DIGITAL LEARNING READINESS REPORT

FUTURE READY — PREPARING STUDENTS FOR SUCCESS

BRANCHBURG TOWNSHIP

Date of Report: 05/15/2016

Digital Learning Readiness Score: **5.1** *(of 10)*

Technology now allows for personalized digital learning for every student in the nation. The Future Ready Schools District Pledge, according to the U.S. Department of Education, is designed to set out a roadmap to achieve that success and to commit districts to move as quickly as possible towards a shared vision of preparing students for success in college, careers and citizenship. This roadmap can only be accomplished through a systemic approach to change, as outlined in the graphic below.

With student learning at the center, a district must align each of the seven (7) key categories, or gears, in order to advance toward successful digital learning:
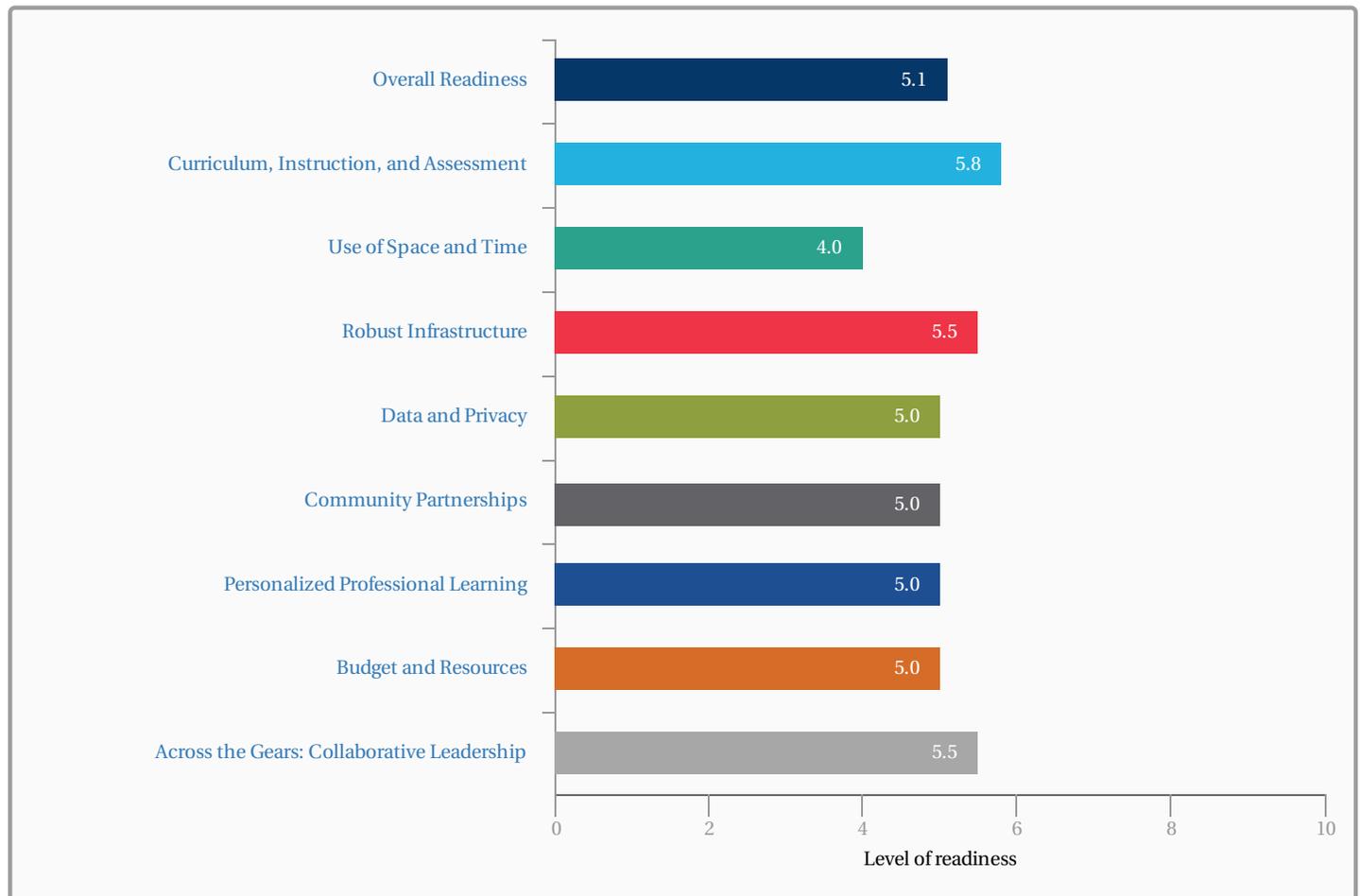
1. Curriculum, Instruction, and Assessment
2. Use of Time
3. Technology, Networks, and Hardware
4. Data and Privacy
5. Community Partnerships
6. Professional Learning
7. Budget and Resources

The outside rings in the figure emphasize the importance of empowered leadership and the cycle of transformation where districts vision, plan, implement and assess continually. Once a district is strategically staged in each gear, district leaders can be confident that they are ready for a highly successful implementation phase that leads to innovation through digital learning.

This confidential report indicates your district's readiness to implement digital learning. The chart below provides a snapshot of your district's progress to date across the seven gears in the Future Ready Schools framework.

Digital Learning Readiness per Gear

This chart provides a snapshot of your district's Readiness Ratings across the seven gears in the Future Ready framework. After your district works on its gaps, your team may want to take the self-assessment again and see trends over time.

Gear	Level of readiness
Overall Readiness	5.1
Curriculum, Instruction, and Assessment	5.8
Use of Space and Time	4.0
Robust Infrastructure	5.5
Data and Privacy	5.0
Community Partnerships	5.0
Personalized Professional Learning	5.0
Budget and Resources	5.0
Across the Gears: Collaborative Leadership	5.5

Level of readiness (scale 0 to 10)

Investigating ▶ Envisioning ▶ Planning ▶ Staging

Digital Learning

Digital learning is defined as the strengthening, broadening and/or deepening of students' learning through the effective use of technology. It individualizes and personalizes learning to ensure all students reach their full potential to succeed in college and a career.

> *Digital learning is the strengthening, broadening, and/or deepening of students' learning through the effective use of technology.*

Digital learning can be enabled through a range of instructional practices. Much more than "online learning," digital learning encompasses a wide spectrum of tools and practices. It emphasizes high-quality instruction and provides access to challenging content, feedback through formative assessment and opportunities for learning anytime and anywhere.

Staging your district to implement digital learning successfully is a complex progress. It will include (1) investigating and researching new designs for learning; (2) envisioning a range of possibilities and formally adopting a new vision; (3) collaboratively developing plans to enable that vision; and (4) staging the implementation for success by enacting policies and capacity building measures. The following provides important information about the foundation your district is establishing in support of digital learning.

Your District's Vision for Digital Learning

District Vision
Learning that encourages improvements in digital instruction through innovative use of digital technology. Students will be able to efficiently and creatively engage in the rapidly growing competitive global world.

Vision for Students	Included in Your District's Vision	
	No	Yes
Personalization of learning		X
Student-centered learning		X
21st Century Skills/deeper learning		X
College and career readiness		X
Digital citizenship		X
Technology skills		X
Anywhere, anytime learning		X

Your District's Uses of Technology for Learning

This table reports the status of your district's uses of educational technology:	Available in Your District	In Your District's Plans	Not Yet a Priority
Online coursework		X	
Intelligent adaptive learning	X		
Digital content in a variety of formats and modes (i.e., visual, auditory, text)	X		
Assessment data (formative and summative)	X		
Social Media	X		
Blended learning		X	
Digital tools for problem solving (visualization, simulation, modeling, charting, etc.)		X	
eCommunication sites for student discussions		X	
eCommunication sites for teacher discussions			X
Real-world connections for student projects	X		
Tools for students to develop products that demonstrate their learning	X		
Digital student portfolios		X	
Online research	X		

Your District's Digital Learning Environment

The following table presents the status of various elements of your district's digital learning environment:

Elements in a Digital Learning Environment	Available in Your District	In Your District's Plans	Not Yet a Priority
Presentation tools	X		
Multimedia production		X	
Social Media		X	
Productivity tools	X		
Document management	X		
Learning management system		X	
eCommunication tools - Asynchronous Tools	X		
eCommunication tools - Synchronous Tools		X	
Library of curated digital content		X	
Collaborative workspace	X		
Visualization tools	X		

Strategic Use of This Report

The purpose of this assessment is to provide your distict's "readiness to implement" scores in the context of the seven gears in the Future Ready Schools framework, as well as provide your district with a "way forward" in closing gaps. To do so, the Alliance for Excellent Education, in partnership with the Metiri Group, is providing rubrics for each element of the gears. To find your district's way forward, simply note your district's stage of readiness as reported on the following pages, and map that back to the associated rubric. Target next steps by looking at the table cell that represents the next level to the right. A score at the "staging" level indicates that your district is ready for implementation.

The rubrics have been developed based on the following levels of readiness:

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders are becoming more deeply informed about emerging research, trends, best practices, and added value related to digital learning. They are supported in their investigation through conference attendance, webinars, and in-depth discussions at district leadership meetings to ensure deep understating that informs their vision of digital learning.	District leaders have identified viable new directions for the school district. They have reviewed the possibilities, built scenarios for how those possibilities would look in their district, and working in tandem with key stakeholders, established a common vision of the future.	District leaders have established indicators of success based on the vision, set a baseline, and conducted a gap analysis. They have forged a plan for closing the gaps and identified key strategies for making progress toward those targets. They have projected benchmarks and milestones and created timelines, associated work plans, management plans and budgets.	District leaders have enacted policies, established new structures, identified budgets and assigned roles and responsibilities that collectively stage the district well for achieving the outcomes described in the vision. Where appropriate, they have undertaken pilots to document the efficacy of the elements of the plan. Once the district reaches the staging level, it is ready to begin full implementation.

Gear 1: Curriculum, Instruction, and Assessment

Through a more flexible, consistent, and personalized approach to academic content design, instruction, and assessment, teachers will have robust and adaptive tools to customize the instruction for groups of students or on a student-to-student basis to ensure relevance and deep understanding of complex issues and topics. Providing multiple sources of high quality academic content offers students much greater opportunities to personalize learning and reflect on their own work, think critically, and engage frequently to enable deeper understanding of complex topics. Data are the building blocks of diagnostic, formative, and summative assessments—all of which are key elements in a system where learning is personalized, individualized, and differentiated to ensure learner success.

Elements of this Gear:

- 21st Century Skills/Deeper Learning
- Personalized Learning
- Collaborative, Relevant, and Applied Learning
- Leveraging Technology
- Assessment—Analytics Inform Instruction

Your District provided the following Curriculum, Instruction, and Assessment vision:

Create scalable solutions that help facilitate collaboration and personalized learning, provide equal access to digital curriculum resources that engage students to support real world learning activities.

Your District's Stage of Readiness for Curriculum, Instruction, and Assessment

Category	Level of readiness
Gear Score: Curriculum, Instruction, and Assessment	5.8
21st Century Skills/Deeper Learning	7.0
Personalized Learning	5.0
Collaborative, Relevant, and Applied Learning	5.0
Leveraging Technology	7.0
Assessment—Analytics Inform Instruction	5.0

Investigating → Envisioning → Planning → Staging
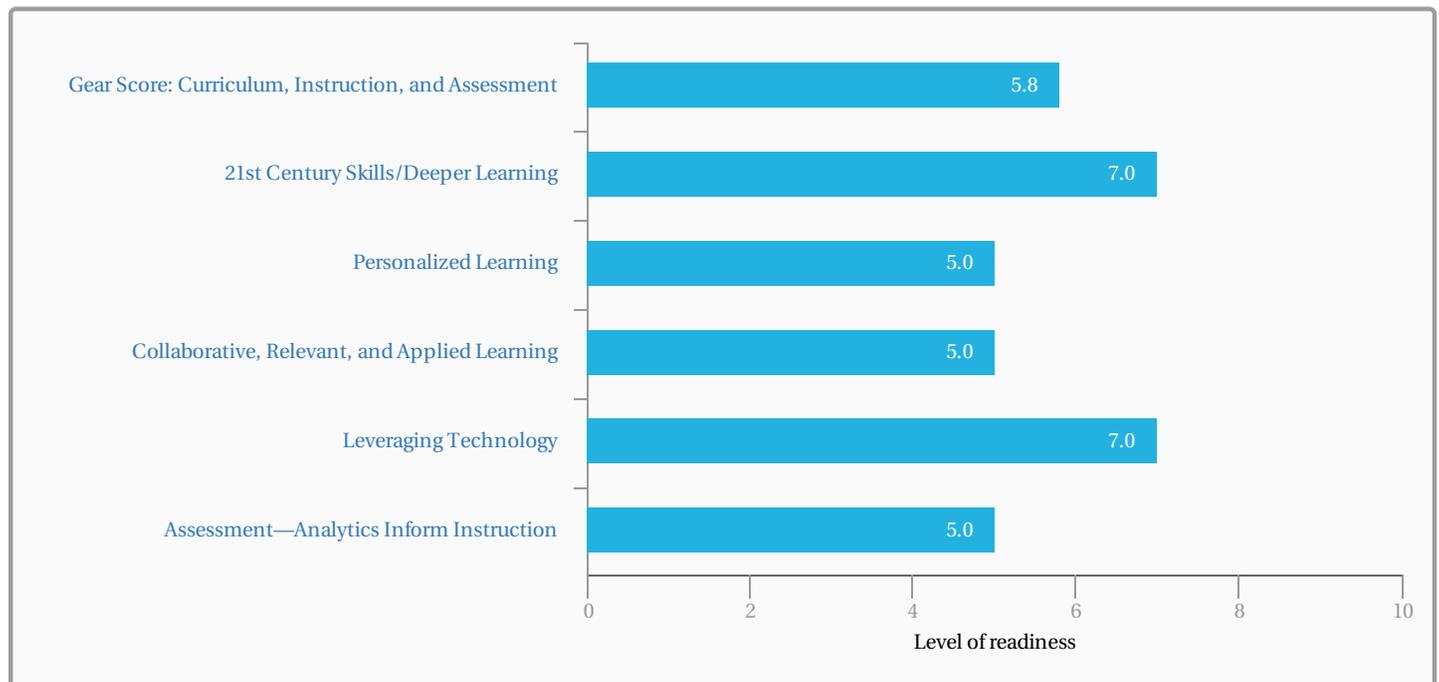
Depth of Your District's Knowledge Base: Curriculum, Instruction, and Assessment

Investigating, researching, and professional discussions are critical at all levels. The chart below reports the depth of your district's leadership team's knowledge base.

Confidence of Your Leadership Team in Discussing Topics Related to Curriculum, Instruction, and Assessment	Not Yet Prepared to Discuss	Could Discuss After Additional Research	Could Discuss with Confidence Now
Discuss strategies for building college and career readiness through digital learning.		X	
Discuss leveraging diverse resources accessible through technology to personalize learning for all students.		X	
Discuss providing students with the opportunity and specific skills to collaborate within and outside of the school, in the context of rich, authentic learning.			X
Discuss instituting research-based practices for the use of technology in support of learning.		X	
Discuss transitioning to a system of digital and online assessment (diagnostic, formative, adaptive, and summative) to support continuous feedback loops improvement informed by data.		X	

Status

The status that your district leadership team reported for each question is displayed below.

	Not currently a priority	Actively researching	Formalizing our commitment	Developing district plans to implement	District policies, expectations and plans are in place
Integrate strategies to promote 21st Century skills/deeper learning outcomes into curriculum and instruction for all students.				X	
Design curriculum and instruction that leverage technology and diverse learning resources to enable all students to personalize their learning with choices and control.			X		
Develop curriculum and instruction that provide each student the opportunity to solve real-world problems and encourage collaboration with students, educators and others outside of the school environment.			X		
Integrate technology seamlessly in the teaching and learning process while assuring that the use of technology adds value to learning for all students.				X	
Provide opportunities for all schools to use digital and online assessment systems that provide all students and teachers with real-time feedback in ways that increase the rate and depth of learning, and that enable data-informed instructional decision ma			X		

Rubrics for Curriculum, Instruction, and Assessment

21st Century Skills/Deeper Learning: Readiness Score of 7

Curriculum, instruction, and assessment are based on clear expectations that all students will leave the education system well staged for college acceptance or for alternative paths to workplace readiness. These expectations mandate solid grounding in standards-based content, but also intentionally integrate elements of deeper learning, such as critical thinking, creativity and innovation, and self-direction; as well as providing opportunities for authentic learning in the context of today's digital society.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders familiarize themselves and staff with new state learning standards and with research-based principles and strategies for 21st Century skills/deeper learning. Attention is given to the assessment of these skills as well.	21st Century skills/ deeper learning outcomes are explicitly referenced and defined in the district's vision of the college and career ready student. Guidance documents and templates for curricula based on these standards are developed.	Instructional leaders formally integrate 21st Century skills/deeper learning into all curriculum documents. District leaders develop explicit plans for building the capacity of the system to develop 21st Century skills/deeper learning skills in students. In addition, they develop plans for assessing these skills/ outcomes on an equal footing with content skills.	District leaders communicate new expectations for college and career readiness that incorporate 21st Century skills/deeper learning. They begin awareness trainings to orient educators to new curricular scope and sequences, guides to 21st Century skills/deeper learning, and upcoming series of associated professional development. They pilot programs that incorporate the new vision for learning.

Investigating ⟶ Envisioning ⟶ Planning ⟶ Staging

Gaps & Strategies for 21st Century Skills/Deeper Learning

Gap 1.1

The district has not yet reviewed 21st Century Skills/Deeper learning competencies, selected a set of skills that resonate with all stakeholders, and integrated those skills into all curricula. Support materials, information resources, professional development, and pilot programs have not been developed.

Strategies to Close Gap 1.1

A Curriculum Integration Process

Integrate skills into the existing curriculum once a framework for the skills has been created. There are several approaches to integrating 21st Century Skills/Deeper Learning into the district curriculum. One approach is to create a framework for each skill that defines its components, the strategies for strengthening that component in students, and the grade levels at which that strategy might be implemented. The process results in a description of how to teach the skill from the simplest concepts to the most complex. The curriculum can then be reviewed unit by unit and decisions made where that component already exists or might best fit and how it would change the learning that takes place in that unit. Engaging key stakeholders in this process, including multi-disciplinary teams of teachers, is essential to ensuring the skills are adequately aligned with the curriculum and fostering buy-in among staff members.

A Parallel Curriculum Approach

Consider a parallel curriculum. Some districts have found success utilizing a parallel curriculum in promoting 21st Century Skills/Deeper Learning. For example, if critical thinking is a targeted skill, units on critical thinking skills (e.g., predicting, making decisions, and analyzing arguments) can be developed and implemented at selected grade levels. When teaching a unit where the skill might be included, all teachers in grades beyond the grade targeted for this instruction can then be asked to review and reinforce the strategies with their students; include selected strategies as required elements of the work assigned in the units and, most importantly, include that element of the skill in the assessment.

Plan for Implementation

The cross-functional team should develop a plan for implementation once a set of key, 21st Century Skills/Deeper Learning competencies have been adopted. Ask the team to re-read the scenarios developing in the envisioning stage along with the results from the back mapping exercise as a foundation for planning. The plan should include: • clarity in definition • an explanation of why each skill or competency is important to the students' future • how the skill is mapped into the curriculum • sample scenarios • revisions to unit/lesson templates to include a section on which 21st Century Skills/Deeper Learning competencies being addressed • plans to assess the skills • descriptions of professional learning needs • strategies and timelines for building awareness and expertise with administrators and staff • outreach to parents • budget to fully systemically support the plan.

Gap 1.2

The district does not assess and report student attainment of 21st Century skills.

Strategies to Close Gap 1.2

Plan for Implementation

Build a plan for systematic use across the district once a set of possible assessments for the 21st Century Skills has been identified and classified by grade levels and content areas. The plan should include: • a listing of all the potential assessments • identification of assessments recommended for use in tracking student achievement of the skills, suggested grade level(s) and content areas for each assessment • a plan for administration of the assessments • a description of how the data will be used in a cycle of continuous improvement • a proposed timeline for both implementation of the entire plan and the administration of the assessments • a budget should be developed and sources identified to ensure funds are allocated to systemically support the implementation.

Personalized Learning: Readiness Score of 5

Educators leverage technology and diverse learning resources to personalize the learning experience for each student. Personalization involves tailoring content, pacing, and feedback to the needs of each student and empowering students to regulate and take ownership of some aspects of their learning.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders research personalized learning and document the characteristics of personalized learning environments and the requirements for building these characteristics.	A common vision for personalized learning is written and communicated, and includes rich scenarios of practice in multiple grade levels and content areas.	District leaders develop plans for promoting and/or expanding opportunities for personalized learning. Policies and access to technology are supportive of these plans.	District leaders prepare a plan for implementing personalized learning at all levels. This plan includes organizational tools, professional development, and examples of practice aimed at multiple levels and content areas.

Gaps & Strategies for Personalized Learning

Gap 2.1

There may not be a deep understanding of personalized learning for students or the research on this topic. The possibilities that technologies and social media bring to advance such learning with students may not be understood.

Strategies to Close Gap 2.1

Bring the Vision to Life: Build Scenarios

Build scenarios or case studies that bring to life the concept of personalized learning and the new experiences it can provide to students at all levels based on the findings from the cross-functional team in the investigating stage. The scenarios should ground the findings in the context of your district to provide examples of what personalized learning will look like in your schools, for your teachers and students. Use the scenarios to create a shared vision of personalized learning for the district.

Map Your Vision to Research

Back map your vision for personalized learning to align with the district's needs, educators' current knowledge and skills, current research, and exemplary practice using the scenarios as a guide for the desired results. Ensure that there is transparency in how your vision is created and individuals' responsibilities in carrying out the vision.

Gap 2.2

District leaders may not have yet recognized the key role that technology and social media will play in empowering students to personalize their own learning.

Strategies to Close Gap 2.2

Identify What It Takes

Conduct an analysis of what is needed to genuinely commit to personalized learning (e.g., policy, infrastructure, curriculum, professional development, etc.), identify which of those needs could be met with current practice and what would be needed. Vet the ability and interest of the district in addressing those need, identifying where gaps may demonstrate a lack of true commitment to personalized learning.

Current policies instructional guidance/resources, and/or professional learning opportunities may not be supportive of or may serve as barriers to personalized learning.

Strategies to Close Gap 2.3

Identify Gaps in Student and Teacher Skills Necessary for Personalized Learning

Determine what skills both students and educators need to participate successfully in personalized learning. Consider student skills related to self-direction and learning strategies; and educator skills related to pedagogy and individualization of content. Gather information from other school districts, as well as regional and national organizations with expertise on the topic. Identify instruments that can be used to assess students' and educators' skills and identify gaps between current skills and the level of skill necessary to participate in flexible, personalized learning.

Identify Pedagogical Gaps

Research pedagogy for personalized learning to determine what types of instruction are most supportive. Identify district policies, initiatives, or resources (e.g., textbooks, lesson plan templates, curriculum guides, teacher evaluation materials) that align with or contradict these pedagogical approaches. Begin to identify gaps between the pedagogies that the district current supports and those that could be used to systemically support personalized learning.

Identify Potential Policy Barriers

Identify what policies are currently in place that may serve as barriers to your vision of personalized learning. Compare the policies of districts with effective personalized learning initiatives (see Investigating strategies) to your district's policies to identify differences that may impact personalized learning efforts. Relevant policies may be related to issues such as use of time, access, use of school-owned materials, Internet filtering, social media expectations, assessment, grading, and/or curriculum development.

Collaborative, Relevant, and Applied Learning: Readiness Score of 5

In digital learning environments, students do work similar to that of professionals in the larger society. They collaborate with educators, fellow students, and others outside of the school environment on projects that often (1) involve the creation of knowledge products, (2) foster deep learning, and (3) have value beyond the classroom walls.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders review the research related to rich, authentic learning, including variants, such as project- and problem-based learning. Teams have also gathered research and best practices on promoting and leveraging collaboration.	The concept of student work as collaborative and authentic is noted as central to the district's vision. District leaders gather examples of teaching and learning, meeting these criteria through research and piloting. A framework for collaborative, relevant and applied learning is created and communicated to all stakeholders.	Instructional leaders review all curricula for opportunities for rich, authentic, and collaborative learning and document these opportunities. Initial plans for the adoption and implementation of these curricula are made that include necessary staff training and support.	Instructional leaders finalize a plan and assign responsibilities for implementing rich, collaborative authentic work that includes unit designs and templates, professional development, and support for teachers as they scale up new instructional practices.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Collaborative, Relevant, and Applied Learning

Gap 3.1

The district has not yet researched, documented, and communicated the value of authentic learning in K-12 education. A framework for rich, authentic work has not yet been developed.

Strategies to Close Gap 3.1

Develop a Common Vision with Stakeholders

Gather key stakeholders to collaboratively develop a vision that systemically supports authentic, collaborative learning. For authentic learning, the stakeholder group must include local business and community leaders, as well as educators from all levels. Once the vision is created, begin discussions of specific goals and expected outcomes that will move the district toward achieving the vision.

Engage the Village into the Process

Bring together a larger, diverse group of educators and community members to help you clarify and refine your vision. Vet the language; anticipated changes to expectations; and anticipated benefits to students, educators, and the community with this group. Keep the school board in the vision development loop.

Prepare Crisp, Clear, Compelling Reasons for Change

Summarize and share research with stakeholders to create a common understanding of the type of learning and collaboration that you envision. Shape findings so that they can be easily shared with community members at large. The district might work with stakeholders and subject matter experts to gather examples of current authentic learning experiences, create recommendations for curricular changes to promote additional efforts, and identify examples of how authentic learning opportunities could further student engagement with content and process standards.

Share the Compelling Reasons with Teachers

Identify exciting new opportunities that collaboration and authentic learning provide for students. Meet with teachers to understand how their current practice could be extended, and identify natural opportunities that could be used to pilot new ideas during the visioning and planning phase. Create transparency by explicitly tying your vision to research and existing learning frameworks and practices, and requesting feedback from educators to improve the alignment. Troubleshoot issues with faculty members who are not on board.

Gap 3.2

The district has not yet revised curriculum, instruction, and assessments that align to and support collaborative and authentic learning.

Strategies to Close Gap 3.2

Clearly Define Terms

Develop an organizational definition of collaborative, authentic learning. Include a description of the essential components and a vision of what authentic learning will look like in your district. Answer critical questions for a variety of stakeholders, such as "How does this impact my classroom?" and "What does this mean for my child?" Create a plan for sharing the definition with faculty, staff, parents, community members, and the school board.

Inform Your Work through the Multiple Voices

Have team members meet with teachers and students to communicate the definition and gain insights about their needs when considering making a commitment to authentic, collaborative learning. Probe for concerns related to physical spaces, technology, training, individual needs, and access to relevant curriculum materials and learning resources.

Identify Pedagogical Gaps and Training

Gather information related to current instructional practices and pedagogies through conversations with teachers and administrators. Based on research conducted during the Investigating stage, begin to identify gaps between the pedagogies that are currently used and those that could be used to support deep, collaborative learning. Start to identify leaders within the district, training materials, or professional development providers that can bridge any gaps in skills for teachers as they transition from current to envisioned practice.

Engage Your Community

Begin working with leadership and advisory groups to engage community members during the planning stage. Community members should include local business leaders, parents/families, teachers, school board members, non-profit groups that work with students (e.g., tutoring services, after school program providers), and others that can help shape and share the plans for implementation. Perhaps model the type of real-world, collaborative work you wish to see students engage with during this process.

Leveraging Technology: Readiness Score of 7

Educators in digital learning environments integrate learning-enabling technology seamlessly into the teaching and learning process. These educators have the skills to adopt multiple, highly effective learning technologies and adapt to diverse, evolving learning structures to assure that the use of technology adds value to the learning process.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District technology and curriculum staff members collaborate with other key stakeholders in an investigation of the latest research and best practices related to technology-enabled learning.	District leaders and key stakeholders establish a common vision for building and sustaining a digital learning environment that clearly defines the role technology plays in supporting these new learning environments.	Instructional leaders review all curricula for opportunities to apply current technologies to improve teaching and learning in ways that align with research and best practices. They then align and integrate these technologies into all curriculum documents.	Instructional leaders prepare a plan for proactively integrating technology into teaching and learning practices throughout the district. This includes professional learning plans and communities of practice. They pilot robust and effective integration of learning technologies within the curriculum.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Leveraging Technology

Gap 4.1

District leaders may not yet have established a culture of digital innovation that promotes pedagogy-driven, digital transformations in curriculum, instruction, and assessment.

Strategies to Close Gap 4.1

Name Your Model

Identify one (or more) of the best practice technology integration models identified in the investigation process that will guide the development of a comprehensive plan to integrate learning-enabling technology into curriculum and classroom practice. The cross-functional team may choose to focus on one model, or combine models to best suit the district's needs. Once a model has been agreed upon, create a plan for piloting the model with selected teachers in the district. Establish a feedback loop that will inform future versions of the model.

Put it in Writing

Develop a comprehensive plan for the integration of effective learning technologies to share with stakeholders (i.e., all professional staff, parents/families, local businesses, and local subject matter experts). Clearly define roles and responsibilities, the implementation timeline, and program evaluation methods for the integration plan. Build ample opportunities for stakeholders to provide feedback on the plan into the timeline. Where possible, map funding requirements for implementation to potential Learning Return on Investment (LROI) and Total Cost of Ownership (TCO).

Gap 4.2

District leaders may not have worked in tandem with key stakeholders to plan, build, and sustain a digital learning environment where technology and digital resources are seamlessly aligned with curriculum, instruction, and assessment as integral to the learning process.

Strategies to Close Gap 4.2

Let Data Drive the Vision

Collect any available data on the current levels of readiness of leadership, professional staff, students, and the community to implement this vision of a digital learning environment. Identify necessary data that are not available and create a plan for collecting it.

Weave It In

Review the district's current strategic plan and embed the new vision for integration of digital learning and curriculum into the existing plan. Emphasize integrating the vision into the strategic plan, rather than simply adding it in, and obtaining input from stakeholders regularly throughout the process. Develop specific examples to illustrate the change in practice that would take place once implemented in a district classroom. Include a communication plan that will align any modifications to research and best practice in order to champion this change in practice.

The district may not yet have established expectations and supports for building technological competence and digital citizenship required of students if they are to leverage technology to deepen their learning.

Strategies to Close Gap 4.3

Plan but Continually Adjust

Review the district's existing technology integration plan to assure that it is aligned to the new vision for digital learning. Make sure the plan identifies implementation roles and responsibilities as well as measurable goals and outcomes. Due to rapid changing technology developments and requirements, build in an annual reexamination of technology policies, practices and funding to maintain effectiveness and efficiency. The review process should include district leaders, teachers, students, and subject matter experts. Identify methods and timelines to evaluate the implementation of the integration plans. Develop a comprehensive communication plan.

Assessment—Analytics Inform Instruction: Readiness Score of 5

The district and its schools use technology as a vehicle for diagnostic, formative, and summative assessment. The school system has mechanisms (i.e., processes and digital environments) for using data to improve, enrich, and guide the learning process. Educators actively use data to guide choices related to curriculum, content, and instructional strategies.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders are becoming more deeply informed about the type of assessments they will need to evaluate student progress in content and process standards as well as 21st Century competencies. They continue to investigate and confirm findings.	District leaders have identified the type of assessments that will be required to track progress over time, but have yet to establish a common vision around specific indicators, metrics, or instruments.	District leaders have established an initial plan using data to guide choices related to curriculum, content, and instructional strategies. They have identified indicators, metrics, and/or instruments for use in determining student progress over time. They have identified diagnostic assessments, formative, and summative assessments. Policies, budgets, and access to necessary technologies necessary to support these assessments have been identified.	With policies, budgets, and access to necessary technologies necessary to support these assessments in place district leaders have established a series of diagnostic, formative, and summative assessments. They have established analytics and mapped reports to expected learning outcomes. Education professionals are prepared to use the data generated by these assessments to track student progress over time, identify gaps, and make changes to improve results.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Assessment—Analytics Inform Instruction

District leaders have not yet established a data culture where everyone is expected to use research, data, and evidence-based reasoning. Teachers are not yet using data to guide their instructional and content-related choices.

Strategies to Close Gap 5.1

Locate the High-Achievers

Get recommendations from district-staff, building administrators, and other professional staff to locate pockets of success in the district where schools or teachers are gathering data and using it to inform instruction. While these assessments may or may not be digital, it is important to identify existing efforts so they can be built-upon and leveraged in subsequent efforts.

Assess the Vision

Use the results from your research and information gathering to begin developing a clear vision for digital assessment to drive planning. Be sure that this vision describes clearly what digital assessment would look like in your district, and how that would expand or replicate current practice. Engage in thoughtful conversations with other leaders and stakeholders, including parents, about what data are necessary so that any visions do not fall into the practice of "assessing because we can" and remain focused on purposeful data-gathering to inform instruction. Share the developing vision and encourage feedback, modeling the process of using a variety of types of data to inform practice.

Gap 5.2

District leaders have not established protocols for using technology to collect, analyzing, access, secure, and analyze diagnostic, formative, and summative data to guide teaching and learning.

Strategies to Close Gap 5.2

See the Vision

Identify all of the protocols that need to be in place to facilitate the vision. Determine which of these are already in place and aligned with the vision, which existing protocols may need to be adapted, and what new protocols will need to be established in order for the vision to become reality.

Identify Barriers, Encourage Potential

Working with a cross-disciplinary team, begin to look for natural opportunities in current practice to leverage digital assessments that inform learning. Identify current protocols, procedures, or practices that may need to be changed in order for the district to move forward with digital assessments. Look for places where current practices can easily be expanded, and begin with these areas to develop early wins. Including the input from parents/families, explore how digital assessments could be more accessible out of school and how understandable assessment results are now and how they could be improved.

Gap 5.3

How are students actively involved in using data to self-assess?

Strategies to Close Gap 5.3

How Will Students Obtain and Use Data?

Review the materials that were collected during the investigation stage and identify new ideas, lessons learned, and questions that still need to be addressed with a diverse group of stakeholders working as a shared leadership team. Start with the end in mind by creating a vision that supports what the district would like to see happening with data at the classroom level. Back-map your goals so that there is a clear vision for collecting, analyzing, accessing, securing, and using data to guide teaching and learning. Vet your vision with key stakeholders (teachers, parents/families, and even students) to be sure that you have identified appropriate, feasible, and locally relevant strategies for collecting and using data.

Gear 2: Use of Space and Time

Student-centric learning requires changes in the way instructional time is used. There are new opportunities for utilizing in-school and out-of-school time, and leveraging approaches such as competency-based learning to make learning more personalized and learning opportunities more accessible. These new opportunities leverage technology to meet the needs, pace, interests, and preferences of the learner. This transition is made possible through innovative uses of technology for assessing student learning, managing learning, engaging students in learning, disseminating content, and providing the infrastructure necessary to encourage flexible, anytime, anywhere learning opportunities.

Elements of this Gear:

- Flexible Learning; Anytime, Anywhere
- New Pedagogy, Schedules, and Learning Environments for Personalized Learning
- Competency-Based Learning
- Strategies for Providing Extended Time for Projects and Collaboration

Your District provided the following Use of Space and Time vision:

> Students would have learning available to them from home, school and within the community. We should be providing this for them and teaching them how to use their time effectively. We would also need to support self-motivation.

Your District's Stage of Readiness for Use of Space and Time

Category	Level of readiness
Gear Score: Use of Space and Time	4.0
Flexible Learning; Anytime, Anywhere	3.0
New Pedagogy, Schedules, and Learning Environments for Personalized Learning	3.0
Competency-Based Learning	7.0
Strategies for Providing Extended Time for Projects and Collaboration	3.0

Investigating → Envisioning → Planning → Staging
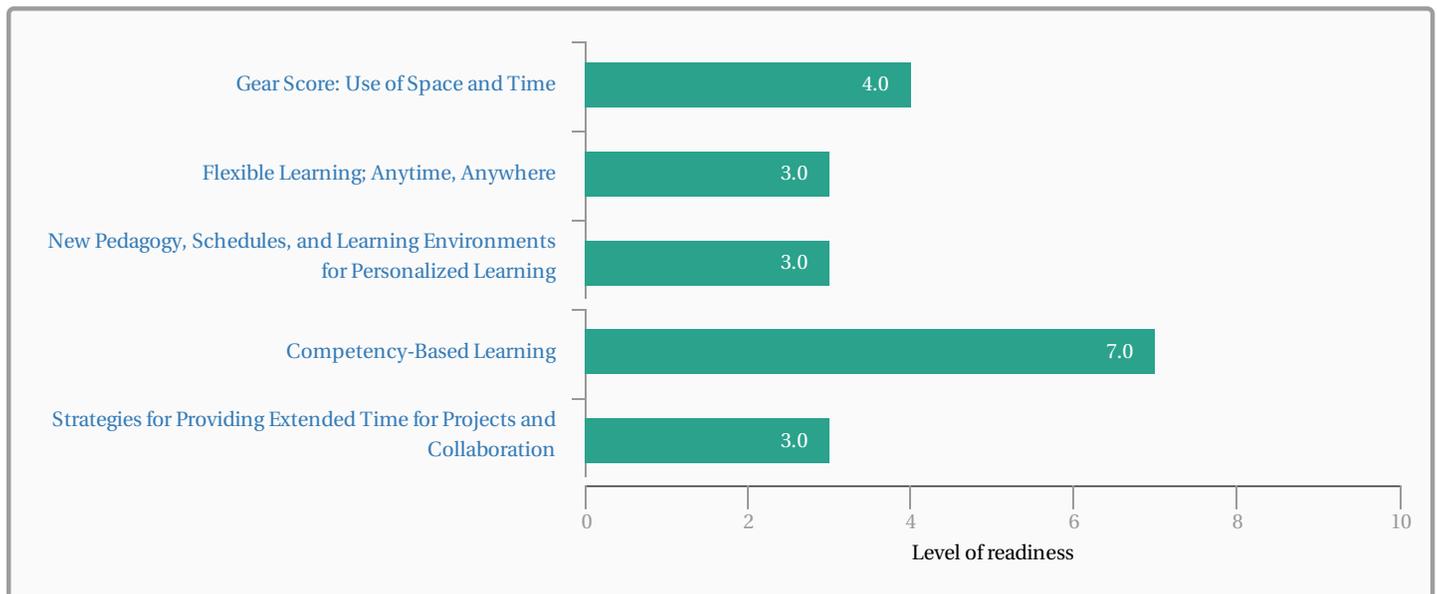
Depth of Your District's Knowledge Base: Use of Space and Time

Investigating, researching, and professional discussions are critical at all levels. The chart below reports the depth of your district's leadership team's knowledge base.

Confidence of Your Leadership Team in Discussing Topics Related to Use of Space and Time	Not Yet Prepared to Discuss	Could Discuss After Additional Research	Could Discuss with Confidence Now
Discuss options for providing students with online and digital learning options for anywhere, anytime learning.		X	
Rethink the use of instructional time and school schedules to provide students with extended time for projects and collaboration, and to provide the flexibility required for personalized, student-centric learning.		X	
Discuss the merits of allowing students flexibility in the time it takes them to complete a course or attain a standard (competency-based learning).		X	

Status

The status that your district leadership team reported for each question is displayed below.

	Not currently a priority	Actively researching	Formalizing our commitment	Developing district plans to implement	District policies, expectations and plans are in place
By leveraging technology and media resources, students have options to learn any time of day, from home, school and/or community.		X			
Teachers are transitioning to more student-centric environments, leveraging flexible uses of time to enable personalized learning for their students.		X			
Student progress is measured by performance and mastery, rather than attendance/seat time (competency-based learning).				X	
The district has moved away from rigid schedules and short class periods, toward instructional time allocations that are flexible, enabling extended work time for complex projects.		X			

Rubrics for Use of Space and Time

Flexible Learning; Anytime, Anywhere: Readiness Score of 3

By leveraging technology and media resources, digital learning options are available for students at any time of day, from home, at school, and in the community. The value of anytime, anywhere learning is dependent on access and capacity for use; ubiquitous, robust internet access and the capacity to use digital learning tools and resources effectively.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders utilize existing research and trends to inform their thinking about flexible, anytime, anywhere learning. They do so by attending conferences, visiting other districts to observe models, leveraging internal and external expertise, and discussing options with colleagues, families, and other stakeholders. District leaders have sought out different perspectives and assembled concrete ideas for providing access to models of online and blended learning, while attending to the questions of equity around 24/7 access to device and high-speed Internet. They have investigated accessibility policies, including acceptable and responsible use.	District leaders use research, and existing practice to build out scenarios for supporting and accessing flexible, anytime, anywhere learning in their schools. They have explored various strategies for access, including one-to-one and bring your own device (BYOD) programs, community-wide Internet access, flexible licensing agreements, and partnerships with community stakeholders. They have established a common vision that leverages technology to empower anytime, anywhere learning through 24-7 access to devices, high-speed Internet access, and digital learning content.	District leaders have collaboratively developed a plan for flexible, anytime, anywhere learning in their district. That plan leverages technology and is attentive to issues related to 24/7 access of device, high-speed Internet, and digital content. They have identified key strategies, policies, timelines, necessary budgets, licensing agreements, and community engagement during staging and implementation. District leaders have also identified gaps in teacher and student readiness for anytime, anywhere learning and created initial plans for integrating models of online and blended learning into their school day, and beyond.	District leaders have policies and budgets in place to enact their plan for anytime, anywhere learning. They have identified plans for addressing issues of access for device, high-speed Internet, and digital content for every student. District leaders have staged a digital learning or content management environment that allows classroom teachers to begin to work towards models or online and blended learning, and have continual review processes in place for licensing agreements. They have measures in place to evaluate their plans, and a continual feedback system to monitor roll out of any devices, access issues, or blended learning opportunities. They are staged to provide professional development to teachers, and additional training to students that will enable flexible, anytime, anywhere learning.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Flexible Learning; Anytime, Anywhere

Gap 1.2

Teachers and students who will be engaging with flexible, anytime, anywhere learning opportunities are not yet fully prepared to successfully participate.

Strategies to Close Gap 1.2

Do Your Research

Collect information about current teaching and learning practices, including how and where students learn outside of school, methods teachers use for encouraging out-of-school-time learning, and what digital content curation strategies are already in place at the district, school, and even individual teacher levels. Preparing teachers and students to successfully participate in flexible anytime, anywhere learning must begin with current practice in mind. To begin the process of determining how to move toward a more flexible teaching and learning environment, seek out concrete examples from other districts at the local, state, and national level that have fully prepared their teachers and students for flexible, anytime, anywhere learning.

Identify digital content curation strategies that teachers are already using.

Seek out concrete examples from other districts at the local, state, and national level that have fully prepared their teachers and students for flexible, anytime, anywhere learning.

Gap 1.1

The district does not have the policies, infrastructure, and the digital learning tools and resources in place to fully embrace flexible, anytime, anywhere learning.

Strategies to Close Gap 1.1

Through the Looking Glass

Become informed. What does flexible, anytime, anywhere learning look like and what does it take to make it happen? Have a cross-functional team of district stakeholders (e.g., district administrators, principals, curriculum specialists, technology directors, teacher leaders, parents, community partners) collect examples of how 24/7 learning takes place in school settings and in the workplace. Build a collection of successful solutions and models ranging from exploratory pilots to full implementation of flexible, anytime, anywhere learning systems.

Preparing the Way

Interview leaders from districts who are further along in the process and other subject matter experts who have successfully implemented flexible, anytime, anywhere learning to determine what process they used to get started and how they removed barriers to successful implementation. Then identify the barriers your district, students, and community members face (e.g., infrastructure, access to devices and content, 24/7 Internet access, district policies, scheduling, training needs of students and staff, licensing agreements, funding) that could hinder adoption of flexible, anytime, anywhere learning opportunities. Be sure to investigate administrator, teacher, and student beliefs and expectations for using technology and resources that may prevent them from being successful in anytime, anywhere learning.

Leverage your Human Capital

Find your expert, early adopters among administrators, students, and staff. Recruit subject matter experts from local and regional businesses, universities, and the community. Use the expertise from these champions of anytime, anywhere learning to identify examples of key factors for successful implementation (e.g., ubiquitous access to digital technology and content, affordable and reliable Internet access, connections to subject matter experts and systemic technical support, opportunities for collaborative skill development and problem solving, competency-based progression) that will illustrate potential barriers and potential solutions for your district.

New Pedagogy, Schedules, and Learning Environments for Personalized Learning: Readiness Score of 3

To facilitate more personalized learning, educators work together to identify and validate new designs for personalized learning where the use of time is adaptable and flexible. Associated resources are made available to all students both synchronously and asynchronously to promote flexibility.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders investigate new designs for personalized learning wherein time is both adaptable and flexible. The district is identifying both synchronous and asynchronous learning opportunities by accessing existing research and reaching out to other districts that are using time differently to promote personalization. The district deepens their understanding of the infrastructure necessary to encourage personalized learning through new pedagogies, schedules, and learning environments.	District leaders have collaboratively developed a vision for personalized learning that leverages new pedagogies, schedules, and learning environments. They use both research and existing practice to review new possibilities for their district and have identified which of those would work locally.	A plan for utilizing new pedagogies, schedules, and learning environments to promote access and participation with personalized learning opportunities is constructed. This plan leverages resources that can be made available to students both synchronously and asynchronously, and accounts for policies, necessary budgets, and licensing agreements that will empower education professionals and students to use time differently to engage students. Necessary training for teachers is identified and any gaps that exist in student readiness are addressed. Those gaps include issues related to equitable access for all students.	District leaders have staged education professionals and students for personalized learning opportunities through the use of new pedagogies, schedules, and learning environments. Policies, funding, and metrics to measure effectiveness are in place, and the infrastructure is ready to provide synchronous and asynchronous learning opportunities to all students.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for New Pedagogy, Schedules, and Learning Environments for Personalized Learning

Gap 2.1

The district has not yet defined and adopted a pedagogical shift to personalized learning, anytime and anywhere.

Strategies to Close Gap 2.1

Connect and Collect

Build a cross functional network of experts (e.g., teacher educators, instructional designers, curriculum coaches) to assist district leadership in researching and compiling literature and concrete examples that illustrate how learners learn (cognitive theory) and how it is applied in practice (traditional, online, and blended learning). Complete a literature review that can serve as a guide for your district.

Unbound by Approach, Pace, and Space

Think freely about the art and science of learning, unbound by approach, time, and location. Investigate how students, professional staff, and business and community members learn and include data on their environment, social interactions, institutions and entertainment. Consider how access to resources in the real-life is different than access in education; how can instructional practice help organize and scaffold learning, and how activities and strategies can be optimized in order to build new ideas and development of complex skills. Develop a vision of how learning in your district can take advantage of the affordances of technology to better replicate a practical learning model. Be prepared to share this vision with professional staff, students, and the community.

Picture the Finish Line

Make plans early for assessing progress in terms of pedagogical shifts. Identify key indicators of personalized learning that align with the district vision, and measures of these indicators. Enlist instructional leaders to provide feedback on the assessment plan. Consider both valid and reliable indicators, as well as collection of qualitative data from interviews and focus groups, to ensure that an accurate picture of progress is obtained.

Gap 2.2

The district has not yet implemented an effective, personalized learning environment. One where learning is connected to an individual learner's interests and experiences, and where learners have more control over the when, where, what and how they are learning.

Strategies to Close Gap 2.2

A PLE is not an LMS

Ensure key leaders are aware of the difference by building definitions by consensus for both terms and developing vignettes that provide a clear picture of effective implementation of a PLE. A Personalized Learning Environment (PLE) is not a Learning Management System (LMS). As a reference point, a PLE is learner-centric environment composed of personal targets for learning, tools and resources, pathways to communicate and collaborate, and services used to direct personal learning and achieve personally defined goals. An LMS is a system (software or web-based) that tends to be course driven or teacher-centric, and used to plan, implement, and assess the learner's progress for credit. It may be tangential to or overlap functions with a PLE. Find examples of PLE models that are successfully implemented in k12 and higher education. Identify LMS and other course driven systems to illustrate how a LMS can contribute to personalized learning not be mistaken for it.

Challenges not Barriers

Consider the staffing needs and time requirements of a personalized learning environment and rethink traditional models of staff assignments and scheduling. Know as much as you can about current staffing and class scheduling. Have district leaders (or contract with external experts) analyze current formulas for allocation of professional staff, student schedules, and use of space and time. Research a variety of successful programs to identify how flexible staffing and use of time is addressed then document challenges and solutions that could be applied to flexible, anytime anywhere learning. Visit model districts and programs to get a first-hand picture of personalized learning in action. Interview district leaders, professional staff and students, and conduct community focus groups for additional insight.

Competency-Based Learning: Readiness Score of 7

One facet of personalized learning, Competency-Based Learning (CBL), integrates student voice and choice, flexible paced learning with timely support, and demonstration of academic proficiency. Pace of learning is flexible based on the needs of individual students and the challenges of complex, often project-based work. Timely support is provided to accommodate learning needs and guarantee access to content and resources. Upon mastery of explicit, measurable and transferable outcomes that demonstrate the application and creation of knowledge, learners move on to a new, targeted standard or course.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders are accessing current research, investigating current trends, and identifying best practices with competency-based learning. They are utilizing extant resources to develop a deep understanding of competency-based learning as it relates to digital learning.	District leaders have a vision for competency-based learning that is grounded in research and best practice. That vision leverages technology, and supports the districts vision for personalized learning. With a common vision in place, key stakeholders have been able to assist the district in building out scenarios that create the best opportunities for the district.	District leaders have developed a plan to transition to competency-based learning. This plan includes provisions for providing the district with necessary data to train teachers, inform stakeholders, redesign curriculum, and envision new ways of facilitating instruction and assessment. A gap or needs analysis has identified the infrastructure that will be necessary to support competency-based learning. As a part of the overall plan they have identified policies, budgets, and issues of equity in accessibility of devices and high-speed Internet to allow for the full opportunities of this transition to be realized.	District leaders have enacted their plan, with new policies that establish competency-based learning in place. With the necessary infrastructure, policies, and budgets in place issues related to equity and access have been addressed. Teachers and students are prepared for the transition to competency-based learning, and the district is staged with redesigned curriculum, instruction and assessment practices.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Competency-Based Learning

Gap 3.1

The District has not yet integrated Competency Based Learning (CBL) into its policy and practice. It has not created designs that provide flexible, paced learning with robust, timely support, learner voice and choice, and measures to evaluate learner proficiency that align to self-paced learning.

Strategies to Close Gap 3.1

The What

Create multiple representations of what the Competency Based Learning (CBL) models will look like in your district. Cleary identify strategies for flexible learning pace, student choice, and demonstration and assessment of proficiency in each design. Keep the designs current and share them with stakeholders through multiple mediums throughout the planning process.

The Why and the How

During planning clearly link the implementation strategies back to district continuous improvement goals and designs for CBL. Identify how each strategy functions to support flexible, paced learning and timely support, student voice and choice, and evaluation of learner proficiency. Define roles of each stakeholder, clearly articulate responsibilities for implementation, and address steps for ongoing quality control.

Policies Getting in the Way

Once potentially confounding policies or regulations are identified, work with a team of district and/or state leaders to fully understand the existing policies. Identify plans for revising policies or regulations if possible, or identify existing CBL models that will work within current policies and regulations. Investigate college and university entrance and acceptance requirements to insure peace of mind for parents.

The When

Design an implementation timeline to accommodate the readiness of professional staff, capacity of infrastructure, and availability of digital learning tools and resources. Consider the advantage of beginning with a pilot program for the different CBL designs, or implementing one or all models in phases. Include all necessary components from your selected change model in the implementation plan and timeline.

Strategies for Providing Extended Time for Projects and Collaboration: Readiness Score of 3

Districts are re-imagining the school day and school year by re-designing and extending learning time, providing greater access to integrated enrichment and quality instruction. Rather than rigid schedules and short class periods, time allocations are flexible, allowing for extended schedules and work time for complex projects. Digital learning enables students to productively use time during and beyond the school day, often redefining homework time.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders utilize existing research and trends to inform their thinking about extending student use of time. By attending conferences and visiting other districts, district leaders have identified successful models at each level (elementary, middle, and high). They have investigated long-standing practices to identify schedule changes that may provide students with extended time for projects and collaboration.	District leaders use research, and existing practice to build out scenarios that would allow students extended time for complex projects. They have explored various strategies for utilizing time differently during and beyond the school day, and identified examples of how authentic learning opportunities could be enhanced by new learning structures and schedules. They have established a common vision with the input of education professionals and other stakeholders. Included in this vision is attention to the necessary infrastructure (including equitable access to devices, high-speed Internet, and learning materials outside of school) to make full use of extended time.	District leaders have collaboratively developed a plan that integrates strategies for extended student work time. They have identified gaps in teacher and student readiness and created initial plans for integrating different scheduling models during and beyond the school day at all levels. The plan is attentive to transition needs and timelines (including policies and budgets), to ensure that curriculum provides enhanced opportunities for students to engage in authentic work. District leaders have been attentive to issues related to access of devices, high-speed Internet, and learning materials throughout the plan.	District leaders have the curriculum, policies, and budgets in place to enact their plans for extending time during and beyond the school day. Teachers and students are prepared for this transition and are staged to leverage new authentic learning opportunities that necessitate more time for collaboration and projects. Education professionals and other stakeholders (including families) understand the scheduling changes that are occurring and the ways that those changes will be continuously evaluated. District leaders have identified plans for addressing issues of access for devices, high-speed Internet, and learning materials for every student.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Strategies for Providing Extended Time for Projects and Collaboration

Gap 4.1

The district has not yet instituted flexible time allocations or curricula that support extended work time for students during and beyond the school day, nor re-designed the use of learning time to provide greater access to integrated enrichment and quality instruction.

Strategies to Close Gap 4.1

It's About Time

Research how school time is allocated. One helpful representation of school time (cited in the Chalkboard Project's A Review of Research on Extended Time in K-12 Schools) breaks it down as total allocated time, instructional time, engaged time, and academic time; the last being where the learning environment, learner, and readiness align so that learning occurs. Document examples of instructional time, engaged time, and academic time in preparation for a closer analysis of use of time in your district. In addition, investigate how other districts in your area are using instructional, engaged, and academic time.

A Closer Look

Work with district staff, students, and parents to identify activities in the school day and school year allocated to learning (structured and unstructured), and time allocated to non-learning related activities (e.g., attendance, announcements, transitions, homeroom, breakfast or lunch). Look closely at the amount of time allocated to specific activities versus the amount of time the activities actually take, paying special attention to inefficiencies that may be eating into the instructional day. Determine how much access to learning is made available beyond normal school hours. Armed with this information, calculate how much time might be captured and re-allocated to learning in the course of a day, week, month, and year.

Quality vs. Quantity

In the end, the quality of the use of time allocated for learning is most important. Research best practice examples of the use of learning time. Create a clear definition of quality use of time for your district, collaborating with educators, parents, and other key stakeholders to come to consensus. Identify practices that optimize opportunities for reaching the learning sweet spot; where skill mastery and deep learning occurs (e.g., self-paced learning, frequent feedback loops, a culture of high expectations, personalized learning, project-based learning, opportunities for collaboration). Define how implementing these practices can impact allocated learning time (e.g., an authentic learning project can be a year-long activity, collaboration and feedback may take place online after school hours).

Gap 4.2

The district has addressed technology requirements necessary to support extended learning time through digital learning. This includes, equitable access to digital learning environments, devices, high-speed Internet, digital content, and learning materials during and beyond the school day for all students.

Strategies to Close Gap 4.2

Get Help from Your Friends

Seek out other districts at the local, state, and national level that have infrastructure, policies, and agreements in place to support flexible, anytime, anywhere learning. Gather information related to the policies, processes, and funding sources that have made them successful. Attend local, state, or national conferences focused on e-learning, one-to-one initiatives, and mobile or wireless learning. Assemble multiple, concrete examples of policies that would support digital learning during and beyond school hours. Gather information and contacts that may provide information and support as your district moves forward.

Gear 3: Robust Infrastructure

When employed as part of a comprehensive educational strategy, the effective use of technology provides tools, resources, data, and supportive systems that increase teaching opportunities and promote efficiency. Such environments enable anytime, anywhere learning based on competency and mastery with empowered caring adults who are guiding the way for each student to succeed. High quality, high speed technology and infrastructure systems within a school district are essential to the advancing of digital learning.

Elements of this Gear:

- Adequacy of Devices; Quality and Availability
- Robust Network Infrastructure
- Adequate and Responsive Support
- Formal Cycle for Review and Replacement

Your District provided the following Robust Infrastructure vision:

Support and maintain a secure, reliable, integrated, scalable network infrastructure. A planned refresh cycle of hardware replacement and services will help to ensure up-time and optimal use of available bandwidth. Staff and students will benefit from a quality network along with the addition of new technologies to support the teachers in conducting a safe managed digital classroom environment.

Your District's Stage of Readiness for Robust Infrastructure

Category	Level of readiness
Gear Score: Robust Infrastructure	5.5
Adequacy of Devices; Quality and Availability	7.0
Robust Network Infrastructure	5.0
Adequate and Responsive Support	5.0
Formal Cycle for Review and Replacement	5.0

Investigating → Envisioning → Planning → Staging
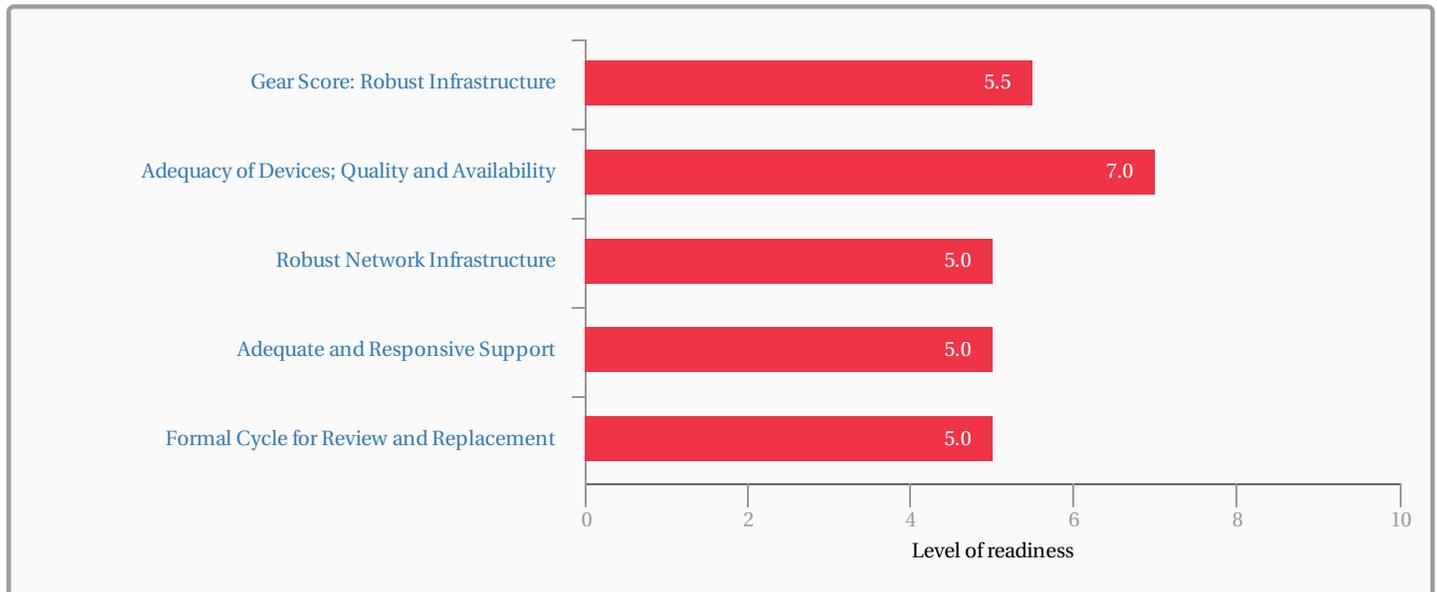
Depth of Your District's Knowledge Base: Robust Infrastructure

Investigating, researching, and professional discussions are critical at all levels. The chart below reports the depth of your district's leadership team's knowledge base.

Confidence of Your Leadership Team in Discussing Topics Related to Robust Infrastructure	Not Yet Prepared to Discuss	Could Discuss After Additional Research	Could Discuss with Confidence Now
Discuss a variety of options available to districts to ensure that appropriate Internet-ready technology devices are available to support teaching and learning.			X
Discuss the elements and implementation of a robust, responsive and safe network infrastructure.		X	
Discuss the elements of a positive, effective, service-oriented technology support system.			X
Discuss a comprehensive, environmentally sound cycle for review and replacement of technology software, hardware and infrastructure.		X	

Status

The status that your district leadership team reported for each question is displayed below.

	Not currently a priority	Actively researching	Formalizing our commitment	Developing district plans to implement	District policies, expectations and plans are in place
Designing and implementing diverse and creative options to ensure that appropriate Internet-ready technology devices are available to students to support learning at any time.				X	
Designing and implementing a network with adequate bandwidth and a supportive infrastructure to ensure ready and consistent access to online resources for teaching and learning.			X		
Creating and implementing a support system that is characterized by a positive service orientation, is proactive, and provides resources, coaching and just-in-time instruction to prepare teachers and students for the use of new technologies.			X		
Formalizing the review and replacement of all technologies in a cycle that is timely, proactive, and environmentally responsible.			X		

Rubrics for Robust Infrastructure

Adequacy of Devices; Quality and Availability: Readiness Score of 7

The school has considered a host of creative options to ensure that diverse and appropriate technology devices are available to all students and staff to support powerful digital learning at any time, from any location.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
As part of a needs assessment for learning technologies, district leaders evaluate proposed and anticipated uses and the technology devices that best accommodate those applications. Special attention is given to strategies that will allow for equitable access to devices for all in the school community.	District leaders establish criteria for technology devices based on future applications and identify types and numbers of devices that will support those applications. Criteria include specific mention of any subpopulation of staff or students for whom access may be an issue and criteria for providing equitable access to all.	District leaders develop a specific plan for procuring and placing devices to meet the needs of provide equitable access in support of teaching and learning.	The district is well staged to deploy identified technologies, with plans for budgeting and purchasing, placement/distribution, and training and support.

Investigating ⟶ Envisioning ⟶ Planning ⟶ Staging

Gaps & Strategies for Adequacy of Devices; Quality and Availability

Gap 1.1

A future-oriented needs assessment has been conducted to determine technology hardware needs. This assessment has contributed to a comprehensive device procurement component to the overall district plan. This procurement plan is sustainable and includes specific elements ensuring that all staff and students will have equitable access to devices.

Strategies to Close Gap 1.1

There Is No Perfect Device: Prioritize

List the criteria by which the district will select the devices once a district's educational priorities are set and the approach (i.e., 1:1, BYOD, sharing via carts, or hybrid – see Investigating Level Strategies for more information on models) is established. As Doug Johnson says in his article, Power Up/Choosing the Right Device, "No device does everything well… and every device can… do most of what is needed." Include criteria for high-speed, efficient access for all schools' current uses and resources, as well as those in schools' future plans. Those might include collaboration tools, communication tools, productivity tools, educational gaming, content management systems, learning management systems, web browsers, and assessment systems. List specialty uses separately, with the acknowledgement that these might require devices with more capacity and features (e.g., video/image production/rendering, CAD/CAM, music synthesizers). Also consider the specific needs of special populations of students, including assistive devices for students with special needs. Lastly, include criteria such as requirements related to maintenance, support, configuration, and processes for updating. Device criteria may vary across grade levels and schools depending on anticipated short-term and long-term visions as well as current educational priorities.

Device Criteria for Online Assessment

Insure ease of use and compatibility in using technology to administer and support student assessment. Most schools and districts are using online assessments to collect, analyze, and report on student achievement. Thus, a district's device selection criteria will need to meet the specifications of its assessment systems and learning systems. Top considerations include accessibility, consistency of experience (especially for testing), timeliness (short wait time for processing and loading), reliability, and recoverability (i.e., restart after failure). Requirements are often specified by vendors and include device type, specifications related to versions of operating systems, amount of available memory, central processor, screen resolution, display size, and possibly requirements for a physical keyboard and ear buds or ear phones. There are also important technical considerations such as durability of devices and associated peripherals, battery life, time for powering up, management options (i.e., mobile device management tools), and quality of options such as cameras and microphones.

Sample Learning Criteria for Device Criteria

Criteria considerations should drive device selection. As an example, consider a middle school (grades 6-8) that decides to integrate the district vision for equitable, 1:1 computing for communication, productivity, critical and creative thinking, and collaboration, with a key educational priority: the need to increase students' mathematics achievement levels. Staff will want to identify the current and future access required for communication (email, content management system (CMS)), productivity (word processing programs, spreadsheets, presentation programs, calendars, and graphics programs), critical and creative thinking (visualization tools, robotics, and 3-D printing), collaboration tools (cloud access, conferencing tools), as well as math-specific tools such as virtual manipulatives; external probes, skill and knowledge-building software, tools, or apps; 3-D visualization tools, online courses/units, robotics, adaptive software, computer coding, and gaming. In some cases, software or apps are unique to a specific type of device such as tablets or computers with certain operating systems or plug-ins; however, comprehensive investigations may lead to the identification of comparable apps/software for other devices. Again, most devices will be able to meet most criteria.

Make It a Community Vision

Conduct a visioning process by a representative, cross-function committee with administrators, teachers, support staff, school board members, and community members (parents, students, government and business representatives) when possible. Allow all stakeholders opportunities to provide input and contribute to the shared vision during all phases of the process.

Gap 1.2

The district is not fully staged for an efficient deployment of technology devices. Sustainable budgeting, multimodal training, and efficient technical support are not necessarily included in the plan.

Strategies to Close Gap 1.2

The Device Deployment Plan

Insure a short-term deployment strategy that aligns to the district's longer-term technology plan as a preliminary step. A typical approach to deployment includes the following components: • Collaboration with the appropriate information technology (IT) staff to insure that the network and Internet infrastructure can support the scope of the planned device deployment • Community outreach to build awareness and support for the initiative • Collaboration with those responsible for professional development in the design and offering of personalized, multimodal training for students, parents, teachers, administrators, and other staff, plus professional learning opportunities and time for teachers to design lessons that leverage the use of the devices in learning • Building a technical support team (often involving students and teachers) and a help desk with the capacity to handle the added load of this device deployment • Establishing and building the capacity of academic or instructional coaches and other educational technology (ET) staff to provide ongoing supports • Establishment of professional learning networks that enable educators, IT staff, ET staff, and others to exchange ideas and share lessons learned • Development of a 3-5 year budget that addresses the total cost of ownership of the devices across their anticipated life cycle (including replacement costs) • The presentation of the plan to the School Board (or appropriate subcommittees, with budget requests) • Updated responsible use policies and parent consent processes for the new device strategy • Strategies for obtaining and funding insurance coverage for devices • Development of a digital citizenship curriculum and plan for implantation of the curriculum with all students • A deployment schedule that synchronizes all elements of the plan outlining the rollout • A strategy for developing the necessary instructional resources to transition to an emphasis on multimedia, multimodal learning • Metrics that include the indicators and associated data collection for measuring progress, as well as a feedback loop for using these data to inform continuous improvement.

Training/Professional Learning Considerations

Align professional development with continuous improvement priorities and goals (vision). Professional development should be offered to meet the schedules and needs of those who will be attending. Professional learning should be intensive, ongoing, job-embedded, and connected to practice. Focus on student learning and address the teaching of specific curriculum content. Encourage strong working relationships among students, teachers, and staff. Providing multiple formats (e.g., face-to-face, synchronous online, asynchronous online) will likely meet the needs of a larger number of educators.

Support Considerations

Leverage teacher leaders to support on-site instructional coaching/mentoring program. Mentoring is proven to increase effective use and application of new resources and tools into classroom instruction. IT services staff should be familiar with the hardware, software, and online resources to ensure they can be used on the devices. All staff should be aware of and have immediate access to FAQs, tutorials, and troubleshooting resources. A helpdesk should be in place for in-depth issues. IT staff should understand their role in supporting learning, not just servicing computers, and have a plan in place for prioritizing issues based on instructional needs. Allow students to share their expertise. For example, provide a student "Genius Bar" where students offer troubleshooting support materials, or offer student-provided support services as part of IT services through internships programs.

Robust Network Infrastructure: Readiness Score of 5

Adequate bandwidth and a supportive infrastructure are in place to ensure ready and consistent access to online resources for teaching and learning. Teams monitor usage and identify possible bottlenecks prior to them affecting teaching and learning. Privacy, safety and security are primary concerns as well. The school community collaboratively designs responsible use policies, and confirm that the network design is supportive of these policies.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
Technology leaders assess current network capabilities and future network needs, both at school and in the communities that they serve. Privacy, safety and security are primary concerns for this review along with Digital Age functionalities. They collaborate with parents, students, and staff members to research elements of a responsible use policy.	Technology leaders ensure their vision includes an element of robust, safe and equitable network access at school and in the home. They integrate a plan for responsible use into that vision.	Technology leaders develop plans for a network infrastructure that is robust, safe and extensible. Plans include district facilities and a comprehensive set of options for home access as well. The entire school community collaboratively develops a formal responsible use policy.	Technology leaders are staged to roll out a robust network infrastructure that anticipates learning needs and facilitates access anytime and anywhere. This infrastructure meets or exceeds all standards for safety, privacy and security. A responsible use policy is completed and accepted by the entire school community.

Investigating ▸ Envisioning ▸ Planning ▸ Staging

Gaps & Strategies for Robust Network Infrastructure

Gap 2.1

The district has not yet designed and/or deployed an updated infrastructure that is robust, addresses digital learning, administrative, and business operations requirements and security.

Strategies to Close Gap 2.1

Vision First

Build an infrastructure with grand purposes in mind. If the district has a current technology plan, extract the vision, plus the information from the current year's annual technology survey to develop a current vision for the district's digital network. Consider how a "system of systems" could streamline operations, increase collaboration and communication, and add efficiencies. For example, develop a vision that brings the professional learning dataset together with the academic achievement dataset, and the human resources dataset. Why? To get a full picture of the bandwidth requirements users need to see the possibilities that integration presents them. In this example, the district could ask and answer some interesting questions with these three datasets linked, such as: What professional learning experiences correlate with higher academic achievement gains? Are behavior referrals decreased in the classrooms of teachers who have certain micro-credentials? Developing use cases such as these that predict how a more integrated system might inform district decision making can help a district more accurately predict bandwidth and networking requirements as they provide a rationale for investing in a robust, reliable technological infrastructure.

Gap 1.2

The district has not yet created an updated plan to ensure the privacy, safety, and security of the network, including a responsible use policy collaboratively created and accepted by all members of the school community in support of that design, and responsibilities for monitoring strict implementation.

Strategies to Close Gap 1.2

Engage Stakeholders

Convene a committee to consider the Acceptable or Responsible Use Policy that is right for the district and schools. The committee should start with the district's vision for the use of digital media in learning. Envisioning student and staff use in the context of learning and teaching is an important precursor to the writing of the policy.

Consider a Responsible Use Policy VS an Acceptable Use Policy

Think empowerment. Consider the Use Policy for students and staff an opportunity to empower use, not restrict it. Write (or rewrite) the use policy with opportunity in mind, helping students and staff to use technology wisely and responsibly. Incorporate language from The Children's Internet Privacy Act (CIPA), The Children's Online Privacy Protection Act (COPPA), and The Family Educational Rights and Privacy Act (FERPA). The School Board should approve the final policy. This policy should be very general and serve as an umbrella for building-based procedures that building principals will want to review with technology leaders. In many cases, each school will implement it as appropriate to the age of the learner served in that school. An excerpt from a district AUP follows: "I understand that using digital devices (whether personal or school owned) and the district network is a privilege, and when I use them according to the Responsible Use Guidelines I will keep that privilege. I will: • Use digital devices, networks and software in school for educational purposes and activities. • Keep my personal information (including home/mobile phone number, mailing address, and user password) and that of others private. • Show respect for myself and others when using technology including social media. • Give acknowledgement to others for their ideas and work. • Report inappropriate use of technology immediately." In most districts, the Acceptable or Responsible Use Policy is reviewed annually with students and teachers and to provide a springboard for teaching and learning around topics such as Internet safety, digital citizenship and ethical use of technology.

Cyber Safety

Envision a district that has established a safe and secure infrastructure for staff, students, and parents/guardians. As the technology committees consider cyber safety policies, practices, and plans, educational goals and values should guide the discussions and decisions. Doing so may require finding a balance between the strictness of the cyber security measures with the need for students and staff to access information and resources. There may be differences in procedures based on the age of the student. Be sure to address security decisions, security management and implementation, and security planning and preparedness. The technology components of cyber security should address perimeter defenses, LAN and WAN management, including such topics as redundancy, virus protection, web or content filters, and password protection. Business continuity should include plans for IT crisis management, environmental safety, and physical security. Stakeholder/end user components should include plans for engagement and communication.

Adequate and Responsive Support: Readiness Score of 5

Sufficient technical and instructional support, characterized by a positive service orientation, is available in every school. This support is proactive, providing resources, coaching, and just-in-time instruction to prepare teachers and students to use new technologies, thereby reducing the need for interventions during the learning process.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders examine desirable levels and methods for providing technology support, including needs assessment activities.	District leaders establish a vision and criteria for comprehensive, user-oriented support services that prioritize support for research-based teaching and learning practices.	District leaders develop a comprehensive plan for support that is user-focused and driven by the teaching and learning goals of the district.	District leaders are staged for a program of comprehensive, learning-centered, and proactive support.

Investigating ▸ Envisioning ▸ Planning ▸ Staging

Gaps & Strategies for Adequate and Responsive Support

Gap 3.1

The district has not yet created and implemented a plan for next-generation support that is comprehensive, user-focused and well-matched to the vision for digital learning.

Strategies to Close Gap 3.1

Consider the Digital Work Flow

Utilize digital workflows. Consider the purposes of the technology and the associated technical and instructional capacity building and systemic support for staff, students, and parents/guardians will need to ensure a learning return on the investment. Map the rollout of all initiatives, considering such needs long before the devices are deployed, projecting several years after the first deployment, and everything in between. It is very strategic to get users as self-sufficient as possible, as soon as possible. Consider creating a short list of foundational apps for both students and teachers that they have access to, on-demand. As the district designs a rollout plan, insure the IT department can reach–and support—every staff, student, or parent/guardian.

Formal Cycle for Review and Replacement: Readiness Score of 5

Teams continuously monitor technologies—software, hardware, and infrastructure—to ensure upgrades, additions, and, when called for, sunsetting/eliminations in a timely, environmentally responsible, and proactive manner.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
Technology leaders investigate and model review and replacement policies. They conduct a comprehensive internal inventory and review disposal policies.	Technology leaders commit to a review and replacement policy that is both economically efficient and environmentally responsible. This policy is formally documented and integrated with district teaching and learning priorities.	Technology leaders build a plan for reviewing and replacing all technology devices and infrastructure. They build this into annual maintenance and operations budgets.	Technology leaders prepare a comprehensive plan that documents and updates policies, current inventories; defines upgrade and replacement schedules; identifies annual budgets; and outlines an environmentally responsible disposal policy.

Investigating ▸ Envisioning ▸ Planning ▸ Staging

Gaps & Strategies for Formal Cycle for Review and Replacement

Gap 4.1

District leaders have not yet established "upgrade and replacement" cycles for hardware, software, and infrastructure, ensuring that such processes are environmentally responsible and economically efficient.

Strategies to Close Gap 4.1

The Value of Planned Obsolescence

Consider the long-term value of a well-designed refresh cycle for devices: 1) Continuous access to devices that meet instructional, assessment, and learning requirements for student and staff, with no gaps, 2) Long-term financial planning that transitions device purchase into the maintenance and operation budgets, rather than one-time, non-recurring costs, 3) Capacity to dispose of devices and other equipment in environmentally sound manner.

Gear 4: Data and Privacy

Data and privacy are foundational elements of digital learning. A personalized, learner-centered environment uses technology to collect, analyze, and organize data to improve the effectiveness and efficiency of learning. Data is the building block of diagnostic, formative, and summative assessments—all of which are key elements in a system where learning is personalized, individualized, and differentiated to ensure learner success. The district ensures that sound data privacy and security policies, procedures, and practices are in place at the district, school, classroom, and student levels.

Elements of this Gear:

- Data and Data Systems
- Data Policies, Procedures, and Practices
- Data-Informed Decision Making
- Data Literate Education Professionals

Your District provided the following Data and Privacy vision:

Staff and students make data driven decisions and use digital learning responsibly. Staff will understand the privacy of student information and also be able to make use of collected assessment data.

Your District's Stage of Readiness for Data and Privacy

Category	Level of readiness
Gear Score: Data and Privacy	5.0
Data and Data Systems	5.0
Data Policies, Procedures, and Practices	7.0
Data-Informed Decision Making	5.0
Data Literate Education Professionals	3.0

Level of readiness

Investigating → Envisioning → Planning → Staging
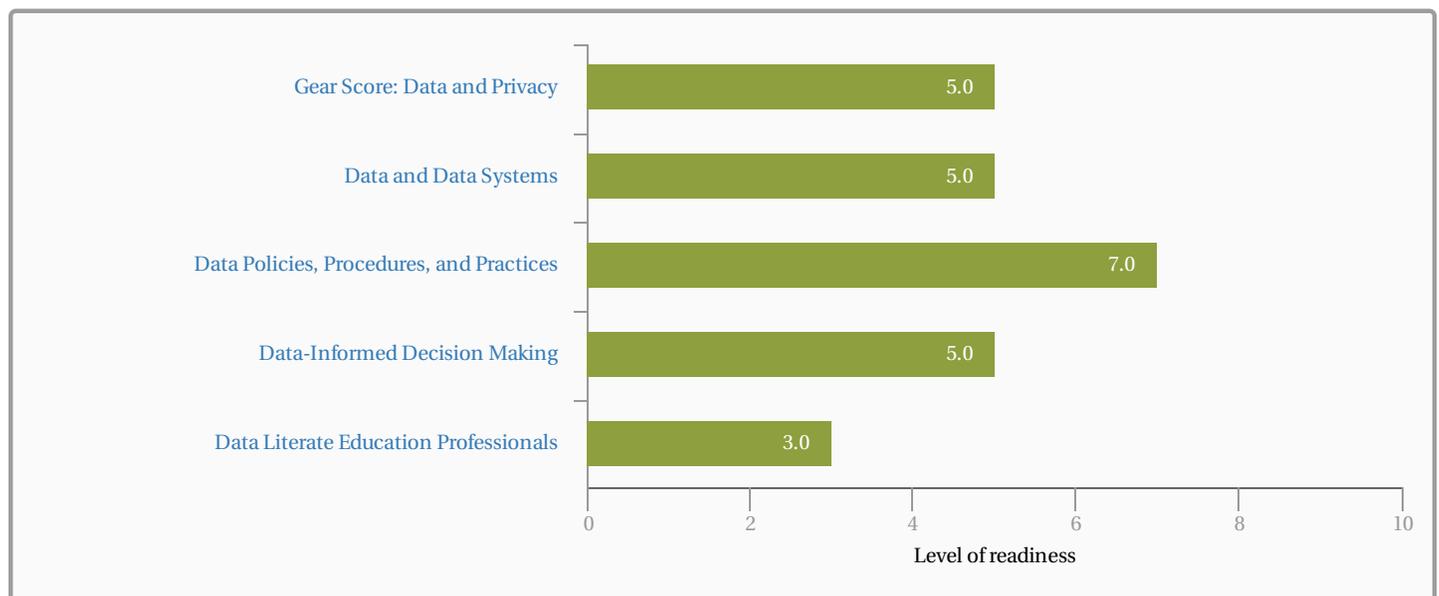
Depth of Your District's Knowledge Base: Data and Privacy

Investigating, researching, and professional discussions are critical at all levels. The chart below reports the depth of your district's leadership team's knowledge base.

Confidence of Your Leadership Team in Discussing Topics Related to Data and Privacy	Not Yet Prepared to Discuss	Could Discuss After Additional Research	Could Discuss with Confidence Now
Discuss data governance policies and procedures that ensure privacy, safety, and security in data collection, analysis, storage, retrieval, exchanges, and archiving, to meet standards and legal requirements (i.e., FERPA and CIPA).		X	
Discuss the data systems, security procedures, and support systems required to ensure that a range of accurate, reliable data sets and associated reports are available, on demand, to authorized users.		X	
Discuss the challenges and opportunities in transitioning to a culture of evidence-based reasoning (a data culture) using accurate, reliable, and accessible data.		X	

Status

The status that your district leadership team reported for each question is displayed below.

	Not currently a priority	Actively researching	Formalizing our commitment	Developing district plans to implement	District policies, expectations and plans are in place
The district has up-to-date policies, procedures, and practices that address the privacy and security of data, and the use of data, technologies, and the Internet that meet or exceed legal requirements and federal guidelines.			X		
The district is operating digital data systems that enable secure data collection, analysis, reporting, storage, exchanges, and archiving for authorized users.				X	
Evidence-based reasoning and data-driven decision making are part of the school and district culture for staff, students, and parents.			X		
All staff are knowledgeable and skilled in using data, technology, and data analytics to inform instruction, curriculum, assessment, and their own professional practices.		X			

Rubrics for Data and Privacy

Data and Data Systems: Readiness Score of 5

To facilitate data-driven decision making, appropriate data (i.e., data dashboards and data analytics) are readily available, easily comprehensible, and useful for supporting the decision making processes. The data are available at any time, on any desktop, and from any location, made available through real-time access to data dashboards, data analytics, and data warehouses.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders investigate new models for storing and accessing data, including systems for learning management, online assessment, student information, and longitudinal data.	District leaders envision how online assessments and data systems will operate in the context of other district reforms. They are working to ensure data are readily available, secure, easily comprehensible, and useful for supporting the decision making process.	District leaders write technical specifications for the data systems required to attain the vision for learning, teaching, and management (e.g., infrastructure, data systems, student information systems, longitudinal data systems, learning management systems, support, etc.). They develop a plan for acquiring, deploying, operating, securing, maintaining, supporting, and upgrading the system over time.	District leaders establish data systems and online assessments (e.g., release of RFP, hiring of contractors, etc.). They hire and/or train the information technology staff members required to deploy and maintain such a system. The system includes real-time access to data dashboards, data analytics, and data warehouses for authorized users.

Investigating ▶ Envisioning ▶ Planning ▶ Staging

Gaps & Strategies for Data and Data Systems

Gap 1.1

The district has not yet established an integrated system of data structures (e.g., data warehouses, data dashboards, data analytics, on-demand reports, etc.) that is readily available, easily comprehensible, and useful for decision making throughout the district.

Strategies to Close Gap 1.1

Appoint a Chief Privacy Officer

Ensure there is district leadership (such as a Chief Privacy Officer) who can provide guidance as the district moves forward with planning for widespread data use and the selection of online tools and resources. This district leader should be able to guide the district through the planning process, respond to questions about data privacy from staff and the community, be an advocate on the use of data in decision-making, and be knowledgeable about federal and state laws relevant to education data privacy and security. The leaders should have the appropriate leadership aptitude to insure diversity of thought, tact, confidence, and the ability to think outside the box. For larger districts, this will likely be a full-time position, while in smaller districts it may fall under the responsibility of an existing staff member or be a position that is shared among several districts.

Start with the Questions

Engage stakeholders including teachers, school leaders, parents, and community partners in conversations about what questions the district wants to answer with data. The purpose of using data is for answering specific questions such as: • Do our students need remediation in college? • What types of graduates go on to college or certificate programs and how do they do? • Is our recent emphasis on attendance having an effect on student performance? • How is our new elementary school math curriculum impacting math proficiency in middle and high school? The team should also include questions required for federal and state reporting. Organize the questions into themes, which can guide the district today and into the future. These themes should be used as a framework for building the district's data plan.

Gap 1.2

The district has not developed a support system for system wide data-informed decision making through: clarity of data definitions, access to data applications, easy access and reporting, necessary training and professional development, and procedures for privacy and security.

Strategies to Close Gap 1.2

Create Common Definitions

Form a committee of key leaders from the district, schools, parents, and community organizations to build an agreed upon definition for key terms. Formulate a vision statement and input from stakeholders as a guide using the district's data. Terms to be defined may include data-informed decision-making, data privacy, data security, data access, student demographic data, and student academic data. Use existing resources from local, state, and national organizations for example definitions. Agreement on the definitions of the terms will provide an important foundation for future data usage planning and activities.

Data Policies, Procedures, and Practices: Readiness Score of 7

Using the Family Educational Rights and Privacy Act (FERPA) as the basis, the district has up-to-date policies, procedures, and practices that address legal, ethical, and safety issues related to the privacy and security of data, and the usage of data, technology, and the Internet. Such policies, procedures and practices address the collection, storage, analysis, reporting, transmission, and archiving of data, as well as the usage of data, the Internet, and technology by students and education professionals in the course of teaching, learning, communications, and the management of school services.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders investigate federal, state, and local laws on privacy and security of data in education systems. They also review policies and procedures on safety, security, and privacy in other districts.	District leaders conduct in-district discussions with policymakers related to the legal, ethical, and safety issues related to privacy and security of data in schools. They secure common understanding among district leaders on the topic.	District leaders draft data governance policies and procedures related to data usage, privacy, and security for review and commentary.	District leaders adopt formal governance structures (policies and procedures) related to data usage, privacy, and security. They then develop a communication, implementation, oversight, and evaluation plan to ensure comprehensive application.

Investigating > Envisioning > Planning > Staging

Gaps & Strategies for Data Policies, Procedures, and Practices

Gap 2.1

Data governance policies and procedures related to data usage, privacy, and security have not yet been adopted, communicated to stakeholders, and implemented.

Strategies to Close Gap 2.1

Consider the Plan as "EMPOWERMENT"

Convene a district committee with broad representation to develop a plan for data security and privacy. The ticket to a useful data policy that everyone understands, supports, and strictly adheres to is "empowerment." The information technology, data, and assessment staff will be key. Write your plan with the end game in mind (i.e., empowering students, staff, policy leaders, community, family, and other stakeholders to use data responsibly, in accordance with the law, to improve learning and teaching).

Who Has Access to Which Data?

Begin by setting goals for data use in your district (e.g., reduce the burden of data collection, increase efficiency, and improve transparency). The plan might begin with your district's vision for data used, based on a set of student data principles (for an example, see http://studentdataprinciples.org/the-principles/) that serve as a foundation for your data policy. At the end of the day, the policy needs to address all personally identifiable data, regardless of where it is stored or by whom (district, schools, individual teachers). Consider this initial step in getting ready to write your plan, policy, and procedures. Identify the questions that need to be answered through the data. Identify the datasets in the district that are purposefully collected, compiled, and stored by the district or district staff. Establish who is the steward for each data set. Establish the job classifications that will have access to each data set; document the type of access each classification will have; and specify the reasons that level of access has been assigned. Identify situations where data are generated by students in the course of learning and set policies for where this information can and cannot be stored, considering free, public, cloud-based resources that individual teachers may use. This process should provide you with a clear picture of the datasets for which you are writing the policy.

A Roadmap to Data Transparency, Security, and Privacy

Write policies and procedures to guide students, staff, parents, and community to ensure safety, privacy, and security. Begin this once you have a definitive list of datasets your district manages, plus situations where students might be generating personally identifiable information stored in the cloud or by a third party vendor. You will need a basic policy, plus procedures for various groups. The policy should clearly and transparently specify the security protections that the district has in place, as well as the processes that should be followed should a breach occur. The district policies should also be specific about when parent notification is required for storage and usage of student data, and describe parents' rights with respect to student data.

Data-Informed Decision Making: Readiness Score of 5

The use of formative and summative assessment data is part of the school culture, with administrators, teachers, and, perhaps most importantly, students actively using this data to improve learning. Assessment is not viewed as punitive, but rather as part of the teaching and learning process. There is an expectation in the district that data will inform all teaching and learning practices and decisions. This is modeled at all levels of the school system, from administration to the students themselves.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders investigate what it means for decision making to be data-informed. In doing so, they document various models of evidence-based reasoning and data-driven decision making as well as learning management systems that support those processes. District leaders listen to other district leaders report on their work in building towards data cultures and identify models where students are engaged in a culture of evidence-based reasoning.	District leaders re-envision the district as a strong data culture. Scenarios within that vision incorporate all aspects of the process, including typical days in the lives of students, staff members, and parents operating in such a culture.	District leaders embark on a community-based planning process designed to transition the district into a culture of evidence-based reasoning and data-informed decision making. The plan includes a timeline, budget, and defined path toward the vision.	District leaders set formal expectations for data-driven decision making and evidence-based reasoning at the district and school levels. They integrate these concepts into school improvement plans, staff development offerings, decision-making processes, and investment set-asides. Curricular materials are purchased; teaching training sessions are offered, and evidence-based reasoning is integrated into student learning standards.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Data-Informed Decision Making

Gap 3.1

District leaders have not yet set formal expectations for data-driven decision-making and evidence-based reasoning at the district and school levels. These concepts are not yet integrated into school improvement plans, staff development offerings, decision-making processes, and budgets at all levels.

Strategies to Close Gap 3.1

A Data Culture

Review existing school improvement plans and identify places where increased use of data can help support existing goals and continuous improvement. Imagine a school and district culture, where key decisions are research and data informed – where it is the norm for students and staff to expect that data, research, and information will be used to inform and, in some cases, drive all decisions. That is data-informed decision making. Meet with administrators and teachers to discuss where they wish they had better access to data, more useful/usable data, or more data knowledge. While collecting data from educators, explain how these data will be used to inform the district's efforts, thus modeling data-informed decision making. Using existing school improvement plans, create model activities to demonstrate how data-driven decision making could be integrated into the plan or used to attain the plan's goals. Create a coherent plan for continuous improvement activities, professional development offerings, and the use of district resources to align to these priorities. Think big.

Data Literate Education Professionals: Readiness Score of 3

Educators in the system are data-literate. They are aware of the legal and ethical responsibility to ensure security, accuracy, and privacy in the collection, analysis, exchange of, and reporting of data. They understand the potential uses and misuses of data in the teaching and learning process and act accordingly. All education professionals in the district use data to inform instructional and administrative decision making. Data literacy extends to students as well as curricula are reviewed and updated to make effective use of evidence and data a priority for all.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders investigate evidence-based reasoning and data-driven decision making, focusing on the types of training and professional development all staff members will need to use sophisticated data systems effectively.	District leaders create a new vision for a data-based environment that includes scenarios defining an informed, well-trained, knowledgeable staff and data-savvy students.	District leaders embark on a community-based planning process designed to transition the district into a culture of evidence-based reasoning and data-informed decision making. The plan includes a timeline, budget, and defined path toward the vision.	District leaders set formal expectations for data-driven decision making and evidence-based reasoning at the district and school levels. They integrate these concepts into school improvement plans, staff development offerings, decision-making processes, and investment set-asides. Curricular materials are purchased; teaching training sessions are offered, and evidence-based reasoning is integrated into student learning standards.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Data Literate Education Professionals

Gap 4.1

The district has not yet set expectations for data literacy for staff and students. Such expectations are neither a formal part of the district vision nor are they integrated into school improvement processes, professional evaluation or student learning standards. Appropriate definitions, guidelines, teacher training and support materials, and assessments are lacking.

Strategies to Close Gap 4.1

Get the Big Picture

Review data policies and procedures, clearly document the roles and responsibilities of individuals related to data, data systems, data security, data privacy, data storage, data stewardship, and for the responsible and effective uses of data in the school district. If the district has data policies and procedures, data governance structures, that is a good place to start. The investigation should include determining: • What questions are to be asked and answered through data? • What data sets are available and how do they map to the questions? • What roles do persons in various job responsibilities have for the data collection, data organization, data analysis, data reporting, and data security and accessibility? This review will help determine what skills staff and students need based on their roles and responsibilities. Once the mapping is complete, an overarching vision for data literacy should be developed for the district. This vision will inform more specific expectations for individual staff members.

Gear 5: Community Partnerships

Community partnerships include the formal and informal local and global community connections, collaborative projects, and relationships that advance the school's learning goals. Digital communications, online communities, social media, and digital learning environments often serve as connectors for these partnerships.

Elements of this Gear:

- Local Community Engagement and Outreach
- Global and Cultural Awareness
- Digital Learning Environments as Connectors to Local/Global Communities
- Parental Communication and Engagement
- District Brand

Your District provided the following Community Partnerships vision:

> Use technology as a platform for interaction with families; the community - strengthen methods for communication; interaction with numerous communication tools such as social media, web presence, email and student information systems.

Your District's Stage of Readiness for Community Partnerships

Category	Level of readiness
Gear Score: Community Partnerships	5.0
Local Community Engagement and Outreach	5.0
Global and Cultural Awareness	5.0
Digital Learning Environments as Connectors to Local/Global Communities	5.0
Parental Communication and Engagement	5.0
District Brand	5.0

Investigating | Envisioning | Planning | Staging
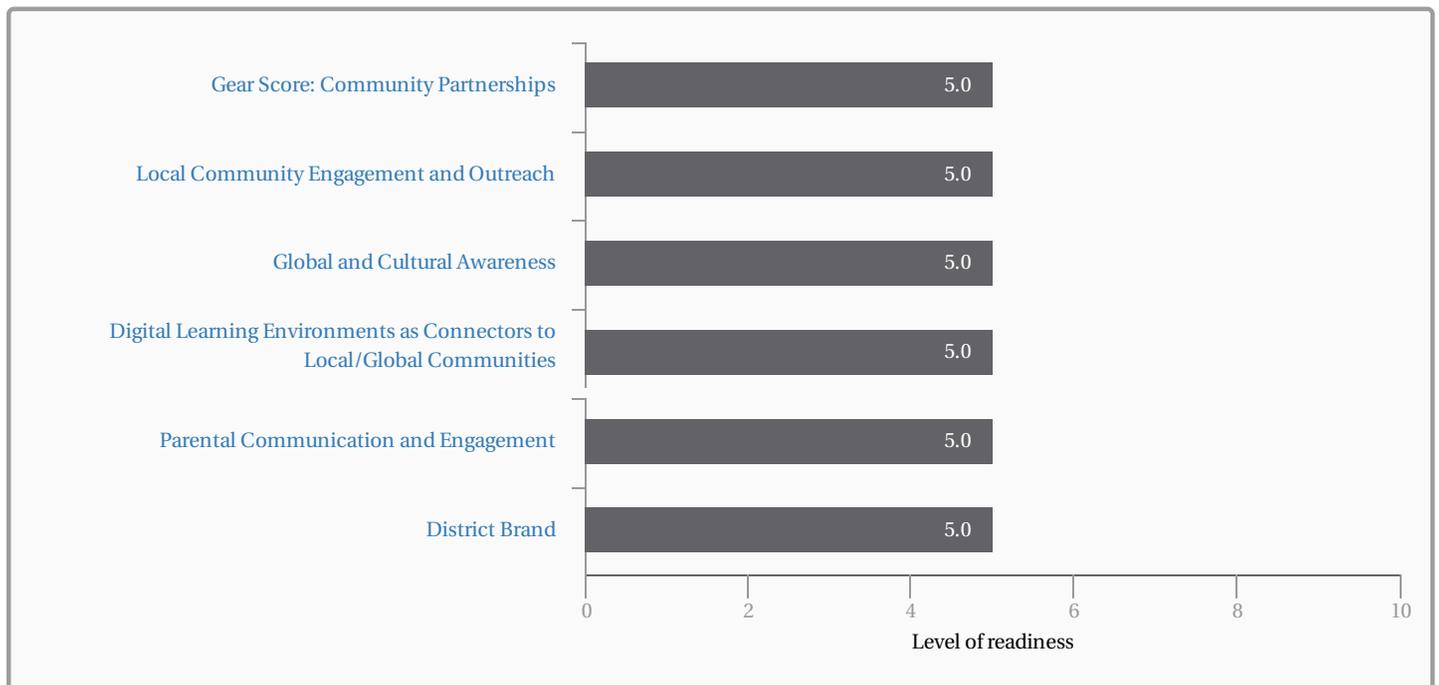
Depth of Your District's Knowledge Base: Community Partnerships

Investigating, researching, and professional discussions are critical at all levels. The chart below reports the depth of your district's leadership team's knowledge base.

Confidence of Your Leadership Team in Discussing Topics Related to Community Partnerships	Not Yet Prepared to Discuss	Could Discuss After Additional Research	Could Discuss with Confidence Now
Discuss how teaching and learning can be enriched through local community partnerships (i.e., increased access, relevance, opportunities for public exhibitions of student work, etc.).		X	
Discuss community partnerships that can build global and cultural awareness in students.		X	
Strategies for ensuring that digital/online learning environments serve as vehicles to enable local and global community partnerships.		X	
Discuss home-school communication that are enhanced and enriched through technology.		X	
Discuss district creation of a "brand," that positions the district as a positive, 21st Century force in the lives of students and the community.		X	

Status

The status that your district leadership team reported for each question is displayed below.

	Not currently a priority	Actively researching	Formalizing our commitment	Developing district plans to implement	District policies, expectations and plans are in place
The school serves as a hub of the community and actively involves the community in achieving its learning goals.			X		
Students' global and cultural awareness is deepened through face-to-face and online community partnerships.			X		
The school district has deployed a digital learning environment with education programs that facilitate safe online peer-to-peer, student-teacher, and student-expert interactions.			X		
The district has designed and deployed a robust digital communication system that is responsive to individual families as staff use it to draw parents into frequent interactions about their child's education.			X		
The district has built a brand that conveys preferred messaging with students' families, the community, and beyond.			X		

Rubrics for Community Partnerships

Local Community Engagement and Outreach: Readiness Score of 5

The school serves as a hub of the local community. As such, it actively involves the community in achieving its learning goals, reaching out to the community to (1) extend learning into community centers, libraries, businesses, higher education institutions, museums, and other public spaces; (2) bring relevance to curricula through partnerships that take the shape of apprenticeships, community service, and the use of community-based experts and resources; (3) implement community-based exhibitions, reviews, critiques, and celebrations of student work; and (4) coordinate after school programs, including collaboration with the school and students' teachers. Community Engagement and Outreach.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders annually survey the community for opportunities for partnerships and cooperative relationships. Their communication outreach and public forums provide community members a voice in school decisions and activities.	District leaders are continuously seeking community partnerships (e.g., extending learning into community centers, libraries, museums, community-based exhibitions, coordinated afterschool programs).	District leaders establish a formal plan or plans to engage the community in viable partnerships and coordinated activities (e.g., extending learning into community centers, libraries, museums, community-based exhibitions, coordinated after school programs).	District leaders establish school-community partnerships as a strategic goal, with clear parameters for such partnerships, including processes for considering, vetting, and engaging in such partnerships. Partnerships include: 1) the extension of learning into the community, connections related to exhibitions and reviews of student work, and 2) coordination of after school programs.

Investigating ▸ Envisioning ▸ Planning ▸ Staging

Gaps & Strategies for Local Community Engagement and Outreach

Gap 1.1

The district does not serve as the hub of the community, where community members, groups, and businesses are actively engaged in activities that expand opportunities for students, while serving mutually beneficial goals for the community.

Strategies to Close Gap 1.1

Provide Partnership Training

Invest in community partnerships by providing regular training for school staff in developing, organizing, and participating in school-community partnerships. Training opportunities can be tailored to specific staff roles, such as school counselors, teachers, administrators, and support staff. All staff, including custodians, have a role in maintaining strong community partnerships.

Gap 1.2

The district has not yet committed to the concept of local and global community engagement and outreach beyond connections with parents.

Strategies to Close Gap 1.2

Create a Community Assets Map

Work with newly established community partners to identify where community resources and public meeting spaces are located and where pivotal community leaders operate. Create an interactive map that includes the community information along with locations of school buildings and resources. This map can be used in future planning activities, while versions of it can be provided online for district staff and community members to access.

Managing Partnerships

Establish a process that schools, teachers, and other education professionals within the school district should follow when they want to launch a partnership. Multiple processes may be in order for short-term and long-term partnerships. Guidelines and templates will be helpful for such cases. A district level "clearinghouse" of partners, activities, and volunteerism would assist in ensuring parity level opportunities.

Select Viable Partnerships

Once the school district has determined what existing needs can potentially be addressed through community partnerships, they should meet to establish specific goals for partnerships activities, prioritize the options to align with these goals, and make a decision as to which partnerships to pursue. All partnerships should be mutually beneficial.

Global and Cultural Awareness: Readiness Score of 5

The community partnerships extend and deepen students' knowledge, understanding, and appreciation of cultures and communities other than their own. Digital networks enable students and education professionals to connect, interact, and collaborate with other students, experts, and organizations from outside of their locale. The school builds the capacity of students to recognize and value diversity, enabling them to participate successfully in community partnerships online and face-to-face.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders conduct a review of effective models of school-community partnerships that build global and cultural awareness. Representatives attend conference sessions, talk with district leaders who are implementing such programs, and identify key characteristics of effective learner-centered practices.	District leaders conduct public and internal sessions on school-community partnerships locally and globally. Educators across the district envision such environments at all levels. District leaders include global and cultural awareness in their district and school visions.	District leaders establish a formal planning process to develop an implementation plan that supports/establishes local and global community partnerships at all levels. That plan includes a glide path, budget, and pathway for schools to make this transition.	District leaders establish and communicate clear expectations that schools/classrooms will include opportunities for local and global community partnerships. All capacity-building elements are in place or carefully readied for implementation (e.g., associated series of professional development and training, models, curricular materials, and instructional coaches).

Investigating ⟩ Envisioning ⟩ Planning ⟩ Staging

Gaps & Strategies for Global and Cultural Awareness

Gap 2.1

The district may have committed to the value that local and global partnerships bring to learning, but it does not formally communicate expectations internally to district and school administrators and other education professionals, nor does it establish structures that serve as a bridge to such partnerships, while building capacity to leverage such partnerships in the service of learning.

Strategies to Close Gap 2.1

Uncover Resources

Conduct a partnership communications inventory to identify the digital resources that exist both in the district and within the community that could be used for students, staff, and community members to connect, interact, and communicate. The inventory should include the resources, the location (if location specific), and both current and potential uses. Digital resources provide unlimited opportunities to connect with individuals within one's own community and throughout the world.

Build from Within

Gather information from school administrators, counselors, and other staff members on existing programs. Individual schools may have existing, successful community connections that could be expanded district-wide. Tap into staff members who are organizing and leading successful partnerships on a small scale to serve on district partnership planning committees or to provide training to other staff members.

Gap 2.2

While individual classroom teachers may be providing global and cultural experiences, the district does not systematically encourage, support, and monitor such experiences.

Strategies to Close Gap 2.2

Learn, Network, and Exchange Ideas

Once the district has conducted a history of the community cultures, it might consider holding regular community and cultural forums, both in school buildings and in community gathering areas, with the intent of communication, exchanges, and achieving mutual goals.

Sharing the Wealth

Establish a communication medium, such as blog posts, e-newsletter, or webinars, for district staff and teachers to share their existing ideas and lesson plans related to providing global and cultural learning experiences. Community agencies can also share information related to their services and resources. District staff should recruit contributors and monitor the content to ensure consistency with the district's intended purpose and message.

Digital Learning Environments as Connectors to Local/Global Communities: Readiness Score of 5

The school district has established a digital learning environment that offers students access, e-communication, resource libraries, file exchanges, and Web tools, which facilitate interactions among peers and between teachers, parents, and students in school and beyond. District leaders build digital citizenship in students and structure online communities that to ensure online safety and security.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders review information on the critical elements of an online learning environment (e.g., access, eCommunication, resource libraries, file exchanges, and Web tools) that facilitate interactions among peers and between teachers, parents, and students in school and beyond.	District leaders map the elements of a digital learning environment to its vision of personalization of learning, student-centered learning, deeper learning, and global and cultural awareness. In doing so, they envision student work, interactions, exchanges, and contributions at all levels, within the school and beyond, with local and global communities. Pilots of various aspects of the environment have been authorized and are underway.	With stakeholder input and collaboration, district leaders build a plan that outlines the steps and milestones to establishing a digital learning environment, with outreach into local and global communities. They align the elements of that environment to its vision. The school reviews the results from various authorized pilots that test the elements of the environment to inform final decisions.	District leaders finalize the technical specifications for a digital learning environment with outreach into local and global communities. They build and deploy the environment or authorize and fund a group to do so. They offer training and professional development to ensure effective use. Support structures are in place.

Investigating ▷ Envisioning ▷ Planning ▷ Staging

Gaps & Strategies for Digital Learning Environments as Connectors to Local/Global Communities

Gap 3.1

The district has not yet established a digital learning environment that offers a broad spectrum of the features to enable interactive communication with local and global partners.

Strategies to Close Gap 3.1

Needs Assessment

Conduct a needs assessment to review the various communications tools used by the district, the schools, and its partners. In addition, the compile a list of digital communications tools that are aligned with curriculum goals and essential to fostering effective online communications between classrooms and experts, resources, partners, and other classrooms. That list should include measures to ensure privacy, safety, and security. The discrepancy between the existing tools and the essential tools represents potential needs that will need to be prioritized. The results of this needs assessment can become the beginning of a district digital communications plan.

Work with Local Media and Press

Form a close working relationship with the local media and press that serve the school district's community. Invite members of the local media and press to multiple school functions and honor their work and support- when appropriate – at school board meetings and/or other school district functions.

Gap 3.2

The district does not have a program in place to ensure that all students build digital citizenship competencies, including online safety and security, prior to their online interactions in local and global partnerships.

Strategies to Close Gap 3.2

Promoting the Standards

Emphasize the importance of digital citizenship competencies, including online safely and security, with all instructional staff. Provide consistent definitions for all staff, as well as documentation of the alignment of digital citizenship competencies with existing standards. Provide resources for teachers to use in teaching digital citizenship to their students, as well as assessments for both students and educators.

Gap 3.3

District policies related to online learning, teleconferencing, cell phones, filtering and other aspects of technology policy limit educator professionals and students access to digital networks.

Strategies to Close Gap 3.3

Parental Communication and Engagement: Readiness Score of 5

School leaders engage parents and students in home-to-school communications through a variety of venues. While this may include internet-based solutions, it also includes options that do not depend on connectivity in the home.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders research options for parental communications and engagement. They survey connectivity needs among parents before designing communication systems.	District leaders include specific language and requirements for parental communications and engagement in all district plans, instructional and technological. They envision a communication system designed for parents that is flexible and adaptable to meet the families' needs.	District leaders develop a comprehensive plan for parental communication and engagement that includes both connected and traditional communications media.	District leaders design, produce, and deploy a robust communication system that is responsive to the needs of individual families. The system is flexible and adaptable at the school level. It includes specific strategies for drawing parents into frequent dialogue with staff members regarding the needs and accomplishments of their children.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Parental Communication and Engagement

Gap 4.1

The district does not systematically ensure that school's digital learning environments used by students and teachers on a daily basis are parent-friendly and accessible, (i.e., parents have secure access to many of the features their students are engaged in online), nor does the district ensure that parents have opportunities to contribute while in that environment.

Strategies to Close Gap 4.1

Align the Vision

The district should provide clear and consistent expectations with respect to the type of access must be provided to various stakeholders to student files and digital learning environments. One of the criteria for selection of components of a digital learning environment should be the type, flexibility, and ease of use for parents and other key stakeholders. The current digital learning systems in use throughout the district should be reviewed for alignment with the district's vision for teacher, students, and parental access.

Gap 4.2

The district has not yet established policies on parental outreach that ensure that parents who do not have Internet access have alternative avenues for communication.

Strategies to Close Gap 4.2

Multiple Options

Embrace multiple options for communication that are consistent with the needs of the parents and broader community armed with information related to the tools available to parents for accessing school-related information. These may include a district mobile app; district, school and teacher websites; social media sites; and options for parents without Internet access.

District Brand: Readiness Score of 5

Branding is defined as the marketing practice of creating a name, symbol, or design that identifies and differentiates a product from other products. It's critical that our schools develop a brand as well, and that the brand represents visionary thinking and 21st Century learning. The brand should be transparent to all members within the organization—they must all be telling the same story, one that they believe in and stand behind.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders research models for establishing a brand. They survey the community to gather information on current perceptions of the district.	District leaders conduct focus groups and interviews related to the story that various constituents want the brand to convey.	District leaders develop a comprehensive plan to define the brand and use the Internet and interactive multimedia to develop the brand.	District leaders develop the web structure for the branding and the initial content for the brand. Their model includes opportunities to refresh continuously the stories that represent the brand.

Investigating   Envisioning   Planning   Staging

Gaps & Strategies for District Brand

Gap 5.1

The district has not yet established a brand for 21st Century, digital learning that drives all policies and practices.

Strategies to Close Gap 5.1

Scenario Building/Commitment to an Effective Brand for 21st Century Digital Learning

Organize a team of stakeholders that includes teachers, administrators, staff members, students, parents, and community members. The team should display the necessary leadership aptitude traits such as "thinking outside the box," courage, confidence, tact, and diversity of thought and opinion. As a group, brainstorm scenarios of what effective 21st Century digital learning looks like at various age levels and within various content areas. Extend that work to describing what the district's brand would look like if it were an effective 21st Century Learning environment. Create a list of essential components of the district's brand.

Gear 6: Personalized Professional Learning

Technology and digital learning can increase professional learning opportunities by expanding access to high-quality, ongoing, job-embedded opportunities for professional growth for teachers, administrators, and other education professionals. Such opportunities ultimately lead to improvements in student success and create broader understanding of the skills that comprise success in a digital age. Digital Professional learning communities, peer-to-peer lesson sharing, and better use of data and formative assessment, combined with less emphasis on "sit and get" professional development sessions eliminate the confines of geography and time. These ever-increasing resources offer teachers and administrators vast new opportunities to collaborate, learn, share, and produce best practices with colleagues in school buildings across the country. Digital leaders establish this type of collaborative culture. They model and are transparent with their own learning. In addition, educators must be engaged in more collaborative, goal-oriented approaches to the evaluation of their own teaching to serve as a personal model for the experiences that they might bring to students.

Elements of this Gear:

- Shared Ownership and Responsibility for Professional Growth
- 21st Century Skill Set
- Diverse Opportunities for Professional Learning Through Technology
- Broad-Based, Participative Evaluation

Your District provided the following Personalized Professional Learning vision:

Encourage more personalized professional development by offering choice in selecting PD topics during faculty meetings; sharing examples of instructional practices taking place within the district.

Your District's Stage of Readiness for Personalized Professional Learning

	Level of readiness
Gear Score: Personalized Professional Learning	5.0
Shared Ownership and Responsibility for Professional Growth	7.0
21st Century Skill Set	5.0
Diverse Opportunities for Professional Learning Through Technology	3.0
Broad-Based, Participative Evaluation	5.0

Investigating   Envisioning   Planning   Staging
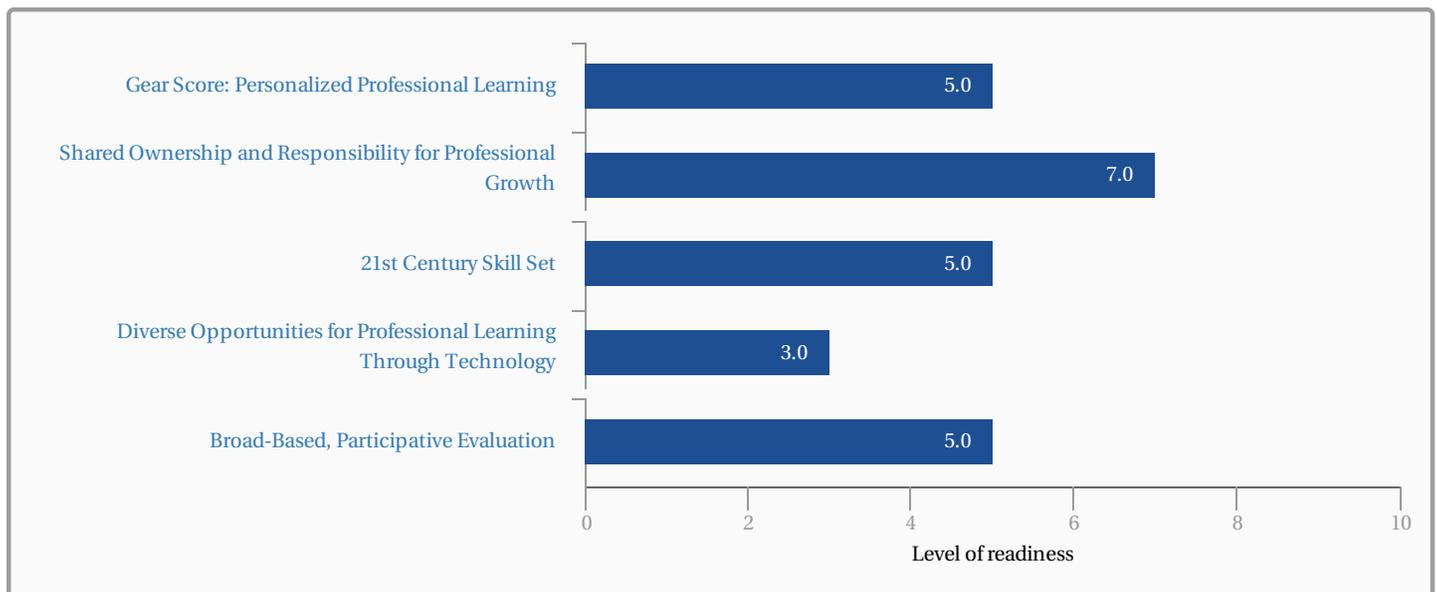
Depth of Your District's Knowledge Base: Personalized Professional Learning

Investigating, researching, and professional discussions are critical at all levels. The chart below reports the depth of your district's leadership team's knowledge base.

Confidence of Your Leadership Team in Discussing Topics Related to Personalized Professional Learning	Not Yet Prepared to Discuss	Could Discuss After Additional Research	Could Discuss with Confidence Now
Discuss models of shared ownership of professional development, where district policy encourages and supports teachers and administrators in self-directed uses of online, social media for professional growth.		X	
Discuss the pedagogical shifts and associated professional development required to ready staff for 21st Century digital learning.		X	
Discuss the models and merits of staff evaluation models that are goal-oriented, participatory, and focused on metrics directly related to 21st Century digital learning.		X	

Status

The status that your district leadership team reported for each question is displayed below.

	Not currently a priority	Actively researching	Formalizing our commitment	Developing district plans to implement	District policies, expectations and plans are in place
Shared ownership and shared responsibility for professional growth of education professionals.				X	
New instructional practices and professional competencies necessary to support 21st Century Skills/deeper learning.			X		
Alternative, personalized models of professional development are enabled through technology and social media (i.e., EdCamps, Twitter Chats, etc.), and encouraged and supported through coherent district policies.		X			
New models for evaluation that involve education professionals in self-assessment, goal setting and professional collaboration in support of those goals.			X		

Rubrics for Personalized Professional Learning

Shared Ownership and Responsibility for Professional Growth: Readiness Score of 7

Teachers, administrators, and other education professionals actively support their own professional practices by using technology, eLearning, and social media to optimize learning and teaching. They are actively taking responsibility for their own professional growth through professional learning networks (PLNs), online communities of practice, eLearning, and social media (e.g., Twitter feeds, EdCamps, blogging and following bloggers, on-demand videos, etc.). Educators have access to collaborative tools and digital environments that break down classroom, school, and district walls. Professional development encourages, facilitates, and often requires that they individually and collaboratively create, join, and sustain professional networks both within and outside of the district, frequently leveraging the latest in social media. The district has established flexible policies and practices that encourage and credit the personalization of professional learning for teachers, administrators and other education professionals.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders investigate the use of technology, the Internet and social media in self-directed professional learning of teachers, administrators, and other education professionals. They review the research on adult learning related to personalized, self-directed learning, and to outside of education to identify models in other sectors.	District leaders build on key research studies and the opportunities that digital and social media present to today's education professionals as they conceptualize shared ownership and responsibility for professional learning. They build scenarios for a preferred future, identifying the policy, practice, and cultural shifts their district will need to implement personalized learning successfully for all education professionals.	District leaders formulate a plan for shared ownership and responsibility of professional growth based on their investigations, research, and their preferred future scenarios. They pilot the new approach within a limited number of current programs, evaluate, and adjust the plan through lessons learned.	District leaders model the innovative use of technology, eLearning, and social media in the professional learning offered through the district. They do the same as they take ownership of their own professional growth, in part by engaging in self-directed professional learning networks on a daily basis. They formally adopt policies and procedures and set expectations for shared ownership and responsibility of professional learning among all education professionals in the district and build the capacity of all leaders in the district to implement the plan using established policies and procedures.

Investigating ▶ Envisioning ▶ Planning ▶ Staging

Gaps & Strategies for Shared Ownership and Responsibility for Professional Growth

Gap 1.1: Personalized Learning Not Supported by the District

District policies, practices, and culture do not encourage or support personalized professional learning among staff. As a result, administrators, teachers, and other education professionals are not taking ownership for their own professional learning. Embedded daily use of technology, PLNs, and social media is the exception rather than the rule. Professional growth toward the targets set by the district, team, and individual is limited.

Strategies to Close Gap 1.1: Personalized Learning Not Supported by the District

Solicit Teacher and Leader Input

Meet with representative teams of teachers and leaders from across the district in the spring to plan the following year of professional learning opportunities. Using student achievement and teacher supervision data to guide desired outcomes, work to purposefully allow for teacher "voice and choice" in their learning. This can be accomplished in a number of ways. Examples include: • Poll teachers periodically using their own survey. • Utilize the "Professional Learning" and "Curriculum and Instruction" assessments in this planning tool to collect their priorities and perceptions. • Revise the teacher evaluation processes to have teachers set goals and identify the professional development they will require to attain those goals. Aggregate these needs across schools and the district to inform planning for professional learning.

Collaborate to Set Goals for Teacher Success

In addition to setting goals relating to student academic achievement, use Personalized Learning Communities (PLC) to establish specific goals relating to individual learning for the education professionals. Specifically, assign tasks to find new ways of gathering and learning relevant material through the PLC, then discuss how to document and share that learning. Consider systems and procedures that your district will put in place to support educators in collaborating and sharing their new expertise to ensure all personnel have access to these innovative approaches to improving instructional practice.

Build the Capacity of Administrators

Formulate a plan to develop the capacity of administrator technology use to take shared ownership and responsibility for their own professional learning. Include first-hand experience with technology–based professional learning, particularly resources designed for administrators. Design the professional learning in ways that enable all district and school administrators/ leaders to become more self-directed and collaborative in accomplishing professional growth targets at three levels: those set by the district, those set by collaborative teams, and those set by the individual administrator.

Pilot Personalized Learning with Leaders

Perform a pilot program that addresses administrators' engagement in personalized professional learning through a range of technology-based professional learning opportunities (i.e., Twitter feeds, edWeb, EdCamp, blogs, MOOCS, etc.). Emphasize the value that personalized learning brings to the district, while de-emphasizing seat time as the defining measure of success. Define alternative metrics of success and measure results.

Show me the Money

Identify funding sources that will systemically support this new capacity of district and school administrators. Although this is primarily a shift in mindset, it is important to analyze any costs associated with a shift to personalized learning. Funds could potentially be redirected from currently professional development resources. Consider new and creative sources with a plan to: • Reduce copier costs by sending more emails and using online collaboration tools to communicate • Use time in staff meetings for low cost training and facilitated discussion • Audit and reduce conference registrations and subscriptions to ensure relevance Negotiate training and support into future contracts with vendors as appropriate.

Targeted Budgeting

Review budgeting function and object for possible adjustments. In all cases, professional learning should be personalized and authentic. That means a "one-size-fits all" professional development program should be a thing of the past. Funding for professional learning should be split into targeted budgets that systemically support specific learning experiences on release days. Depending on the size and structure of your district, budgets should be allocated by departments, schools, grade levels, specific program areas, and teachers to progress in their own personalized professional learning plans that are aligned to the district's vision for student learning. All plans should identify the professional learning that will be required to accomplish district or school goals as well as the educator's individual professional goals.

Gap 1.2: Seat Time Remains the Principal Measure of Professional Learning

The accountability/assessment for professional learning has not yet shifted away from seat time measures to alternatives such as performance-based, competency-based achievement of professional learning targets.

Strategies to Close Gap 1.2: Seat Time Remains the Principal Measure of Professional Learning

Vision with Commitment

Develop a districtwide plan that articulates a new vision for personalized professional learning which uses the professional learning mini-assessment and FRS action planning tool. The plan should include tangible activities and offer a strong commitment to shared ownership and responsibility for teacher effectiveness and growth toward achieving high levels of success in personalized student learning using research-based instructional strategies. The taskforce will submit their visionary plan to the superintendent who will work with the FRS leadership team to gather internal support, board approval and community awareness.

Potential Policy and Procedure Pitfalls

The FRS leadership team should revisit the policy review to ensure there are no policy barriers which may impede the implementation of new personalized learning professional learning strategies for teachers. Should any policies, or practices be identified, the team will make note of them for revision or elimination as a future action. Be sure to inspect contractual references and discuss a plan for amendments or MOUs which align to the professional learning goals.

Align Strategically

Address the topic of competency-based accountability and pacing within the overall strategic plan for personalized professional learning systems to thrive. The plan must include a commitment to the concept, definitions of terms, clear expectations, and plans to develop procedures and guidance in transitioning to such a system. This system should be researched, piloted, and well vetted among stakeholders before it is articulated in the strategic plan. Failure to perform due diligence on the professional learning portion of the FRS plan may jeopardize successful implementation.

Gap 1.3: Personalized, Professional Learning Not in District Plan

The district is not yet providing the digital structures that encourage and empower educators to personalize their professional learning. As a result, they have not yet built the capacity of district leaders to personalize their own professional learning, in part through modeling the use of a range of technology tools.

Strategies to Close Gap 1.3: Personalized, Professional Learning Not in District Plan

Committee Action Planning

Charge the district wide professional learning committee to articulate the plan for professional learning. Ensure its coherence with the district's strategic plan. Include shared ownership and responsibility for professional growth as a major component of the district's strategic plan and individual campus improvement plans. Both the district and the campus plan should be developed by representatives from all stakeholder groups.

Digitally Tracking Competency-based Accountability

Address the topic of competency-based accountability for personalized professional learning within the district strategic plan. The plan includes a commitment to the concept, definitions of terms, clear expectations, and plans to develop procedures and guidance in transitioning to such a system. Demo technology solutions that can track teacher attainment of professional development competencies as opposed to tracking hours. Look at professional digital portfolios where teachers can reflect on their learning and how it will improve their instruction. Insure the technology aligns professional learning competencies with the professional learning, resulting in meeting teaching and learning improvements.

Gaps in Shared Ownership and Responsibility for Professional Growth

Your data indicate that your district is fairly well-staged for ensuring that educators working in your district share ownership and responsibility for their own professional growth. The strategies provided below might be helpful in expanding and fine-tuning your readiness in the area.

Strategies to Close Gaps in Shared Ownership and Responsibility for Professional Growth

Committee Action Planning

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21st Century Skill Set: Readiness Score of 5

Educators have the opportunity to expand their knowledge and skills to address a 21st Century focus (e.g., critical thinking, collaboration, creativity, communication, technology competencies, self-direction, information literacy, etc.). Professional learning includes immersion in the learning sciences research to provide support and insights into more student-centered instructional practices and for the purposeful promotion of deeper learning/21st Century skills in all students. Educators master a variety of new, research-based instructional strategies to better engage students and prepare them for college and beyond. In doing so they broaden their own 21st Century skill set.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
The investigative focus is on the learning sciences research related to 21st Century learning and technology-enabled learning.	District leaders build on key research studies and associated effective practices related to 21st Century skills to inform scenario building and visioning. They envision student learning environments and their individual and team professional practices, which incorporate 21st Century skills, technology/media-enabled learning, and technical skill development.	District leaders develop a professional learning plan that addresses 21st Century skills. It includes staying current with research and trends on 21st Century skills, plus policies and funding for professional learning that, when implemented will result in increased capacity by teachers, administrators, and other education professionals to integrate proven 21st Century skill sets into classroom practices and professional learning.	District leaders assign roles and responsibilities for the implementation of the plan. They formally adopt expectations for education professionals to acquire such competencies within a specified timeframe, offering diverse pathways for staff to acquire such competencies. They establish sets of metrics to gauge progress. Plans include competency-based skill assessment for 21st Century learning and technology-enabled learning in professional learning that are designed to lead to integration in classroom practices and professional practices.

Investigating ▸ Envisioning ▸ Planning ▸ Staging

Gaps & Strategies for 21st Century Skill Set

Gap 2.1

The district has not yet fully developed a culture that encourages innovation in the use of 21st Century skills. Part of the issue is a lack of communication and emphasis on the research as to why 21st Century Skills are important and how they advance learning.

Strategies to Close Gap 2.1

Envisioning Research-Based Solutions in Practice

A district committee reviews the findings and recommendations from the Task Force investigating 21st Century Skills. Based on that work, the committee identifies research-based solutions for building a district and school culture that embodies 21st Century skills/learning. For example, the new culture will require evidence-informed decision making, where educators are expected to think critically and make decisions using research and evidence; educators are given the autonomy and flexibility to be creative and innovative as they work toward achieving agreed upon standards; and educators are expected to make collaborative decisions, working as teams to meet the needs of all students in their district. They build scenarios such as a "day in the life of a teacher, principal, curriculum director" to describe the way in which personalized learning would add value to the school and district. This work informs the vision for digital learning developed for the district.

Change Management

Interview technology experts to consider transformational change models required for successful implementation of a 21st Century digital learning culture. Conclusions are shared with stakeholders.

Gap 2.2

The district has not communicated the reasons why 21st Century skills are important to its graduates and its staff, nor have they emphasized the research that shows how these skills increase the relevancy, engagement, and deep learning by students.

Strategies to Close Gap 2.2

Envisioning Research-Based Solutions in Practice

Review the findings and recommendations from the Task Force investigating 21st Century Skills. Based on that work, the committee identifies research-based solutions for building educators 21st Century skills (and technology skills) that will enable independence and self-directed in their own professional learning. In addition, the committee identifies strategies for building students' 21st Century skills and how that topic will be addressed through professional learning. They build scenarios such as a "day in the life of a teacher, principal, curriculum director" to describe the way in which personalized learning would add value to a teacher's professional practice. Based on these scenarios and their research, they identify the competencies teachers, administrators, and other education professionals will need for 21st Century learning and teaching.

Apply Investigative Findings to the District

Consider the range of options for building the capacity of education professionals in using 21st Century skills in learning that were identified in the investigative phase, work for your district, e.g., consider how social professional learning (e.g. online courses, MOOCs, webinars) could be leveraged. In doing so, consider the shifts and changes in policy, culture, beliefs, practices, etc. that would be necessary. For the social professional learning example, how would policy need to change to document individual teachers uses outside of school when seat time monitoring is not an option?

Vision Building

Develop a vision for 21st Century skills in personalized professional learning in collaboration with stakeholders. That vision should include the knowledge and skills the district will expect education in the district to acquire and apply to their professional practice and to their job responsibilities. Include a "Profile" for educators that identify the "21st Century Skills/Deeper Learning" they will need to excel in their individual and collaborative professional learning, professional practice, and instructional practices. Once the district identifies the competencies that educators will need for 21st Century learning and teaching, district leaders commit to that vision, and the new professional learning focuses it will require.

Gap 2.3

The district hasn't explicitly set clear, high expectations that all staff will become knowledgeable and competent with 21st Century skills and that all staff will use such skills in their work in the district.

Strategies to Close Gap 2.3

Tools as Targets

Consider the technologies required for classroom digital learning as targets for professional learning. Review professional learning targets related to digital learning in the classroom: social media, conferencing or collaboration software, digital content resources, interactive simulations, social networking, cloud-based digital libraries and expert directories, online "collaboratories," probe-ware, mobile learning devices, survey/polling applications and response systems, etc.

Pedagogical Approaches that Connect

Investigate research-based, innovative pedagogies and curricula for digital learning as background for the professional learning required by teachers, administrators, and other education professionals. Those research-based approaches might focus on one or more of the following: project-based learning, authentic learning projects, personalized learning, blended learning, virtual learning, intelligent adaptive learning, continuous feedback, collaboration, etc.

Confidence in Competencies

Assess the educator competencies required to teach in a Digital, 21st Century Classroom/School The technology competencies of educators and the level of their incorporation of 21st Century skills in teaching and learning are assessed to determine professional learning needs. There is a clear differentiation between assessing technical competency (a precursor to effective uses of technology), and measuring the capacity to embed technology into lessons that promote deep learning, self-direction in students, and cognitive and social-emotional engagement in learning.

Share and Share

Summarize and share research with stakeholders in order to create a common understanding of key technology-enabled learning needs and required proficiencies. FAQs are shared to clarify the difference between technical competency and mastery of technology-enabling instructional design and implementation. Best practice models are identified, analyzed and shared with stakeholders in preparation for planning. Recommendations from experts are used to build decision matrices. The District might work with stakeholders and subject matter experts to create a curated repository of technology-enabled learning tools and active learning methodologies for review and recommended use.

Funding Implications

Consider the scope of the professional learning that will be required over the upcoming transition to digital learning. District leaders should document that scope and implications for time allocation and budget. Based on the investigations of the district committee and discussions related to how the research applies to this district, work with stakeholders to establish a vision for the professional learning required to be ready to implement digital learning.

Diverse Opportunities for Professional Learning Through Technology: Readiness Score of 3

Digital leaders model new types of professional learning and ensure that educators have access to (and the technology savvy necessary to leverage) professional development opportunities that are diverse, customizable and often supported by the latest technologies. Professional learning is available anytime in a variety of modes. Alternative models are supported through coherent policies and practices in the district.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders collect research on the effectiveness of a broad spectrum of professional learning options and recent cognitive science research on the importance of choice and participant engagement in adult learning.	District leaders consider their research findings as they strategize on the benefits and pitfalls to new, alternative forms of professional learning now possible through technology and social media. They have made efforts to understand current professional learning practices (both formal and informal) of education professionals, and have started to expand their own use of technology mediated professional learning.	District leaders have collected data on current practice, skills, and available technologies. They have used that data to develop a plan for professional learning that includes a broad spectrum of opportunities from face-to-face, through new technology-mediated options. The plan addresses elements essential to the success of these new options including the assurance that education professionals have required technologies and associated skills, and that policies related to professional learning support such options.	District leaders have shared their plan for professional learning, being transparent about the link between the professional learning in the district and recent research. They encourage, model, and provide opportunities for a broad spectrum of professional learning. That spectrum ranges from series of face-to-face professional learning, to professional learning through social media. There is access to required technologies, and opportunities to develop the skills that enable the use of those technologies. Education professionals are expected to choose options that meet their needs and to participate fully in the professional learning District policies are revised to ensure coherence.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Diverse Opportunities for Professional Learning Through Technology

Gap 3.1

The district has not fully researched, developed, and offered a broad range of professional learning options that use technology and social media that provide authentic, personalized professional learning.

Strategies to Close Gap 3.1

Involve Teachers in Researching the Topic

Set up a professional learning group of teachers to research effective adult learning strategies. Provide these teachers with time in the day, or a stipend for after-hours work. Create multiple opportunities for the teacher research cohort to report their findings to the school's administrators, teachers & staff, both in face-to-face meetings and through the use of blogs, webinars, etc. During the reporting of the research have the teachers who are participating as learners in this process offer their own perspectives on how effective they think individual learning strategies would be for them. This might be through a simple 1 to 5 star rating system – with comments, or in a more extensive blog, etc.

Review the Knowledge Base and Synthesize Findings

Identify critical questions about effective professional learning, adult learning, and emergent, technology rich forms of professional learning. Identify and collect research connected to critical questions facing your districts. Review current literature (ISTE, ASCD, other professional organizations) to determine how educators are utilizing professional development opportunities outside of traditional means. For alternative models of professional learning check the level of access to required technologies. Synthesize research findings into a clear and compelling document on the effectiveness of various professional learning models, approaches, and methods.

Learn from Neighboring Districts

Consult with neighboring districts that allow for non-traditional means of professional development to determine what practices could be put into place.

Gap 3.2

The district has not yet ensured that all staff have 24/7 access to up-to-date devices, and high-speed broadband, nor access to collaborative online tools and communities of practice.

Strategies to Close Gap 3.2

Investigate Professional Learning Options

Investigate a broad spectrum of professional learning made possible through technology and social media. Identify how others are evaluating the quality of professional learning through technology, especially social media Investigate options such as: Twitter Chat (perhaps district hashtag), Google Hangout or other social media facilitated groups, on-demand, digitally based professional development opportunities, MOOCs, Edweb.net webinars, Skype, professional learning networks (PLNs), gamifying, the use of tools such as: Socrative, Edmodo, Kahoot, Facebook, Instagram, Twitter, Voxer, etc. that teachers can use to grow professionally and/or incorporate into their instruction to help students improve their own learning. Look into performance assessment to document "off-the-clock" learning (e.g., digital badges, presentations to colleagues, mentoring and coaching others, changes in classroom practices, etc.). Identify the benefits and pitfalls of new forms of professional learning (especially those that are technology mediated or take place via social media), as well as current practices in more traditional professional learning options. Identify ways that school and/or district personnel currently participate in professional learning through technology, especially social media.

Instructional Practices Audit

Identify current participation across the district in alternative, technology-rich forms of professional learning. Gather evidence of current practices (both formal and informal) in professional learning. Consider ways to identify current forms of professional learning education professionals in your district are participating in. Conduct a comprehensive audit of current instructional practices to include data collected from classroom walkthroughs, Instructional Rounds, teacher/student/parent surveys, etc. to determine the current status in terms of instructional approaches in place across district classrooms. Analyze themes that emerge, including what are the most prevalent instructional practices, what approaches would teachers like to try more, what tools/resources they will need in order to explore new approaches, and any conflicting perspectives between/among teacher-administrator-parent-student responses.

Use National Standards for Technology to Determine Needs

Conduct a School Technology Needs Assessment (e.g. STNA from the Friday Institute: https://www.fi.ncsu.edu/wp-content/uploads/2013/05/School-Technology-Needs-Assesment-STNA.pdf) to determine a current snap shot of school technology needs, professional development needs and attitudes towards both. Form a representative team of district stakeholders and review the ISTE Standards for Teachers, Students, Administrators, Coaches and Technology Staff. Determine what areas of strength and weakness there are. Consider using the ISTE Diagnostic Tool (http://www.iste.org/lead/lead-transform/diagnostic-tool).

Technology Infrastructure Audit

Conduct a comprehensive technology infrastructure study, determining current technology capacity (e.g., number of devices, wireless access points, broadband speed, etc.) to support 21st Century teaching and learning practices. Based on the results of this study, create a one-, three-, and five-year plan for moving forward/next steps in building the infrastructure necessary to achieve staff and student learning goals. Identify any barriers to providing systematic access to professional learning through technology.

Comprehensive Time Audit: Professional Learning

Conduct a comprehensive time audit to determine how much time (both formal, district mandated and/or contractual, as well as informal) the district dedicates to professional learning). Examine the total allotment of current hours set aside for such purposes and develop a collaborative plan for determining whether the amount is sufficient and whether the current hours should be re-purposed to achieve personalized professional learning goals for all staff.

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Comprehensive Time Audit: Classroom Instruction

Conduct a comprehensive time audit to determine how classroom instructional time is used (e.g., how much time is devoted to lecture? Student-centered versus teacher-centered delivery of instruction, beginning and end of class activities? Non-instructional tasks? Loss of instructional time due to school events, such as assemblies, safety drills, etc.?). Find ways to ensure that all available instructional time is maximized and if there are better ways to ensure that all lessons are effective, efficient, and relevant. Describe ways to improve and technology tools, which could support such improvements.

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Broad-Based, Participative Evaluation: Readiness Score of 5

In order to promote goal-oriented, self-regulated professional behaviors, evaluation is participative (i.e., the educator who is the subject of evaluation is actively involved in goal-setting, collecting indicators of progress, and self-evaluative behaviors). Professional evaluation uses a broad set of indicators that includes student achievement, evidence of improved instructional practice, student engagement, and 21st Century skill attainment.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders explore and document new models for participative evaluation, but they do not yet define specific new directions. All stakeholders have representation in this exploration and communication of progress and findings are provided to all.	District leaders describe and select new research-based models of evaluation that are supportive of digital learning goals. In these models, teachers play more active roles in the evaluative process and data sources enable teachers to establish goals and independently track their progress toward goals. District leaders use data sources beyond standardized assessments.	District and school leaders plan the transition to a system where evaluation is a collaborative process. Multiple data sources are identified that will allow educators to discover areas of need and collaboratively plan to meet those needs. Digital tools are identified that allow educators to access data, communicate, and collaborate in the service of professional development for digital learning.	District and school leaders make initial changes that will lead to a more collaborative evaluation process. Multiple and diverse sources of data related to student learning and twenty-first-century skill development are made priorities in plans and budgets.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Broad-Based, Participative Evaluation

Gap 4.1

The district has not yet fully researched and developed, and instituted a system for evaluating staff that is participative, using a broad range of criteria and data sources.

Strategies to Close Gap 4.1

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Executive Team and Board Commitment

Involve the school board in an extended meeting to discuss the new models for broad-based participative evaluation systems. The results of the board discussion should be shared with executive team. Seek input from members of that team and begin to write an executive summary of what the program would look like and craft the appropriate policies. Based on stakeholder input, plus this work of the board and the executive team, the district should select and commit to a model for a broad-based, participatory staff evaluation system.

Identify Policies That May Serve As Barriers

Review current policies and regulations related to the teacher practices and select those that may serve as barriers to implementation for adjustment. Also identify gaps, where new policies may be needed. The superintendent and the members of the school board should have a private planning retreat to review the need for program and policy changes to support participative evaluation practices. Investigate the programs and policies in place in exemplar school districts (preferable those in close proximity) where collaborative goal setting and continuous professional improvement are the norm.

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Gap 4.2

The district has not yet ensured a broad base of criteria and associated evidence for educator's evaluation. Nor has the district aligned such criteria with the district vision for digital learning?

Strategies to Close Gap 4.2

Consider Models which Meet Goals

Establish specific goals for instructional practices, student engagement and other professional skill areas and collect data in these domains as well. While student achievement is central to the education mission, education professionals should not be judged solely on test scores, especially since they provide little specific guidance for professional growth. However, neither is content area instruction alone the sole source of student achievement. In fact, if achievement is judged by student success in future endeavors such as college attendance and completion, job satisfaction and future earnings, there are important cognitive and learning skills and dispositions that researchers are finding to be even more directly related to these outcomes such as self-regulated behavior, collaborative skills, etc. Researchers are also finding that these skills are malleable and can be taught, scaffolded, and assessed. Data related to these 21st Century Skills should be gathered and included in the evaluation process.

Clearly Identify the 21st Century Skills and Expertise Expected of Educators

Create a list of common values relating to 21st Century teaching skills deemed necessary for success in 21st Century classrooms. What must educators know and be able to do to ensure that the students they serve know and are able to do what s necessary to succeed in college and careers. Commit to all district staff reaching mastery in these non-negotiable areas, creating specific paths supporting al educators in reaching these destinations.

Select or Build a Preferred Model

Based on the review and rating of models of participatory teacher evaluation systems, one is identified as preferred, or a new model is designed as the preferred model.

Using Technology in Collaborative Supervision

Find a technology solution to enhance collaboration and transparency in the evaluation model. Teachers can monitor and assess teaching competencies with online systems. They can also share with peers or supervisors. Administrators can work with teachers in a formative manner prior to issuing a summative evaluation. Technology can assist with confidentiality, structure, data management, collaboration, and compliance with state and federal guidelines.

Gap 4.3

Programs and policies to support participative evaluation practices that include opportunities for collaborative goal setting and professional improvement are currently not in place.

Strategies to Close Gap 4.3

Make a Commitment

Broaden the base for envisioning. A larger team that includes teachers, school administrators, district administrators, school board members, and one or two members of the superintendent's executive team should work with the documents that have been created and draft a final version to be returned to the superintendent's executive team. The executive team will include this item as a board agenda item to be voted on an approved by the board of trustees with implementation to begin with the start of the next school year.

Policies as Barriers

Find policies that may serve as barriers to implementation based on a review of current policies and regulations related to the teacher practices. Identify gaps, where new policies may be needed. The superintendent and the members of the school board should have a private planning retreat to review the need for program and policy changes to systemically support participative evaluation practices. Investigate the programs and policies in place in exemplar school districts (preferable those in close proximity) where collaborative goal setting and professional continuous improvement are the norm.

Clear Expectations

Create a list of common values relating to 21st Century teaching skills deemed necessary for success in 21st Century classrooms. What must educators know and be able to do to ensure that the students they serve know and are able to do what is necessary to succeed in college and careers. Commit to all district staff reaching mastery in these non-negotiable areas, creating specific paths systemically supporting all educators in reaching these destinations.

Gear 7: Budget and Resources

An effective budget development and review process is guided by a deep understanding of school finance at the District, State and Federal levels. Funding a digital learning environment requires strategic, short-term and long-term budgeting that leverages the use of learning-enabling technology and resources to optimize student learning. All budgets at the district and the school level are aligned in order to prioritize student learning and cost-efficiency, with consistent funding streams for both recurring and non-recurring costs. The District's financial model includes the metrics and processes to determine Total Cost of Ownership (TCO) for developing and sustaining the digital learning environment and to ensure accountability for determining learning Return On Investment (ROI).
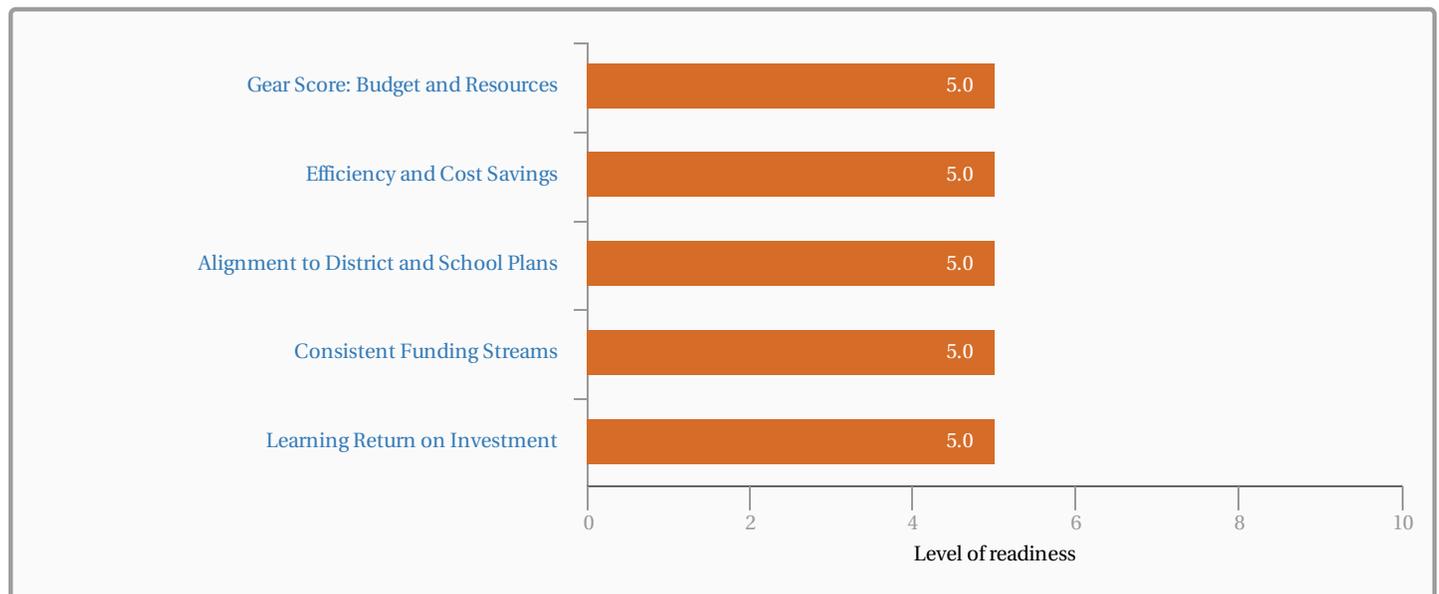
Elements of this Gear:

- Efficiency and Cost Savings
- Alignment to District and School Plans
- Consistent Funding Streams
- Learning Return on Investment

Your District provided the following Budget and Resources vision:

Develop and communicate a district budget and process that optimizes educational opportunities for all students, supports district goals; plans for maximum utilization of our facilities while continuing to be fiscally responsible to our community.

Your District's Stage of Readiness for Budget and Resources

Category	Score
Gear Score: Budget and Resources	5.0
Efficiency and Cost Savings	5.0
Alignment to District and School Plans	5.0
Consistent Funding Streams	5.0
Learning Return on Investment	5.0

Level of readiness

Investigating → Envisioning → Planning → Staging

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Depth of Your District's Knowledge Base: Budget and Resources

Investigating, researching, and professional discussions are critical at all levels. The chart below reports the depth of your district's leadership team's knowledge base.

Confidence of Your Leadership Team in Discussing Topics Related to Budget and Resources	Not Yet Prepared to Discuss	Could Discuss After Additional Research	Could Discuss with Confidence Now
Discuss ways to support students with tools and resources for digital learning that offer efficiencies and cost savings (e.g., BYOD, Web 2.0 tools, free apps, etc.).		X	
Discuss strategies to support systemic digital learning that offer efficiencies and cost savings (e.g., online courses or blended learning, cloud computing solutions, digital resources to replace textbooks, "going green", etc.).		X	
Discuss use of non-recurring funding for short-term digital learning initiatives (e.g., for innovative pilot programs) by leveraging business partnering, community donations and special grants.		X	

Status

The status that your district leadership team reported for each question is displayed below.

	Not currently a priority	Actively researching	Formalizing our commitment	Developing district plans to implement	District policies, expectations and plans are in place
Policies, procedures and timelines for transitioning to cost-saving strategies that leverage digital systems, tools and resources.			X		
District and school level plans for digital learning justified and linked with consistent annual funding streams.			X		
Funding identified for digital learning programs in the district's annual maintenance and operation budgets. Non-recurring funding allocated for short-term initiatives or pilots.			X		
Metrics and methodology for monitoring the relationship between budget priorities and student learning goals.			X		

Rubrics for Budget and Resources

Efficiency and Cost Savings: Readiness Score of 5

Innovative funding for digital learning leverages technologies to improve teaching and learning as well as to increase efficiency and cost savings. A cross-functional District budget development team is formed that is composed of District leaders, key stakeholders, and subject matter experts who collectively represent the District's interests. This team employs strategies for calculating the total cost of ownership (TCO) for all technology resources; focusing on learning-enabling technology, digital resources and instructional practice.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
A cross-functional District leadership and budget development team does a high-level review of current District, State, and Federal financial processes. They identify current barriers to budgeting for digital learning and collect strategies and best practice examples of innovative funding structures and scenarios that effectively determine Total Cost of Ownership (TCO). The team identifies innovative solutions to funding the transition to digital learning.	Innovative, proven practice examples, funding structures and budget scenarios inform District leadership and budget development efforts. The District's creates a vision for transformational and sustainable funding for a high performing and effective digital learning environment.	District leaders and budget development teams define their strategies, processes and metrics for determining Total Cost of Ownership (TCO). The district develops sound policies and procedures for the ongoing review and analysis of cost variables for equitable funding of digital learning. The District designs a communication plan that illustrates cost/benefit opportunities associated with digital learning.	District leaders and budget development teams conduct timely reviews of the analysis of efficiencies, effectiveness, and costs of implementing and sustaining a digital learning environment The cross-functional District leadership team develops implementation strategies and viable timelines to activate procedures and practices needed to maximize educational investment. The District communicates actual costs, efficiencies, and effectiveness of implementing and sustaining a digital learning environment.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Efficiency and Cost Savings

Gap 1.1

Cost effectiveness and efficiencies in the budget for digital learning have not yet been achieved.

Strategies to Close Gap 1.1

Avoid Analysis Paralysis

Consider how a more informed student-centered budgetary process will impact the district's current business practices. The district's Budget Development Team should study the various measures the district will use to develop and evaluate budgets it is important to consider how a more informed student-centered budgetary process will impact the district's current business practices. It is difficult to make decisions confidently when there are multiple viable options and complex impacting factors. One effective way to consider alternatives is to build decision matrices that can be used to guide discussion and facilitate the visioning process.

A New Mindset

Establish a common vision for funding a digital learning environment that uses mechanisms like Total Cost of Ownership (TCO) to inform the budgetary process can be the first step to creating a "digital learning mindset." In a 2012 article from the National Association of School Principals titled Technology Integration for the New 21st Century Learner: Today's students need educators to re-envision the role of technology in the classroom, Principal Nancy Blair states "Developing a progressive technology-infused campus is not about money; it's about mindset."

Gap 1.2

To date, the district has not achieved any real cost savings through the use of technology, nor has the district been very proactive in seeking out and implementing cost saving measures that leverage technology.

Strategies to Close Gap 1.2

Building a Foundation for Consensus

Analyze multiple approaches to documenting cost savings such as using total cost of ownership or TCO tools in order to identify the process and strategies that will best serve the district's needs.

Consider the Possibilities for Your District

Consider the viability of suggested cost savings in your district once your team investigates ways in which they could occur. Engage a cross-functional team in the district and look at such options. A few suggested areas for costs saving the team may consider include: • Transitioning from print to more digital, online resources • Bring Your Own Device (BYOD) for savings in device purchasing • Capitalizing on available e-rate funding • Going digital in business operations with direct deposit, electronic transfers, pay stubs, etc. • Going digital in HR with personnel files, hiring, time clocks, or evaluation • Utilize video conferencing to saves travel time and reimbursements • Online professional learning for educators (e.g., less travel costs, reduced travel time) • Automated lighting and heat in all schools/district buildings • More efficient bus routes due to digital simulation • No snow day make-ups. Students attend from home through the network • Online courses offered for credit recovery and/or advancement • District-run cyber schools, which retains student funding in the district • Digital phone systems (reduce long distance costs, saves personnel costs-broadcasts messages, routing calls, etc.)

Alignment to District and School Plans: Readiness Score of 5

Priorities for budget and resources are clearly linked to district- and building-level strategic and tactical plans and to continuous improvement goals. All expenditures must be justified as supportive of these plans. Innovative programs are funded conditionally upon their alignment to the district's vision and mission.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders ensure that annual academic planning processes inform and guide technology budget development activities. A cross-functional budget team identifies best practice examples of district-and building-level strategic and tactical plans that map funding structures to technology-enabled learning tools and resources, and 21st Century skill development.	District leaders and budget development teams analyze best practice funding structures and scenarios to help define the District's vision for a sustainable digital learning environment. They explicitly link funding requirements to strategic and tactical plans. The District shares its vision for sustaining a digital learning environment with stakeholders. They communicate logic and best practice examples in order to broaden support.	As District leaders and key stakeholders build district- and building-level strategic and tactical plans they explicitly map curriculum integration to digital learning expenditures to viable funding streams, timelines, and accountability measures. The planning process identifies and prioritizes multiple funding and accountability scenarios.	District leaders build a broad base of stakeholders to support their strategic and tactical plans. The District illustrates the alignment of curriculum, instruction, and technology-enabled resources. District leaders and key stakeholders are prepared to communicate strategic and tactical plans. They can justify budgets and identify cost-saving strategies that leverage technology and the academic return of investment.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Alignment to District and School Plans

Gap 2.1

The District's annual academic planning process is not used to inform and guide the budgetary process. The curriculum and instruction plans are not aligned or mapped to digital learning resources, outcomes and expenditures.

Strategies to Close Gap 2.1

Connecting the Dots

Map current funding structures to new and existing technology-enabled resources armed with prioritized examples and vetted strategies. This process becomes the basis for a more informed and comprehensive discussion and review. For example, it becomes easier to identify the district's capacity to use funds across multiple disciplines and programs. The district can also create a graphic illustration that represents clear connections, inferred connections and gaps. Based on a review through multiple lenses, the district is ready to define its vision for a student-centered, digital learning budget process.

Share the Vision

Take advantage of the technology available to you. Use multiple communication resources, including social media, to share the district's vision for systemic support of digital learning and 21st Century skill development throughout the budget development and approval process. Add value to your effort by illustrating the purpose of adopting this vision showcasing specific authentic learning examples and mapping expenditures to student learning goals. Using concrete examples will clearly connect new and existing funding to student-centered learning during the budgetary development and review process.

Consistent Funding Streams: Readiness Score of 5

The District has consistent and flexible funding that enables equitable access to optimal learning environments. Budgets for technology-enabled learning tools and resources are addressed in short and long-term fiscal plans. Funding sources are identified in the District's annual maintenance and operation budgets with minimal reliance on grants or other temporary sources. Funding for digital learning is integrated across multiple budget areas where appropriate.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders investigate and analyze innovative and best practice methods for consistent and sustainable funding of digital learning environments and technology-enabled learning initiatives as part of annual maintenance and operation budgets. District leaders and budget development teams also investigate alternative funding sources (i.e., public/private partnerships, community donations, foundation awards, etc.) that can assist the district initiate or maintain consistent funding.	District leaders analyze current budgeting strategies relevant to technology-enabled learning tools, resources and instructional practice. This would include budgeting for broadband, network infrastructure, hardware, technical support, instructional content, and professional learning. A cross-functional budget team uses the analyses of innovative and best practice examples and practices to envision and propose potential transformational funding strategies and scenarios.	Based on District vision and priorities for supporting digital learning, district leaders develop a viable plan that identifies funding priorities, propose viable funding streams and timelines, and define accountability measures.	District leaders have identified viable funding sources for short and long-term funding. The District is committed to consistent and sustainable expenditures with explicit intent to support digital learning over time.

Investigating ▸ Envisioning ▸ Planning ▸ Staging

Gaps & Strategies for Consistent Funding Streams

Gap 3.1

The district does not have a clear strategy for using recurring and non-recurring budgets to ensure a consistent funding stream to support digital learning, or if the strategy is clear, the district is not fully implementing this strategy. The District is not prepared to illustrate or defend potential budgetary scenarios and potential funding streams in order to justify adequate and consistent funding of technology-enabled teaching and learning.

Strategies to Close Gap 3.1

Use Non-examples

Identify scenarios where inconsistent funding is proven to have a negative effect on technology-enabled teaching and learning. Non-examples can be used to illustrate what practices to avoid and why. Determine if those practices exist in your past or current strategies and recommend potential strategies for establishing more consistent funding.

Don't be Short Sighted

Envision how most programs or activities might benefit from learning-enabled technology and can contribute to the development of 21st Century skills. Use this effort to define a how a sustainable digital learning environment can thrive within existing budgetary constraints.

Learning Return on Investment: Readiness Score of 5

All metrics for review of budget priorities and cost-efficiency are based on their demonstrated relationship to student learning goals. District leaders have strategies and tools for measuring Return On Investment (ROI) in digital learning; focusing on learning-enabling technologies, resources, instructional practice and student learning.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders investigate return-on-investment models and metrics that can be used to relate budget priorities for digital learning to student learning goals.	District leaders propose metrics and a methodology that demonstrate budget priorities for digital learning that relate to student learning goals.	District leaders have a plan and tools for monitoring the relationship between budget for digital learning and student learning goals.	District leaders build the financial model with metrics and a methodology for monitoring budget priorities for digital learning, based on student learning goals.

Investigating ▸ Envisioning ▸ Planning ▸ Staging

Gaps & Strategies for Learning Return on Investment

The District may not yet be able to track and/or demonstrate the academic return on investment for expenditures for digital learning.

Strategies to Close Gap 4.1

Reflection

Review an array of evidence of direct and indirect student learning (i.e., benchmark assessments, student perception surveys, samplings of authentic learning assignments, evaluation rubrics, etc.) to determine if the district has sufficient evidence of student learning to use to illustrate technology-enabled personalized learning and the development of 21st Century skills.

Explicit Connections

Define and discuss L-ROI from the perspective of digital learning and 21st Century skill development, selecting examples of L-ROI from case studies to use for deeper discussion and potential alignment to district needs. Use selected L-ROI metrics to envision how this type of accountability can be integrated into all aspects of strategic and fiscal planning.

Drawing Conclusions

Document and share how this commitment could impact budgetary decisions, student learning and stakeholder perception when the district is committed to the cost, time and effort it takes to calculate and budget according to L-ROI.

Gear 8: Across the Gears: Collaborative Leadership

The Future Ready framework is a systemic planning framework around the effective use of technology and digital learning to achieve the goal of "career and college readiness" for all students. While the seven interdependent Gears provide a roadmap toward digital learning, success within a district is dependent on innovative leadership at all levels. First and foremost, leaders within a district must be empowered to think and act innovatively; they must believe in the district's shared, forward-thinking vision for deeper learning through effective uses of digital, 21st Century technologies. Critical to their success will be a culture of innovation that builds the capacity of students, teachers, administrators, parents, and community to work collaboratively toward that preferred future. The policy foundation that results must be coherent with that vision. Unleashed in a culture of vision and empowerment, leaders will have the flexibility and adaptability they require to prepare their students to thrive in the 21st Century.
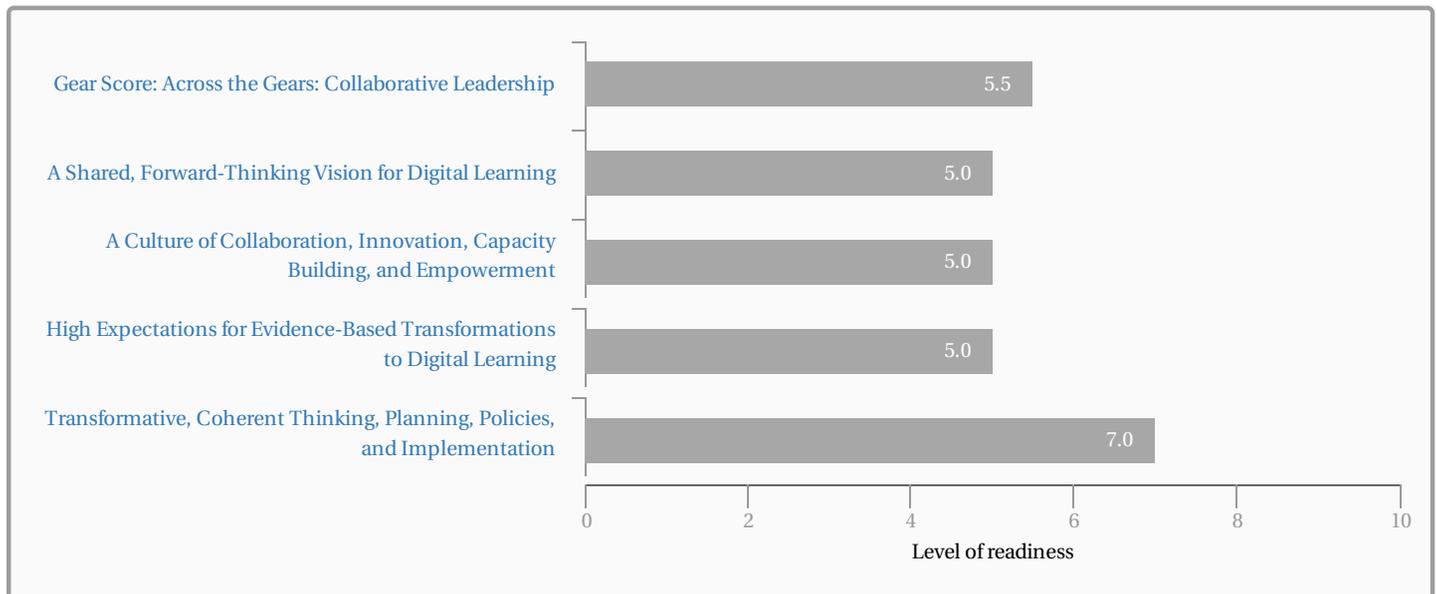
Elements of this Gear:

- A Shared, Forward-Thinking Vision for Digital Learning
- A Culture of Collaboration, Innovation, Capacity Building, and Empowerment
- High Expectations for Evidence-Based Transformations to Digital Learning
- Transformative, Coherent Thinking, Planning, Policies, and Implementation

Your District provided the following Across the Gears: Collaborative Leadership vision:

High expectations of continuous growth to stay current with new technology and implementing it

Your District's Stage of Readiness for Across the Gears: Collaborative Leadership

	Level of readiness
Gear Score: Across the Gears: Collaborative Leadership	5.5
A Shared, Forward-Thinking Vision for Digital Learning	5.0
A Culture of Collaboration, Innovation, Capacity Building, and Empowerment	5.0
High Expectations for Evidence-Based Transformations to Digital Learning	5.0
Transformative, Coherent Thinking, Planning, Policies, and Implementation	7.0

Investigating → Envisioning → Planning → Staging

Depth of Your District's Knowledge Base: Across the Gears: Collaborative Leadership

Investigating, researching, and professional discussions are critical at all levels. The chart below reports the depth of your district's leadership team's knowledge base.

Confidence of Your Leadership Team in Discussing Topics Related to Across the Gears: Collaborative Leadership	Not Yet Prepared to Discuss	Could Discuss After Additional Research	Could Discuss with Confidence Now
Discuss the district's strategy for developing, communicating, implementing, and evaluating a shared, forward-thinking vision for digital learning.		X	
Discuss strategies to establish a culture of collaborative innovation, where leaders at all levels are informed, trusted, empowered, and ready to lead.		X	
Discuss the high expectations that will be required of all students, education professionals, and family/community if the district is to realize continuous, sustainable progress toward the vision.		X	
Discuss the coherent strategic, tactical, and budgetary policies and planning required to achieve the vision.		X	

Status

The status that your district leadership team reported for each question is displayed below.

	Not currently a priority	Actively researching	Formalizing our commitment	Developing district plans to implement	District policies, expectations and plans are in place
The district has involved the community in establishing a shared, forward-thinking vision for personalized, digital learning.			X		
The district and schools have established a culture where leaders are informed, collaborative, and empowered to innovate.			X		
The district leadership team has established high expectations for transformation at all levels.			X		
District leaders have coherent policies, plans, and budgets for achieving the vision.				X	

Rubrics for Across the Gears: Collaborative Leadership

A Shared, Forward-Thinking Vision for Digital Learning: Readiness Score of 5

The district recognizes that, to prepare their students to thrive in today's connected, fast-paced society will require an education that engages students in evidence-based, deeper learning through smart uses of technology and new pedagogies. The district has engaged students, teachers, administrators, parents, and the community in the envisioning of a transformed education system that personalizes learning for all students through the effective uses of technology.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
A cross-functional team participates in conferences and discusses strategies with other districts and experts on a vision for digital learning. The team explores the economic, social, educational, and ethical underpinnings for such a vision.	The district uses the research and investigations to conceptualize the essential elements of their vision for digital learning. They develop scenarios as to how those elements would be actualized in their district, noting the benefits and consequences.	District leaders establish strategic and tactical plans for: a) developing a shared vision for digital learning, b) formally adopting that vision as a component of the district's overall goals, c) aligning all programs to the vision, and d) establishing metrics to assess progress toward the vision.	District leaders have engaged students, teachers, administrators, parents, and the community in the envisioning of a transformed education system that provides personalized, deeper learning through the effective uses of technology. The vision has been formally adopted, communicated internally and externally.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for A Shared, Forward-Thinking Vision for Digital Learning

Gap 1.1

District leaders do not yet have a formal, approved, forward-thinking vision for digital learning—one that addresses what students need to thrive in the 21st Century, based on current research and societal trends. And, if a vision has been developed, it may not be included as a key component of the district's strategic plan.

Strategies to Close Gap 1.1

Match Student Achievement Gaps with Technology Solutions

Not every student achievement gap requires a technology-based solution. The team should work closely with district leaders, such as the director of curriculum or assessment specialists, to look at student achievement data and determine which gaps require changes in teaching and learning strategies that are enhanced by the use of technology, which can be maintained or enhanced with technology, and those which require other solutions. Include a career-ready perspective by partnering with local business and community groups to gain a better understanding of their needs and the skills that future employees will need that can be enhanced by digital learning. Prepare a chart to graph issues with corresponding solutions.

Consider the 21st Century Skills Required for College and Career Readiness

The team should identify the skills students will require for college and career readiness beyond student achievement, skills such as entrepreneurial skills, critical thinking and problem solving, e-communication, creativity and innovation, self-direction, and visual thinking and analyses. Once identified, defined, and agreed upon, these skills should be integrated into the district vision. Scenarios should be developed that bring these skills to life in the context of lessons and units across the curriculum at all grade levels. As with student achievement, the team will need to consider how and where technology can be leveraged to enable students to become proficient with these skills.

Create a "Planning for Results" Template

A "Planning for Results" template or a similar tool can be used to help team members organize and articulate specific areas of need. Team members work collaboratively to identify the areas of need, the desired achievable results, current reality, and assumptions of why the currently reality exists as part of determining a vision for digital learning. Consider the needs of all stakeholders when identifying results and describing current reality, including students, educators, parents, and community members. Team members work collaboratively to identify the areas of need, the desired achievable results, current reality and assumptions of why the currently reality exists as part of the Envisioning stage in determining a vision for digital learning. The next steps in the process…completion of Strategies, Actions, and Evaluation…occur during the Planning and Staging Phases.

Gap 1.2

A district's vision for digital learning has not been broadly and effectively communicated internally with staff and/or externally with parents/community stakeholders.

Strategies to Close Gap 1.2

Develop a Formal Communications Plan

Develop a communications plan, including actions as suggested by the National Schools Public Relations Association. The outline of a plan could include, but is not limited to, the Statement of Overarching Strategic Digital Learning Vision, Suggested Communication Goal, and Objectives. After identifying all stakeholder groups, determine a communication strategy and associated actions for communicating with each group. The plan would include the following strategies and actions: • develop key messages related to specific purposes and audiences • establish systems for sharing the vision with new staff as part of the onboarding process • incorporate the communication of the vision for into all district leadership goal setting sessions • identify technology tools (e.g., websites, social media, local television) • create appropriate messages for each medium • enlist the support of community leaders.

A Culture of Collaboration, Innovation, Capacity Building, and Empowerment: Readiness Score of 5

The District leadership team has established a collaborative culture of innovation in which leaders at all levels are empowered to innovate. The capacity of leaders to innovate is maximized through a culture of trust and respect, providing leaders with the flexibility and adaptability they require to lead. This culture leads to sustainable change, informed by research and facilitated by digital leaders.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders are becoming more deeply informed about creative, innovative, empowered leadership. They have established a research base that identifies the potential outcomes for a culture of collaboration, innovation, capacity building, and empowerment in leadership.	Based on their research, district leaders have identified the type of leadership that has the greatest potential for transforming the district. The leadership they identified as optimal is collaborative, where leaders at all levels are empowered to act innovatively and creatively, provided such actions have high potential for advancing the district vision.	District leaders have established a plan for transitioning to a collaborative culture of change, where empowered leaders have the flexibility, adaptability, responsibility, and authority to act, provided such actions have high potential to advance the vision.	The capacity of leaders to innovate is maximized through capacity building within a culture of trust and respect. This culture provides leaders with the flexibility and adaptability to innovate, which in turn leads to sustainable change, informed by research and driven by the district vision for digital learning.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for A Culture of Collaboration, Innovation, Capacity Building, and Empowerment

Gap 2.1

District leaders have not fully established the type of flexible, adaptable, collaborative culture of innovation in which educators at all levels are trusted, respected and empowered to innovate. As a result, the capacity of leaders and other education professionals to achieve the district's vision may be minimized.

Strategies to Close Gap 2.1

Learn Lessons from Success

Form a "book study" professional development activity for the leaders in your district using books related to collaborative and shared leadership. Mark Edwards, superintendent of the much lauded Mooresville Graded School District in North Carolina, notes the impact school leaders have had on the culture of success with digital learning. In Thank You for Your Leadership: The Power of Distributed Leadership in a Digital Conversion Model (Pearson, 2015), Edwards discusses the cultural conditions for shared leadership, everyday pathways to leadership, and leading with formative power in what he calls "second-order leadership."

Create a District Vision of Collaborative Innovation

Gather ideas for flattening your district's organizational decision-making and providing transparency for those decisions. An exercise that can be used to further envision what a collaborative culture of innovation would look like at either the district or building level would be creating a "What You Will See, What You Will Not See" chart. Based on reviews of research and other resources, as well as information from exemplary districts' practices (see Investigating strategy for description), use a team meeting to create a chart that completes this thought: In a collaborative culture of innovation in which educators at all levels are trusted, respected, and empowered to innovate to achieve the district's vision… We would see… We would not see…

Review the Leadership Standards

Team members should measure their team leadership aptitude. Learning Forward (formerly the National Staff Development Council) is an outstanding source for resources on leadership. The Standards Assessment Inventory 2 supports the Leadership Standard for school community members. It consists of numerous articles on the topic, but also a self-assessment. Encourage team members to take the assessment and use the results for further professional development, team building, individual goal setting, or complimentary leadership activities. The standards and inventory can be found at www.LearningForward.org.

District leaders have not identified the change processes required in their context, which is limiting the district's ability to initiate and/or sustain the necessary to changes to achieve the district vision.

Strategies to Close Gap 2.2

Select a Model to Facilitate Change

Research and select or adapt a model that will guide the change that needs to take place in your district. Choose a model based on context and needs as determined by a needs assessment (see Investigating strategy for description). There are many research-based models, including Kotter's 8-Step Change Model, the Concerns-Based Adoption Model (CBAM), Rogers' Diffusion of Innovations, and Ely's Conditions for Change. Resources for becoming familiar with different models for facilitating change are available online and in print, like James Ellsworth's Surviving Change: A Survey of Educational Change Models, which provides an overview of a variety of models designed for different purposes.

High Expectations for Evidence-Based Transformations to Digital Learning: Readiness Score of 5

Across the district, teachers, administrators, and students are expected to show progress toward the district vision. The district has established metrics for gauging such progress and is working across the district to monitor progress and to use evidence-based decision making to ensure that technologies are implemented in ways that advance the vision.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders analyze research studies on the potential impact of digital leaning on student attainment of the learning goals, thus forming a knowledge base on digital learning. They also document various models of evidence-based reasoning and models of change management.	District leaders carefully review the knowledge base on digital learning resulting from their investigations. Based on that evidence, they envision a time when instructional decisions are informed by this knowledge base.	District leaders develop plans for building the capacity of education professionals to use the knowledge base to inform decisions. They pilot projects where teachers collaborate to identify and close gaps in student learning through digital learning.	District leaders set high expectations for the district, schools, and classrooms to adopt the types of digital learning shown to be effective in meeting the learning needs of all students to achieve academic and 21st Century learning goals. To ensure success, the district provides the conditions essential for local, evidence-based decision making related to digital learning.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for High Expectations for Evidence-Based Transformations to Digital Learning

Gap 3.1

District leaders have not set explicit expectations with timelines as to the progress they expect district/school-based staff and students to make toward the district vision for digital learning.

Strategies to Close Gap 3.1

Sort and Select

Compile a digital learning resource page for the education community the team is representing. After investigating exemplary districts and searching out effective models through literature reviews (see Investigating strategy for description), focus resources on the particular models (e.g., 1:1, BYOD, project-based learning, authentic learning, intelligent adaptive learning, apprenticeships, self-direction, range of technology use model) that are most feasible in your context. Assume that the general public and most teachers will not read everything. Compile an executive summary of the pertinent findings and short descriptions of particularly relevant information.

Gap 3.2

The district has not yet established a complete set of metrics for collecting and analyzing indicators of progress toward the district vision for digital learning, including analyses as to how technology is being used in learning, teaching, leading, and assessment, with standards set based on sound educational research.

Strategies to Close Gap 3.2

Transformative, Coherent Thinking, Planning, Policies, and Implementation: Readiness Score of 7

The district's forward-thinking vision is advanced through leaders' transformative thinking. Leaders have ensured that the district's policies are coherent with the philosophy underpinning the vision (e. g., personalizing professional learning for education professionals, just as they personalize learning for students). They have developed strategic plans that map potential pathways to the district's preferred future, and have created the tactical and financial plans and dedicated budget necessary for implementation. As they implement they monitor, adjust, build capacity, and incrementally improve.

Investigating (0-3)	Envisioning (4-5)	Planning (6-7)	Staging (8-10)
District leaders study the processes by which other districts successfully transformed their school system to deepen and extend learning through technology.	District leaders identify the changes that will be required in their schools in order to attain the vision they have set for digital, 21st Century learning.	District leaders develop a strategic plan to advance digital learning. The plan uses the Future Ready framework to ensure coherent thinking across the system's policies, procedures, cultures, practices, and investments.	District leaders work with policymakers to adopt the strategic plan as a way forward to attaining the vision. While working toward coherence across the district, the plan is implemented in ways that empower district and school leaders and teams with the flexibility to think and innovate as they make decisions that meet the needs of learners.

Investigating → Envisioning → Planning → Staging

Gaps & Strategies for Transformative, Coherent Thinking, Planning, Policies, and Implementation

Gap 4.1

Leaders have not yet ensured that the district's policies are aligned and coherent with the philosophy underpinning the vision for digital learning (e. g. , student-centered pedagogy; focus on authentic, 21st Century, deeper learning; personalized learning for students and education professionals; flexibility in the use of time to ensure learning needs of all students are meet).

Strategies to Close Gap 4.1

Identify Necessary Changes for Learning Environments

Develop a strategic learning plan in tandem with a digital resource plan (see Envisioning strategy for description). Classroom instruction will need to align with the vision for the digital learning environment. Author and Professor Andy Hargreaves defines the needed changes as being technical, actual actions or behavior changes, and adaptive, which involves changing hearts and minds. Chart both the technical and adaptive changes needed for student-centered pedagogy. Focus on authentic, 21st Century, deeper learning; personalized learning for students and education professionals; and flexibility in the use of time to ensure the learning needs of all students are met.

Gap 4.2

District leaders have not dedicated appropriate resources to the data analysis, interpretation, and capacity building necessary for informing instruction and improvement.

Strategies to Close Gap 4.2

Investigate Exemplary Districts' Practices

Armed with information about your district's current level of operations, needs, and potential solutions, identify districts that have addressed similar needs or implemented similar solutions. Your state department of education may be able to assist you in locating appropriate models and resources. Collaborate with leaders in the exemplary districts to determine how they have implemented the solutions, and how similar strategies might be applicable in your context.

Gap 4.3

District leaders do not have a management plan and process in place that maps potential pathways to the implementation of the district's preferred future; nor is the district fully supporting the work with capacity building, dedicated time for collaborations and committee work, and necessary resources/funding streams.

Strategies to Close Gap 4.3

Solicit Feedback from Stakeholders

Solicit feedback from all interested parties, including leaders, teachers, staff, and community members, as the action plan takes shape. While the tendency may be to wait until all the pieces are determined and in order, there is no greater mistake than to have planning done in isolation. Publish the plan as you go, invite questions, and use technology to publish drafts and solicit feedback. Take the time to answer questions as they come up rather than after the plan is complete. This scrutiny provides the transparency needed to gain buy-in and inhibit detractors. Additionally, as more people become engaged, they are more likely to become "owners" and "champions" as they feel they had the opportunity to take part and be heard. This is time consuming but will be worth it in the end.

Conduct a SWOT Analysis – Strengths Weaknesses Opportunities Threats

Use SWOT as a useful technique for understanding the plan's Strengths and Weaknesses, and for identifying both the Opportunities and the Threats you face. A SWOT analysis includes four components: • Strengths: What do we do well? What unique resources can we draw on? • Weaknesses: What could we improve? What will others see as weaknesses? • Opportunities: How can we turn our strengths into opportunities? • Threats: What threats could harm this plan?

BRANCHBURG TOWNSHIP: Vision for Digital Learning

A summary of your district's vision statements from your district's self-assessment:

Curriculum, Instruction, and Assessment (Gear 1):

Create scalable solutions that help facilitate collaboration and personalized learning, provide equal access to digital curriculum resources that engage students to support real world learning activities.

Use of Space and Time (Gear 2):

Students would have learning available to them from home, school and within the community. We should be providing this for them and teaching them how to use their time effectively. We would also need to support self-motivation.

Robust Infrastructure (Gear 3):

Support and maintain a secure, reliable, integrated, scalable network infrastructure. A planned refresh cycle of hardware replacement and services will help to ensure up-time and optimal use of available bandwidth. Staff and students will benefit from a quality network along with the addition of new technologies to support the teachers in conducting a safe managed digital classroom environment.

Data and Privacy (Gear 4):

Staff and students make data driven decisions and use digital learning responsibly. Staff will understand the privacy of student information and also be able to make use of collected assessment data.

Community Partnerships (Gear 5):

Use technology as a platform for interaction with families; the community - strengthen methods for communication; interaction with numerous communication tools such as social media, web presence, email and student information systems.

Personalized Professional Learning (Gear 6):

Encourage more personalized professional development by offering choice in selecting PD topics during faculty meetings; sharing examples of instructional practices taking place within the district.

Budget and Resources (Gear 7):

Develop and communicate a district budget and process that optimizes educational opportunities for all students, supports district goals; plans for maximum utilization of our facilities while continuing to be fiscally responsible to our community.

Across the Gears: Collaborative Leadership (Gear 8):

High expectations of continuous growth to stay current with new technology and implementing it

Glossary

21st Century Skills: 21st Century Skills are essential skills that children need to succeed as citizens and workers in the 21st century. They include core subjects, 21st century content, learning and thinking skills, ICT literacy, and life skills.

Adaptive learning: An approach that uses technology to engage students in interactive learning activities, which are customized to meet each individual's learning needs, based on continuous feedback and data analytics.

Authentic learning: A general model for designing learning activities that are rigorous, in-depth and have value beyond the classroom. The work assigned in authentic learning environments often mirrors the type of work done in the real world.

Blended learning: Blended learning describes models of learning where a student learns at least in part at a supervised brick and-mortar location away from home and at least in part through online delivery with some element of student control over time, place, path, and/or pace; often synonymous with hybrid learning. (Horn and Staker, 2011)

Collaborative Workspaces: Any tool that allows for collaboration or access to shared documents such as Google Docs or TeamBox.

Competency-based: A type of learning where the student advances in mastery of a set of competencies at a pace, and often in an order, determined by the student.

Data culture: An educational environment characterized by the effective use of data and evidence-based reasoning.

Deeper learning: Deeper learning prepares students to know and master core academic content, think critically and solve complex problems, work collaboratively, communicate effectively, and be self-directed and able to incorporate feedback. It enables graduating high school students to be college and career ready and to make maximum use of their knowledge in life and work.

Digital Citizenship: Understanding the safety concerns, rights and responsibilities necessary to access and participate in online communications or communities.

Document Management: Tools for storing, sharing and organizing documents such as drop boxes, file storage and organization tools, shared public spaces, etc.

Performance-based: Learning activities that require complex performances as demonstrations of knowledge.

Personalized learning: An approach to learning that is student-centric, where students have a significant degree of control and choice in what, when, and how they learn.

Privacy: The balance between collection and dissemination of data, technology, and individuals' right to have their personal information kept private. (Source: Data Quality Campaign.)

Project-based learning: Inquiry-based learning where learning takes place in response to a complex question or challenge.

Security: The policies and practices implemented at the state, district, and school levels to ensure that data are kept safe from corruption and that access is limited and appropriate. Data security helps ensure privacy and protects personally identifiable information. (Source: Data Quality Campaign.)

Synchronous Tools: Communication tools that support real-time communication such as webinars, Skype or chat rooms.

Visualization Tools: Tools that support the visual representation of thinking and ideas such as charting, graphing, or concept mapping tools.