

2018-2023

1009 Main Street
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LCPS TECHNOLOGY PLAN 2018-2023

LUNENBURG COUNTY PUBLIC SCHOOLS

www.lunenburgcountyschools.org/technology

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Executive Summary

The Lunenburg County Public Schools Educational Technology Plan 2018-2023 provides guidance for the school system as it strives to improve student academic achievement through the effective and efficient integration of technology and instructional support skills into the curriculum. Even though Lunenburg is one of the smallest counties in Virginia, this fact does not deter progress and a bold commitment to achieve high standards. This plan is a compilation of the Virginia Department of Education Technology Plan, a comprehensive document, provided as a guide to Virginia school divisions. The areas include:

- Enhance Personalized, Equitable Student Learning Experiences with Technology
- Support Innovative Professional Learning with Technology
- Create Cultures of Change Through Innovative Leadership Practices
- Secure and Robust Infrastructure

These four areas outline the plan's goals. Each goal is extended to include results, indicators and actions.

The Lunenburg County Public Schools Educational Technology Plan 2018-2023 drew goals, results, indicators and actions from the state plan, initiated revisions and resulted in the present plan. Currently, within in our local, state and national economies, an atmosphere of practicality and prudence requires us to look realistically at expenditures within our county. We must decide whether or not to fund essential needs versus recommended needs. The county must implement actions to ensure that critical functions remain intact in order to maintain an operating system that is secure and productive. A temporary postponement of some recommended strategies can be instituted. This plan will be evaluated and updated annually or in the event of funding changes, or if new needs or concerns arise. This plan will act upon an ongoing perusal and corrected path, should conditions arise which require such actions.

Highlights for LCPS include:

- One-to-One device initiative completed for grades 9-12 through the DOE e-Learning Backpack grant.
- On-going one-to-one device initiative in grades 3-8.
- Acer notebooks purchased for administrators in order to be used in walkthroughs and VTSS initiatives.
- All building have a wireless infrastructure.
- Three of the four buildings are now upgrades to Cat 6 wiring granted through Erate funds. Additional Erate funding is providing upgrades switches in 2018.
- 24/7 security monitoring system installed for network and firewall through the division, which provides a safe, reliable infrastructure to the network and users.
- LCPS is a Google School Division.
- SpiceWorks Ticket system allows quality and timesaving customer service.
- ITRTs and IT personnel offer professional development opportunities.

Stakeholders of Lunenburg County Public Schools will have access to this plan which will be posted on the division website, www.lunenburgcountyschools.org/technology.htm

Stakeholders and Technology Committee

School Board Members

Donald B. Carnes, Chairman
Kathy P. Coffee, Vice Chairman
Doug Aubel
Beverley P. Hawthorne
Elizabeth R. Williams
Ada Whitehead
Amy McClure

Superintendent

Mr. Charles M. Berkley, Jr.

Technology Committee Members

Frances Wilson, Director of Technology and Testing
Theo Coleman, Technician
Joe Nemeth, Technician
Amanda Morris, Parent, Secondary Level
Jessica Nowlin, Parent, Elementary Level
Katie Morris, Student
Dawn Bacon, Director of Instruction
Sharon Bolan, Media Specialist/ITRT
Sidney Long, Director of Human Resources
Andrea Shell, Principal
Dr. Sharon Stanislas, Principal
Natalie Coronas, CTE Director/Assistant Principal, Central High School
Amy McClure, School Board Advisor
Charles Berkley, Superintendent, Administrative Advisor

Mission Statement

The mission of the Lunenburg County School Board is to insure that all students learn in an environment which nurtures the cooperative efforts of all school personnel, students, parents, and community members. We are dedicated to enabling all students to become effective, productive, and contributing citizens in our competitive global society.

Vision Statement

Each student is to be provided opportunities to reach his/her highest level of achievement and potential. We as a school division involve communities, families, and parents actively along to be dedicated to the success of each and every student.

How Technology Supports the Vision, Mission and Direction of Lunenburg County Public Schools

Lunenburg County Public Schools strives to assure integration of technology into the instructional curriculum. Our mission is to provide educational services to improve student education, prepare them for life after school. Classroom instruction is weighed to maintain a balance between new and innovative technologies and solid instructional curriculum. Instruction supported by technology allows students an equitable education by respecting their differences in learning styles, abilities and capabilities.

Technology Goals

Our goals have been aligned the [Lunenburg County Public Schools Comprehensive Plan](#) as well as with the state technology plan.

LCPS will strive to:

- Provide technologies and accommodations to assist in deeper, personalized learning for students with differing learning styles. (Standard 1)
- Support data results driven instruction and assessment to evaluate, instruct and improve both teaching and learning. (Standards 2 & 3)
- Strengthen efficiency and effectiveness of administrative services and responsibilities (Standards 3 & 4)
- Allow students the opportunity to pursue workplace readiness skills and promote workplace readiness through the effective use of technology. (Standard 1)
- Provide professional development opportunities to faculty and staff that merge technology, internet safety, digital citizenship and instructional best practices. (Standards 2 & 3)
- Assure efficient, high quality, on-time customer services to all stakeholders. (Standards 1-4)

Since the 1980s, the Virginia General Assembly, the Virginia Board of Education and the Virginia Department of Education have recognized and supported technology's role in meeting their collective vision for schools in the Commonwealth. Through legislation,

initiatives, guidance, and forward-thinking leadership, Virginia has implemented many excellent [educational technology programs](#) over these last decades.

The local autonomy of school divisions has led to diverse creative and innovative approaches to technology throughout the state. Virginia's divisions are often cited in [studies and articles](#) exploring innovation in educational technology. However, there is also an inequality that can result from local control based on local priorities, and the educational institutions of Virginia have tried to address these in various ways, with more work needed in this area.

The 2018-2023 Educational Technology Plan for Virginia is the latest revision of long-range technology plans adopted by the Board of Education to support their [Comprehensive Plan](#). The focus of the plans has remained relatively consistent throughout the years. The most enduring consistency is the emphasis on integrating technology into the classroom, as a tool for providing ways for students to achieve in school more broadly and more deeply. The plan also has generally been composed of the subsections of the current plan in some way or another:

- Learning (Enhance Personalized, Equitable Student Learning Experiences with Technology),
- Teaching (Support Innovative Professional Learning with Technology),
- Leadership (Create Cultures of Change through Innovative Leadership Practices), and
- Infrastructure (Secure and Robust Infrastructure).

The new plan was developed to be a living document, one that can change as needed because it is posted electronically and one for which the VDOE can continually supply new examples of educational technology in action, links to research and/or information, and other helpful non-commercial resources. We invite our Virginia school personnel to participate in the continual development of our plan by letting us know of good resources to share with your fellow educators. Email VirtualPrograms@doe.virginia.gov to provide information or links that could be included in the plan.

One last and very important note: the technology uses referenced in our plan includes technology for ALL students, as the increased emphasis on personalized learning makes clear. Along with the needs of typical students, the needs of exceptional students at both ends of the spectrum must be addressed.

The Technology Plan for Virginia has two distinct but related purposes. It provides a plan for the Virginia Department of Education in regards to the use and support of educational technology to support the Board of Education's Comprehensive Plan. However, it also serves as a model and standard for school divisions creating their own technology plans ([§ 22.1-253.13:6. Standard 6. Planning and public involvement.](#)). In years past, divisions have submitted their plans for approval by the VDOE. However, there is no longer a need to for this action. Divisions are asked to ensure their plans are consistent with the State Educational Technology Plan for 2018-2023, and certify that it is through the

[Annual Data Collection \(Compliance with the Standards of Quality\)](#) which is generally conducted during July of each year. Beyond that, the VDOE will conduct surveys to gather information about how school divisions are addressing the state’s goals.

Enhance Personalized, Equitable Student Learning Experiences with Technology

Goal:

Promote and support student [personalized, deeper learning](#) experiences to demonstrate workplace readiness by creatively solving complex problems, thinking critically, collaborating, communicating and demonstrating responsible citizenship.

Resources/Partnerships:

Institutions of higher education, educational stakeholder groups, professional organizations, business and industry groups, and local school divisions

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
<ul style="list-style-type: none"> • Students will develop deeper learning skills by leveraging technology as a resource or tool. • Educators will leverage current and emerging technologies to increase opportunities for students to follow personalized learning pathways. • Students will apply technology effectively to support the construction and application of content knowledge and skills. • Students will demonstrate 	<ul style="list-style-type: none"> • Technology Needs Assessment to analyze technology based resources used by students and innovative learning experiences such as, but not limited to blended learning, project-based learning, and personalized learning. • Collect information on the number of students enrolled in advanced coursework (e.g., dual enrollment, AP, IB) internships, and mentorships or receiving industry certifications. 	<ul style="list-style-type: none"> • Research, vet, and develop digital resources for divisions to assist in providing innovative, personalized and deeper learning experiences for all students. • Develop and revise existing policy and guidance documents to support innovative learning experiences. • Work collaboratively with teacher and technology stakeholders to create instructional resources, including local alternative assessments, that can be used by all educators across the state to support

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
<p>mastery in a variety of ways, including the use of technology through the creation of digital artifacts.</p> <ul style="list-style-type: none"> • Educators will expose all students to career and college opportunities including those in the technical fields to promote workplace and college readiness through advanced coursework, mentorships and internships. 		<p>innovative learning experiences.</p> <ul style="list-style-type: none"> • Provide virtual learning tools that deliver multiple pathways for learning through blended and fully online models in ways that increase quality of education and equity for students. • Promote in-school and out-of-school technology-based learning opportunities (such as pursuit of industry certifications, professional licenses, and dual enrollment courses) along with career exploration, exposure, and planning opportunities. • Provide technology and computer science cross-curricular connections starting in the elementary grades and across all disciplines to promote meaningful, real world applications of knowledge and skills and promote deeper learning opportunities

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
		<p>aligned to the Virginia Standards of Learning.</p> <ul style="list-style-type: none"> • Prepare our students for a participatory culture by providing resources related to Internet safety, digital citizenship skills, and student awareness of and skills for personal and data privacy (as specified by the Code of Virginia § 22.1-70.20).

Related Resources from VDOE and Elsewhere

Student Led Ideation Challenge

The [Student Led Ideation Challenge](#) was developed by the Innovative Solutions Consortium (ISC) in partnership with the VDOE and piloted in the 2016-2017 school year. This project, which requires students to work with real-world problems as a team, will be launched state-wide in 2017-2018. Read about the 2016-2017 winners: [Loudoun students innovating well beyond their years—U.S. Navy takes notice](#) [↗](#).

College and Career Opportunities for Students

The VDOE provides several programs to assist students in preparing to attend college or pursue a career after graduation. The [Governor’s STEM Academies](#) expand options for the general student population to acquire STEM (Science, Technology, Engineering and Mathematics) literacy and other critical skills, knowledge and credentials that will prepare them for high-demand, high-wage, and high-skill careers in Virginia. Students can earn Digital Badges after taking and passing the [Workplace Readiness Skills for the Commonwealth assessment](#), which reflects 21 Workplace Skills as identified by a wide variety of businesses and industries located around the state.

Performance Based and Local Alternative Assessments

The VDOE is continuing its work on locally developed assessments with a focus on performance based assessments through 2020. Review the plan and timeline outlined in the April 28, 2017 [Superintendent’s Memo #135-17: Update on the Implementation of Local Alternative Assessments](#). Further information can be found on the [Performance-Based and Local Alternative Assessments](#) page on the VDOE web site.

Virtual Learning

In Virginia, schools can provide [online courses](#) for their students in several different ways. Schools may use their own or division-created online courses, purchase particular courses from state approved [Multidivision Online Providers](#), purchase or otherwise obtain digital material that is delivered by a local teacher as a blended learning course, or enroll students in courses through [Virtual Virginia](#) [↗](#). Students are required to complete a virtual learning experience in order to graduate. See [§ 22.1-253.13:4. Standard 4. Student achievement and graduation requirements](#) [↗](#) (item D:9).

#GoOpenVA

Virginia is participating in the National [#GoOpen](#) [↗](#) campaign through our [#GoOpenVA](#) project. The goals of the project are to increase awareness of the benefits and uses of [Open Educational Resources](#) (OER); establish a community of practice to foster, create, share, and leverage Open Educational Practices (OEP); understand state and division level use of OER and how to support further implementation; encourage alignment of OER efforts with local and state strategies; and, acknowledge school division efforts to implement OER. The project is developing and piloting three OER curriculum resources (for Virginia Studies, World History and Geography to 1500, and Algebra I) during the 2017-2018 school year. These resources will be the models for other resources to be developed in the coming years.

Virginia Cyber Range

A new resource to help students learn important digital skills and also provide the Commonwealth with needed talent, the [Virginia Cyber Range](#) [↗](#) will “provide advanced cybersecurity training exercises for high-school and college students, revolutionize cybersecurity education within the commonwealth, and position Virginia to become a leading source of critical cybersecurity expertise for the nation.” See the article [Virginia Cyber Range to Enhance Cybersecurity Education Across the Commonwealth](#) [↗](#).

Support Innovative Professional Learning with Technology

Goal:

Promote and support current and emerging technology-based resources that support educators in developing and employing innovative strategies and practices to support student-centric learning models to increase quality of education and equity for students.

Resources/Partnerships:

Institutions of higher education, educational stakeholder groups, professional organizations, business and industry groups, and local school divisions

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
<ul style="list-style-type: none">• Educators support personalized, deeper learning experiences that are	<ul style="list-style-type: none">• Types and numbers of professional learning opportunities are	<ul style="list-style-type: none">• Develop and revise existing policy and guidance documents to support

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
<p>enhanced through appropriate and meaningful technology integration.</p> <ul style="list-style-type: none"> • Through the use of technology supports (e.g., learning and/or content management systems, student information systems, adaptive technologies) educators will monitor students' progress to personalize learning and inform instructional practices. • Educators utilize the instructional technology resource teacher model to support student engagement through technology in the classroom. • Educators understand how to enhance performance-based and alternative assessments through the intentional integration of technology. 	<p>documented and recorded.</p> <ul style="list-style-type: none"> • Number of professional online courses and resources offered to educators and number of participant completers. • Current and emerging technology-based resources used by educators as indicated by the Technology Usage Survey responses. • Collect information on the number of students enrolled in advanced coursework (e.g., dual enrollment, AP, IB) internships, and mentorships or receiving industry certifications. 	<p>innovative learning experiences.</p> <ul style="list-style-type: none"> • Work collaboratively with teacher and technology stakeholders to create instructional resources that can be used by educators to support innovative learning experiences. • Revise the Technology Standards for Instructional Personnel to support the recruitment, development, and retention of knowledgeable and skilled teachers and school leaders. • Promote the use of micro-credentialing to provide avenues teachers can use to pursue individual professional goals in the integration of technology in teaching and learning. • Promote in-school and out-of-school technology-based learning opportunities (such as pursuit of industry certifications, professional licenses, and dual

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
		<p>enrollment courses) along with career exploration, exposure, and planning opportunities.</p> <ul style="list-style-type: none"> • Integrate the proficient use of technology into professional learning activities sponsored by the Virginia Department of Education (VDOE). • Guide and support teacher education programs for the inclusion of technology skills that promote adaptation and integration of current and emerging technologies into professional practices, the use of assistive technology, as well as working knowledge of digital citizenship skills and issues. • Provide information about assistive technology availability and uses through the Training and Technical Assistance Centers (TTAC).

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
		<ul style="list-style-type: none"> • Support instruction in the development of rubrics and other evaluation tools for use with performance-based assessment that integrate technology. • Coordinate and collaborate partnerships with professional organizations and local school divisions to align agency professional learning goals to ensure targeted and strategic professional learning experiences in the area of instructional technology for teachers statewide.

Related Resources from VDOE and Elsewhere

Resources for Revised SOL

When new Standards of Learning are adopted, the VDOE provides resources and professional development opportunities to support the new approaches to learn embedded in the standards. An example is a 2015 presentation regarding [Supporting the Mathematics Process Goals through Research-based Teaching Practices](#). Teachers can learn about these opportunities through [Teacher Direct](#).

Deeper Learning Workshop Materials

TVDOE partnered with Jobs for the Future’s (JFF) Students at the Center initiative with generous funding from The William and Flora Hewlett Foundation, to convene an all-day forum on September 26, 2016, focused on the use of performance assessments as a lever

for transformative teaching and learning. [Materials from the conference](#), *Assessing For Deeper Learning: A Transformative Pathway to Prepare Virginia Students for the Future*, are provided on the VDOE web site.

Accountability Terminology Guide

The terminology used in Assessment and Accountability can be confusing. The VDOE has gathered together a list of frequently used terms, the [Accountability Terminology](#).

Guidelines for ITRTs

Although it is almost a decade old, the [Instructional Technology Resource Teachers – Guidelines for Teachers and Administrators](#) still provides guidance regarding the work Instructional Technology Resource Teachers (ITRTs) are designed to do in the school and school division. It includes the results of three studies about how ITRTs impact learning, and offers some recommendations. LCPS holds ITRT meetings annually to update our personnel.

CanDo: A Tool to Support CTE in Schools

Virginia's [Career and Technology Education \(CTE\) Resource Center](#) provides information about and support for [CanDo](#) which is web-based tracking developed for teachers by Arlington County – in association with SchoolTool. Using Virginia's state-approved task/competency lists, educators can track students' progress electronically. Administrators have access to real-time scores and reports that satisfy state and federal requirements.

Special Education Resources

Although the resources collected by the eight regional [Training and Technical Assistance Centers \(TTACs\)](#) are directed to Special Education teachers, the resources are helpful for all educators. See their extensive [list of resources](#) on technology.

Innovative Assessments Being Explored

Eleven school divisions from around the state are participating in a grant to explore innovative assessments, [Student-Led Assessment Networked Improvement Community in Virginia](#). After the pilot is completed, the divisions will share their experiences with other school divisions.

USDOE on Teacher Preparation

In December 2016, the U.S. Department of Education published [Advancing Educational Technology in Teacher Preparation: Policy Brief](#). In this document, the US DOE argued that teacher preparation programs need to shift their approach to pre-service teacher preparation so that graduates would be able to “effectively select, evaluate, and use appropriate technologies and resources to create experiences that advance student engagement and learning.” The policy brief “identifies key challenges and solutions to

the effective integration of technology in teacher preparation, provides guiding principles on how to move the field toward effective integration of technology in teacher preparation programs, and identifies areas of opportunity and collaboration for stakeholders across the field.

Staying Current with Copyright

Staying up-to-date on copyright is difficult because the law changes with new technologies as well as new judicial decisions. An authoritative resource for all educators is from the [American Library Association \(ALA\) website](#).

Social Media and PLNs

One way that teachers can create their own Personal Learning Network (PLN) is through the social media platform Twitter. Teachers can pursue information or skills that they are interested in learning, and connect with others who are like-minded. [The Complete Guide To Twitter Hashtags For Education](#) can help the novice begin to use twitter for their own professional learning. There are many other ways to connect with other educators, however—Second Life, Pinterest, even Facebook. The [Virginia Society for Technology in Education](#) (VSTE) supports a variety of learning communities. The VDOE provides a [professional learning network database](#) of Virginia division contacts for specific topics such as Integration of Technology and High School Redesign.

Create Cultures of Change through Innovative Leadership Practices

Goal:

Promote leadership that supports [deeper learning](#) experiences for students and innovative instructional practices by educators through the use of technology.

Resources/Partnerships:

Institutions of higher education, educational stakeholder groups, professional organizations, business and industry groups, and local school divisions

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
<ul style="list-style-type: none"> Educational leaders develop a vision for teaching and learning that includes the appropriate use of technology. Educational leaders are able to communicate and guide the implementation of 	<ul style="list-style-type: none"> Types and numbers of professional learning opportunities are documented and recorded. Number of professional online courses and resources offered to educators and 	<ul style="list-style-type: none"> Provide guidelines for qualifications and hiring practices for all school leadership positions that reflect the need to have a deep understanding of the use of technology in learning and school operations.

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
<p>division and school goals for teaching and learning that integrate technology and promote innovation.</p> <ul style="list-style-type: none"> • Educational leaders model tolerance for risk and experimentation and create a culture of trust and innovation. • Educational leaders support, secure and advocate for resources to sustain technology initiatives and goals including those designed to support personalized learning environments. • Educational Leaders promote the use of a variety of innovative instructional strategies and practices developed with current and emerging technology-based resources to support the innovative instructional approaches in the classroom. • Educational leaders possess the capability to efficiently and 	<p>number of participant completers.</p> <ul style="list-style-type: none"> • Current and emerging technology-based resources used by leaders, schools, and/or divisions as indicated by the Technology Usage Survey responses. 	<ul style="list-style-type: none"> • Provide opportunities (e.g. pilot projects, requirement waivers, resources, etc.), within or between school divisions to implement and evaluate new technologies and instructional approaches. • Provide communication on the continued Board of Education work in support of the Profile of a Virginia Graduate, Accreditation Matrix, and the College, Career, and Civic Readiness Index. • Promote and provide professional learning opportunities regarding educational technology leadership, research, and innovations in education. • Promote the effective and efficient use of Instructional Technology Resource Teachers.

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
<p>effectively use technology in the performance of job duties (data-driven decision making, educator evaluations, communications, and more).</p> <ul style="list-style-type: none"> Technology is included in technical assistance and school improvement resources provided by to educational leaders based upon school and school division needs as determined by criteria such as Accreditation Matrix Performance Levels. 		<ul style="list-style-type: none"> Collaborate with other organizations to provide opportunities for leaders to meet, collaborate, and share ideas, resources, and effective practices, and to promote professional learning networks through social networking tools. Support the role of technology in statewide systems to collect, monitor, and report achievement to inform practices surrounding continuous improvement efforts.

Related Resources from VDOE and Elsewhere

School Quality Profiles

[School Quality Profiles](#) are a new way to look at the performance of Virginia’s public schools. School Quality Profiles were developed by the state Board of Education in response to the 2015 Virginia General Assembly, which directed the board to redesign online reports for schools and school divisions to more effectively communicate to parents and the public about the status and achievements of the Virginia’s public schools. School Quality Profiles are available for all schools, school divisions, and for the state.

Virginia Tiered Systems of Supports

The [Virginia Tiered Systems of Supports \(VTSS\)](#) aligns academics, behavior and social-emotional wellness into a single decision-making framework to establish the supports needed for schools to be effective learning environments for all students. VTSS partners with school divisions throughout the commonwealth to support the successful implementation of the framework. Implementing the VTSS requires the use of evidence-

based, system-wide practices with fidelity to provide a quick response to academic, behavioral, social and emotional needs. The practices are progress-monitored frequently to enable educators to make sound, data-based instructional decisions for students. LCPS is currently involved in VTSS in all four schools.

Principal Preparation

The Wallace Foundation has selected Virginia State University (VSU) to participate in a [national \\$47-million initiative](#) to develop models over the next four years for improving university principal preparation programs and to examine state policy to see if it could be strengthened to encourage higher-quality training statewide. An independent study will capture lessons from the participating universities and their partners to be shared with policymakers and practitioners across the country. Virginia State University, along with district partners and the Virginia Department of Education, will receive in the first year \$2.41 million to take on this work.

Model Policy for Data Sharing Agreements with Vendors

Chesterfield County Public Schools has worked with many different providers of digital materials. In order to protect student privacy, they have developed a data sharing agreement that must be signed by any provider. The [Model Standard Terms of Use and Data Sharing Agreement](#) (PDF) is available for any division to adapt for their own use.

Grants for Improving Teacher and Principal Quality

For the 2017-2018 school year, the [State Council of Higher Education for Virginia \(SCHEV\)](#) awarded seven competitive awards. The professional development grants will be used to increase the academic achievement of all students by helping Virginia schools and school districts improve teacher and principal quality and to ensure that all teachers are highly qualified in the core subjects they teach. To grants are listed on their [2017-2018 Awards web page](#).

Virginia Consortiums

The [Southwest Virginia Public Education Consortium \(SVPEC\)](#) was created by the Virginia General Assembly in 1992 to address disparity between Northern Virginia and Southwestern Virginia. The SVPEC provides assistance to the public school systems of Bland, Buchanan, Carroll, Dickenson, Grayson, Lee, Russell, Scott, Smyth, Tazewell, Washington, Wise, and Wythe Counties and the cities of Bristol, Galax, and Norton. Its objectives are to coordinate the region for joint educational initiatives and address common needs.

Future Ready Schools

One of the ways schools and divisions can get assistance in planning is through the [Future Ready Schools national initiative](#). A research-based and reality-tested framework provided on the initiative's web site guides leaders through the process of helping their schools move towards the future. The group also focuses on developing the skills leaders will need in order for them to lead the process successfully. One of the Future Ready partners (EdSurge) has created an online [Guide to Becoming a Future Ready Leader](#).

Creating a Culture of Innovation

The Canadian educational non-profit, [Galileo](#) has created an e-book, *Focus on Inquiry*. One chapter addresses how to lead the development of a culture for innovation, [Creating a Culture of Creativity, Risk-Taking and Innovation](#)

Rural Schools Face Special Challenges

Rural divisions have special issues and problems when trying to develop a plan for personalized learning. The Future Ready initiative has developed the document [A Guidebook for Success: Strategies for Implementing Personalized Learning in Rural Schools](#) specifically to assist these divisions in moving forward.

National Perspectives

When developing a plan, it is helpful to have resources to refer to which provide a national perspective. The annual [Digital Learning Report](#) is one helpful resource for divisions, as is [National Educational Technology Plan](#).

Culture of Data Use

The Institute of Education Sciences: Regional Educational Laboratories (IES: REL) has published a [Culture of Data Use Workshop Toolkit](#) to help school and divisions apply research to the use of data in education. The workshop is team-based with structured activities to help educators understand how data can effectively be used. The toolkit includes materials that can be used by a facilitator in the division.

Secure and Robust Infrastructure

Goal:

Promote and support a secure and robust technology infrastructure to support access, adequacy, and equity.

Resources/Partnerships:

Institutions of higher education, educational stakeholder groups, professional organizations, business and industry groups, and local school divisions

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
<ul style="list-style-type: none">Students, educators, and leaders have equitable access to secure and robust networks that provide high quality, reliable access to the Internet and other networks.	<ul style="list-style-type: none">Increased reporting of equitable and continuous access to secure and reliable networks by students, educators, and leaders as indicated by the	<ul style="list-style-type: none">Promote equitable access to high quality, effective learning environments for all students by supporting efforts to reduce barriers to technology access.

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
<ul style="list-style-type: none"> • Schools and school divisions use best practices that comply with federal, state, and industry guidelines and recommendations to minimize network threats and vulnerabilities and protect educational data. • Students, educators, and leaders have equitable access to computing devices and other digital resources, including assistive technologies. • School divisions have access to technical and human resources that enable the effective evaluation of infrastructure costs and other considerations necessary for high quality and reliable access to the Internet and other networks used by students, educators, and leaders in innovative way. 	<p style="text-align: center;">Technology Usage Survey.</p>	<ul style="list-style-type: none"> • Provide technical assistance such as network standards, recommendations, and other information available from various stakeholder organizations that provide guidance on interoperability, broadband, and network capabilities. • Promote the continual expansion of broadband capability to support digital learning and innovative education using guidance provided by relevant stakeholder organizations. • Promote local participation in federal (such as e-Rate) and state (such as the Virginia Public School Authority) programs to maximize resources available to students, educators, and school leaders. • Provide assistance to school divisions on the evaluation of infrastructure costs related to broadband to ensure equity; encourage cooperative purchase

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
		<p>agreements when appropriate.</p> <ul style="list-style-type: none"> • Provide assistance to school boards and leaders on the development of plans and programs that balance safety and security issues while allowing for instructional innovation. • Provide evaluation criteria and standards that allow school divisions to make informed purchases of computing devices and other digital resources, including assistive technologies. • Provide assistance to divisions on the development of regional contracts for planning, acquiring, managing, and maintaining technology, including assistive technology. • Provide information about evaluation criteria and standards for hardware and software adoption to include a focus on interactivity, personalization and

Results (What do we want to accomplish?)	Indicators (What evidence will exist of completion?)	Action (What action will be taken?)
		universal design features. <ul style="list-style-type: none"> • Ensure that assistive technology services and devices are implemented in accordance with the Individuals With Disabilities Education Act (IDEA). • Provide guidance on the efficient use of the technical support personnel required in the Standards of Quality (§ 22.1-253.13:2. Standard 2. Instructional, administrative, and support personnel – see J).

Related Resources

Building Broadband

Individual school divisions in Virginia are approaching the problem of student access to the Internet outside of the school in differing ways. One approach taken by Albemarle County Public Schools is described in the article [A School District Is Building A DIY Broadband Network](#). LCPS negotiated to 200 mbps through Erate in 2018 and will be eligible for re-negotiations in 2019.

Virginia's KLIP

The [K-12 Learning Infrastructure Program \(KLIP\)](#) is a partnership with the Virginia Department of Education, the governor's office, the EducationSuperHighway (ESH), and the Friday Institute for Educational Innovation. The KLIP supports increased access to affordable, high-speed Internet in every classroom in Virginia. The goals of the KLIP are to: get fiber to schools that need it, ensure classrooms have updated and reliable Wi-Fi, help divisions get more broadband for their budgets, and assist schools with the e-Rate process to get the discounts they need for Internet access and internal connections. LCPS is enrolled in the KLIP program.

e-Learning Backpack

The purpose of the [Virginia e-Learning Backpack Initiative](#) is to provide every ninth grade student attending a public school that is not fully accredited with a tablet or laptop computer, digital content and applications, and access to content creation tools. While much of the focus of the initiative is currently on the supplemental grants provided through the Virginia Public School Authority (VPSA) for eligible schools, the Virginia e-Learning Backpack Initiative is actually a broader initiative intended to assist all schools in the transition to digital content and tablet or laptop computers. Central High School participated in the e-Learning Backpack initiative for each of the four grant years. ASUS tablets were purchased and are currently being used by individual students and in classroom sets. LCPS is purchasing chrome books and Lenovo tablets for secondary and elementary students, respectively.

Accessibility and the Division Web Presence

The VDOE has listed some resources that will be helpful to school divisions as they seek to update their web pages and digital content to comply with ADA regulations. Find links to information, tools and instructions on the [Website Accessibility Resources and Tools for School Divisions](#) page. LCPS is currently in compliance.

Training and Technical Assistance Centers

The Virginia Department of Education (VDOE) supports eight [Training and Technical Assistance Centers \(TTACs\)](#), located at Universities across the Commonwealth of Virginia, to improve educational opportunities and contribute to the success of children and youth with disabilities (birth - 22 years). LCPS is currently collaborating with TTAC in all four schools in order to update and improve student educational opportunities.

Virginia Longitudinal Data System

The [Virginia Longitudinal Data System \(VLDS\)](#) provides state policy makers, authorized researchers and citizens with access to educational and workforce training data from multiple sources while protecting the privacy of Virginia students. VLDS supports critical reporting on the quality of public education – such as accurate graduation and dropout rates for high schools and school divisions – while providing information that can help policy makers improve programs that prepare and connect Virginians with employment opportunities.

Continuity Planning

The Virginia Department of Emergency Management provides resources to assist local governmental entities to create [Continuity of Operations Plans \(COOP\)](#). If your division has not been involved with this process, contact your local government agency and discover how you can participate.

Consortium of School Networking

As K–12 education institutions are increasingly using digital content and related e-learning technologies to meet evolving education needs and goals, division find there are gaps in the integration and interfaces among disparate applications. The [Consortium for](#)

[School Networking](#) (CoSN) has several resources that assist school divisions tackling this particular problem.

Rapid-Cycle Evaluation Support

The US DOE's Office of Educational Technology is developing a tool to assist schools in use [Rapid-Cycle Evaluation \(RCE\)](#). The new tool, called the [Coach](#)," is in early pilot. "The Coach, embedded with professional development tools, walks educators through how to craft a research question, set up data, create a match comparison group and analyze the results." Divisions can sign up to use the beta version of this tool.

Notation

This plan was developed to be a living document, one that can change as needed because it is posted electronically and one for which the VDOE and LCPS can continually supply new examples of educational technology in action, links to research and/or information, and other helpful non-commercial resources as technology needs are identified.