

Richard Woods, Georgia's School Superintendent
"Educating Georgia's Future"

Georgia Department of Education Technology Services

3 Year Technology Plan

3 Year Technology Plan

Vision and Goals for Georgia's Department of Education Technology Services

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DOE Strategic Plan

"Educating Georgia's future by graduating students who are ready to learn, ready to live, and ready to lead" is the DOE vision and will be realized by accomplishing the following goals.

Guaranteed and viable standards

1. Revise/develop and implement viable academic standards that engage learners with essential knowledge, skills, and enduring concepts
2. Increase the percentage of K-5 students with a strong knowledge of foundational skills and concepts
3. Increase the percentage of high school graduates who are college and/or career ready

Challenging goals, effective feedback and supports

4. Increase personalized learning by setting challenging goals, providing effective feedback and supports
5. Expand educational opportunities in order to maximize student engagement, meet a variety of student interests, and ensure the relevance of learning

Collegiality and professionalism

6. Increase district, leader, and teacher effectiveness through high quality service and support

Safe and healthy environments

7. Increase the number of schools with a safe, healthy, and positive learning climate

Community and Family Engagement

8. Increase effective communication and encourage stakeholder engagement

Technology Integration is a core foundation that supports the attainment of these goals by providing needed technology tools, infrastructure, and resources that can increase the effectiveness of teachers and school leaders as well as the engagement of parents and students. Expanding the use of technology throughout the state enables the personalization of our education system. The Office of Technology Services vision, goals and initiatives are aligned to support these efforts and we partner with all of the DOE departments to ensure our initiatives are effective

Technology Services Vision

To support the Department of Education's mission to "Offer a holistic education for each and every child in the state", Technology Services will optimize technology integration to personalize our education system. Our vision is: *"Technology Services will provide Georgia's teachers, students, parents, administrators, and educational partners with timely, appropriate and secure information using high quality data and tools that are easy to use, powerful, cost effective and readily accessible."*

TECHNOLOGY SERVICES GOALS

To determine how best to support the DOE mission Technology service has collaborated with school districts, students, parents, DOE staff, and education partners to determine what these groups want, need, and expect from technology. The three components to getting timely and accurate information are high quality data, tools that easily allow a user to convert data into information, and high-speed access to both the data and tools. Accordingly, Technology Service's vision will be realized by accomplishing these goals:

1. Collect and maintain high quality data.
2. Provide easy, powerful and cost effective tools.
3. Provide secure, appropriate, fast and ubiquitous access to data and tools.

Collect and Maintain High Quality Data

Georgia began annual collections of public school students and teachers information ten years ago so we already have a large pool of data about our students and teachers. The data collections team has also put into place the data collection policies and business rules to ensure the security, timeliness, integrity and accuracy of the data collected. The primary initiative for this goal is the ongoing support and enhancement of the data collection effort while ensuring student privacy is always protected. In addition, we are also pursuing the following high quality data initiatives:

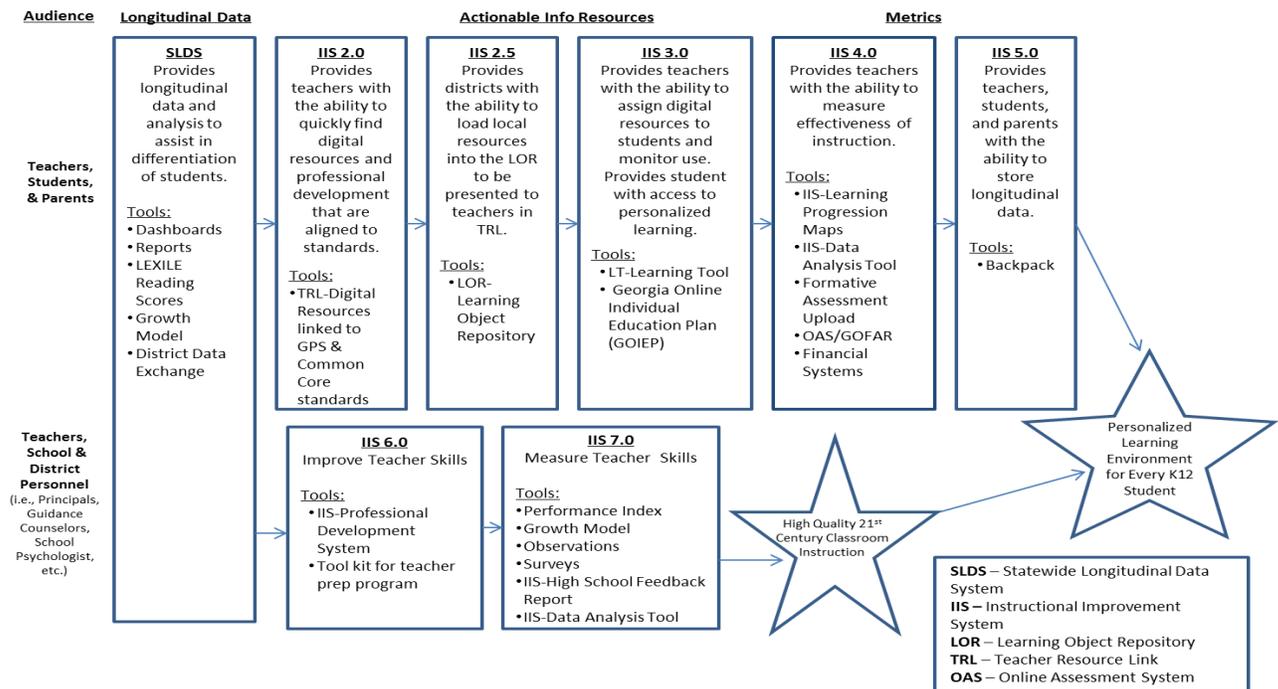
- Provide teachers and administrators with ongoing training on how to ensure student privacy is protected. Training is delivered on line as well as at an annual data conference.
- Provide LEA staff with ongoing training in collecting and reporting data to ensure high quality data. Training is delivered on line as well as at an annual data conference.
- Provide LEA staff with an operational data store so they can upload data into the Longitudinal Data System (LDS) as frequently as they want. This will provide LDS with more real-time information without putting a mandated burden on districts.
- Collaborating with the Georgia Student Information System Association to ensure they have a voice in how data is collected and used within Georgia.
- Provide updates required by Every Student Succeeds Act (ESSA) to the state accountability report card (CCPRI). This will require new data to be collected.
- Collaborate with teacher effectiveness to update the Teacher and Leader Effectiveness Measurements per regulations passed in SB364. This will require new set of quality data to be collected in addition to the current data we already collect.
- Collaborate with the Alliance agencies to support the P20 database. This effort will allow the GaDOE access to a broader set of data about Georgia's Students. Including, giving GaDOE ability to assess student success after graduation.

PROVIDE EASY, POWERFUL, AND COST EFFECTIVE TOOLS AND INFORMATION

Tools are the software applications such as LDS that let users work with their data.

- Easy tools are intuitive and enable users to acquire, combine, analyze, and turn data into actionable information with minimal effort.
- Powerful tools are integrated with all of the users' other tools eliminating the need to have multiple password and ids, rekey information or manually import it from other tools.
- Cost effective tools are affordable and can be sustained without high annual subscription or maintenance fees. They can also be modified, as the user owns the tool.

Technology Services primary initiative for this goal is implementing a portfolio of statewide applications that are fully integrated with one another. The portfolio is delivered via a foundational tool called the tunnel, which connects the local districts Student Information System (SIS) to the GaDOE's network. This connection allows users secure and appropriate access to all state tools without any additional IDs or passwords. Below is a diagram of the applications provided to the LEAs by GADOE.



Several other initiatives are also underway to support this goal and are as follows:

INITIATIVES FOR TEACHERS AND ADMINISTRATORS

- Provide teachers with access to their students' longitudinal academic data and training on how to use the data effectively via the GaDOE's LDS.
- Partner with Curriculum to provide teachers with access to high quality digital resources that align to the GaDOE Standards of Excellence. Within this system teacher can collaborate and share resources.
- Partner with Curriculum to develop and deploy professional learning opportunities for teachers.
- Collaborate with researchers to provide teachers with access to the early warning tools to promote personalized learning.
- Provide teachers with access to a Learning Management System (LMS) to enable personalized learning.
- Partner with the special Education team to provide teachers with a GaDOE Individual Educational Program (IEP) system to track all special needs students.
- Provide LEA administrators with the GaDOE high school feedback dashboard to provide information on the academic achievement of their graduates in post secondary schools.
- Maintain all student data in GaDOE repositories so that as a child moves within the state their data follows them.
- Partner with the School improvement and Assessment teams to provide teachers with online assessment tools to enable the creation, administration and analysis of formative tests.
- Partner with the Assessment team to provide teachers and administrators with a GaDOE growth model that indicates academic growth patterns for students.
- Technology Services maintains a rolling three-year technology plan that addresses sustainability and initiatives required to support Georgia's educated users.

INITIATIVES FOR STUDENTS

- Collaborate with Curriculum to provide students with training on Digital Citizenship and Digital Literacy to promote the effective use of technology.
- Provide students with access to, their longitudinal data, a learning management system and aligned, high quality digital resources and courses to enable blended learning via the LEA parent/student portal.
- Provide students with credit recovery options to reduce the dropout rate via the GaDOE's credit recover program within the GAVS.

INITIATIVES FOR PARENTS

- Provide parents with access to their student's longitudinal academic data via the LEA parent portal.
- Provide parents with access to a learning management system and aligned, high quality digital resources via the GaDOE's parent portal to enable blended learning.
- Provide parents with access to an individual education plan (IEP) system for their special needs students. Since this is maintained as a GaDOE system, as a student moves, all of their IEP information would be accessible by whatever school they moved to within the state.
- Provide students and parents with a virtual guidance counselor that can remind them of upcoming milestones their child needs to achieve, such as taking the PSAT or applying for scholarships. It would also record all of the activity so the parent would have a historical log of their activities. This will be delivered via the parent portal.
- Provide students with access to a Learning Management Tools to enable personalize learning via the GaDOE's student portal.

INITIATIVES FOR EDUCATIONAL PARTNERS

- Collaborate with Economic Development, Labor Department; Technical Colleges, Universities, LEA staff and CTAE to build and deploy a workforce pipeline dashboard.

- Partner with CTAE to provide online access to Career, Technical, and Agricultural Education (CTAE) and career pathway courses to maximize opportunities to all students to gain the workforce skills offered by these courses
- Collaborate with PSC and Georgia's teacher prep universities to provide Georgia's teacher preparation programs comprehensive training kits for all state tools so that new teachers coming into the classroom will have already been trained.
- Partner with the First Lady's Children's Cabinet to share data between state agencies such as Division of Family and Children Services (DFACS), Department of Juvenile Justice (DJJ), Juvenile Court and Department of Human services (DHS).
- Partner with CTAE and industries to develop industry specific virtual courses to increase the portfolio of course offerings to students.
- Collaborate with Title programs and Special Education to ensure all technology services work needed to meet ESSA requirements are completed.
- Partner with LEA school councilors and CTAE to replace the college 411 systems no longer supported by Georgia Student finance.
- Partner with Department of Juvenile Justice (DJJ) to provide them access to the GaDOE LDS so they can better serve their students.
- Partner with Department of Health Services (DHS) to integrate the information in foster care into LDS.
- Collaborate with districts and states to leverage and share digital resources.
- Partner with LEA instructional technologists to establish a working model of the 21st century classroom. The working model is called the Center for Classroom Innovation (CCI) and is located in the GaDOE building.
- Partner with Special Education team to provide GNETS teachers and administrators access to LDS.
- Partner with FBO to ensure all approval recommendations from the Education Reform Commission are implemented within the financial applications.
- Partner with the Board of Regents to leverage Peachnet and eRate to provide bandwidth to LEAs.

PROVIDE SECURE, APPROPRIATE, FAST AND UBIQUITOUS ACCESS TO DATA AND TOOLS

The best tools and data are useless unless you have access to them. Technology Services final goal is to provide appropriate, fast and ubiquitous access to the GaDOE's data and tools for Georgia's teachers, students, parents, administrators and educational partners. We are collaborating with the Board of Regents to leverage their university network called Peachnet and are delivering 100MBPS of internet access to every K12 public school in Georgia. The primary initiative is to support the current 100MBPS and enable growth as capacity is exceeded. We are planning for a 1000MBPS capacity for every school by 2018.

In addition, we are pursuing the following access initiatives:

- Maintain all networks, hardware, data and software tools in a harden data center to ensure reliable performance, constant availability and secure access. Hardened data center and backup data center are operated with a 3 year refresh plan to ensure performance.
- Partner with the Department of Administrative Services (DOAS) to establish statewide contracts for procurement of wireless technology to aid schools in connecting to the state supplied bandwidth.
- Migration of our Data Center in the Twin Towers Office to the Harden Data Center.
- Partner with Governors Office of Student Achievement (GOSA) to procure and manage funds to assist districts with building out their local infrastructure to fully utilize state supplied bandwidth and enable personalized learning.
- Collaborate with school nutrition to select and implement new school nutrition application.

This is a representation of the layers of infrastructure the Technology Services strategic plan addresses with the initiatives listed above.

Wednesday, May 25, 2016

Connectivity to the Classroom

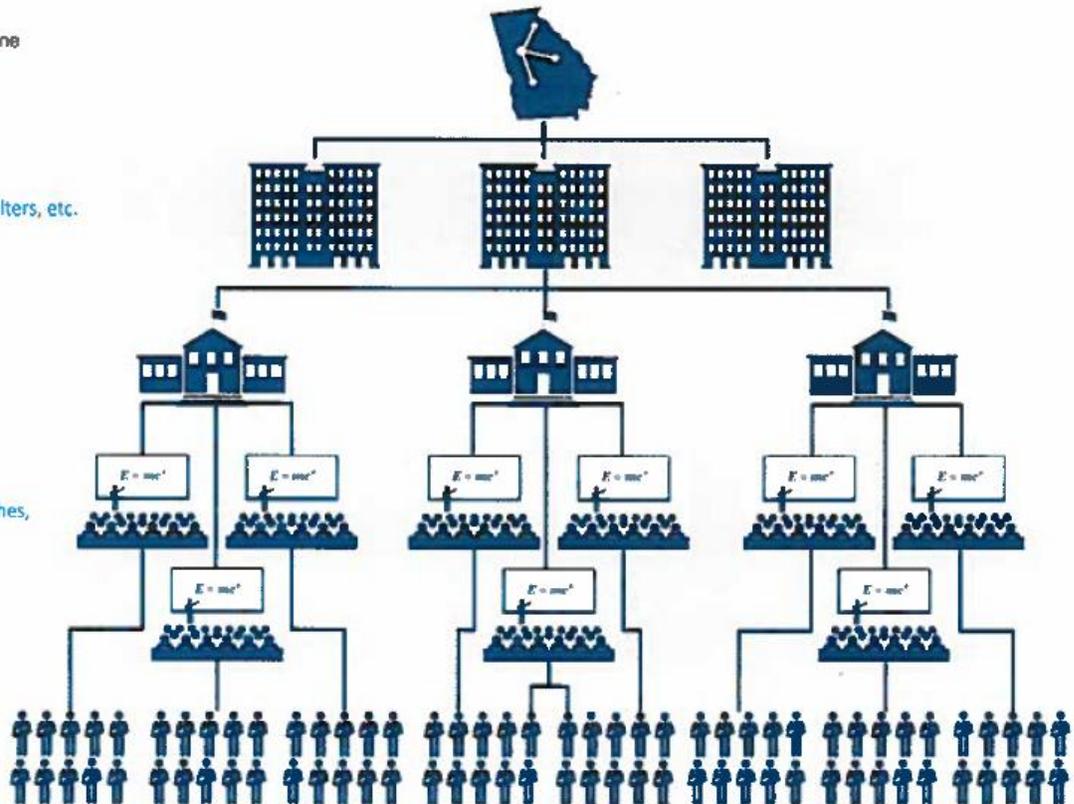
PeachNet
Statewide Education Backbone

Tier 1
School Districts
Ex: Firewalls, Routers, CIPA filters, etc.

Tier 2
Schools
Ex: Router, Switches, etc.

Tier 3
Classrooms
Ex: Wireless Solutions, Switches, Cabling, etc.

Tier 4
Students
Student devices not generally available with this funding



To support the Department of Education’s mission to “Offer a holistic education for each and every child in the state”, Technology Services will optimize technology integration to personalize our education system via the initiative listed in this document.

The Convergence

