Draft Outline for the
Educational Technology Plan for Virginia: 2017-2022

Learning: Developing the Life-Ready Graduate from K to 12 (to support how students learn)

GOAL: All learners will have deep and empowering learning experiences in both formal and informal settings that prepare them to be active, creative, knowledgeable, and ethical participants in our globally connected society, meeting the requirements of Virginia's Profile of a Graduate.

Deeper Learning Objective: Through Virginia Standards of Learning, students are provided not only a solid grounding in the Virginia content standards but also opportunities for deeper learning to include critical thinking, collaboration, communication, and creative thinking.
> **Strategy:** Standards of Learning incorporate deeper learning skills
> **Strategy:** Integration of Computer/Technology and Computer Science Standards, K to 12
> **Strategy:** Learning resources to encourage 21st century skills addressing college and career readiness
> **Strategy:** Student access Web-based content, tools, and collaborative spaces

Balanced Assessment Objective: All students are assessed using a variety of measures (such as portfolios, performance-based tasks, statewide assessments, diagnostic, etc.), enabled and enhanced with technology, for both formative and summative assessments so as to provide a comprehensive view of students and their learning.
> **Strategy:** Share local alternative assessments
> **Strategy:** Evaluate statewide assessments
> **Strategy:** Competency-based assessments in all content courses, particularly CTE
> **Strategy:** Best practices in Special Education Alternate Assessments

Extended Digital Environment Objective: The use of digital resources is woven seamlessly into the learning experiences for students, for whom learning transcends the barriers of time and place.
> **Strategy:** Expand virtual and blended learning opportunities
> **Strategy:** Virtual Virginia courses
> **Strategy:** Student opportunities to pursue and fulfill industry certifications, professional licenses and dual enrollment courses
> **Strategy:** Open Education Resources (OER) supported through participation in the national #GoOpen project

Digital Literacy Objective: Students are confident digital citizens, developing skills that transfer to local community citizenship.
> **Strategy:** Integrate Internet safety and digital citizenship skills (as specified by the Code of Virginia)
> **Strategy:** Student awareness of and skills for data safety
> **Strategy:** Students communicate respectfully with a variety of people, value diversity

Teaching: Gaining Skills to Enhance Student Learning (to support teachers who are learning along with students)

GOAL: Educators' professional growth will be supported by technology that connects them to expertise, resources, and learning experiences that can empower them to provide, in turn, deep, personalized learning experiences for all students.

Skill Baseline Objective: The base level of technology skills for teachers and other educators (such as specialists and librarians) is consistent and robust.
> **Strategy:** Update the Technology Standards for Instructional Personnel (TSIP) from 1998 version
> **Strategy:** Teacher education programs include robust technology skills

Professional Learning Objective: Teachers and other educators pursue personalized professional learning opportunities with the goal to seamlessly integrate technology tools to support personalized, deeper learning for students.
> **Strategy:** Teachers to pursue personalized learning paths
> **Strategy:** Teachers use digital resources to effectively personalize student learning
> **Strategy:** Information about new and emerging technologies, assistive technology
> **Strategy:** Support for educators on how to use data to improve student learning

Leadership: Develop Framework for Effective Governance (to develop and empower effective leadership)

GOAL: Embed an understanding of technology-enabled education within the roles and responsibilities of education leaders, and enable leaders to be effective through fostering a quality leadership framework.

Technology-enabled Leaders Objective: Leverage work with other organizations, grants and initiatives to develop and implement professional development regarding the use various technologies to provide broader and more effective ways to communicate with peers and educational stakeholders, creating trust and respect among all parties.
> **Strategy:** Professional growth opportunities for leaders provide insight into the use of technology for learning as well as for leading
> **Strategy:** Partner with other organizations to provide opportunities for leaders to meet, collaborate, and share ideas, resources, effective practices
> **Strategy:** Guidance on maintaining appropriate and frequent two-way communications (including parents and students) through social media and other technology tools
> **Strategy:** Encourage leaders through VDOE requirements, policies and procedures to maintain at least a base level of educational technology skills (including knowledge of assistive technology) and to try innovative approaches to education

Collaborative Partnerships Objective: Develop, maintain, and leverage partnerships with various local and state organizations to provide a greater connection between the schools and the community.
> **Strategy:** Pilot projects to evaluate new technologies, new approaches
> **Strategy:** Encourage opportunities to share and develop initiatives, projects and programs; promote internships and mentorships

Planning/Policies/Procedures Objective: Provide guidance to divisions to develop sound plans, policies and procedures for the acquisition and management of technologies for both current and future needs.

> **Strategy:** Statewide technology plan; Division technology plans
> **Strategy:** Encourage evaluation and participation in federal and state programs
> **Strategy:** Provide guidance regarding policies and procedures for long-term planning, acquiring and managing technology, including assistive technology
> **Strategy:** Address needs of all stakeholders who are responsible for policies and procedures at the division level
> **Strategy:** Assist school boards and administrators evelop and evaluate policies to balance safety and security issues while allowing for instructional innovation, ensure Internet safety programs and data security plans comply with state and federal regulations while enabling students to pursue innovative ways of learning

Infrastructure: Networks, Software, Devices & People (to support equity of access and opportunity)

GOAL: All students and educators will have access to a secure, flexible and capable infrastructure when and where they need it for learning, and be supported by knowledgeable professionals.

Technology Infrastructure Objective: Provide the technical infrastructure necessary to support learning environments.

> **Strategy:** By 2020, facilitate the continual expansion of broadband capability to support digital learning and innovative education by providing speeds of 4.3 Mbps per user (smaller divisions), 3 Gbps per 1,000 users (medium school divisions), and 2 Gbps per 1,000 users (larger school divisions)—based on accepted standard established by State Educational Technology Directors Association (SETDA)
> **Strategy:** Divisions use various standards (such as SCORM) for the interoperability of systems and avoidance of proprietary systems
> **Strategy:** Assistance to divisions interested in pursuing use of data from longitudinal data systems
> **Strategy:** Work with communities to provide internet connectivity in and out of school buildings

Equity Objective: Provide resources and support to ensure that every student has access to a personal computing device that is appropriate for their needs.

> **Strategy:** Tools that extend students' capabilities, can be customized to meet individual needs and preferences, and support learning
> **Strategy:** Assistive Technology service and devices according to IDEA
> **Strategy:** Evaluate the interactive and universal design features of technology and digital resources

Security Objective: Provide and support secure technical infrastructure that protects threats to data, equipment, all other technology resources, and people.

> **Strategy:** Update plans, procedures, and technology to minimize threats
> **Strategy:** Routinely test system to ensure continued resilience

Human Infrastructure Objective: Provide the human infrastructure necessary to support learning environments.

Strategy: Promote funding and support for Instructional Technology Resource Teachers (ITRTs)
Strategy: Promote funding and support for Technical Support Personnel as specified in the Standards of Quality
Strategy: Incorporate librarians and other specialists into all educational technology initiatives
Strategy: Update the 2008 Guidelines for ITRTs

Accountability: Tools and Skills (to define and then measure success)

GOAL: At all levels, our education system will leverage the power of technology to measure what matters and enable the use of data to improve learning and school operations, while protecting individual privacy.

Balance Objective: Appropriate data are made available to stakeholders while at the same time the data are protected from abuse.
Strategy: Leaders work with stakeholders to ensure data are appropriately accessible
Strategy: Protect data so that stakeholders can be confident that data (such as student data) are secure and that privacy is protected
Strategy: Division personnel knowledgeable about data privacy responsibilities and procedures, including the secure transfer and use of data

Data and Learning Objective: Divisions use technology tools to obtain a variety of data in order to provide usable information for students, teachers and parents to help throughout the teaching and learning process.
Strategy: Best practices in the use of technology to understand wide variety of data
Strategy: Support divisions on how to most effectively make decisions and take action based on data

Data Collection and Reporting Objective: Data are collected as needed, in a secure and effective manner, to assist both divisions and the VDOE to meet their goals, especially in the areas of monitoring and compliance.
Strategy: Ensure the collection of data is coordinated and managed, and that the use of such data is communicated to the stakeholders.
Strategy: Provide secure data to stakeholders in useful formats; accessible
Strategy: Use data to inform and adjust daily operations as well as policies, procedures and plans