

SWOT Analysis Template for Technology Planning Needs Assessment

What is the current reality in our school?

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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)*

<i>Strengths</i>	<i>Weaknesses</i>	<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> • Standards-based instruction using workshop model • Teachers use interactive whiteboards, projectors, slate boards, and document cameras in instruction daily in most classrooms • Students use MobyMax, Zaner-Bloser, Classworks, Brainpop, SRA Imagine IT to reinforce content standards • 4th and 5th grade teachers use Edmodo for daily standards-based assignments, research, and assessments • 3rd, 4th, and 5th grade teachers use Class Dojo for classroom management 	<ul style="list-style-type: none"> • Unclear expectations of technology integration • Lack of collaboration regarding technology instruction • Computers often used for drill and skill • Lack of space for STEM lab • Inept use of Blackboard • Limited technology professional development • Occasional loss of internet • Aging technology • Rapidly changing technologies • Lack of space for STEM Lab 	<ul style="list-style-type: none"> • Blackboard adopted as system wide Learning Management System (LMS) • STEM Committee being formed • Teachers willing to learn standards and how to integrate • Upper grades teachers can mentor lower grades teachers in implementation of project-based learning 	<ul style="list-style-type: none"> • Some resistant, older experienced teachers • Teachers who are not tech "Savvy"

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<ul style="list-style-type: none"> • 3rd, 4th, 5th use Flipgrid to enhance wax museum • 3rd, 4th, 5th grade science and social studies teachers use project-based learning with technology integration • Some teachers have implement class blogs 			
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Summary/Gap Analysis:

Students are learning through research and standards-based instruction with some integration of technology. This standards-based instruction concentrates on content and does not typically include technology standards.

Our essential conditions survey shows that student-center learning occurs about 50% of the time and when teachers were asked about integration of technology to achieve curriculum goals only 53.5% responded that they use it on a daily basis. The disheartening finding is that 6.7% never or rarely implement technology in the classroom. (Hicks, 2015)

The Bartow County School System has adopted Blackboard where there is an alignment to Georgia Standards. Teachers have had minimal training. Our upper grades teachers use Edmodo because of its ease of use for students and teachers.

Teachers are trained in differentiation and beginning to be trained in Project-Based Learning (PBL). A committee is being formed to research implementing STEM. Teachers use workshop model daily, which lends itself to integrating technology. We now need to work on integrating the technology that we have into our daily curriculum. “The traditional teacher-centered instruction of predetermined plans, skills, and content is inappropriate” (Creighton, 2003, Brooks & Brooks, 1993, as cited in Nicaise & Barnes, 1996).

The Bartow County School System and Adairsville Elementary School place importance on technology. It is my hope that there will be an implementation of ISTE standards in all classrooms as we move forward.

Data Sources:

Adairsville Elementary School Improvement Plan SY 2014/15. (2014). Adairsville, GA: Bartow County Schools.

Creighton, T. (2003). *The principal as technology leader*. Thousand Oaks, CA: Corwin.

Hicks, R. (2015). *Google Forms: Adapted ISTE Essential Conditions Survey*. Adairsville, GA: Bartow County Schools.

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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 believe 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 view 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?*

<i>Strengths</i>	<i>Weaknesses</i>	<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> • Faculty see importance in technology implementation 	<ul style="list-style-type: none"> • Adairsville Elementary does not currently have a shared technology vision • Need shared vision developed by all stakeholders 	<ul style="list-style-type: none"> • Technology committee with representatives from all grade levels • Active PTO members support technology 	<ul style="list-style-type: none"> • Lack of stakeholder participation from community

Summary/Gap Analysis:

Adairsville Elementary School is part of the Bartow County School System who, “is committed to providing quality instruction and excellent educational experiences while insuring academic achievement through technology for students.” (BCSS, 2012) This is a great vision, however; teachers in the county don’t necessarily know this vision and aren’t held accountable for implementing it.

Stakeholders were asked if a shared vision existed 66.7% believe one does and that there is some implementation (Hicks, 2015). It is an assumption that a vision exists because we have the technology. After completing our essential conditions survey my thoughts

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about a shared vision were realized. The Lead and Reform Diagnostic Tool listed the school at 24% in the shared vision category. We are definitely in the beginning stage.

While technology is being used in most classrooms there is no clear direction or plan in place at the school level and instruction is not always aligned to national or state technology standards.

There needs to be a focus on aligning ISTE standards with standards-based instruction in all classrooms and a clear vision of what that looks like given to all teachers.

Data Sources: Bartow County School System Technology Plan 2012-2015. (2012). Retrieved from:

http://www.bartow.k12.ga.us/files/_yLDAL_/c641f947b06506233745a49013852ec4/Sytem_Technology_Plan.pdf

Hicks, R. (2015). *Google Forms: Adapted ISTE Essential Conditions Survey*. Adairsville, GA: Bartow County Schools.

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<http://www.iste.org/lead/lead-transform>

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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?*

<i>Strengths</i>	<i>Weaknesses</i>	<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> • Bartow County School System technology plan in place • Bartow County School System vision in place 	<ul style="list-style-type: none"> • No current technology plan or alignment with shared vision • Technology not currently a priority • School Improvement Plan does not address technology needs 	<ul style="list-style-type: none"> • Technology committee with grade level representatives exist • Multiple stakeholders currently involved in School Improvement Plan (SIP) could be utilized to help develop and integrate shared vision with SIP 	<ul style="list-style-type: none"> • Hard to keep up with rapidly changing technologies • Time constraints for developing plan

Summary/Gap Analysis:

There is no specific technology plan in place for Adairsville Elementary School; however, there is a plan in place for the district. Technology is addressed very minimally in the School Improvement Plan (SIP) and it is usually in the form of naming a digital resource that will be used to fulfill a goal.

There needs to be a plan in place for technology that is integrated into the Adairsville Elementary School Improvement Plan. Teachers are not asked what professional development they need in technology. When I asked teachers what professional development they would like to see 60% wanted more Blackboard or Edmodo training. There needs to be professional development plan to help guide teachers in technology.

Data Sources: Bartow County School System Technology Plan 2012-2015. (2012). Retrieved from:

http://www.bartow.k12.ga.us/files/_yLDAL_/c641f947b06506233745a49013852ec4/Sytem_Technology_Plan.pdf

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ESSENTIAL CONDITION FOUR: Equitable Access (Specifically address low SES and gender groups)

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 arranged/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?*

<i>Strengths</i>	<i>Weaknesses</i>	<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> • ALL 4th and 5th graders have MacBook Airs at a ratio of 1:1 • Student computer ratio of 4.15:1 according to technology survey (BCSS, 2012) • Classroom set of MacBook Airs for checkout • Two class sets of I Pads for check out • All teachers have MacBook Airs • All k-3 classrooms have I Mac and 3 desktops • All classrooms have interactive board, projector, document camera, and slate • ESOL has three dedicated computers • Computer lab with 30 desktop computers 	<ul style="list-style-type: none"> • Professional development is sporadic and stakeholders have no voice in what is offered • School owned elementary school student technology must remain at school • K-3 teachers must wait to check out technology for whole class to use • Lack of space for STEM lab 	<ul style="list-style-type: none"> • PTO willing to purchase more computers and/or I Pads • Literacy Night, Math Night, PTO meetings offer opportunities to include technology training and inform stakeholders of technology opportunities 	<ul style="list-style-type: none"> • Aging computers • Some untrained faculty • Local network frequently down • Outdoor classrooms (2nd grade, gifted, special education, ESOL) wireless sporadically works

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- Afterschool students have access to lab for homework
- Plethora of digital resources

Summary/Gap Analysis:

Our technology reality is that all 4th and 5th grade students have MacBook Airs they use daily and return to homeroom for charging. There is a class set of MacBook Airs for grades k-3 to check out, a computer lab with 30 desktop computers, and there are two class sets of I pads to checkout. We have a number of digital learning tools available. It is common to see computers being used only for drill and practice in lower grades while used for research and presentations in upper grades. Other technologies that teachers use include interactive boards and projectors daily for whole group instruction. Document cameras are available as another technology resource to analyze student work in small or whole group

Students have maximum use of technology during school hours. In grades K-3 students share technology at a rate of 4.15:1 (BCSS, 2012). The current equitable access gap exists between lower and upper grades. Our goal is to have a ratio of 1:1.

Adairsville Elementary School is considered a Title 1 school so many students have no access to technology at home. We are working on offering one night a week where families can come to the school for use of technology in the lab. Being a Title 1 school funds have been slowly allocated to the purchase of additional technology.

Teachers and students have a plethora of digital resources available to use during school hours and at home.

Our ISTE Lead and Reform Diagnostic shows that this is the only area that we are meeting with a 58%. While a survey of stakeholders shows that 26.7% of teachers strongly disagree that students have equitable access on a daily basis and 33.3% are neutral and 33.3% feel strongly that teachers have equitable access on a daily basis (Hicks,2015).

Our PTO has committed to help fund more computers and I Pads we feel this will help. We have also applied for grants to help fill the equity gap between upper and lower grades.

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http://www.bartow.k12.ga.us/files/_yLDAL_/c641f947b06506233745a49013852ec4/Sytem_Technology_Plan.pdf

International Society for Technology in Education. (2009a). *ISTE Essential Conditions*. Retrieved from ISTE Standards:

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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.

<i>Strengths</i>	<i>Weaknesses</i>	<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> • Teachers place importance on technology • Teachers can successfully use interactive boards, projectors, and document cameras • Teachers record attendance using Powerschool • Teachers are proficient with use of email • Teachers have technologies available for use during instruction and at home for planning • Many teachers are proficient in various Web 2.0 tools • Teachers with Masters or Ed.S. with a concentration 	<ul style="list-style-type: none"> • Lack of ISTE standards integration • Lack of collaboration for technology integration 	<ul style="list-style-type: none"> • Teachers want to learn • Teachers willing to serve as mentors • Teachers have been trained in the Blackboard basics 	<ul style="list-style-type: none"> • Continuous changes in technology prevent proficiency • Time constraints for learning new technologies

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in technology <ul style="list-style-type: none"> • Teachers have been trained in differentiating instruction. 			
<p>Summary/Gap Analysis:</p> <p><i>When surveying teachers I found that 53.5% of teachers use technology to achieve curriculum on a daily basis, 33.3% use technology for assessments sometimes, 46.7% use technology on a daily basis to motivate students, and 60% use technology to support students needs. The ISTE Lead and Reform Diagnostic Tool showed that on skilled personnel we were at 50%, which means we are approaching and we are at 33% in empowered leaders.</i></p> <p><i>Many teachers are tech “Savvy” and help others. Several teachers have completed a Master’s or Ed.S. with a technology emphasis. There is a “tech” specialist teacher at each grade level that teachers ask questions or seek help from.</i></p> <p><i>Teachers were asked how they integrate technology responses include: in lessons, smart board, apps on iPads, promethean board, computers, Powerpoint, Edmodo, search engines, class blog, project based learning, collaboration, assessment.</i></p> <p><i>All teachers have MacBook Airs so teachers are expected to check email, enter attendance, know basics of the computer, and use technology in the classroom on a daily basis. Some teachers are more proficient than others.</i></p> <p><i>There is a lack of knowledge of ISTE standards to teachers need to be educated about their importance and to begin integrating them into their curriculum.</i></p> <p><i>A technology mentor program would greatly benefit teachers who are less than tech Savvy.</i></p>			
<p>Data Sources: Hicks, R. (2015). <i>Google Forms: Adapted ISTE Essential Conditions Survey</i>. Adairsville, GA: Bartow County Schools.</p> <p>International Society for Technology in Education. (2009a). <i>ISTE Lead and Reform Diagnostic Tool</i>. Retrieved from ISTE Standards: http://www.iste.org/lead/lead-transform</p>			

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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?*

<i>Strengths</i>	<i>Weaknesses</i>	<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> • All teachers have MacBook Airs for use during trainings • Once a month the county technology coach conducts a basic training during grade level planning 	<ul style="list-style-type: none"> • Professional learning opportunities are sporadic • Professional learning opportunities not based on ISTE standards, NSDC, or state technology standards rather programs • Professional learning opportunities are very short and usually don't have time for application and follow up for questions • No definite plan for technology professional development 	<ul style="list-style-type: none"> • Tech "Savvy" teachers can mentor and model project based learning and flipped classrooms • Online webinars • Three day technology conference offered by Bartow County School System in summer 	<ul style="list-style-type: none"> • Rapidly changing technologies • Lack of time • Funding

Summary/Gap Analysis:

Ongoing Professional learning at Adairsville Elementary School is minimal. The professional learning is shortened blocks of time and not extended or in depth. We are approaching based on the essential conditions survey. According to our School Improvement plan "We have devoted sufficient resources to carry out effectively the professional development activities that address the root causes

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of academic problems. Weekly grade level meetings address implementation of interventions, activities, and tasks to promote high academic achievement (SIP, 2014-2015). As you can see there is no focus on technology professional development. We have a plethora of digital resources available with many teachers not proficient at using them. Ongoing Professional development of digital resources and technology standards implementation would help ensure that teachers are proficient and tech savvy.

The Bartow County School System technology plan states that professional development are clearly outlined. All teachers have been “trained” in Blackboard, however; many teachers still don’t know how to use it or shy away from it. The plan is detailed for two-year timeline. It is time to update the timeline and begin additional professional development.

Data Sources: Adairsville Elementary School Improvement Plan SY 2014/15. (2014). Adairsville, GA: Bartow County Schools.
Bartow County School System Technology Plan 2012-2015. (2012). Retrieved from:
http://www.bartow.k12.ga.us/files/_yLDAL_/c641f947b06506233745a49013852ec4/Sytem_Technology_Plan.pdf

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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?*

<i>Strengths</i>	<i>Weaknesses</i>	<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> • Designated technology specialist • Technology support one day each week • Grade level technology teacher specialist • Technology committee • Online work order submission • Tech support is helpful and willing to answer questions • Media specialists available for immediate issues 	<ul style="list-style-type: none"> • Length of time for repairs not always timely • Lack of technology specialist on site daily 	<ul style="list-style-type: none"> • Technology specialist willing to “train” if time allows 	<ul style="list-style-type: none"> • Connectivity • Aging technologies

Summary/Gap Analysis:

The ISTE Lead and Reform Diagnostic tool shows that technical support ranks 48%, which is listed as approaching. When teachers were surveyed results showed that 73.3% felt there is some assistance for supporting faculty and students but understaffed while 13.5% felt there was adequate assistance and plan for supporting faculty and students in technology. One teacher commented that there are not enough people to help but those who can do.

Adairsville Elementary School submits work orders to a technology specialist who comes one day a week. If there are enough

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submitted work orders the designated technology specialist if not work orders have to wait until the next week.

Grade level teacher technology specialist and the media specialist have upgraded access to install updates and to fix basic errors.

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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? (QCCs/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?*

<i>Strengths</i>	<i>Weaknesses</i>	<i>Opportunities</i>	<i>Threats</i>
<ul style="list-style-type: none"> • Numerous digital resources are available for use 	<ul style="list-style-type: none"> • Teachers are not required to use ISTE standards • Technology use not aligned to national technology standards 	<ul style="list-style-type: none"> • Teachers willing to implement technology standards 	<ul style="list-style-type: none"> • Rapidly changing technologies

Summary/Gap Analysis:

With the amount of technology available it is disheartening to know that many teachers in our school and county who are unaware that technology standards exist. Teachers who have studied with an emphasis know that they exist and if they have a conversation with another teacher they may mention it in passing. We need to correct this through education and training. Another that is disturbing is the lack of knowledge about the county technology plan. I looked for it because I needed it for this technology program. It was not easy to find and I had to “dig” to find it. It should be on the forefront rather than hidden in 5 levels of a website. It is time for Bartow County School System and Adairsville Elementary to implement technology standards and follow up to ensure they are being integrated on a daily basis.

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