# ESSENTIAL CONDITION ONE: EFFECTIVE INSTRUCTIONAL USES OF TECHNOLOGY EMBEDDED IN STANDARDS-BASED, STUDENT-CENTERED LEARNING

ISTE Definition: Use of information and communication technology (ICT) to facilitate engaging approaches to learning.

#### **Guiding Questions:**

- How is technology being used in our school? How frequently is it being used? By whom? For what purposes?
- To what extent is student technology use targeted toward student achievement of the Georgia Learning Standards (GPSs, QCCs)?
- To what extent is student technology use aligned to research-based, best practices that are most likely to support student engagement, deep understanding of content, and transfer of knowledge? Is day-to-day instruction aligned to research-based best practices? (See Creighton Chapters 5, 7)

Strengths	Weaknesses	Opportunities	Threats
All classrooms have LCD	No clear technology plan for	Professional development on	Many teachers do not want to
projectors, document cameras,	the school.	implementing technology in the	let the students use technology
slates, and computers for use		classroom with model lessons.	that has been purchased for
with instruction. Every teacher	Most teachers are not utilizing		their classroom.
has been trained at least once	technology beyond the basic	Invest in mobile technology	
on the use of technology and	teacher led lecture.	carts for each department for	Many teachers are not using the
embedding it into instruction.		students who do not have	technology at all that has been
	Many teachers are using the	devices to bring to school.	purchased and are unwilling to
All students have a Google	technology but the students are		try new techniques in the
<u>drive account</u> that allows them	not using it for authentic	Help to identify and develop	classroom to embed technology
to create and save documents in	learning experiences.	early adopters who are utilizing	in lessons.
the cloud.		technology for student driven	
	Only three full sized computer	instruction, then have them	Lack of funds for purchasing
All students have access to	labs and zero mobile carts	mentor other teachers.	more technology because of
upgraded wifi and can bring	available to a school of over		budget cuts. We have
their own electronic device to	1400 students. Not all students		purchased some technology
school to use in lessons.	have access to a mobile		already but there has been some
G. 1 . 1	electronic device to bring to		malfunctions and breakage.
Students have access to	school. This makes it very		There has been an
USAtestprep that provides	difficult to get technology into		unwillingness to purchase
instruction and remediation that	every student's hands and use it		replacements, which prevents it
is aligned to CCGPS and is	with student-centered learning.		from being used effectively
available both at school and at			with instruction.
their homes.			Come touch and malvest- int to
There is a school website for			Some teachers reluctant to
There is a <u>school website</u> for			move from teacher-led lecture

communication with		style delivery of instruction to student-driven constructivist
community members.		instruction.
The school utilizes social media to communicate with parents and the community.		

Summary/Gap Analysis: Villa Rica High School finally got projectors, document cameras, and slates for every classroom. The teachers received training on the use of the document cameras and slates. The county also implemented a Bring Your Own Technology initiative as well as setting up every student with a Google Drive account. There needs to be more training on how to bring the technology that the teacher uses and the technology that the student uses together. There is also a significant need for training on how to use technology with students in a constructivist instructional strategy. Sources: informal interviews, informal observations, school website, and county website.

#### **ESSENTIAL CONDITION TWO: Shared Vision**

ISTE Definition: Proactive leadership in developing a shared vision for educational technology among school personnel, students, parents, and the community.

### **Guiding Questions:**

- Is there an official vision for technology use in the district/school? Is it aligned to research-best practices? Is it aligned to state and national visions? Are teachers, administrators, parents, students, and other community members aware of the vision?
- To what extent do teachers, administrators, parents, students, and other community members have a vision for how technology can be used to enhance student learning? What do they <u>believe</u> about technology and what types of technology uses we should encourage in the future? Are their visions similar or different? To what extent are their beliefs about these ideal, preferred technology uses in the future aligned to research and best practice?
- To what extent do educators see technology as critical for improving student achievement of the GPS/QCCs? To preparing tomorrow's workforce? For motivating digital-age learners?
- What strategies have been deployed to date to create a research-based shared vision?
- What needs to be done to achieve broad-scale adoption of a research-based vision for technology use that is likely to lead to improved student achievement?

Strengths	Weaknesses	Opportunities	Threats
There is a district three-year	Few Teachers are aware of the	Teachers and students could	Many teachers are reluctant to
technology plan.	district technology plan and	participate in creating a shared	use technology in the
	how it was created.	vision for technology; this	classroom and are not happy
Technology is a part of the		could be disseminated to the	with the BYOT policy that has
school improvement plan.	Until doing research for this	whole school through	been implemented this year.
	project the current school	department meetings.	
Technology is embedded in the	improvement plan was hidden		Only teachers on the leadership
performance standards of the	from public view, making few	Technology-savvy teachers	team are involved in the
new Common Core Georgia	teachers aware of the plan.	could host workshops to help	creation of the SIP and possibly
<u>Performance Standards</u>		other teachers who are reluctant	technology vision.
(CCGPS)	There is no obvious shared	to try certain technologies in	
	vision for technology at our	their classroom.	
Parent perception survey	school.		
includes questions regarding			
technology use as part of the			
learning process. By taking the			
parents' perception into			
account, we are including them			
in the process of creating a			
shared vision for the school.			

Summary/Gap Analysis:

Carroll County Schools has a <u>five year technology plan</u> that is available on the website. However, most teachers are unaware of the technology plan. Villa Rica High school has technology as a part of the School Improvement Plan, but most teachers are also unaware

of the plan and the parts that pertain to technology. The recent implementation of Bring Your Own Technology has introduced many classrooms to technology in the classroom. However, there is not a common vision of how technology should be used in the classroom. Sources: County Technology Plan, informal interviews, and School Improvement Plan.

### **ESSENTIAL CONDITION THREE: Planning for Technology**

ISTE Definition: A systematic plan aligned with a shared vision for school effectiveness and student learning through the infusion of ICT and digital learning resources.

## **Guiding Questions:**

- *Is there an adequate plan to guide technology use in your school? (either at the district or school level? Integrated into SIP?)*
- What should be done to strengthen planning?

Strengths	Weaknesses	Opportunities	Threats
Technology is part of the SIP.	There isn't a committee that is	Create a technology committee	Some teachers are not using the
	dedicated to looking at	to address the creation of a	basic technology that was
There is a <u>district five-year</u>	technology and its use in the	technology vision and ways to	purchased and are reluctant to
technology plan.	classroom.	implement technology into	try. They are not interested in
		instruction.	trying to plan for technology
There is a district Bring Your	There has not been follow up		because they plan to never use
Own Technology initiative.	with the implementation of new	Provide more professional	it.
	technologies in the classroom.	development on the use of	
A workshop was given on ways	Many teachers have expressed	technologies in the classroom	Technology seems to be an
to utilize technology in the	that they don't feel comfortable	that show the planning process	afterthought and not being used
<u>classroom</u> on the last teacher	utilizing the technology in the	to implement technology.	in ways to help students master
workday.	classroom and therefore do not		a topic.
	know how to plan to use it.		
	There is no technology coach at		
	the school, which makes it very		
	difficult to plan for technology		
	because there isn't one person		
	to implement to plan		
	consistently.		

Summary/Gap Analysis:

Technology is a part of the <u>School Improvement Plan</u> but few teachers are aware of it. The creation of a technology committee that includes teachers who are using technology successively in the classroom would help to improve technology use in the school. These

teachers could also be available to help other teachers implement technology in their classroom. The creation of a technology vision would also help to create a shared responsibility of utilizing technology with students throughout the school. Sources: Informal observations, informal interviews, surveys, School Improvement Plan, District Technology Plan, and the Bring Your Own Technology initiative.

### **ESSENTIAL CONDITION FOUR: Equitable Access**

ISTE Definition: Robust and reliable access to current and emerging technologies and digital resources

#### **Guiding Questions:**

- To what extent do students, teachers, administrators, and parents have access to computers and digital resources necessary to support engaging, standards-based, student-centered learning?
- To what extent is technology arrange/distributed to maximize access for engaging, standards-based, student-centered learning?
- What tools are needed and why?
- Do students/parents/community need/have beyond school access to support the vision for learning?

Strengths	Weaknesses	Opportunities	Threats
Every classroom has an LCD	Only a few classrooms have	Use technology money to	Villa Rica has a large
projector, document camera,	interactive whiteboards and	purchase new laptops for	percentage of students on free
and slate.	student response systems.	teachers to use with new	or reduced lunch who do not
		equipment, interactive	have access to technology at
There are three computer labs	Many of the computers at the	whiteboards, and student	home.
with 32 computers each	school are over 5 years old and	response systems.	
available to the school.	run new software and		Students who misuse
	equipment very slowly.	Purchase mobile carts for each	technology have their
Students and teachers have		department.	technology privileges revoked,
access to Usatestprep for	There are no mobile carts		which makes it difficult to
practice with standards based	available to utilize with	Make the process for resetting	design a lesson that involves
materials.	students in the classroom who	Infinite Campus passwords	the use of technology.
	do not have their own device.	easier so more people will use	
Students, parents, and staff		the resource.	
have access to Infinite Campus	Many students and parents are		
to review students' grades and	locked out of Infinite Campus	Make computer labs available	
attendance.	and the process to reset	for use before and/or after	
	passwords is cumbersome.	school for students who do not	
		have access to technology at	
		home.	

## Summary/Gap Analysis:

Villa Rica has come a long way in the past 3 years with regards to technology. Every classroom is now equipped with a computer, LCD projector, document camera, and slate. However, technology for students to use is limited to what they bring from home and the three computer labs available on campus. Many students at Villa Rica are on free or reduced lunch, which makes it difficult for them to access technology at home. These students would benefit from the purchase of mobile labs or opening the computer labs before or after school. Sources: School Improvement Plan, 2012 Annual Report, and informal observations.

#### **ESSENTIAL CONDITION FIVE: Skilled Personnel**

ISTE Definition: Educators and support staff skilled in the use of ICT appropriate for their job responsibilities.

#### **Guiding Questions:**

- To what extent are educators and support staff skilled in the use of technology appropriate for their job responsibilities?
- What do they currently know and are able to do?
- What are knowledge and skills do they need to acquire?

(Note: No need to discuss professional learning here. Discuss knowledge and skills. This is your needs assessment for professional learning. The essential conditions focus on "personnel," which includes administrators, staff, technology specialists, and teachers. However, in this limited project, you may be wise to focus primarily or even solely on teachers; although you may choose to address the proficiency of other educators/staff IF the need is critical. You must include an assessment of teacher proficiencies.

Strengths	Weaknesses	Opportunities	Threats
An IT specialist is one campus almost everyday and available to help address issues with	Many teachers are unaware of the resources available to them and students to help with	Provide more technology for teachers and students to use in the classroom.	Many teachers do not attend optional workshops on technology training on teacher
All staff members use Infinite Campus to keep track of grades, take attendance, and	Most teachers are only using technology for basic drilling of skills and not for authentic	Provide more training on resources available in the classroom and sample lessons to model the use of the	workdays.  Many teachers are unwilling to relinquish control of the technology and let students use
write IEPs.  All staff members have a google email address and access to google drive to create and share documents.	project-based learning.	individual technologies.	it in student-centered learning.
Some staff members utilize different web resources and software programs to pinpoint student needs and differentiate instruction.			

#### Summary/Gap Analysis:

Villa Rica staff members can access basic technologies to take attendance, keep track of grades, and write IEPs. Many teachers are not allowing students to use technology in the classroom and are not letting students use the technology for student-centered learning. Training with model lessons that utilize technology would help teachers see how it can be used. Sources: informal observations and informal interviews.

## **ESSENTIAL CONDITION SIX: Ongoing Professional Learning**

ISTE Definition: Technology-related professional learning plans and opportunities with dedicated time to practice and share ideas.

#### **Guiding Questions:**

- What professional learning opportunities are available to educators? Are they well-attended? Why or why not?
- Are the current professional learning opportunities matched to the knowledge and skills educators need to acquire? (see Skilled Personnel)
- Do professional learning opportunities reflect the national standards for professional learning (NSDC)?
- Do educators have both formal and informal opportunities to learn?
- Is technology-related professional learning integrated into all professional learning opportunities or isolated as a separate topic?
- How must professional learning improve/change in order to achieve the shared vision?

Strengths	Weaknesses	Opportunities	Threats
Required and optional technology training sessions are offered periodically.	Technology training is offered as one-shot opportunity. Little follow up is available.  Prior knowledge of participants	Training sessions could be offered during regularly scheduled departmental meetings and/or before/after school.	Optional sessions are poorly attended due to increased staff responsibilities and resentment on part of teachers.
	is not considered when scheduling training.	Members of grade-level teams could be trained to provide one-on-one support to fellow team members.	Training is sometimes required although technology is not available to participants.

## Summary/Gap Analysis:

Training sessions are offered on a somewhat regular basis although not always well attended. Training is not offered at times when technology is available to teachers and/or teachers have prerequisite skills to use the technology. Teachers resent required meetings and do not attend optional trainings opportunities. If embedded in other faculty/team meetings, professional learning might be better delivered and received. Sources: review of professional learning offered, informal observations, and informal interviews.

### **ESSENTIAL CONDITION SEVEN: Technical Support**

ISTE Definition: Consistent and reliable assistance for maintaining, renewing, and using ICT and digital resources.

#### **Guiding Questions:**

- To what extent is available equipment operable and reliable for instruction?
- Is there tech assistance available for technical issues when they arise? How responsive is tech support? Are current "down time" averages acceptable?
- Is tech support knowledgeable? What training might they need?
- In addition to break/fix issues, are support staff available to help with instructional issues when teachers try to use technology in the classroom?

Strengths	Weaknesses	Opportunities	Threats
Technical support is available	Technical support can	There are a few staff members	Funding is limited for
on site 3-4 days a week.	sometimes not be found	in various departments that are	maintenance and upgrade of
	immediately and the	trained in different aspects of	existing equipment and
Media Specialist is	implementation of the	technology.	software.
knowledgeable and will to help	technology in the classroom		
with technical issues.	must be abandoned until the	Create a team of teachers to	
	problem is addressed.	provide additional	
		technological support for	
	No support for class sets of	hardware/software issues.	
	response systems.		
	There are often disruptions to the internet service and no communication is initiated with the teachers or is often hours into the outage.  Computers in labs are aging		
	and resources to maintain		
	equipment are limited.		
	Technical support for		
	instructional purposes is not		
	available		

Summary/Gap Analysis:

On-site technical support for hardware and software issues is available most days with online tech request portal for teacher/staff use. Generally, computer labs are maintained and operable although bandwidth sometimes limits use. Digital textbooks are limited but all

textbooks are limited at this time due to budge restrictions. Few quality examples of engaged learning activities are available within the school. Sources: interview with Media Specialist, informal observations, and informal interviews.

### **ESSENTIAL CONDITION EIGHT: Curriculum Framework**

ISTE Definition: Content standards and related digital curriculum resources

#### **Guiding Questions:**

- To what extent are educators, students, and parents aware of student technology standards? (OCCs/NET-S)
- Are technology standards aligned to content standards to help teachers integrate technology skills into day-to-day instruction and not teach technology as a separate subject?
- To what extent are there digital curriculum resources available to teachers so that they can integrate technology into the GPS/QCCs as appropriate?
- How is student technology literacy assessed?

Strengths	Weaknesses	Opportunities	Threats
Technology and business	Most teachers have no	Identify technology embedded	Many of our students are
teacher have awareness of	knowledge of technology	in curriculum standards and	unable to access the technology
student technology standards.	standards connected with	create awareness among the	resources that we currently
	curriculum standards.	faculty.	have because they are locked
Math teachers are aware of			out and the process for
technology tied to math	Teachers are not aware of	Explain how technology can	unlocking it makes it time
standards.	NET-S.	support learning and lead to	consuming. Therefore, it is
		increased mastery of	difficult to assess students on
	Technology literacy is not assessed outside of technology	curriculum standards	their technology standards.
	and business classes.		Digital textbooks and resources
			are limited as are hardcopies.
			Student technology literacy is
			assessed only in technology
			classes.

#### Summary/Gap Analysis:

It is evident that although technology is embedded in standards, few teachers teach and assess mastery of tech standards. Outside of business and technology departments, few teachers and administrators are familiar with NET-S standards. The staff needs to develop a shared vision for technology and create technology-rich lessons to ensure students meet technology standards and are ready for 21st century education and jobs. Sources: informal observations in departmental and faculty meetings.