

SCR 22 Education Technology Task Force
Infrastructure & Governance

Goal: *Review the current condition of technology in the public education classrooms and educational settings of the State and prepare a plan to outline actions that support Delaware becoming the premier state for utilizing technology in pre- kindergarten to grade 12 education.*

As a result of the work of this subcommittee, we will :

- (g) Recommend a phased plan for the implementation of the State educational technology plan;**
- (h) Recommend a funding plan for the implementation of the State educational technology plan;**
- (i) Recommend a plan to track and assess progress in the implementation of goals set forth in the State Educational Technology Plan.**

Subcommittee Members

Ammann, Ted

Fitzgerald, Kevin (Chair) ABSENT

Gause, Colleen

Lewis, Elizabeth

Mancini, Steven

Rep. Dukes, Timothy

Reynolds, Randy

Watson, Michael (Chair tonight)

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Goal: Review the current condition of technology in the public education classrooms and educational settings of the State and prepare a plan to outline actions that support Delaware becoming the premier state for utilizing technology in pre- kindergarten to grade 12 education.

Essential Question: How do we review current need of expansion of State-provided bandwidth?

Leading Ideas

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Analysis

Collective Knowledge *What we already know?*

- We have the DOE structure grant.
- State continues to invest for other State agencies.
- Laurel, Seaford, Woodbridge always seem last to get things. Are we continuing to allow access for northern districts and Kent county schools to move forward first?
- Where do we offset the cost with existing fiber that is available? What's a minimum standard?
- NCC people feel like they are sometimes held back. We want to be equitable throughout the State.
- Lake Forest is looking to extend to the lower levels.
- The schools that are 10MG or less are small.
- There are many schools upgrading to 1gig.
- We need to bring up the minimum level of bandwidth for the schools that are downstate.
- Costs are less expensive with fiber when joining to another existing site.
- Owning fiber is costly, but Delaware gets pretty good subscription rates.

Additional Knowledge Needed *What more do we need to know?*

- Look closely at estimated monthly costs on the snapshots for Kent (Caesar Rodney) and Sussex County (Woodbridge). Quotes dark fiber 100 MB. Numbers are pre-eRate discount. Fiber would be too costly for Woodbridge. TLS is what serves the communities now. Fiber provided – on net. Based on trends, projection was for 24 months. Proxy costs is the only thing that has gone up.
- The quotes are estimates. It is a net gain of \$1.6 million dollars per year with fiber.
- What if we were to purchase fiber outright? This is common in Pennsylvania. Once you own it then you pay a small maintenance fee.
- DTI is working on an RFP for Lit services is less than dark fiber as well. Some of these costs could go down. Colleen thinks it is probably cheaper now to just lease the fiber. Cost \$80,000 per mile
- Some house schools have some of the original DCET wiring. The districts have been making upgrades when building renovations happen and the district pays those costs. Steve is not sure all the districts realize that this needs to happen.
- Phase 1 - Broadband grant has \$1 Million left. Lewes/Milford/Seaford corridor.
- Phase 2 – Committee looking for good scenario for \$1 Million looking at areas where no one is going to build (Laurel/Woodbridge). Maybe we don't award dark fiber. Look at a business case.
- Verizon Wireless is the biggest wireless provider.

Decision Points

- It is going to be a hybrid model environment with 1G. Most costly will be on fiber, especially in Sussex County.
- Subscription rates are costs for construction. Less return on investment the further south you get in the State.
- If a few major businesses were to want fiber, that would help cover the cost.
- DTI funds up to 100 bump them up to 1 gig. Annually \$1.7 to take everyone up to 100 MG with no change to the districts.
- Liz asked, "Is the priority to bring up schools to the minimum?" Subsidize the southern districts could help serve for access. Colleen said libraries have also been given access.
- Tim Dukes said 1 mile from major furniture store in Laurel, that area has no access to the internet.
- Colleen said there are four towers going up in Western Sussex County – email her the location of large area without access and she will look into it.
- What about going wireless? Schools are still running many programs that need fiber.
- Michael Watson asked how Kansas City goes completely wireless so fast.
- Google wants to be able to come in and do what they want to do. Steve said Google wants complete control.
- Colleen – DTI Committee has a phase 2. Should the next grant be used for low areas to subsidize access to wireless?
- What happens when the students leave school? How do they access their work? Randy said Cape Henlopen is doing the one-to-one initiative.
- Steve thinks in the next five years their area will be BYOD – bring your own device.
- Randy pointed out that many programs are in the Cloud.
- Steve found that Kansas, Austin and Salt Lake City are currently use Google.

At 5:30 Michael asked for some decision points.

- SETDA recommendations
- If only this much money do we help bring up lower areas. Or do we want to do 100 Meg minimum?
- Look at the costs for each site. Consider proximately with current dark fiber. eRate reimbursement.
- Steve - What is considered short term? We want to raise the bar to 100 Meg. Legislation – can we get into discussion now or do we have to wait? Rep. Dukes said it came through the house pretty fast at the end of the last session. Rep. Dukes thinks it would be important for each person to connect with their legislature.
- A lot of northern schools could push up to dark fiber within six months.
- Liz - What is the problem we are trying to solve? Does putting technology in the schools increase the student performance? The other sub-committees will figure this out.
- Colleen – there are several schools that are below standards. We need to give them the bandwidth or fiber.
- Michael said the superintendents want the access for their students to be increased.
- Michael gave an example of Clayton Elementary school with students not being able to do practice testing.
- Steve said districts have to make priority. He gave an example of Howard High School. Five years ago they were low infused and brought in new teachers who worked on blended learning and the same students are working at a higher standard now. They have increased student achievement. When you see it in action, it makes NCC want more bandwidth.
- Rep. Tim Dukes talked about the testing and lack of funding for technology. Some of the smaller districts are left in a difficult place.
- EQUITY across the state is important.
- Evaluate current funding streams, perhaps cost savings. Cost containment.

- Access way beyond our minimum recommendations.
- Technology is a tool that levels the playing field for all students.
- Making technology accessible is important.
- Are there any private groups that would consider going into this?
- Colleen said another agency is looking into it. Legally, can we exchange value of conduit for fiber? They are four to five months out from this report.
- Michael – Colleen said the Harrington area partners with Maryland. Shared interest with Pennsylvania. Have talked to Kentucky and Washington, DC they have thrown money at the problem.
- Liz concerned about if we just address one thing.
- Steve said BRINC is looking at outside resources to consolidate services and costs. Many districts have redundant infrastructure in multiple schools.
- DOE has saved the districts money with the recent Schoology RFP. Cost is \$3.33 per student. In the past those costs were over \$15 per student.
- What if the districts did consolidation? Colleen said there would be cost savings. Just need to relinquish some control.
- Liz – Technology is an area that could be consolidated. Have the districts tried in the past to consolidate Technology? About four years ago the Governor did look at this.
- Bare minimum – bandwidth needs upgrading.
- When a district prioritizes it's not equal across the State when they want to upgrade.
- Colleen can build a cost model and infrastructure.
- Ask the districts what their district/school strategies are for technology.
- Obtain SEDTA questions from Wayne Hartschuh and see what questions we want to ask the districts.
- **COME UP WITH A COMPLETE PLAN/SOLUTION BY MARCH. MINIMUM RAISE FROM 10 TO 100 AND HAVE A PLAN.**
- Find out why consolidations hasn't worked well in the past. Also find out district goals from the next chiefs meeting.

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Essential Question: How can we recommend a phased plan for the implementation of the State educational technology plan?

Leading Ideas

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Analysis

Collective Knowledge
What we already know?

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Additional Knowledge Needed
What more do we need to know?

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Decision Points

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Wrap-Up

Major Decision Points

Please combine decision points from previous pages

- Equity across the state is important, both with access and how upgrades are handled.
- Evaluate current funding streams, perhaps cost savings. Cost containment.
- Access way beyond our minimum recommendations.
- Keep in mind that technology is a tool that levels the playing field for all students.
- Making technology accessible to all students is important.
- Raise the minimum amount of bandwidth from 10 megabytes TO 100 megabytes minimum per school.
- Look further at a cost model and infrastructure breakdown.
- Find out what are the districts/schools technology strategies.
- Find out why consolidation hasn't worked well in the past.
- Find out what are the goals of the districts when it comes to technology.

Deliverables

What	Who	When
<i>Example: Teacher Survey</i>	<i>Example: Subcommittee Chair Person</i>	<i>Example: By next Sept. Meeting</i>
<ul style="list-style-type: none"> • Work with other sub-committees to include infrastructure questions on their survey. • Discuss potential options for consolidation at next school chiefs meeting. • Find out what are the schools technology strategies and goals. • Build a cost model and infrastructure. 	<ul style="list-style-type: none"> • Randy Reynolds • Steve Mancini • Steve Mancini • Colleen Gause 	<ul style="list-style-type: none"> • Before October 1 • Before October 1 • October 1 • October 8 Task Force meeting

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