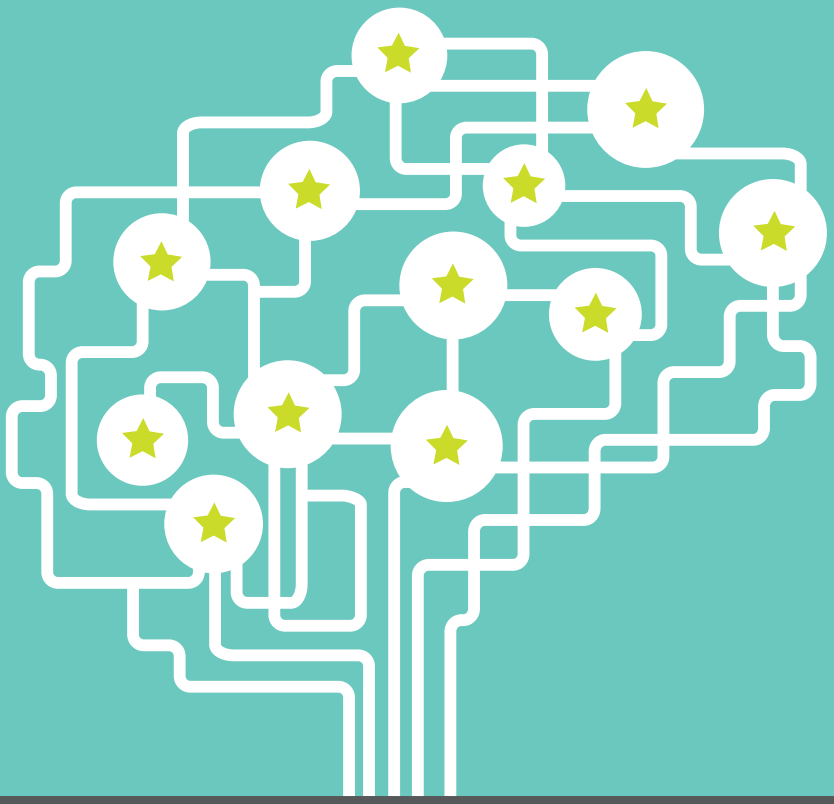
UTAH'S MASTER PLAN



# ESSENTIAL ELEMENTS

## FOR TECHNOLOGY POWERED LEARNING

COMMUNICATION ★ TECHNICAL SUPPORT ★ INSTRUCTIONAL DESIGN
INFRASTRUCTURE ★ PROJECT MANAGEMENT ★ DEVICE & SOFTWARE
PROFESSIONAL DEVELOPMENT ★ POLICY & PROCEDURE ★ PROCUREMENT
DIGITAL CONTENT ★ RESEARCH & PROGRAM METRICS ★ LEADERSHIP

# ESSENTIAL ELEMENTS

## FOR TECHNOLOGY POWERED LEARNING

## Utah's Master Plan

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# STATEMENTS OF SUPPORT

"The Essential Elements plan aggregates some of the best thinking of Utah leaders and others throughout the nation. In my roles as a member of the Task Force, a member of the UETN Board and as IT director of the Jordan School District, I support this vision of elevating learning opportunities for students of Utah."

**Cindy Nagasawa-Cruz,** *Information Technology Director, Jordan School District; Board Member, UETN*

"By providing this funding through a qualifying grant program, each district and charter school has the opportunity to craft its own unique application that will uniquely benefit its students. There is no one-size-fits-all in this plan."

**Ben Dalton**, *Superintendent, Garfield School District*

"As Tooele School District's Director of Information Technology, I am very comfortable with this plan and the direction of the Digital Teaching and Learning Task Force. Additionally, the Utah Technology Coordinator's Council has endorsed the plan and intends to lend its full support."

**Jim N. Langston**, *Director of Information Technology, Tooele County School District*

"Utah's new Essential Elements plan is poised to bring opportunity, equity, training and technology to all Utah institutions that participate. As a former Utah school superintendent and current CEO of UETN, I believe the master plan is well-suited to both urban and rural schools. Students, educators and the public all stand to benefit. I highly recommend that the state move forward with this initiative."

**Ray Timothy**, *CEO and Executive Director, Utah Education and Telehealth Network*

"The Utah Digital Teaching and Learning Task Force has thoroughly explored pertinent issues and has created a fair and equitable plan that I support. I encourage all concerned to read the plan and consider lending their support."

**Bryan Bowles**, *Superintendent, Davis School District*

"I'm impressed with the collaborative nature of this plan and the hard work that each Task Force member has put into the initiative. We have utilized knowledge from experts around the state to create a document that has great potential for success."

**Fred Donaldson**, *Executive Administrator, DaVinci Academy of Science and the Arts*

"There are few opportunities for change that are truly transformative in public education. The use of technology to change the delivery of instruction culture and improve the teaching craft is one such opportunity. The Utah Master Plan, Essential Elements for Technology Powered Learning, is our opportunity to transform Utah."

**David L. Thomas**, *Chair, Digital Teaching and Learning Task Force; Vice Chair, Utah State Board of Education*

"It has been an honor to serve on the Digital Teaching and Learning Task Force. The time has been well spent collaborating on the vision and direction for 21st century schools in Utah. It is exciting to visualize and support the future for Utah education."

**Rick L. Robins**, *Superintendent, Juab School District*

"Schools throughout Utah are already looking for ways to improve student learning through technology. They want to finish what they started, and this plan provides them with the needed support and funding."

**Terry Shoemaker,** *Superintendent, Wasatch School District*

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# Section 1: INTRODUCTION

**Utah has a powerful opportunity to act and to harness technology as an extraordinary tool to our benefit.** Information technology can help Utah construct an economy that overcomes the obstacle of distance and the constraints of climate. Technology powered learning engages students and enhances learning. Our aim is to leverage Utah's great strengths toward even greater gains for learners across our state. Our schools in Utah have a rich history of successful initiatives and forward thinking movements. At the same time, we realize that there is more to be done to help prepare our students for jobs that do not exist today and to help them thrive in an ever-changing world. We must prepare our future workforce for the demands of a world in which everyone will be required to use and create knowledge and leverage technology as a powerful tool to aid in this preparation.



To move all students to high levels of learning powered by technology, they will need access to infrastructure, devices, and applications that can be most effectively incorporated into learning. While we have some schools doing amazing things, it is imperative that all schools give students the opportunities and tools that they need to succeed in today's global economy. With teachers serving as architects of learning combined with the knowledge to effectively integrate technology, schools can provide students with a pipeline to explore real world concepts, interact with real world experts, and analyze and solve real world problems. Connected technology offers the potential to keep classroom resources and materials current with the contemporary world to an extent that is unprecedented. Technology also offers opportunities for self-directed, personalized learning projects that can tailor the curriculum to student interests and engagement, and allow teachers to facilitate active student learning rather than merely the rote transfer of information. We know that the right technology in schools—learning technology—done the right way can provide these tremendous boosts to teaching and learning. The world is changing whether we will it or not; technology is here whether we embrace it or not. Embracing technology—and making Utah's schools and students the best in America at using it—can establish Utah as a leader and an innovator. If Utah can move to where the opportunities are going to be, our goals will follow. If Utah has the most technologically capable workforce and the most technology-powered schools in the country, we are confident the economic benefits will follow.

## VISION AND GUIDING PRINCIPLES

### Vision

- Change and improve the culture of public education, classroom instruction, student and parent engagement, teaching and learning processes.
- Support the Utah Core and provide systemic support for student engagement and classroom innovation.
- Provide access (teacher, student and home) to quality digital curriculum, learning management support structures, collaboration systems, formative assessment systems, ongoing access to proven software, instructional practices research.
- Prepare students for college and careers including an emphasis on higher-order problem solving across the curriculum.
- Broaden STEM career path options for students.
- Support the drive toward on-demand, 24/7 learning and the flipped classroom.
- Drive economic development by providing students the skills and experiences they need to give Utah companies the quality workforce that they need.
- Move towards 66 percent by 2020 P.A.C.E. Goals.

### Guiding Principles

- Recognize the complexity and significance of the change management process required for success.
- Technology supports, not supplants, excellent teaching. The key to quality instruction is the teacher.
- Public schools are managed by elected local boards with their own policies, priorities and constituents who prefer local control of the education system for their students.
- Changes to processes require thoughtful planning and preparation to maximize success.
- Sustained ongoing funding and negotiating multiple state contracts provides economies of scale in support of local purchasing control.
- Build on the infrastructure investments and planning teams (including administrators, teachers, parents and students) LEAs have in their schools.
- Provide flexible implementation frameworks for LEAs to craft their technology vision for teaching and learning that includes meeting their needs for equipment, software/curriculum, professional development, infrastructure upgrades, technical support and refresh.

- Leverage LEA expertise in crafting technology processes and digital curriculum for evolving local needs.

For the past four years, the state of Utah, including the local school systems, the USOE, UETN, and the Legislature have been working to best leverage the power of technology for learning. The Legislature created and charged the Utah Digital Teaching and Learning Task Force to combine these efforts to create this master plan for Utah.

# Section 2: RESEARCH AND PROGRAM METRICS OF SUCCESS

## RATIONALE

The Utah State Board of Education is currently designing the Digital Teaching and Learning Program (the Program), as outlined in Senate Bill 222 (S.B. 222). The Task Force recommends the following system of metrics to address the S.B. 222 requirements to:

i. Identify outcome based metrics to measure student achievement related to a digital teaching and learning program.
ii. Develop minimum benchmark standards for student achievement and school level outcomes to measure successful implementation of a digital teaching and learning program.

### A Road Map

The following road map has been developed to frame the metrics in the context of the Digital Teaching and Learning Program. The road map includes a vision and theory of action that is designed to lead to a set of established long-term outcomes. The direct and intermediate outcomes are early/interim indicators that a district/school is on the pathway that is likely to lead to achieving the long-term outcomes. The direct and intermediate metric are also intended to be used as formative datasets by schools and district to inform their continuous improvement.

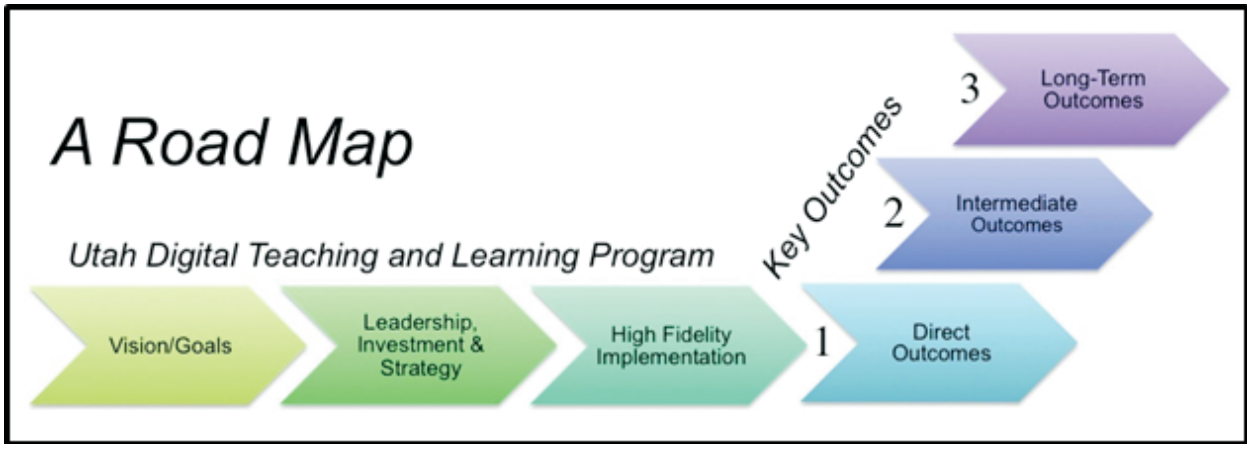



*Figure 1: Road map for the utah digital teaching and learning program*

## Methodology

The researchers generated a set of research/evaluation questions to frame the background research needed to inform the development of the metrics for Utah's Digital Teaching and Learning Program. Interviews were conducted with 21 identified Utah stakeholders using a protocol based on the research/evaluation questions. These data were collected from a small sample of educators and, therefore, the summary is not intended to be representative of educators statewide. Rather, it provides context to inform the work of the researchers and the Board.

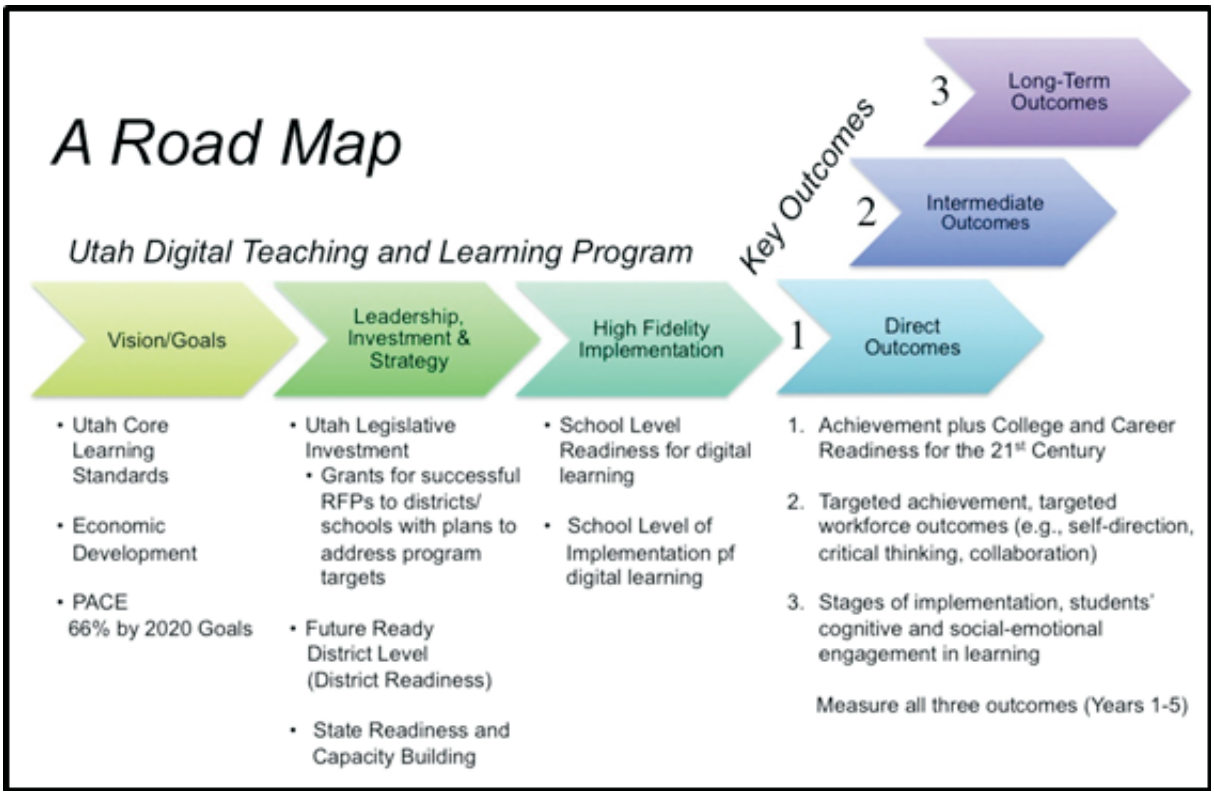
Document reviews by the researchers (e.g., whitepapers, state digital learning initiative websites, The Future Ready dashboard, SETDA and other professional organization publications) served as background as to standard and exemplary assessment practices in the field of digital learning. In addition, a review of Utah's teaching and learning standards provided information related to the standards that specifically align with the intended outcomes of a digital teaching and learning initiative. This work was also informed by the researchers' extensive experience and expertise in policy and practice for K-12 digital learning, and literature on state policy to practice including the two publications, New Directions in Education Policy Implementation, edited by Meredith Honig, and Scaling Up, edited by Chris Dede.



## The Metrics in Context

The Road Map is designed to show the inter dependencies between the Utah Digital Teaching and Learning Program policies and programs and the three levels of anticipated outcomes. In turn, the outcomes are related in that, the direct and intermediate outcomes should lead to the long-term outcomes. Figure 2 repeats the Road Map visual, with added specificity for each element.

*Figure 2: Road map with specificity*




**THE FOLLOWING NARRATIVES DESCRIBE EACH ELEMENT OF THE ROAD MAP IN DETAIL.**

*Vision/Goals (A Road Map Element)*

The Vision/Goals element of the Road Map was established by SB 222 and the work of the Task Force. The vision for the Utah Digital Teaching and Learning Program includes the college and career readiness of all students in Utah schools, leading to growth and viability in Utah's economy, with metrics provided by the Governor's PACE initiative. As background, each letter of PACE is significant:

**P:** Prepare Young Learners,

**A:** Access for All Students,

**C:** Complete Certificates and Degrees, and

**E:** Economic Success.

The PACE targets for 90% proficiency for 6 English language arts and mathematics targets at specific grade levels in K–12 schools have not yet been reached. On average statewide, schools in 2015 are achieving at 38% to 50% proficiency on the PACE targets, leaving much room for growth.

## Leadership, Investment, and Strategy (A Road Map Element)

The Road Map element of leadership, investment, and strategy is essential to achieving the outcomes. As such, this element is an essential component of the direct and intermediate outcomes that should lead to the direct outcomes and, thus, needs to be measured and tracked over time.

- Leadership, Investment, and Strategy for the Program:

The Utah Legislative Investment, as measured by the level of support provided to the state and specific districts and schools, documents the investment. The Task Force recommends the following strategy to ensure that the metrics for direct and intermediate outcomes measure the outcomes directly tied to the specific school/district interventions funded by the Digital Teaching and Learning Program. To ensure that alignment, the Task Force recommends that the state allocate funds based on a qualifying grant program to districts (and within districts, schools). Furthermore, the districts (and its targeted schools) should be required to write high-quality plans for their use of the Digital Teaching and Learning Program assets, clearly identifying their targets for student achievement and college and career/workforce readiness. For example, a district might focus the high school component of their proposal, for 2016-2017 on increasing career readiness through digital learning programs designed to build critical thinking in English Language Arts, and self-direction with students in grades 9 and 10. That district would then be held responsible for making progress in those specific student outcomes at those specific grade levels only.

- District Readiness for Digital Learning includes:

*Districts would be required by the state to participate in an assessment that analyzes each district's readiness for digital learning. The district readiness would include such areas as:*

- Vision, Goals and Outcomes
- Policy, and Leadership
- Curriculum, Instruction, and Assessment
- 21st Century Digital Learning Environment/ Use of Time
- Educator Proficiency with Digital Learning
- Student-Centered Practices

*These data would be combined with the UETN data collection to also include:*

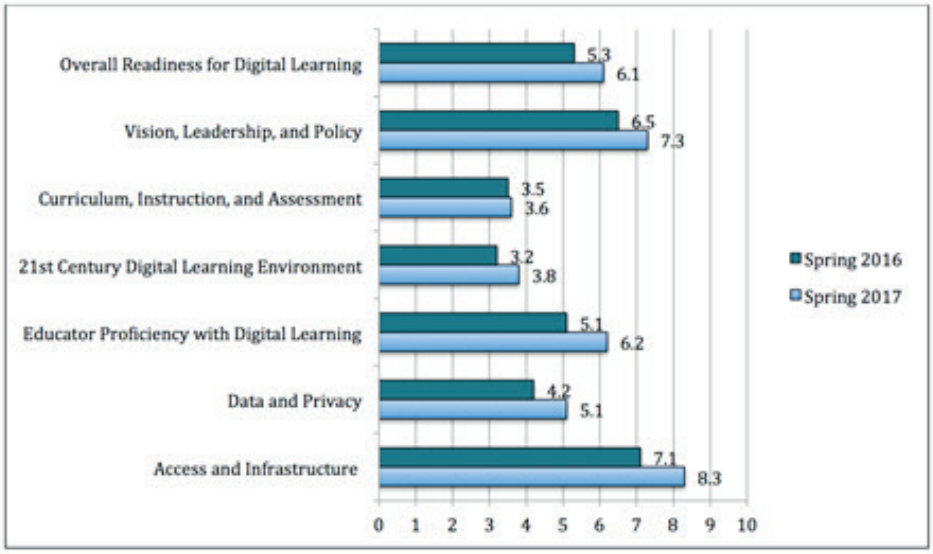
- Access and Infrastructure

The resultant reports would identify gaps, and would be used to inform the district's plan and application for Utah Digital Teaching and Learning funds. Based on these data, the District would be classified at Level 1, 2, 3, or 4 in readiness for digital learning. The districts would be

expected to annually improve their district readiness, until at level 4 for all of the elements of readiness as described above. (see figures below).

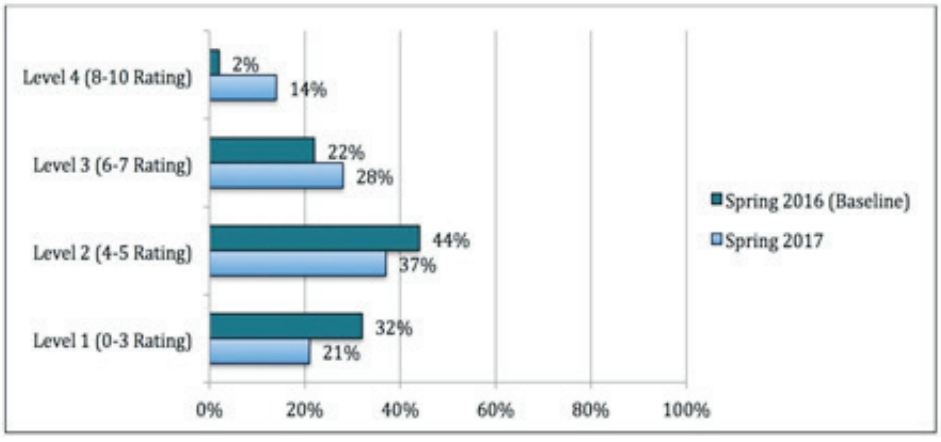
The following figures represent the type of information a district and the state could access from this school readiness and school implementation data.

*Figure: Sample district readiness for digital learning (Spring 2016–Spring 2017)*




Note: Typically a district will have leading and lagging indicators, often with Technology, Networks and Hardware, and Leadership leading indicators.

*Figure: Sample state report: percentage of districts ready for digital learning (spring 2016 – spring 2017)*




**N = 43 DISTRICTS**

Note: An example of a District Readiness Assessment that is free of charge is Future Ready (http://dashboard.futurereadyschools.org). It includes the assessment, customized online and PDF reports for districts, identification of gaps, and strategies for closing those gaps.

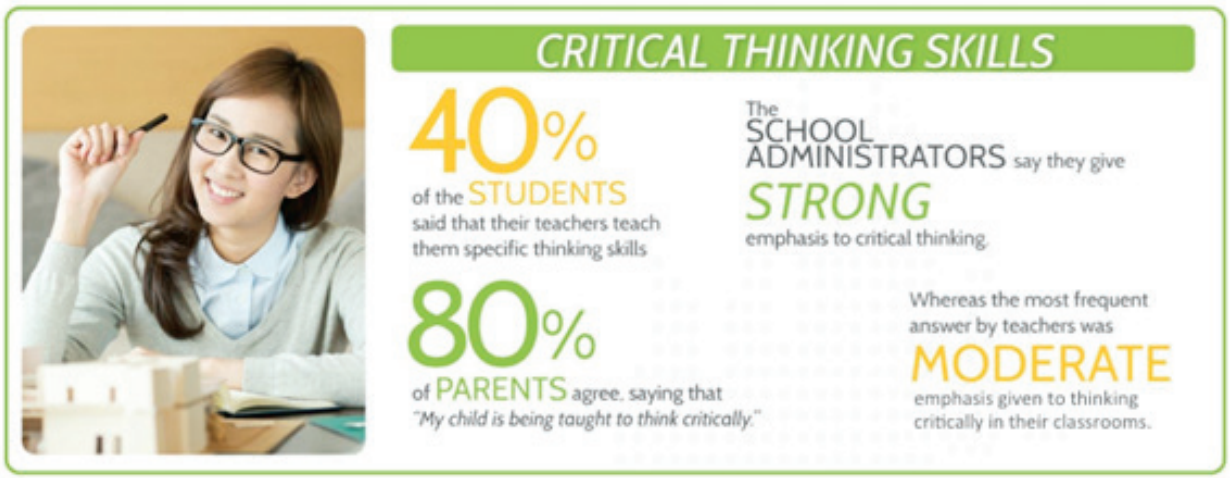
- Schools would be required by the state to participate in assessments that analyze each school's readiness for digital learning and a school's level of implementation. The school readiness would include such similar areas to the district, but would focus on SCHOOL READINESS and SCHOOL IMPLEMENTATION:
    - Vision, Goals and Outcomes
    - Policy, and Leadership
    - Curriculum, Instruction, and Assessment
    - 21st Century Digital Learning Environment/ Use of Time
    - Educator Proficiency with Digital Learning
    - Student Voice and Role

*These data would be combined with the UETN data collection to include:*

- Access and Infrastructure

The school report, would not only include the type of charts shown above, they would also have specific data on the perspectives of teachers, students, parents, and school administrators.

*Figure: Sample infographic on critical thinking from a school digital learning report*




These perspectives might then be compared to how students in classrooms in schools that targeted critical thinking then answered critical thinking questions from the state assessment.

- State Readiness and Capacity Building

The state education agency will need to increase its technical assistance to districts in the following areas:

- Support to districts in taking a readiness assessment and interpreting the data on the district's readiness for digital learning.
- Support to districts in assessing school readiness for digital learning and school implementation of digital learning.
- Leadership development and professional development to build the capacity of Utah educators to maximize the Utah Digital Teaching and Learning Program investment.
- Establishment of a process for assessing the quality of the district and school's plans and applications to the Utah Digital Teaching and Learning Program.
- Oversight in the assessments of progress for direct, intermediate, and long-term outcomes.

Oversight of the assessments for school readiness for digital learning and school implementation of digital learning, including randomly selected site visits of 10–20% of districts/schools for verification purposes.

District/School Responsibilities

- Complete the district and school readiness assessment annually.
- Use the data from a readiness assessment to inform the development of an annual digital learning plan for the district.
- Support schools in annually completing a multiple stakeholder assessment of the school's readiness for digital learning and level of implementation of digital learning.
- Support each school in preparing an annual plan for digital learning.
- Support each school in taking assessments for self-direction and engagement as appropriate, and in reviewing the data and interpreting that data for formative purposes.
- Annually set targets to increase levels of district and school readiness for digital learning and school implementation of digital learning.
- Use the customized reports and digital dashboard formatively for continuous improvement.

## Fidelity of Implementation (A Road Map Element)

The readiness of schools for digital learning and the levels of implementation of digital learning in the schools are an essential progression toward the long-term outcomes. The Task Force recommends that each school be asked to complete an annual assessment of its readiness for digital learning and its progress in implementing digital learning. And, as mentioned above randomly selected site visits would be conducted for verification.

## OUTCOMES

### Long-Term Outcomes (A Road Map Element)

The Vision/Goals translate into the Long-term Outcomes. The long-term outcomes for the project focus on student achievement and student workforce readiness.

Long-Term Outcomes:

- Student Achievement/College Readiness, as measured by student proficiency on SAGE (especially math and English Language Arts—subgroups)
- College and Career Readiness/Workforce Readiness, as measured by:
  - Grade 11 ACT scores
  - Students' levels of self-direction, which includes: 1) informed goal setting 2) pre-planning, 3) strategies for managing learning, 4) owning and evaluating learning
  - Students' levels of critical thinking

Note: The Task Force recommends that critical thinking be measured based on student scores on a set of items from SAGE that are determined to represent critical thinking.

While the long-term outcomes would be tracked annually, beginning with baseline data collected in the spring of 2016, the state should expect that these two outcomes in the aggregate should see significant growth within 4–5 years.

### Intermediate Outcomes

The intermediate outcomes are designed to serve as indicators that a school or district is making progress toward the long-term outcomes. The intermediate outcomes are similar to the long-term outcomes, but are more targeted, based on the goals that districts and schools set annually in their plans for Digital Teaching and Learning Program.

Note: This targeting enables the state to review a school's or a district's progress with digital learning only the in the areas in which digital learning is being targeted by that school or district.

Intermediate Outcomes:

- TARGETED Student Achievement/Targeted College Readiness, as measured by student proficiency on SAGE in specific content areas and grade levels identified by the schools and districts in their annual plans.
- TARGETED College and Career Readiness/Workforce Readiness, as measured by:
  - Grade 11 ACT scores, for those schools or districts that focus their Digital Teaching and Learning Program goals at the high school level for workforce readiness.
  - Students' levels of self-direction at specific grade levels (assessment of students' self-direction), for those schools or districts that set self-direction as a target for

those levels.

- Students' levels of critical thinking on SAGE at targeted grade levels for those schools or districts that focus their Digital Teaching and Learning Program goals on critical thinking/workforce readiness at those grade levels.
- Students' levels of collaboration at targeted grade levels (self-reported through surveys of students and teachers), for those schools or districts that focus their Digital Teaching and Learning Program goals on collaboration/workforce readiness at those grade levels.

Note: The task force recommends that critical thinking be measured based on student scores on a set of items from SAGE that are determined to represent critical thinking.

### Direct Outcomes (Measured in Years 1–5)

The direct outcomes serve as indicators of the progress schools and districts are making toward the intermediate and long-term outcomes.

Direct Outcomes

- Stages of Implementation of digital learning

As noted above, the Task Force recommends conducting assessments to determine each district and school's level of readiness for digital learning, and levels of digital learning implementation in schools. Each district and school would be expected to set targets for increasing such readiness and implementation levels through the Program.

- Students' cognitive and social-emotional engagement in learning

According researchers at Stanford (Fredricks, Blumenfeld, and Paris, 2004), students' cognitive and social-emotional engagement lead to deeper learning and increased academic achievement. Metiri recommends that the cognitive and social-emotional engagement of all students grade five be measured annually, along with a measurement of classroom structures and pedagogy that engages students.

## SUMMARY: ASSESSMENTS AND BENCHMARKS

Annual data collection (in addition to current SAGE, ACT, Dibels, etc.):

- Student engagement (cognitive and social-emotional/classroom structures)
- Student self-direction (grades 5–11)
- District readiness for digital learning
- School readiness for and implementation in digital learning
- School and district plan for digital learning, informed by aforementioned assessments
- Site visitations by expert teams at randomly selected districts/schools

NOTE: Baseline for all assessments will be established in spring 2016. Each participating district and school would have access to a dashboard with real-time reports and datasets on the

metrics for its district/school. These data would be aggregated to the state level for annual and trend reports over time.

## BENCHMARKS

Benchmarks will be set according to district readiness rating, school readiness, and school implementation ratings.

- In spring of 2016, baseline data will be collected on the metrics 1–6 listed above.
- Year 1 will be considered a launch year, where districts and schools are getting ready. Data will be reported and used formatively. Teachers will be gaining new approaches to teaching and learning digitally and will need at least a year to gain the expertise and experience needed to see student gains.
- Years 2 Plus: Benchmarks will be based on a combination of reaching thresholds related to the direct outcomes AND making progress in the intermediate outcomes.
- Year 4 Plus: In addition to continuing to make progress with direct and intermediate outcomes, the state should expect to see gains in the long-term outcomes.

## TRENDS IN ACHIEVING OUTCOMES

Year 1: State aggregated reports on all direct outcomes.

Years 2 Plus: Trends will be reported statewide on the direct and intermediate outcomes.

Years 4 Plus: Trends will be reported statewide on the direct, intermediate, and long-term outcomes.

### Formative Data for the Districts and Schools:

The Task Force recommends that each school and district have access to an interactive dashboard that tracks and reports their long-term, intermediate, and direct outcomes in real-time.

### Scorecard

A scorecard will report statewide progress of schools and districts with digital learning readiness and implementation.

# Section 3: LEADERSHIP AND CHANGE MANAGEMENT

## RATIONALE

Leadership and change management are recognized as the top contributors to success or failure for any technology initiative. Outstanding leadership will be proactive, build great teams, set clear visions, expect comprehensive plans and realistic time lines, and take a leading role in selling the vision to all stakeholders, both inside and outside the organization.

### Leadership of the State

Keys to these system changes at the state level are many. In order for local leadership to be effective, state leaders must pave the way to allow for change and improvement to occur. These include, but are not limited to, the necessary funding, infrastructure, policy and/or rules to support a Qualifying Grant Program. Just as the Governor has set forth bold goals of moving toward 66 percent by 2020, P.A.C.E., other actions, and leadership are necessary.

Public education powerfully impacts many areas of high interest to the state. An improved educational system is and should be a high priority for the state. The state can and should take a leadership role in guiding LEAs to higher levels of achievement. The legislature must deliver enabling legislation to make this a reality. The State Board can then play a critical and ongoing role to examine and update state policies.

### Leadership of Superintendents and Principals

Key to these system changes at the local level are, first, the superintendent, the leader of the district and, second, the principal of the school site who will be required to promote and support new learning conditions and teacher leaders. The leadership needs of complex educational organizations are best met through distributed leadership models.

The superintendent's role may change dramatically by becoming an active change leader to serve and assist schools, by creating a vision for the district based on the tenets of the initiative, and by working with all stakeholders to solidify a shared vision. It is essential that they be an active participant in the work—managing change isn't enough, superintendents have to lead it.

In this process, superintendents develop relationships with principals as their partners for change and implement strategies that are parallel to those used by principals at the school

level. Principals, in turn, expand the leadership function of site teams, teacher leaders, other staff and community members.

### Change Management

This new learning environment uses the power of technology to enable deeper learning. It recognizes the relationship of culture and technology, calling for a fundamental change in well-established assumptions of how teachers teach and how students learn. Changes of this magnitude require leadership that is active, enlightened and sensitive. John Kotter's "Eight Steps to Successful Change" has identified concrete steps to achieve transformation:

1) Establish a sense of urgency;

2) Form a powerful coalition;

3) Create a vision;

4) Communicate the vision;

5) Empower others to act on the vision;

6) Plan and create short term wins;

7) Consolidate improvements and produce still more change;

8) Institutionalize new approaches.



## STATE RESPONSIBILITIES

- Ensure that sufficient focus, resources and accountability are in place.
- Acquire and provide digital tools and databases that enable change management and support distributed leadership.
- Define and articulate powerful change management mechanisms and team-based distributed leadership paradigms for use at the state and LEA level.
- Require formal LEA training on leadership and change management as part of the LEA qualified grant program.
- Provide ongoing coaching for school boards, LEA and school leadership.
- Incentivize the development of a culture that is aligned with achievement.

## LEA RESPONSIBILITIES

- Ensure that sufficient focus, resources and accountability are in place.
- Develop a shared vision based on goals of the initiative.
- Communicate the vision to all internal and external stakeholders in the LEA and allow them to participate in defining how the vision will become reality and effect accelerated student achievement.
- School boards identify a sustainability plan and ongoing funding sources.
- Leaders ensure comprehensive implementation plans are developed and implemented.
- Requirements for success of special needs students are considered at all levels.
- Superintendents develop an understanding of "defined autonomy" which gives autonomy to principals to lead their schools, but expects alignment on LEA goals and initiatives and the use of resources to support enhanced digital learning.
- LEAs implement a team based distributed leadership paradigm as recommended by the state.

# Section 4: PROFESSIONAL LEARNING

## RATIONALE

Professional learning for educators is a key component of this master plan for Utah. Access to technology alone seldom results in lasting organizational change, but requires ongoing and effective professional learning supports for educators. There are examples of excellent professional learning and technology implementations occurring throughout our state. This plan leverages the best practices currently in use and research-based strategies gained from others to bring about a systemic paradigm shift toward engaging, effective teaching that integrates technology.

### Guiding Principles for Teachers

- Good professional development is an ongoing expectation and time should regularly be set aside to support professional learning of educators.
- Technology can and should be leveraged to support professional learning communities.
- Professional learning programs should support and align with Utah Educator Effectiveness Standards and lead to USOE and/or higher education licensure and professional credits.
- This plan should build on successful models already deployed including UETN Training, Train the Trainer, LEA School Technology Specialists, eMINTS, and other programs.
- Professional development should support teachers content, pedagogical, and technology knowledge and practices (TPACK Model).
- Technology professional development should align to the ISTE standards for teachers. (ISTE-T, 2008) and help teachers to:
- Facilitate and inspire student learning and creativity.
- Design and develop digital age learning experiences and assessments.
- Model digital age work and learning.

### Guiding Principles for Administrators

- The Principal is the instructional leader in the school. This plan recommends ongoing professional learning for building, district, and region-level administrators including leadership teams.

- Technology professional development should align to the ISTE standards for administrators. (ISTE-A, 2008) including:
- Visionary Leadership
- Digital age learning culture
- Excellence in professional practice

## STATE RESPONSIBILITIES

To maximize efficiencies and equal access, many professional learning activities will be coordinated at the state level by both UETN and USOE. These include train-the-trainer programs, administration of the Educational Technology Endorsement Program (ETEP) and other endorsements, online courses and workshops, conferences, and social media communities. Other state-level responsibilities include:

- Conduct a statewide inventory of technology integration professional development practices.
- Inventory published literature and existing survey responses to identify, and justify, best practices in professional learning for digital learning environments.
- Develop an integrated professional learning plan in support of the statewide technology initiative. This plan may include face-to-face, distance-learning, synchronous and asynchronous strategies, badges and micro credentialing, and balance traditional training with just-in-time learning, performance support tools for educators, collaborative learning opportunities, best practice capture and dissemination of practices, and train-the-trainer approaches.
- The professional learning plan will feature embedded measures for quality monitoring and continuous improvement; and standards upon which professional learning can be evaluated.
- Fund school technology specialists, technology trainers, and other personnel whose primary responsibility is to support effective technology integration for teachers.
- Support prior investments in technology training resources including Canvas, Teaching Channel, and regional trainers. These should continue to be leveraged for ongoing professional learning.
- Produce criteria for effective professional development to help LEAs gauge their investments in professional development services provided by third-party vendors.
- Design and issue license endorsements for programs that incorporate best practices with educational technology integration.
- Recommend that the Board of Education should implement additional time set aside for LEA technology integration professional learning.

## LEA RESPONSIBILITIES

Ongoing development of a district or school's faculty and administrators is an important LEA responsibility. LEAs should be adept at identifying areas of need and fostering professional learning communities and a culture of support for practicing educators. Local school board members should also be supported in their shift toward lasting organizational change outlined in this plan. Other LEA responsibilities include:

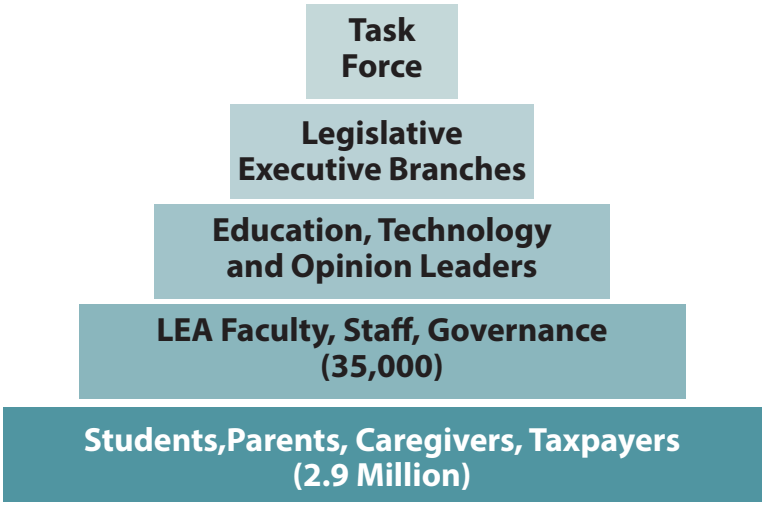
- Create technology-rich classrooms and schools where teachers will teach and students will learn.
- Assist members of the school community to understand how technology is being employed in the school; support parents with technology access, orientations, training, and involvement.
- Use the ISTE Standards, Utah Teacher Effectiveness Standards, and Professional Learning criteria to locate good professional learning opportunities for teachers.
- Host workshops, learning communities, team meetings, and other ongoing opportunities for purpose-built professional learning activities.
- Mentor new faculty in their effective use of educational technology; coordinate with local teacher education programs.

# Section 5: COMMUNICATION

## RATIONALE

Internal and external communication is essential in fostering positive perception and public support of this Essential Elements proposal. This communication plan includes research, analysis, implementation, and evaluation at the state and LEA levels, all aimed at engaging with various publics and fostering leader, educator, and citizen support. The plan also seeks to anticipate and respond to issues and concerns that surface through that interaction. Target audiences include increasingly larger groups as shown previously.

## STATE AND LEA ROLES AND RESPONSIBILITIES




### Research

- Quantitative overview: Utah public education serves more than 600,000 students in more than 1,000 schools in 41 school districts and 117 charter schools. Public education employs more than 32,000 educators, administrators, and staff.
  - More than 200,000 post-secondary students are enrolled in higher education and applied technology.
  - Higher education employs more than 34,000 faculty and staff.
- More than 285,000 under age six are poised to enter the system in the next five years.
- Public education include 41 school districts.

- Boards of education
- Superintendents and cabinets
- Principals and assistant principals
- Educators

- Four regional service centers serve small school districts
  - NUES—Northeast Utah Educational Services, Heber City
  - CUES—Central Utah Educational Services, Cedar City
  - SESC—Southeast Educational Development Center, Price
  - SEDC—Southwest Educational Development Center, Cedar City
- Utah's public education system also includes 117 Charter Schools.
  - Charter school boards
  - Directors/principals
  - Educators
  - UAPCS, Utah Association of Public Charter Schools

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## Planning

- Target audiences
  - Legislative and executive branches of state government (104 legislators, 1 governor)
  - Statewide education and technology leaders
    - Utah State Board of Education and USOE
    - UETN Board, advisory council and staff
    - UCET—Utah Coalition for Educational Technology (1000+ educational technology leaders)
    - UAPCS and UEA (Utah Association of Public Charter Schools and Utah Education Association)
    - USSA and USBA (Utah School Superintendents Association and Utah School Boards Association)
    - UAESP and UASSP (Utah Association of Elementary School Principals and Utah Association of Secondary School Principals)
    - UASBO—Utah Association of Business Officials (Business and industry employ power audiences including parents and grandparents.)
  - 41 school districts
    - Boards of education
    - Superintendents and cabinets
    - Principals and assistant principals
    - Educators

- 4 regional service centers
  - NUES—Northeast Utah Educational Services, Heber City
  - CUES—Central Utah Educational Services, Richfield
  - SESC—Southeast Educational Service Center, Price
  - SEDC—Southwest Educational Development Center, Cedar City
- 117 Charter Schools (via UAPCS, Utah Association of Public Charter Schools)
  - Charter school boards
  - Directors/principals
- Statewide media
  - Social media: Twitter, Facebook, YouTube
  - Television, radio, newspaper, online
  - Newspaper OP-EDs
  - Radio talk shows
  - TV interviews, news stories, public service announcements

- Goal—grow statewide leader, educator, student, and citizen support.
- Objectives—engage, train, survey, interact.
- Strategies—one-on-one, small and large group.
  - One-on-one, face-to-face is the gold standard for effective communication with small groups of opinion leaders.
  - Social and traditional media strategies are then used to build upon that foundation as the plan reaches out to larger groups (see pyramid of target audiences above).

## Implementation

- Tactics—informal interaction, presentations and workshops, action research, media relations, collateral materials (print and online).
  - The 30-second elevator speech as a conversation starter.
  - The priority of listening and asking open-ended questions.
  - Ongoing dialogue—public relations as a sustained conversation.
  - Individualized messaging—finding out the priorities of the individual and adding them.
  - Create a toolbox of media materials and resources that can be used with various target audiences.
    - Website—encourage in-person and online sharing of success stories via
    - Videos
    - Quick facts document (online and print)
    - Q and A document (include anticipated tough questions) online and print, postcards, and business-sized card handouts

- Presentations and public-speaking opportunities
- Endorsement document with quotations from opinion leaders

- Messaging targeted to specific audiences (see pyramid of target audiences above).
  - All Utah learners (from preschoolers to grandparents) have a stake in the process, plan, and success of this initiative
  - Digital citizenship and scholarship are key to personal success and economic development
  - The plan is safe for students and educators.
  - The plan is fair and equitable for various LEAs regardless of size or location because of the base+ funding formula.
  - The plan is cost-effective and has built-in metrics and accountability.
  - The plan is supportive of the articulated goals of parents, grandparents, and caregivers.
  - Messaging addresses WII-FM (What's in it for me? From the points of view of the targeted audiences)
- Messaging engages the mind and heart (speaks to intellect and emotion).
- Time line (see Section 12 for more detailed time line)
  - Phase 1: Development and presentation to Utah State Board of Education—June–October 9, 2015
  - Phase 2:  Legislative hearings and session: November–March 2016
  - Phase 3: Starts with passage of the legislation: January–March 2016
- Budget, Tasks, and Assignments to be determined.
- Evaluation
  - Formative—Communication is effective when stakeholders can articulate key messages and share them with others (informal conversations, social media "likes," and retweets, etc.).
  - Summative—Based on the following rubric:
    1. Exemplary: A systematic, research-based plan and implementation with desired, measurable results
    2. Established: A well-organized plan with acceptable results
    3. Emerging: Largely a "one-size"

# Section 6: INFRASTRUCTURE

## RATIONALE

UETN is a critical resource for Utah. It provides the backbone on top of which all services and functions of a modern education system is built. UETN will continue to provide these essential network services for Utah. This plan outlines the backbone Wide Area Network needs, the need for wireless infrastructure at the Local Area Network, and ways to maximize our state network. Sustainable funding, particularly to handle the growth in bandwidth needs and schools, is critical to our success. Specifically:

- UETN will provide bandwidth to LEAs in support of learning tools and environments, including last mile, wide area network (WAN), and Internet.
- UETN will work to provide a security plan, and work with LEAs to ensure that network and other resources are protected.
- The UETN Board and the Utah State Board of Education will recommend annually both ongoing and one-time funding to support this initiative.

## STATE ROLE AND RESPONSIBILITIES

### UETN

- Will collaborate with USOE and LEAs to procure, install, and manage Wi-Fi and other related network services necessary to deliver Internet and network resources to individual students and teachers in K–12 schools. The Task Force recommends that UETN investigate managed Wi-Fi service providers as an option in order to bring highly scalable, secure, and reliable Wi-Fi services to schools without the need to significantly increase UETN staff and to best leverage the new E-rate category 2 funding.
- Provide vision and planning to meet future network and data needs.
- Provide engineering services and where necessary, support to ensure highly reliable network services in support of current and future learning technology and education administration needs. Explore opportunities to work with district technology departments and service centers on projects that enhance connectivity and security.
- Ensure that the network is secure according to current industry best practices. All vendor provided services must meet these same best practices.
- Provide and enhance filtering solution options to the LEAs.

- Maintain a complete inventory of all software and hardware used in support of the state and local education environment. Inventory of assets related to this program are the joint responsibility of the vendors, the LEAs, and state.

## LEA ROLE AND RESPONSIBILITIES

### Regional Service Centers

- Assist in developing district and school infrastructure plans.
- Technical support:
  - Provide Tier 2 and 3.
  - Interact with UETN, USOE, and the LEAs.
- Professional development—support the professional development plan as outlined.
- Grant writing assistance:
  - Identify grant opportunities.
  - Assist in writing and submitting grant proposals.
  - Assist in administering grant programs, accounting for funds, and closing out grants when complete.



### LEAs

- Develop technology plan for districts, and where applicable, schools.
- Technical Support:
  - Provide Tier One.
  - Interact with regions, USOE, and UETN to provide timely information regarding utilization and upgrade requirements.
- Professional Development—support the professional development plan as outlined.
- Security and filtering:
  - Provide and maintain adequate security measures (e.g., firewalls, Intrusion detection, etc.).
  - Provide and maintain adequate filtering services as required by statute and federal guidelines related to the E-rate program.

- Federal E-rate program:
  - Submit requests for infrastructure improvements to UETN as required to meet federal deadlines.
  - Work with UETN on E-rate filings.
  - File for E-rate in areas where the district and schools are responsible.
- Assist with inventory at the local level.
- Provide and maintain adequate filtering services as required by statute and federal guidelines related to the E-rate program.
- Federal E-rate program:
  - Submit requests for infrastructure improvements to UETN as required to comply with the UETN Network Connection Policy.
  - Work with UETN on E-rate filings.
  - File E-rate applications in coordination with districts and schools.
- Assistance with inventory at the local level.
  - Provide and maintain adequate filtering services as required by statute and federal guidelines related to the E-rate program.

# Section 7: DIGITAL CONTENT, SOFTWARE, AND DEVICES

## RATIONALE

Educational technology resources and tools that support teaching and learning, progress monitoring, and assessment are an important and ongoing investment. These tools should become an integral part of how the classroom functions—as accessible as all other classroom tools, both in and beyond the school day (Edutopia, 2007). This master plan relies on various technology content resources, software programs, and applications to achieve improved student engagement and outcomes. Some content may have open licensing, while some may be copyrighted by a publisher. Content applications should support inquiry-based, student-directed, and personalized pedagogical approaches. Interactive tools, creation and production tools, and authentic resources should be utilized. The following table provides a guide for considering content applications.

## DIGITAL CONTENT AND SOFTWARE

*Table 1. Criteria adopted by the Utah Instructional Media Consortium (uimc) and UETN provides a guide to identify high quality content*

| Criteria | Recommendation |
|---|---|
| Alignment with Standards | Content has a direct correlation to, and supports teaching of the Utah Pre-K–12 Core Curriculum. |
| System Compatibility | Content, tools, and software should operate with existing operating systems and authentication methods, including home access. |
| Content Integrity | Concepts are clearly explained, scope of content is rich and informative, and the concepts are timely and accurate. |
| Learning Process | Scope of content is organized in a meaningful sequence with a good balance of background information and interactive activities that extend learning. Content challenges learners to think, reflect, discuss, hypothesize, compare, and classify. Activities are clearly related and designed to take students from basic knowledge to higher level thinking. |

| | |
|---|---|
| Equity | Content represents balanced cultural, ethnic, religious, ability, and gender groups and responsibly represents diversity. |
| Interest Level | The design, editorial, and media enhancements engage, motivate, and sustain student interest. |
| Production Values | The presentation of graphics, media, and text work together to deliver a meaningful experience. Elements are balanced and harmonious with a clear and impacting message for learners. Content is aesthetically pleasing and compatible with recommended devices and interfaces. |
| Age Appropriateness | Subject matter, language, media and interfaces are age and developmentally appropriate. The grade level association is accurate. |
| Creativity | Content has a unique approach to presenting the subject matter and meeting learner needs. New, fresh, and inventive ideas engage learners. |
| Supports for Special Needs | The content and interface are fully ADA compliant with special supports for special needs and English language learners. |

For early learners, evaluation of applications requires special considerations (Gillette-Mallard, 2015) including:

- Active involvement—thinking and intellectual manipulation that engages beyond mindless swiping and scrolling.
- Engagement with learning materials—contingent interactions, extrinsic motivation and feedback, and intrinsic motivations; freedom from distractions, pop-ups, and ads.
- Meaningful experiences—based on the quality and quantity of connections between the app experience and the wider experience of a child's life.
- Social interaction—apps that harness interaction and vocabulary development through character responses or partner work enable learning.

Software contemplated in this section of the master plan includes:

- Instructional software tied to specific curricular goals and content areas. Providers of these products must provide evidence of their effectiveness and ongoing improvement of student outcomes.
- Productivity and utility tools including learning management system software, word processing, spreadsheets, graphic design programs, multimedia production software, authentication software, and other utilities.
- Content software—database collections, video on demand systems and curated resource repositories.

## STATE RESPONSIBILITIES

- Dissemination of and professional development on the criteria used to evaluate effective content and applications.
- Template language, developed by legal counsel, to protect security of student data in software contracts.
- Continue to support Open Education Resources (OER) including the state's online textbooks http://www.uen.org/oer/ as well as licensed content and applications.
- Continue to leverage Utah's investment in resources available through UETN, including Utah's Pioneer Online Library, eMedia, UEN.org, Preschool Pioneer, and other applications; and software through the STEM Action Center, the Early Literacy initiative, and other efforts.
- Account for student growth and increased licensing costs.
- Balance local decision-making with UETN's ability to consolidate purchases and provide cost-savings through E-rate and consortium licensing. Statewide access is likely more cost effective and equitable for all learners, while local purchases allow flexibility to meet local needs.
- Where feasible, bundle K–12 software licensing through UETN with those of Utah's UCAT and USHE institutions, thereby driving the cost even lower.
- Provide software that is best available at a state level, including a Learning Management System, authentication software, productivity tools, Digital Citizenship and Internet Safety program, and other applications.

## LEA RESPONSIBILITIES

- Review, evaluate, and select content and software products. Participate in state-level RFP committees. Develop RFP selection criteria.
- Implement software solutions, including ongoing training.
- Protect student data.
- Select software solutions from a menu of state-negotiated contracts. Supplement state solutions with local solutions as needed.
- Incorporate productivity tools and software into the school curriculum, communication with parents, and school culture.
- Incorporate instructional software with fidelity—follow the guidelines established by the LEA to achieve recommended gains.
- Comply with FERPA, Utah Code Title 53A, Chapter 13, Part 3, Utah Family Educational Rights and Privacy Act, and State Board rule R277-487.

### Security

Security of student data is of paramount concern at both the state and LEA level. USOE, UETN, and LEAs should work cooperatively to assure third party software providers and contracted services authenticate through secure methods. Licensing multiple software programs that require individual student logins presents risk and loss of control of student data. Legal counsel will provide template language that should be included in all software contracts to assure security of student data, and include this topic in professional learning experiences for educators and building administrators.

## DEVICES

State contracts will be negotiated for the most prevalent device packages as determined by LEA input and results of the technology inventory conducted by UETN. USOE and UETN will determine the best strategy to conduct a competitive RFP to qualify one or more providers from which LEAs may select their preferred device package. Choices will include both laptop and tablet options, as well as solutions tailored for different grade bands.

By negotiating state contracts, the volume will reduce device cost. This option also supports schools and districts that have already deployed their preferred system so they may continue to grow their program. Professional development, technical support, repairs, and maintenance are also streamlined through purchase of common packages. Negotiated agreements will include, but are not limited to: professional development, warranty, repairs, replacements, software/operating systems, device cases, battery replacements, and other peripherals.

## STATE RESPONSIBILITIES

- Manage procurement and selection of providers for the systems described above using a consortia or cooperative agreement (see Section 9).

## LEA RESPONSIBILITIES

- Purchase devices per procurement described above. LEAs are responsible for inventory, maintenance, insurance, and replacement of their devices.
- Determine policies for home and/or summer use of the device. Models for this will be discussed during administrator professional development sessions.

# Section 8: TECHNICAL SUPPORT

## RATIONALE

A technology powered learning environment necessarily relies on the technology functioning properly. Technology support is therefore critical to success. The specifics for how technology support is to be provided will be developed through a collaboration of USOE, UETN, LEAs and the vendors. As part of the procurement process, vendors will be required to outline and describe how they will provide support to LEA technical support personnel, and how school personnel will be able to leverage vendor support and repair options. Overall, the vendor will be charged with developing and implementing a technical support and repairs program that provides uptime and reliability that supports learning, minimizes the impact on the local technical support staff, provides appropriate training to local support staff, and keeps in mind the working environment of a K–12 school.

Based on examination of other similar large-scale programs, the Task Force further recognizes and/or recommends that:

- The vendor provided technical support and repairs program must consider how it will provide the following functions (or its functional equivalent):
  - Operate help desk services available to both technical support personnel as well as users.
  - Track and report back to USOE, UETN and as appropriate LEAs data related to support incidents in order to identify trends and systemic challenges.
  - Provide appropriate training to LEA technical support staff. The best technical support is professional development.
  - Recommend a ratio of local technical support staff to users for budgeting and staffing purposes. The Task Force recognizes that differing solutions and varying levels of technical skills will provide for some variation in actual staff to user ratios.
  - Work with education technology directors to determine needs and identify gaps.
  - Support the creation and implementation of student support teams (e.g., Cyber Corps like support delivered by students).
  - Provide end-to-end repair services for both warranty and out-of-warranty issues.
  - Recognize that their solution must sufficiently interface with existing technologies in Utah schools such as:
    - Back office (district level and school level)

- Building (LAN, printers and peripherals, etc.)
- Classroom (interactive white boards, audio assist, data probes and other common peripherals, etc.)

## STATE ROLE AND RESPONSIBILITIES

- Partner with vendors to leverage and improve state training infrastructure as appropriate (Utah Tech Summit, UtahSAINT, online learning environments).
- Manage vendor contracts and monitor performance.
- Create and support a statewide community of technical support personnel to provide feedback loops between the LEAs and vendors.
- Ensure the program is forward looking, recognizes and supports future policy initiatives and changes in existing policies.

## LEA ROLE AND RESPONSIBILITIES

- Provide adequate release time for technical support personnel to attend and take advantage of training associated with the program.
- Follow prescribed technical support protocols as defined by the vendor and approved by USOE and UETN.
- Actively participate in a statewide community of technical support personnel to share and leverage shared learning and solutions.
- Assist in leveraging lowest price contracts on administrative software (e.g., Microsoft Campus Agreement, Adobe Agreement, VMWare, etc.).

# Section 9: PROCUREMENT

## RATIONALE

Utah prides itself on equitable access to educational resources for all students, regardless of their location. Procurement of devices, software, and services is best coordinated at a statewide level where volume purchasing can drive down pricing and enhance and simplify implementation (i.e., linking services like LMS and research tools); though LEAs may elect to procure independently while adhering to the grant guidelines described here. Procurement must be carefully coordinated to maximize E-rate and other funding reimbursements on eligible services.

UETN has both legal authority (Utah Code Section 53B-17-105) and a history of providing statewide procurement and contract management for technology equipment, software licensing, and services. The Task Force recommends that UETN in coordination with USOE continue to conduct statewide procurement. As appropriate, UETN will further leverage its statewide procurement practices by including other interested entities such as higher education or healthcare to further enhance buying power and reduce cost.

The Task Force recommends that Consortium Agreements and Cooperative Purchasing Agreements with both direct appropriation and cost recovery billed to the LEA be developed for the primary device and wireless networking solutions (including on-going warranty, support, and implementation services for both). Competitive RFPs designed to yield multiple solutions and contracts and aggregated purchasing will ensure best volume pricing while retaining choice for LEAs. LEAs that elect to use consortium agreements for purchasing will realize significant cost savings for the state.

Additionally, certain software and online solutions should be competitively bid and Cooperative Agreements developed to allow for LEAs to purchase directly with the vendor through state-negotiated terms and pricing consistent with current UETN practices.

Finally, the Task Force further recommends that a Local Procurement Provision (LPP) be included that allows LEAs to directly procure functionally equivalent solutions and to receive reimbursement for the state's share. Functional equivalence should be determined through an application process administered by UETN and USOE.

## STATE ROLE AND RESPONSIBILITIES

In cooperation, UETN and USOE will:

- Develop and perform statewide competitive RFPs for technology powered learning solutions and wireless networking solutions in compliance with state and federal policies and rules.

- Negotiate and manage contracts with awarded vendors.
- Coordinate LEA selection of vendors in order to aggregate purchases to maximize volume.
- Develop the LPP application process and administer the provision.
- Determine (and administer if possible) if a single bill payer model is feasible and would reduce overall cost to the state and LEAs.
- Determine (and administer if possible) if a direct transfer of state funds with permission of the LEA is possible and would simplify and reduce overall administrative burden for all parties.

## LEA ROLE AND RESPONSIBILITIES

- Consult with UETN and USOE to prioritize hardware, software, and services that must be procured.
- Consult with UETN and USOE in procurement processes, including developing RFP's, evaluating RFP's, making purchasing recommendations and decisions, leveraging consortium purchases to drive down cost, and implementing products and services that are procured.
- Make timely reimbursements to the state as appropriate for shared cost items or participate in a direct fund transfer option should one be determined to be viable.

# Section 10: COST PROPOSAL

## RATIONALE

Utah has a long history of providing equitable access for all learners while maximizing cost savings through consortium purchases, including combining purchases with public education, public libraries, UCAT colleges and higher education. The cost proposal outlined below includes funding to be allocated at the state level, and a model for ongoing funding to the districts and schools.

## LEGISLATIVE REQUEST

- Ongoing: $70,000,000
- One-Time: $30,000,000

## FUNDING FORMULA

- The board will distribute funds appropriated for the program as described in this section.
  - Qualifying LEAs that are Charter Schools
    - The amount available to distribute to qualifying charter schools is an amount equal to the product of enrollment on October 1 in the prior year at charter schools statewide, divided by enrollment on October 1 in the prior year in public schools statewide; and the total amount available for distribution under this section.
    - The board shall distribute to qualifying charter schools the amount available for distribution to qualifying charter schools in proportion to each qualifying charter school's enrollment as a percentage of the total enrollment in qualifying charter schools; or as determined by the State Charter School Board and approved by the board.
    - Charter School technology spending/maintenance of effort are not to be supplanted as established by board rule.
  - Utah Schools for the Deaf and the Blind
    - The board shall distribute grant money to the Utah Schools for the Deaf and the Blind in an amount equal to the product of: (a) enrollment on October 1 in the prior year at the Utah Schools for the Deaf and the Blind, divided by enrollment on October 1 in the prior year in public schools statewide; and the total amount available for distribution under this section.

- Qualifying LEAs that are School Districts
  - The board shall distribute 10% of the funds available on an equal basis
  - The remaining 90% of the funds shall be distributed to the qualifying LEAs on a per-student basis.
  - LEA technology spending/maintenance of effort are not to be supplanted as established by board rule.
  - Each LEA has an opportunity to receive funds if the LEA's plan has been approved in year one.
  - If an LEA's plan is not approved during year one of the program, the board shall deposit the LEA's allocation of program money into separate account that is non-lapsing, while providing additional supports to help the LEA become a qualifying LEA is subsequent years.
- USOE / State Board of Education
  - Funding is allocated to USOE to administer the program including ongoing evaluation and performance reports.
  - Administrator/principal professional development and grant writing assistance program.
- UETN
  - Funding is allocated to UETN to administer the program including procurement, contracting, accounting and inventory management staff.
  - Funding is allocated to UETN to support infrastructure for the program including increased bandwidth, provision of wireless personnel and infrastructure, filtering and software contracts that are determined to be best provided equitably at a statewide level (e.g., online research library, videos and media content, Learning Management System, authentication solution, etc.).
  - Funding for professional development personnel at statewide level to coordinate Train the Trainer and statewide programs.

# Section 11: STATE QUALIFYING GRANT PROGRAM

## RATIONALE

A large-scale program such as this provides the opportunity to leverage lessons learned and to make systemic successful practices. In order to enhance the state's capacity to discover and extend these practices while balancing local autonomy with fiscal responsibility, the Task Force recommends that the program be administered via a State Qualifying Grant program. This structure will allow LEAs autonomy and choice while creating feedback loops and opportunities to share solutions. USOE can act as the aggregator of information and solutions and will be in the best position to make recommendations and take action to scale and disseminate successful solutions.

All LEAs are eligible to apply to participate in this program. Each LEA's application will be reviewed and approved by USOE before the LEA is qualified to participate.

The Utah State Board of Education will establish rules implementing the qualifying grant program for LEAs to participate. The grant qualifying program will be based on the best models for effective integration of technology tools and resources into teaching and learning.

## STATE ROLE AND RESPONSIBILITIES

### Pre-Qualifying Grant Training

The USOE will create a mandatory pre-qualifying grant implementation training program for LEA administrators to ensure uniform messaging and expectations of leadership.

### LEA Qualifying Application

The USOE will create an application process. LEAs plans must include curricular and other targeted goals and how it intends to leverage one of the approved technology solutions to improve instruction and learning outcomes against targeted audiences. Additionally, LEAs must complete a readiness assessment and submit the results. The LEA qualifying application will provide details on each of of the following areas:

#### CURRICULUM, INSTRUCTION, AND ASSESSMENT

- All students will engage in:

- Deeper learning
- Personalized learning
- Collaborative, Relevant, and Applied Learning
- Leveraging technology and digital learning environments
- Assessment—analytics inform instruction

- Establishment of Curricular and Implementation Goals
  - Direct Outcomes
  - Intermediate Outcomes
  - Long Term Outcomes

**USE OF TIME**

- The needs of all students will be meet through:
  - Learning is flexible; anytime, anywhere
  - New pedagogy, schedules, and learning environment for personalized learning
  - Competency-based learning
  - Strategies for providing extended time for projects and collaboration

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**TECHNOLOGY, NETWORKS, AND HARDWARE**

- Adequacy of devices; quality and availability
- Equitable access for all students
- Robust network infrastructure
- Adequate and responsive support

- Formal cycle for review and replacement

**DATA AND PRIVACY**

- Data and Data Systems
- Data Policies, Procedures, and Practices
- Data-Informed Decision making including data sources such as formative assessments, user activity, Internet browsing, and attendance data.
- Data Literate Education Professionals
- Comply with FERPA, Utah Code Title 53A, Chapter 13, Part 3, Utah Family Educational Rights and Privacy Act, and State Board rule R277-487

**COMMUNITY PARTNERSHIPS**

- Local Community engagement and outreach
- Digital citizenship, global and cultural awareness
- Digital learning environments serve as connectors to local and global communities
- Parental Communication and Engagement
- District Brand

**PROFESSIONAL LEARNING**

- Shared Ownership and Responsibility for Professional Growth
- College and Career Readiness skill set
- Diverse opportunities for professional learning
- Broad-based, participative evaluation

**BUDGET AND RESOURCES**

- Efficiency and cost savings
- Alignment to district- and building-level strategic and tactical plans
- Consistent funding streams
- Learning return on investment

**EMPOWERED, INNOVATIVE LEADERSHIP**

- 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

### Qualifying Grant Review Process

- The USOE will create an evaluation rubric based on the LEA application.
- The Utah State Board of Education will establish by rule the qualifying scores in each area that must be achieved before an LEA's application is approved.
- The USOE will establish a regular schedule for reviewing LEA applications.
- LEA applications will be reviewed by committee established by the USOE. Review committee members will include experts from, but not limited to: LEAs, USOE, UETN, and other relevant education entities.
- The USOE will establish a long-term monitoring process which will certify that the LEA grant application is being effectively implemented and that the program parameters are being met.
- If an LEA's application is not approved during year one of the program, technical assistance will be provided, and the LEA may submit a revised application for review.

## LEA ROLE AND RESPONSIBILITIES

- LEAs must participate in the Pre-Qualifying Grant Training provided by USOE.
- LEAs must submit an application to participate in the Qualifying Grant program.
- LEAs must agree to program rules as determined by the State Board of Education.

# Section 12: PROJECTED TIME LINE

## 2015

- ☑ **May 2015:** Digital Teaching and Learning Task Force members selected
- ☑ **June 2015:** Digital Teaching and Learning Task Force convened
- ☑ **June 2015 to October 2015:**Master Plan Creation by the Task Force
- ☑ **October 2015:** Presentation to the Utah State Board of Education
- ☐ **October 2015:** Presentation to the Education Interim Committee of the Utah State Legislature
- ☐ **November 2015:** Presentation the Executive Appropriations Committee of the Utah State Legislature
- ☐ **December 2015:** Final Plan, Essential Elements for Digital Learning submitted to Senate and House Leadership of the Utah State Legislature

## 2016

- ☐ **January 2016 to March 2016:** Essential Elements for Digital Learning Plan considered by the Utah State Legislature
- ☐ **March 2016:** Essential Elements for Digital Learning Plan approved by the Utah State Legislature
- ☐ **April/May 2016:** Advisory Committee selected
- ☐ **May–July 2016:** Creation of LEA Application and Rubric
- ☐ **August–December 2016:** Procurement RFP and Selection
- ☐ **Fall 2016:** LEA Leadership Boot-Camp
- ☐ **Fall 2016–Winter 2017:** LEA Master Plan Creation

## 2017

- ☐ **Winter/Spring 2017:** LEA Application Review and selection of schools for first cohort.
- ☐ **Spring 2017:** Technical Support for non-qualifying LEAs
- ☐ **Fall 2017:** First cohort of schools begin implementation of Essential Elements for Technology Powered Learning
- ☐ **Winter 2017/Spring 2018:**
  - ☐ **2018–2019 Cohort**
    - ☐ LEA Leadership Boot-Camp
    - ☐ LEA Master Plan Creation
    - ☐ LEA Application Review and selection of schools

## 2018

- ☐ **Fall 2018:** 2nd Cohort begins

# Section 13: RESEARCH CITED AND SUPPORTING DOCUMENTS

## RESEARCH CITED

An examination of individual, team and organizational learning and factors influencing learning in a comprehensive high school" Robbins, John Paul Jr.,
http://lib.dr.iastate.edu/cgi/viewcontent.cgi?article=11713&context=rtd

Appendix: Florida Technology Integration Matrix
http://fcit.usf.edu/matrix/download/tim_table_of_summary_indicators.pdf

Diagnosis—permanent paradigm paralysis by Judith Curry
http://judithcurry.com/2013/09/28/ipcc-diagnosis-permanent-paradigm-paralysis/

Edutopia, 2007. *What is successful technology integration?* Retrieved online at
http://www.edutopia.org/technology-integration-guide-description

Facilitate Leadership: The Imperative for Change "Leadership for Restructuring or Systemic Change," Southwest Educational Development Laboratory (SEDL)
http://www.sedl.org/change/facilitate/leadership.html

Gillette-Mallard, K., 2015. A new framework to identify truly educational apps. Retrieved online: http://www.edcentral.org/new-framework-identify-truly-educational-apps/

International Society for Technology in Education. (2008). *National educational technology standards for teachers.* Retrieved online:
http://www.iste.org/standards/iste-standards/standards-for-teachers

International Society for Technology in Education. (2008). *National educational technology standards for administrators.* Retrieved online:
http://www.iste.org/standards/iste-standards/standards-for-administrato

Kotter International "8 Steps to Accelerate Change in 2015"
http://www.kotterinternational.com/insights/landing-page/8-steps-to-accelerate-change-in-2015/

Redefining Education through Technology—Alan November
https://www.questia.com/library/journal/1P3-3187688651/redefining-education- though-technology-an-interview

School District Leadership that Works: The Effect of Superintendent Leadership on Student Achievement
http://www.ctc.ca.gov/educator-prep/ASC/4005RR_Superintendent_Leadership.pdf

Team of Teams: New Rules of Engagement for a Complex World, McChrystal, General Stanley
http://mcchrystalgroup.com/teamofteams/

Thank You for Your Leadership: The Power of Distributed Leadership in a Digital Conversion Model—Mark A. Edwards
http://www.amazon.com/Thank-You-Your-Leadership-Distributed/dp/0133563189

Welsh, J., J.C. Harmes, and R. Winkelman, "Florida's Technology Integration Matrix." Principal Leadership, October 2011, p. 69.
http://www.setda.org/wp-content/uploads/2013/12/PLOct11_techtips.pdf

## SUPPORTING DOCUMENTS

HB 131: 2014 Utah Legislative Session
http://le.utah.gov/~2014/bills/hbillint/HB0131S04.pdf

SB 222 v.42: 2015 Utah Legislative Session
http://le.utah.gov/~2015/bills/static/SB0222.html

SB 222 Enrolled: 2015 Utah Legislative Session
http://www.uen.org/digital-learning/downloads/SB0222_Enrolled.pdf

Governor's Technology Workgroup Report
http://www.uen.org/digital-learning/downloads/TechnologyWorkGroupReport.pdf

Digital Teaching and Learning Framework
http://www.uen.org/digital-learning/downloads/DigitalLearningFrameworkProposalDraft_12-5-2014.pdf

Utah Administrative Code Rule R277-487
http://www.rules.utah.gov/publicat/code/r277/r277-487.htm

ISTE Standards

Students: https://www.iste.org/docs/pdfs/20-14_ISTE_Standards-S_PDF.pdf

Teachers: https://www.iste.org/docs/pdfs/20-14_ISTE_Standards-T_PDF.pdf

Administrators: http://www.iste.org/docs/pdfs/20-14_ISTE_Standards-A_PDF.pdf

Future Ready Schools

Main: http://futurereadyschools.org

Dashboard Tool: http://dashboard.futurereadyschools.org


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