	11. Enable Technology Leadership. 12. Support ICT training for educators to enhance instruction.	6. Develop/provide technology integration training and professional development for teachers and enhance access to electronic services.
4.0 INFRASTRUCTURE • Expand the Bring Your Own Technology (BYOT) program as an option to schools to increase access to technology. • Enhance centralized data storage capabilities.	All students and educators will have access to a comprehensive infrastructure for learning when and where they need it.	5. Increase access to digital tools. 6. Provide access to reliable infrastructure.	7. Support, evaluate and coordinate the district robust technology infrastructure to ensure effective utilization of available services

• Pilot cloud computing for web-based access to productivity tools (word processing, spreadsheets, presentations). • Continue to evaluate new products and modify classroom standard configurations. • Continue working with textbook companies for student data loads to provide access to digital materials available with textbook adoptions.		7. Improve opportunities to access digital content.	and promote equitable access to technology.
5.0 PRODUCTIVITY • Continue to improve access through utilization of the vPortal capabilities. • Continue efforts to deliver district information through electronic and form management tools to improve business processes and workflows (i.e., Intranet, Cherwell ticketing system). • Provide updates via the website to communicate with community (i.e., videos created by MultiMedia Services division, BoardDocs, etc.)	Our education system at all levels will redesign processes and structures to take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money, and staff.	8. Enhance access to student data. 10. Improve community involvement.	8. Use technology to improve district services in all operational areas.

The Technology Integration Matrix
Table of Summary Descriptors

This table contains summary descriptors for each cell of the Technology Integration Matrix (TIM). Other available resources include a tables detailing student activity, teacher activity, and instructional settings for each TIM cell.

Characteristics of the Learning Environment	Levels of Technology Integration into the Curriculum: Entry	Adoption	Adaptation	Infusion	Transformation
Active	Information passively received	Conventional, procedural use of tools	Conventional independent use of tools; some student choice and exploration	Choice of tools and regular, self-directed use	Extensive and unconventional use of tools
Collaborative	Individual student use of tools	Collaborative use of tools in conventional ways	Collaborative use of tools; some student choice and exploration	Choice of tools and regular use for collaboration	Collaboration with peers and outside resources in ways not possible without technology
Constructive	Information delivered to students	Guided, conventional use for building knowledge	Independent use for building knowledge; some student choice and exploration	Choice and regular use for building knowledge	Extensive and unconventional use of technology tools to build knowledge
Authentic	Use unrelated to the world outside of the instructional setting	Guided use in activities with some meaningful context	Independent use in activities connected to students' lives; some student choice and exploration	Choice of tools and regular use in meaningful activities	Innovative use for higher order learning activities in a local or global context
Goal-Directed	Directions given, step-by-step task monitoring	Conventional and procedural use of tools to plan or monitor	Purposeful use of tools to plan and monitor; some student choice and exploration	Flexible and seamless use of tools to plan and monitor	Extensive and higher order use of tools to plan and monitor

The Technology Integration Matrix was developed by the Florida Center for Instructional Technology at the University of South Florida College of Education and funded with grants from the Florida Department of Education. For more information, visit http://mytechmatrix.org.

The Technology Integration Matrix
Table of Instructional Setting Descriptors

This table contains instructional setting descriptors for each cell of the Technology Integration Matrix (TIM). Other available resources include a tables detailing student activity, teacher activity, and a table of summary indicators for each TIM cell.

Levels of Technology Integration into the Curriculum

Characteristics of the Learning Environment	Entry	Adoption	Adaptation	Infusion	Transformation
Active	The setting is arranged for direct instruction and individual seat work. The students may have very limited and regulated access to the technology resources.	The setting is arranged for direct instruction and individual seat work. The students may have very limited and regulated access to the technology resources.	Technology tools are available on a regular basis.	Multiple technology tools are available in quantities sufficient to meet the needs of all students.	The arrangement of the setting is flexible and varied, allowing different kinds of self-directed learning activities supported by various technologies, including robust access to online resources for all students simultaneously.
Collaborative	The setting is arranged for direct instruction and individual seat work.	The setting allows for the possibility of group work, and at least some collaborative technology tools are available.	Desks and workstations are arranged so that multiple students can access technology tools simultaneously.	Technology tools that allow for collaboration are permanently located in the setting and are available in sufficient quantities to meet the needs of all students.	Technology tools in this setting connect to text, voice, and video chat applications and network access has sufficient bandwidth to support the use of these technologies for all students simultaneously.
Constructive	The setting is arranged so that all students can view the teacher's presentation.	Technology tools that allow for building knowledge are available to students for conventional uses on a limited basis.	Technology tools that facilitate the construction of meaning are available to students for conventional uses.	The setting includes a variety of technology tools and access to rich online resources that are available in sufficient quantities to meet the needs of all students.	The setting includes robust access to a wide variety of technology tools, robust access to online resources and communities, and the ability to publish new content online.

Levels of Technology Integration into the Curriculum

	Entry	Adoption	Adaptation	Infusion	Transformation
Authentic	Resources available via technology in the instructional setting include primarily textbook supplementary material and reference books or websites, such as encyclopedias.	The setting includes access to information about community and world events and primary source materials.	The setting includes access to information outside of school and primary source materials.	The setting provides a variety of technology tools and access to rich online resources, including information outside of the school and primary source materials, that are available in sufficient quantities to meet the needs of all students.	The setting includes technology tools and online resources that allow for student engagement with the local or global communities. A variety of technology tools are available with robust access for all students simultaneously to information outside of the school and primary source materials.
Goal-Directed	The setting includes access to skill building websites and applications, including the ability to track student progress across levels.	The setting includes access to technology tools that allow students to plan, monitor, and evaluate their work.	The setting includes access to technology tools (such as graphic organizers, calendars, spreadsheet software, and timeline software) for planning, monitoring progress, and evaluating outcomes.	The setting includes access to a variety of technology tools for planning in sufficient quantities to meet the needs of all students.	The setting includes access to a wide variety of technology tools and robust access to online resources for all students simultaneously.

The Technology Integration Matrix was developed by the Florida Center for Instructional Technology at the University of South Florida College of Education and funded with grants from the Florida Department of Education. For more information, visit http://mytechmatrix.org.

The Technology Integration Matrix
Table of Teacher Descriptors

This table contains teacher descriptors for each cell of the Technology Integration Matrix (TIM). Other available resources include a tables detailing student activity, instructional settings, and a table of summary indicators for each TIM cell.

Levels of Technology Integration into the Curriculum

Characteristics of the Learning Environment	Entry	Adoption	Adaptation	Infusion	Transformation
Active	The teacher may be the only one actively using technology. This may include using presentation software to support delivery of a lecture. The teacher may also have the students complete "drill and practice" activities on computers to practice basic skills, such as typing.	The teacher controls the type of technology and how it is used. The teacher may be pacing the students through a project, making sure that they each complete each step in the same sequence with the same tool. Although the students are more active than students at the Entry level in their use of technology, the teacher still strongly regulates activities.	The teacher chooses which technology tools to use and when to use them. Because the students are developing a conceptual and procedural knowledge of the technology tools, the teacher does not need to guide students step by step through activities. Instead, the teacher acts as a facilitator toward learning, allowing for greater student engagement with technology tools.	The teacher guides, informs, and contextualizes student choices of technology tools and is flexible and open to student ideas. Lessons are structured so that student use of technology is self-directed.	The teacher serves as a guide, mentor, and model in the use of technology. The teacher encourages and supports the active engagement of students with technology resources. The teacher facilitates lessons in which students are engaged in higher order learning activities that may not have been possible without the use of technology tools. The teacher helps students locate appropriate resources to support student choices.
Collaborative	The teacher directs students to work alone on tasks involving technology.	The teacher directs students in the conventional use of technology tools for working with others.	The teacher provides opportunities for students to use technology to work with others. The teacher selects and provides technology tools for students to use in collaborative ways, and encourages students to begin exploring the use of these tools.	Teacher encourages students to use technology tools collaboratively.	The teacher seeks partnerships outside of the setting to allow students to access experts and peers in other locations, and encourages students to extend the use of collaborative technology tools in higher order learning activities that may not have been possible without the use of technology tools.

Levels of Technology Integration into the Curriculum

	Entry	Adoption	Adaptation	Infusion	Transformation
Constructive	The teacher uses technology to deliver information to students.	The teacher provides some opportunities for students to use technology in conventional ways to build knowledge and experience. The students are constructing meaning about the relationships between prior knowledge and new learning, but the teacher is making the choices regarding technology use.	The teacher has designed a lesson in which students' use of technology tools is integral to building an understanding of a concept. The teacher gives the students access to technology tools and guides them to appropriate resources.	The teacher consistently allows students to select technology tools to use in building an understanding of a concept. The teacher provides a context in which technology tools are seamlessly integrated into a lesson, and is supportive of student autonomy in choosing the tools and when they can best be used to accomplish the desired outcomes.	The teacher facilitates higher order learning opportunities in which students regularly engage in activities that may have been impossible to achieve without the use of technology tools. The teacher encourages students to explore the use of technology tools in unconventional ways and to use the full capacity of multiple tools in order to build knowledge.
Authentic	The teacher assigns work based on a predetermined curriculum unrelated to the students or issues beyond the instructional setting.	The teacher directs students in the conventional use of technology tools for learning activities that are sometimes related to the students or issues beyond the instructional setting.	The teacher creates instruction that purposefully integrates technology tools and provides access to information on community and world problems. The teacher directs the choice of technology tools but students use the tools on their own, and may begin to explore other capabilities of the tools.	The teacher encourages students to use technology tools to make connections to the world outside of the instructional setting and to their lives and interests. The teacher provides a learning context in which students regularly use technology tools and have the freedom to choose the tools that, for each student, best match the task.	The teacher encourages innovative use of technology tools in higher order learning activities that support connections to the lives of the students and the world beyond the instructional setting.
Goal-Directed	The teacher uses technology to give students directions and monitor step-by-step completion of tasks. The teacher monitors the students' progress and sets goals for each student.	The teacher directs students step by step in the conventional use of technology tools to either plan, monitor, or evaluate an activity. For example, the teacher may lead the class step by step through the creation of a KWL chart using concept mapping software.	The teacher selects the technology tools and clearly integrates them into the lesson. The teacher facilitates students independent use of the technology tools to set goals, plan, monitor progress, and evaluate outcomes. For example, in a given project, the teacher may select a spreadsheet program that students use independently to plan and monitor progress. The teacher may provide guidance in breaking down tasks.	The teacher creates a learning context in which students regularly use technology tools for planning, monitoring, and evaluating learning activities. The teacher facilitates students' selection of technology tools.	The teacher creates a rich learning environment in which students regularly engage in higher order planning activities that may have been impossible to achieve without technology. The teacher sets a context in which students are encouraged to use technology tools in unconventional ways that best enable them to monitor their own learning.

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The Technology Integration Matrix
Table of Student Descriptors

This table contains student descriptors for each cell of the Technology Integration Matrix (TIM). Other available resources include a tables detailing teacher activity, instructional settings, and a table of summary indicators for each TIM cell.

Levels of Technology Integration into the Curriculum

Characteristics of the Learning Environment	Entry	Adoption	Adaptation	Infusion	Transformation
Active	Students receive information from the teacher or from other sources. Students may be watching an instructional video on a website or using a computer program for "drill and practice" activities.	Students are using technology in conventional ways and the locus of control is on the teacher.	Students work independently with technology tools in conventional ways. Students are developing a conceptual understanding of technology tools and begin to engage with these tools.	Students understand how to use many types of technology tools, are able to select tools for specific purposes, and use them regularly.	Students have options on how and why to use different technology tools, and often extend the use of tools in unconventional ways. Students are focused on what they are able to do with the technology. The technology tools become an invisible part of the learning.
Collaborative	Students primarily work alone when using technology. Students may collaborate without using technology tools.	Students have opportunities to use collaborative tools, such as email, in conventional ways. These opportunities for collaboration with others through technology or in using technology are limited, and are not a regular part of their learning.	Students have a beginning level of conceptual knowledge of using technology tools for working with others.	Technology use for collaboration by students is regular and normal in this setting. Students choose the best tools to use to accomplish their work.	Students regularly use technology tools for collaboration, to work with peers and experts irrespective of time zone or physical distances.
Constructive	Students receive information from the teacher via technology.	Students begin to utilize technology tools (such as graphic organizers) to build on prior knowledge and construct meaning.	Students begin to use technology tools independently to facilitate construction of meaning. With their growing conceptual understanding of the technology tools, students can explore the use of these tools as they are building knowledge.	Students consistently have opportunities to select technology tools and use them in the way that best facilitates their construction of understanding.	Students use technology to construct and share knowledge in ways that may have been impossible without technology. They have a deep understanding of the technology tools that allows them to explore and extend the use of the tools to construct meaning.

Levels of Technology Integration into the Curriculum

	Entry	Adoption	Adaptation	Infusion	Transformation
Authentic	Students use technology to complete assigned activities that are generally unrelated to the world beyond the instructional setting.	Students have opportunities to apply technology tools to some content-specific activities that are related to the students or issues beyond the instructional setting.	Students begin to use technology tools on their own in activities that have meaning beyond the instructional setting.	Students select appropriate technology tools to complete activities that have a meaningful context beyond the instructional setting. Students regularly use technology tools, and are comfortable in choosing and using the tools in the most meaningful way for each activity.	Students explore and extend the use of technology tools to participate in projects and higher order learning activities that have meaning outside of school. Students regularly engage in these types of activities that may have been impossible to achieve without technology.
Goal-Directed	Students receive directions, guidance, and feedback via technology. For example, students may work through levels of an application that provides progressively more difficult practice activities.	Students follow procedural instructions to use technology to either plan, monitor, or evaluate an activity. For example, students may begin a K-W-L chart using concept mapping application.	Students have opportunities to independently use technology tools to facilitate goal-setting, planning, monitoring, and evaluating specific activities. Students explore the use of the technology tools for these purposes.	Students regularly use technology tools to set goals, plan activities, monitor progress, and evaluate results. The students know how to use, and have access to, a variety of technologies from which they choose. For example, students may choose to write a blog for peer mentoring toward self-selected writing goals.	Students engage in ongoing metacognitive activities at a level that may have been unattainable without the support of technology tools. Students are empowered to extend the use of technology tools and have greater ownership and responsibility for learning.

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