Strategic planning for sustainability

Mr. Jeff Terry, Chief Information Officer

2017 – 2018 Technology Assessment



Rewind to 1993
What Happened to this guy?

1993 - 1995

- **Desktop computers in libraries and school offices**
- **No data networks**
- **No building WAN connectivity**
- **No Internet**
- **No formal technology plan**
- **Limited technology support**



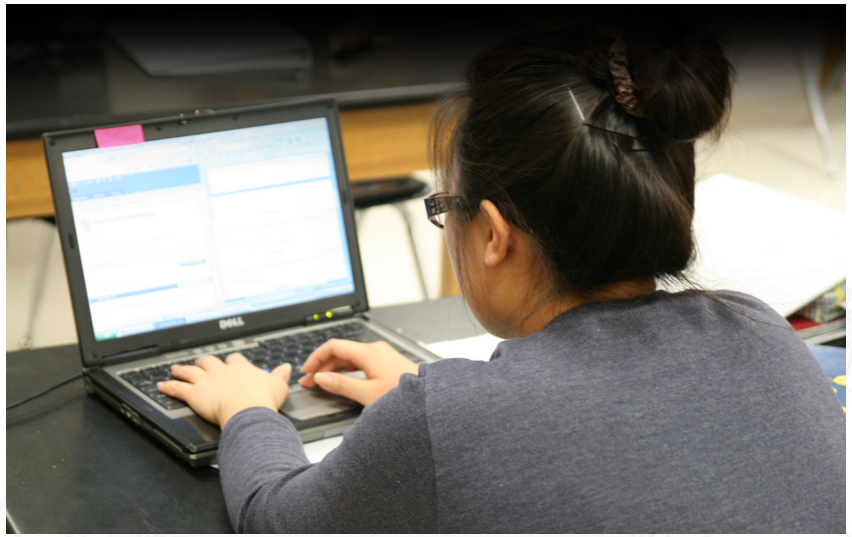
1995 - 2000

- **Desktop computers in labs, libraries, classrooms, school offices**
- **First data networks for library digital card catalog**
- **Building connectivity with 56K modems**
- **Limited bandwidth Internet**
- **First formal technology plan**
- **Additional Information Technology support**
- **School specific email services**



2000 - 2010

- **Mobile devices become mainstream – laptop program 9th-12th**
- **Classroom wireless data networks**
- **Enterprise email services**
- **Blackboard Learning Management**
- **Required technology plan**



- **Additional Instructional and Information Technology support**
- **Building connectivity with fiber and high-speed Internet**
- **IP Telephony**
- **Classroom interactive whiteboards**

2010 - 2016

- **Laptop program expands to 7th & 8th grades**
- **Converged networks – voice, video, data**
- **Building connectivity with high-speed dark fiber**
- **Blackboard Website, LMS, Emergency notification**
- **Integrated technology plan – Digital “C” Change**
- **Additional Instructional and Information Technology support**
- **Instant communication – social media, email, texting**
- **Increase awareness for network security; building security systems**
- **Formal technology investment plan**



The 7 year technology rotation plan has been updated each year since 2010 to include all of the following:

- **Computer labs**
- **Library computers**
- **Student laptop computers**
- **Staff computers**
- **Networking**
- **Servers**
- **Wireless connections**
- **Camera surveillance equipment**
- **Active boards**
- **IP Telephony equipment**





- Laptop Program leases
- Desktops and labs
- Networking maintenance
- WAN and Internet services
- Blackboard Web, LMS, Emergency Notification services
- IT equipment maintenance
- IT equipment warranty costs
- Interactive whiteboard maintenance
- Laptop program maintenance

- Continue expansion of virtual server deployment for district services.
- Worked with partners to provide deeper discounts for computers, networking systems, and support.
- Created a governance group to review and authorize purchases.
- Continuing to standardize on technology products to best utilize staffing.
- Remove school network routers with dark fiber implementation.
- Considering cloud services for future server needs.
- Investigating expansion of the 1:1 laptop program to include 6th grade.



2017-2018 Technology Request - labs

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Camera	$ -	$ -	$ -	$ -	$ 224,000	$ -	$ -
Computer Labs	361,580	181,800	75,750	363,600	179,780	181,800	75,750
Library	-	113,120	-	-	-	113,120	-
Computer Carts	83,325	-	-	-	83,325	-	-
IP Telephony	132,750	-	-	-	-	-	214,560
Student Laptops	157,560	-	315,120	646,653	301,990	-	315,120
Network	783,000	612,000	639,000	369,000	549,000	1,125,000	783,000
Promethean Boards	-	574,000	567,000	378,000	262,500	798,000	784,000
Server	148,000	121,000	126,000	117,000	121,000	148,000	121,000
Staff Computers	96,200	112,073	-	103,656	96,200	112,073	-
Wireless	-	88,000	115,500	-	203,000	115,500	85,250
Total Technology Needs	**$ 1,762,415**	**$ 1,801,993**	**$ 1,838,370**	**$ 1,977,908**	**$ 2,020,795**	**$ 2,593,493**	**$ 2,378,680**

Funding Sources	
SOL Grant	726,000.00
EBS Lease Revenue	132,000.00
Expiring Lease (12th grade & Elem. teachers)	363185.52
Total Technology Needs	**$ 541,229.48**

2017-2018 Technology Request - 6th grade

	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Camera	$ -	$ -	$ -	$ -	$ 224,000	$ -	$ -
Computer Labs	43,430	121,200	-	196,950	104,030	121,200	-
Library	-	113,120	-	-	-	113,120	-
IP Telephony	132,750	-	-	-	-	-	214,560
Student Laptops	301,990	-	315,120	646,653	301,990	-	315,120
Network	747,000	612,000	594,000	369,000	549,000	999,000	747,000
Promethean Boards	-	574,000	567,000	378,000	262,500	798,000	784,000
Server	148,000	121,000	126,000	117,000	121,000	148,000	121,000
Staff Computers	96,200	112,073	-	103,656	96,200	112,073	-
Wireless	-	88,000	115,500	-	203,000	115,500	85,250
Total Technology Needs	**$ 1,469,370**	**$ 1,741,393**	**$ 1,717,620**	**$ 1,811,258**	**$ 1,861,720**	**$ 2,406,893**	**$ 2,266,930**

Funding Sources	
SOL Grant	726,000.00
EBS Lease Revenue	132,000.00
Expiring Lease (12th grade & Elem. teachers)	363,185.52
Total Technology Needs	**$ 248,184.48**

Expanding the 1:1 laptop program will provide RCPS with the following budgetary benefits

- Eliminate labs for middle schools ($257,550 savings)
- Move 4 good labs ($60,600 savings)
- Eliminate carts 6th Grade ($83,325 savings)
- Reduce networking costs ($36,000 savings)
- An estimated power reduction($3,700 per year savings)
- Increase student revenue estimated ($47,575)
- No additional funding needed for support



- Cave Spring Middle School
- Glenvar Middle School
- Hidden Valley Middle School
- Northside Middle School
- William Byrd Middle School



- Increase instruction time with personalized learning
- Increase opportunities for digital textbook usage
- Provides 6th grade students with tools to enhance 21st century learning skills
- Provide 6th grade teachers with comparable tools
- Regain space in buildings with reduction of computer labs
- Reduce costs in networking, carts and power consumption
- Reduce middle school SOL testing window





Making Connections Conference

- Collaboration event with as many as 34 school districts in Southwestern Virginia's region 6 and 7
- Focus on Cybersecurity for the first topic.
- Support from our partners – Cox, Microsoft, Dell, Cisco, Sycom, Classlink, Gaggle, Blackboard, Promethean, TIG, Va. Tech, Radford University
- Superintendents, board members, district leaders in Technology, Instruction and CTE invited
- Sponsored by VSTE; supported by VDOE
- March 22nd at The Hotel Roanoke

RCPS “Student Voice”

Thank you for your support. Any Questions?

