Public School Technology
Assessing Demand for and Supply of State Resources

January 29, 2024

Agenda and Takeaways

- Agenda

  - What is technology?

  - Supply – Origin and status of State funding for school technology

  - Demand – Digital Learning Plan and schools' use of federal COVID funds for technology

  - Recap and questions

- Takeaways

  - NCGA has investigated public school technology needs about once per decade

  - State system for funding technology prioritizes local flexibility

  - Assessing supply of resources vs. demand can be complicated

    - Current funding for connectivity appears to meet need

    - Significant funding gaps appear to exist for devices and content

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What is Technology? (DPI's Chart of Accounts)

- Computer Software and Supplies (Obj. 418)

    - Computer programs, USB flash drives, printing paper, ribbons, etc., annual renewable license code, braille conversion software, and maintenance fees for computer software.

- Computer Equipment and Hardware (Objs. 462 and 542)

    - Capitalized and non-capitalized computer hardware, printers, file servers, other equipment required for infrastructure/connectivity, etc.; including lease/purchases.

- Supplies and Materials (Obj. 411)

    - Subscriptions to internet based educational resources and for the purchase of on-line educational media/materials used for the instruction of pupils.

    - Non-technology items

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State Allotments that *can* fund Technology

- Academically or Intellectually Gifted

- Alternative Programs and Schools

- At-Risk Student Services

- Behavioral Support

- Career Technical Education

- Child and Family Support Teams

- Children with Disabilities

- Classroom Materials/Instructional Supplies/Equipment

- Digital Learning Initiative (DLI)

- Disadvantaged Student Supplemental Funding

- Driver Training

- Limited English Proficiency (LEP)

- Literacy Intervention

- Low-Wealth Counties Supplemental Funding

- School Connectivity

- School Technology Fund

- Small County Supplemental Funding

- Summer Reading Camps

- Textbooks and Digital Resources

- Transportation of Pupils

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School Technology

- S.L. 1993-321, S.L. 1993-769 created the School Technology Commission.

  - State School Technology Plan; LEAs required to develop local plans in alignment.

  - Created the School Technology Fund (STF) under the State Board of Education, initially funded with $42M.

  - LEAs with approved local school technology plans may access funds.

- S.L. 1997-443 created the Civil Penalty and Forfeiture Fund (CPFF) and directed the proceeds to be transferred to the STF.

- S.L. 2005-276 directed $18M annually to be transferred from CPFF to STF.

- 2008 – Trial Court in *NC School Boards Association v. Moore* found that the State owes the STF $747M in funds erroneously not transferred between 1997 and 2005.

School Connectivity Initiative

- SL. 2005-276 directed the NC Rural Economic Development Center and the e-NC Authority to study the "feasibility [of] developing regional education networks that provide and sustain **broadband service** access to individual students and teachers…"

- Report, published May 2006, recommended building a program to leverage federal E-Rate funds to provide "**infrastructure backbone, connectivity, and related support services**" to all schools.

- Since then, NC has cumulatively reached $2B in E-Rate procurement value with $1.5B coming from FCC.

(Source: SCI Report to JLEOC, Jan 2024)

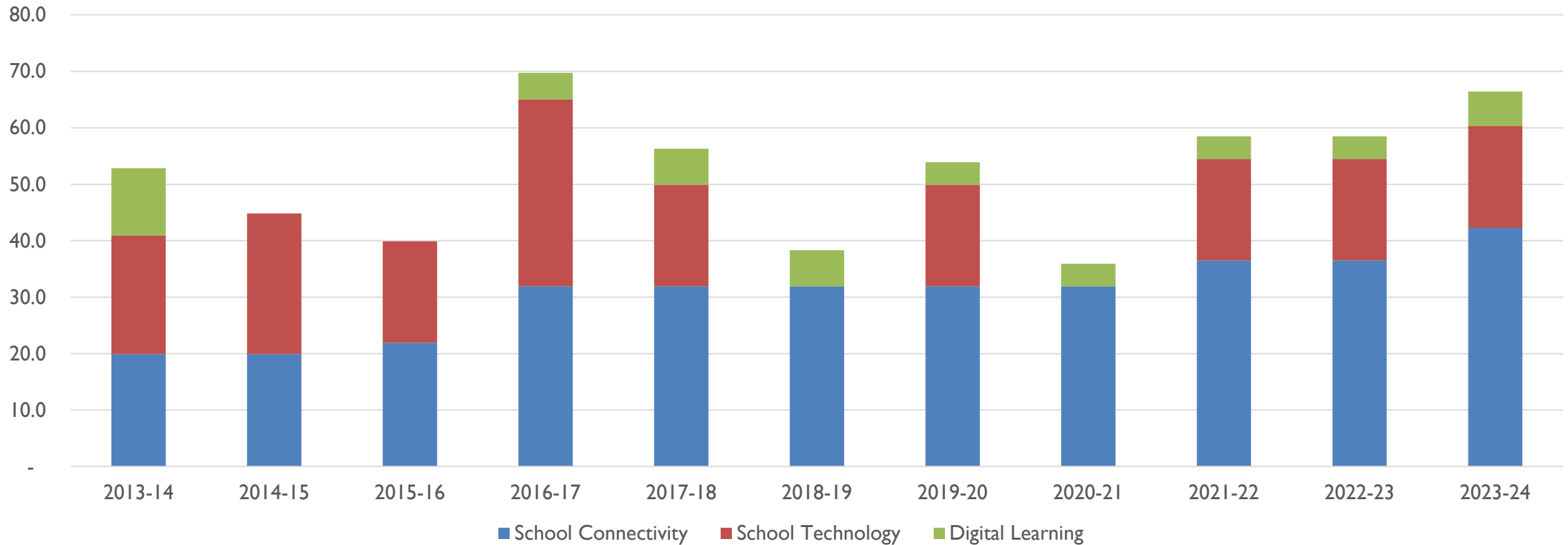| 2022-23 Services ($ in millions)	E-Rate	State	Total
Category 1 Consortium Internet	7.5	2.9	10.4
Category 1 School Fiber Connections (WAN)	20.0	8.8	28.8
Category 2 Classroom Connection (Wi-Fi)	27.2	13.1	40.3
E-Rate Eligible Totals	54.7	24.8	79.5
Identity and Access Management	-	1.7	1.7
Client Network Engineering	-	1.8	1.8
Program Administration	-	1.2	1.2
Firewall Services	-	2.9	2.9
Content Filtering Services	-	5.3	5.3
E-Rate Ineligible Totals	-	12.9	12.9
Grand Totals	**54.7**	**37.7**	**92.4**

Digital Learning Plan

- SL 2013-11 – SBE directed to develop and implement digital teaching and learning standards

- SL 2013-12 – Indicated NCGA's intent to transition to funding digital learning materials

- SL 2013-360 – Established initial digital learning grant program, directed DPI to develop digital learning plan

- SL 2016-94 – Appropriated $4.7M recurring for digital learning grants

  - Emerging Technologies Grant - One-year, up to $50,000 for LEAs and $25,000 for Charter, Regional, and Lab Schools

  - Impact Grant - Three-year, up to $95,000 for LEAs and $30,000 for Charter, Regional, and Lab Schools

Technology Funding History (2013-Now)

School Connectivity, School Technology, and Digital Learning Appropriations
($ in millions)

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Assessing Demand - Digital Learning Plan

- SL 2013-360 – Established initial digital learning grant program, directed DPI to develop digital learning plan

- The North Carolina Digital Learning Plan – September 2015

  - Connectivity - $32M per year (State share)

  - Devices for all K-12 students, refreshed every 4 years - $155M per year

  - Digital content - $90M per year

  - Professional development - $6M per year

$283M per year

Assessing Demand – Local COVID Expenditures

- Computer Software and Supplies
  - Computer programs, USB flash drives, printing paper, ribbons, etc., annual renewable license code, braille conversion software, and maintenance fees for computer software.
  - **$183M ($61M per year)**

- Computer Equipment and Hardware
  - Capitalized and non-capitalized computer hardware, printers, file servers, other equipment required for infrastructure/connectivity, etc.; including lease/purchases
  - **$445M ($148M per year)**

- Supplies and Materials
  - Subscriptions to internet based educational resources and for the purchase of on-line educational media/materials used for the instruction of pupils, *and more*
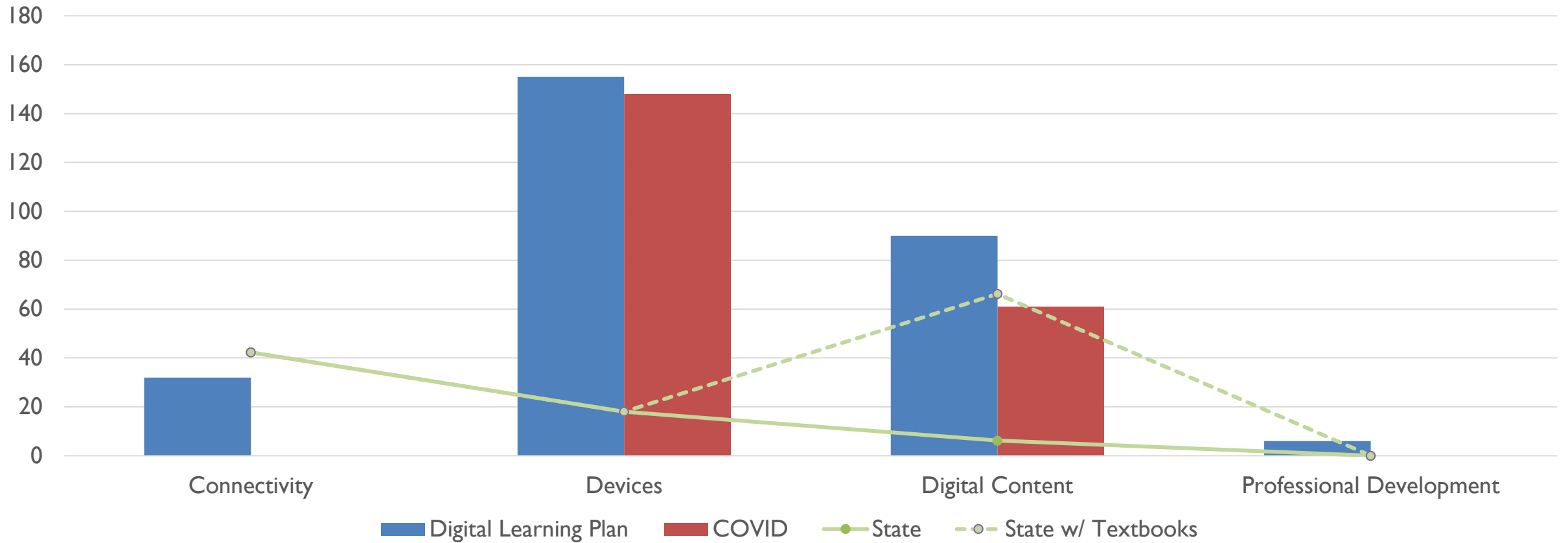 - **$374M ($125M per year)**

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Recap

(Apples to Crabapples) Comparison of Demand vs. Supply for School Technology Funding
($ in millions)

Takeaways

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- State system for funding technology prioritizes local flexibility

- Assessing supply of resources vs. demand can be complicated

  - Current funding for connectivity appears to meet need

  - Significant funding gaps appear to exist for devices and content

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Addendum – Federal COVID Funding
Directed by NCGA for Technology-related Purposes

- SL 2020-4 and SL 2020-97 (CRF, CARES Act)

  - $1M – mobile Wi-Fi gateway routers on buses

  - $21M – community and home Internet access points

  - $30M – computers for students

  - $5M – computer for school personnel

  - $4.5M – develop statewide cybersecurity infrastructure

  - $1.5M – expand learning management platform

  - $0.1M – small school bus safety pilot

  - $1M – Gaggle safety management product

- SL 2021-3 (ESSERF II, CRSSA)

  - $0.5M – NC Kids Digital Library

  - $10M – implement and assess statewide cybersecurity infrastructure

- SL 2021-180 (ESSERF III, ARPA)

  - $16M – software to mitigate cyberbullying

  - $5M – Gaggle safety management product

  - $2.5M – Plasma Games

  - $2.2M – software and personnel to track subscriptions

  - $1M – database for capital projects

- SL 2021-180 (SFRF, ARPA)

  - $18.1M – smart school bus safety pilot

- SL 2023-134

  - $2.1M – GoGuardian

  - $2.2M – Gaggle

  - $1M – Betabox