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)*

Strengths	*Weaknesses*	*Opportunities*	*Threats*
• Four technology connection classes available for students. • Teams and content areas utilizing 1:1 devices, BYOD, and classroom iPad and laptop carts. • Learning Management System offered to all students and staff. • Content classes focused on content standards. • Technology classes focused on NETS-S standards.	• Teachers unsure of how to use technology effectively and not just as a productivity tool. • ISTE and NETS-S standards not focused on or encouraged for use in the content area classes. • Resistors and saboteurs not interested in learning how to effectively incorporate technology in their classroom.	• Attending and redelivering information from the GaETC, ISTE, or other technology based conference.	• Change in ISTE or Common Core Standards. • Demand for students to perform on standardized testing as it becomes linked to teacher pay and evaluation. • If the local industry decreases in profit, they might decrease grants or make fewer donations to the school to provide needed resources.

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Summary/Gap Analysis:

Dalton Middle School is blessed with a large population of teachers who not only use technology in their classroom frequently, but also have students using technology as well. When asked in a recent survey, the majority of teachers have their students using technology to complete research and assessments. While it is beneficial for the teachers and students to utilize it in this way and for productivity purposes, it is not the most efficient research-based strategy for using technology in the classroom to improve student achievement. Training needs to take place to help teachers learn new tools and strategies for using technology efficiently such as Project-Based Learning. Inquiry based learning is utilized throughout the school, but teachers need to learn how to transition this approach to learning utilizing technology. The survey found that many different effective Web 2.0 tools and technologies are utilized throughout the school by different teachers so staff development and collaboration needs to occur to make others aware of these possibilities. This could be done through the creation of a gallery walk where students showcase to teachers their favorite or most meaningful assignment they have completed using technology.

Data Sources: ISTE Lead & Transform Diagnostic Tool, Teacher Survey Responses, Dalton Public Schools 2015-2018 Technology Plan, Personal observations

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 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?*

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Strengths	*Weaknesses*	*Opportunities*	*Threats*
• The district has a clear vision for technology use designated in the district technology plan. • The district technology vision aligns with the school vision and mission.	• Most staff, students, and parents are unaware that there is a specific vision related to technology for the district. • The school does not have a vision specific to technology integration.	• Community based conversations revolving around the vision of technology usage in the school. • Consult local businesses relating to the technological needs of workers both currently and in the future.	• The local industry could change and demand a different type of technology vision for the students to be successful in the workforce.

Summary/Gap Analysis:

Dalton Public Schools has a clear and concise vision for technology usage by students and staff. While this is a well-crafted plan for our district to follow, only certain individuals in the technology department are even aware that it exists unless you know to ask for it. It was created with the needs of our students and community in mind so that the students graduate from our system with the skills needed to be successful in the current society. A technology vision is needed for the middle school so that we can better help our students bridge the gap from elementary school skills to those required of them in high school. The vision and plan would have greater success if all stakeholders were able to contribute and feel like they had a voice in this process (Creighton, 2003.)

Data Sources: ISTE Lead & Transform Diagnostic Tool, Teacher Survey Responses, Dalton Public Schools 2015-2018 Technology Plan, Personal observations

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.

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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*
• There is a district plan in place for technology use and integration. • The school technology classes collaborate to ensure all students in the school are technology literate.	• The current technology plan was developed by former technology directors, not the current directors who are implementing the plan. • The lack of a school technology plan. • A disconnect between the district level personnel creating the plan and the teachers in the classroom who are asked to implement what is planned.	• Joint meetings with local businesses to discuss technology planning at the school level as well as the business level.	• Legislature could affect the funding allocated to the district for technology needs. • Student population and needs could change.

Summary/Gap Analysis:

The district has a well-crafted plan with benchmarks in place to help assess the progress of the three year plan. On the school level there are overarching goals that we would like to achieve, but not a clear plan as to how these goals will be accomplished. Our district is in a state of transition and have just hired a new Director of Technology as well as a new Instructional Technology Coordinator. While both of these individuals have great ideas, both have limited knowledge of the education realm and are having to carry out the implementation of a technology plan and vision that they had no part in creating.

In moving forward, the school needs to work more closely on focusing on developing a clear plan that takes advantage of all of the technology resources we have available. This means that there needs to be more communication between the technology side and the teachers in the classrooms. The technology connections teachers are a wonderful tool for helping in this process as this is something they do on a regular basis.

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Data Sources: ISTE Lead & Transform Diagnostic Tool, Teacher Survey Responses, Dalton Public Schools 2015-2018 Technology Plan, Personal observations

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 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*
• Large quantity of devices available to all students through iPad and laptop carts that can be checked out by teachers, 50 stationary computers for use in the media center, and BYOD policies in classrooms. • 1:1 devices for teams of all demographics and backgrounds that can be used both at school and at home. • Learning Management System provides access for all students to quality engaging resources and content.	• Low socioeconomic status of students presents a challenge for students to BYOD. • Lack of funding to fill the need for more 1:1 teams throughout the school. • Access to Wi-Fi in the community is limited.	• Collect recycled devices within the community to provide more devices for students to use both within the school and at home. • Local Community Center and library provide computer labs and Wi-Fi that are free to use and located strategically within the community.	• Student needs could change requiring access to new and different technologies. • Economic downfall could lead to less funding from businesses and families to provide further technology for students.

• Afterschool Boost program available two days a week for students to stay and work if they do not have Internet access at home.			

Summary/Gap Analysis:

Dalton Middle School is a Title I school with a low socioeconomic status average. Many of our students have no access to technology at home and depend on the access provided to them through the school. Equitable access is provided to all students regardless of their background as they are enrolled in our school. This includes the plethora of computers available for use in the media center, technology rooms, carts that teachers can check out, and the teams that are introducing the 1:1 devices. The 1:1 initiative is one that needs to grow to continue equitable access because the students are also allowed to take the computers home for a small fee during the school year if they are on a 1:1 team. The amount of teachers wanting 1:1 devices in their classroom as risen above what funding can supply and additional funding through grants is being sought currently. On top of devices being accessible to students, access to free Wi-Fi within the community is crucial for students to be able to utilize the devices for instructional purposes using the learning management system that many teachers use for their classes.

Data Sources: ISTE Lead & Transform Diagnostic Tool, Teacher Survey Responses, Dalton Public Schools 2015-2018 Technology Plan, Personal 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,

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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*
• Increased number of teachers enrolling and completing graduate programs in instructional technology. • Newly hired teachers are familiar with using a LMS from their college courses and are able to easily incorporate them in their own classrooms. • Teachers are incorporating technology in the class and creating courses within the LMS for students to access and use.	• Current technology support staff are skilled in the informational side of technology, not the instructional side. • New technology is ordered and installed without proper training so teacher is left not knowing how to effectively use it. • Technology coaches are not employed in the school.	• Continuing education courses offered in person and online through Northwest Georgia RESA specifically related to the educational needs of educators. • Promoting of the school and education system at job fairs and in the community.	• Skilled college graduates choosing other careers with higher incentives.

Summary/Gap Analysis:

In a school with a growing population, many new teachers are hired each year. The typical new hire is a first year teacher with skills and knowledge of using technology and learning management systems practiced in the classroom setting during their college coursework. These skills are coupled with the motivation and enthusiasm to bring the same technologies to their own classrooms as they work with their own students. On top of these young teachers we are also filled with a large population of teachers who are continuously looking for the most effective tools to utilize in their classrooms to prepare learners for the next step. Right now, blended learning, hybrid learning, and online learning are situations that our students need to be prepared to handle in high school and college. Constructing a staff of teachers who are all capable of creating this environment is pivotal in student success. We

must also offer incentives for the skilled personnel within our school so that they are not looking for new opportunities in other districts or career paths.

Data Sources: ISTE Lead & Transform Diagnostic Tool, Teacher Survey Responses, Dalton Public Schools 2015-2018 Technology Plan, Personal observations

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*
• Qualified staff located within the school to lead professional development sessions. • Teachers are willing to seek out others to help guide them through a new technology. • Both formal and informal training environments are available to help teachers learn.	• Implementation plans lack the guidance of classroom teachers before they are presented to all staff. • All staff are expected to learn new technologies at the same pace. • Some teachers are not open to learning new technologies. • Limited time is given between introduction of	• Consult local businesses for support in training and financial support, such as grants or donations. • Attending technology conferences such as GaETC and ISTE.	• Funding allocation could change from the state or district level to affect what professional development is offered.

• Collaboration between technology teachers and content teachers.	new technology and expected use.		

Summary/Gap Analysis:

Teachers with Instructional Technology program degrees are becoming more common in Dalton Middle School. This is in part due to the nature of the degree and that it is extremely applicable for those still in the classroom, as well as the fact that we do not currently have a technology coach who can lead us in continued professional development in the realm of instructional technology. With such a large group of qualified teachers on staff to lead professional development, it becomes the task of those interested to decide what type of training they would like to see and finding the time to make it happen. Having such a large staff it is seemingly impossible to find a time to conduct proper training without pulling teachers out of the classroom and replacing them with a substitute. However, substitutes are expensive when you need that many and you put at risk the quality of the presentation if you try to shorten it to fit in a small window of time available after school. Community groups need to be formed within the school where we share and collaborate not only on the content, which we already have, but also share instructional strategies for integrating technology seamlessly to enhance the overall lesson.

Data Sources: ISTE Lead & Transform Diagnostic Tool, Teacher Survey Responses, Dalton Public Schools 2015-2018 Technology Plan, Personal observations

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 <u>instructional</u> issues when teachers try to use technology in the classroom?*

Strengths	*Weaknesses*	*Opportunities*	*Threats*

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• Technology HelpDesk established to process technology maintenance requests. • Technology support staff is knowledgeable about the equipment and able to repair as needed.	• One technology support position to meet the needs of 1850 students plus their teachers. • Immediate assistance not available for instructional purposes.	• Hiring technical support that have a background in instructional strategies and uses of technology in the classroom.	• State mandated online testing monopolizing time and efforts of technology support staff. • Higher incentives for trained technicians in the business world.

Summary/Gap Analysis:

As the largest school in the district, we have the largest amount of technology available for student and teacher use that must be maintained and renewed as needed. However, while we have a great organizational tool in Technology HelpDesk to enter request for support to the technology department, we are only assigned one technician for all of our issues. This year that individual averaged a lag time of three weeks from the time the request was submitted to the time they were able to resolve the issue. The wait times resulted in teachers becoming frustrated that they could not carry out their lessons as intended and often had to stop using the technology altogether until it could be serviced. If the technology required ordering parts or replacement the timeline increased as well. To help alleviate these issues, we need to hire an additional technology support position that is skilled in both the technical side as well as the instructional side of technology usage in the classroom. The new position would act as a technology coach and be able to help with troubleshooting issues to get the technology back in the hands of those that need it on a smaller time frame.

Data Sources: ISTE Lead & Transform Diagnostic Tool, Teacher Survey Responses, Dalton Public Schools 2015-2018 Technology Plan, Personal observations

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)*

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- *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 classes that focus on technology standards with students and try to collaborate with content classes. • Digital curriculum resources are teacher made and aligned to content standards. • Technology literacy assessed through technology courses at the end of each semester.	• Most teachers are unaware of technology standards and how to integrate them into their classroom. • Students know of technology standards but think they only apply to technology courses. • Digital curriculum resources are not available school-wide.	• Working with other districts to share digital resources through Canvas Commons.	• Non-educators making key legislature decisions to change the standards and resources available to teachers and students.

Summary/Gap Analysis:

Dalton Middle has four technology connection classes who focus on different aspects of technology applications while still keeping the NETS-S as the core of their curriculum. Other than these teachers and those who have been through graduate degree programs in technology fields, most content teachers are not familiar with the ISTE or NETS standards. Collaboration needs to increase between these technology teachers and the content teachers to guide them in the best ways to integrate what they already do with the technology standards. Creating a committee with representatives from each grade and content as well as those thoroughly versed in the technology standards will help bridge the gap and help the settlers, resistors, and saboteurs according to Creighton (2003) feel more comfortable in the use of technology in their classroom to improve student achievement.

Data Sources: ISTE Lead & Transform Diagnostic Tool, Teacher Survey Responses, Dalton Public Schools 2015-2018 Technology Plan, Personal observations

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Resources:

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

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Appendix A: Teacher Survey Questions & Results

What is your role in the school system? (Circle One)		
Teacher	Administrator	Technology Specialist
33	**2**	**1**

How many total years have you worked in education as a teacher, administrator, or technology specialist? (Circle One)				
0-3 yrs	4-10 yrs	11-15 yrs	16-20 yrs	21+ yrs
3	**14**	**10**	**1**	**13**

How often do you use technology for productivity (lesson plans, email, etc.) at work? (Circle One)			
Once a week	2-3 times a week	4-6 times a week	7+ times a week
0	**0**	**8**	**33**

How often do you use technology for instructional purposes during the week? (Circle One)			
Once a week	2-3 times a week	4-6 times a week	7+ times a week
3	**5**	**11**	**20**

How often do you have students using technology during the week? (Circle One)			
Once a week	2-3 times a week	4-6 times a week	7+ times a week
10	**16**	**9**	**6**

What type of technology do students use in your classroom? (Circle ALL that apply and/or provide other opportunities)			
School provided laptops	School provided iPads	Personal Computers and/or iPads	Personal Cellular Phones
34	**26**	**19**	**31**
Other: _____			

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Tuner/Metronome, Classroom Performance System (clickers), iPods

When using technology with your students what do you have them doing? (Mark ALL that apply and/or provide other opportunities)			
Research	Word Processing	Creation of Digital Products	Assessments
28	**16**	**17**	**27**
Discussions	WebQuests	Submission of Assignments	Collaboration with Students/Teachers
18	**10**	**20**	**18**

Other: _____

Blogging, Interactive practice and lesson modifications, Online instruction, Practice Activities, Building lessons in Canvas, Reading program specific to our alternate curriculum that is teacher led

Do you feel supported in your use of technology within the school? (Circle One)		
Yes	Sometimes	No
18	**18**	**4**

Do you feel the district supports you in your use of technology? (Circle One)		
Yes	Sometimes	No
14	**20**	**7**

Would you like more professional development for effectively using technology in your classroom? (Circle One)	
No	Yes
11	**30**

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Is there a certain thing you would like training in regarding educational technology? Explain in the space provided.
• **Kid blog, Weebly, etc.** • **Developing lessons using technology tools. Not general – look at this and that, but actually letting teachers bring lessons and develop methods of incorporating technology to enhance the outcomes for students.** • **Next steps for a 21st century classroom, collaboration, and planning/designing around technology** • **Take that money and put the technology in our classrooms** • **How to use technology when there aren't enough devices** • **Better instruction for Canvas** • **I need more help to learn how to Canvas, etc.** • **I just need help staying up to date on the latest ideas and practices** • **Across grade level share out sessions, in depth canvas training** • **I would like more examples of technology resources and how to use them in the classroom** • **More efficient with Canvas Program** • **Conferences out of state** • **Ideas for how to integrate** • **Really I need access to technology for my students**