Talking Tech to Students

WiTT
September 29, 2015

Katherine McElroy
Executive Vice President, c3/consulting

Education Report Card Committee
Alignment Nashville Learning Technology Team
Nashville Technology Council Board Member

Colleen Hoy
Director, We Build Tech, Nashville Technology Council

Alignment Nashville Learning Technology Team

AGENDA

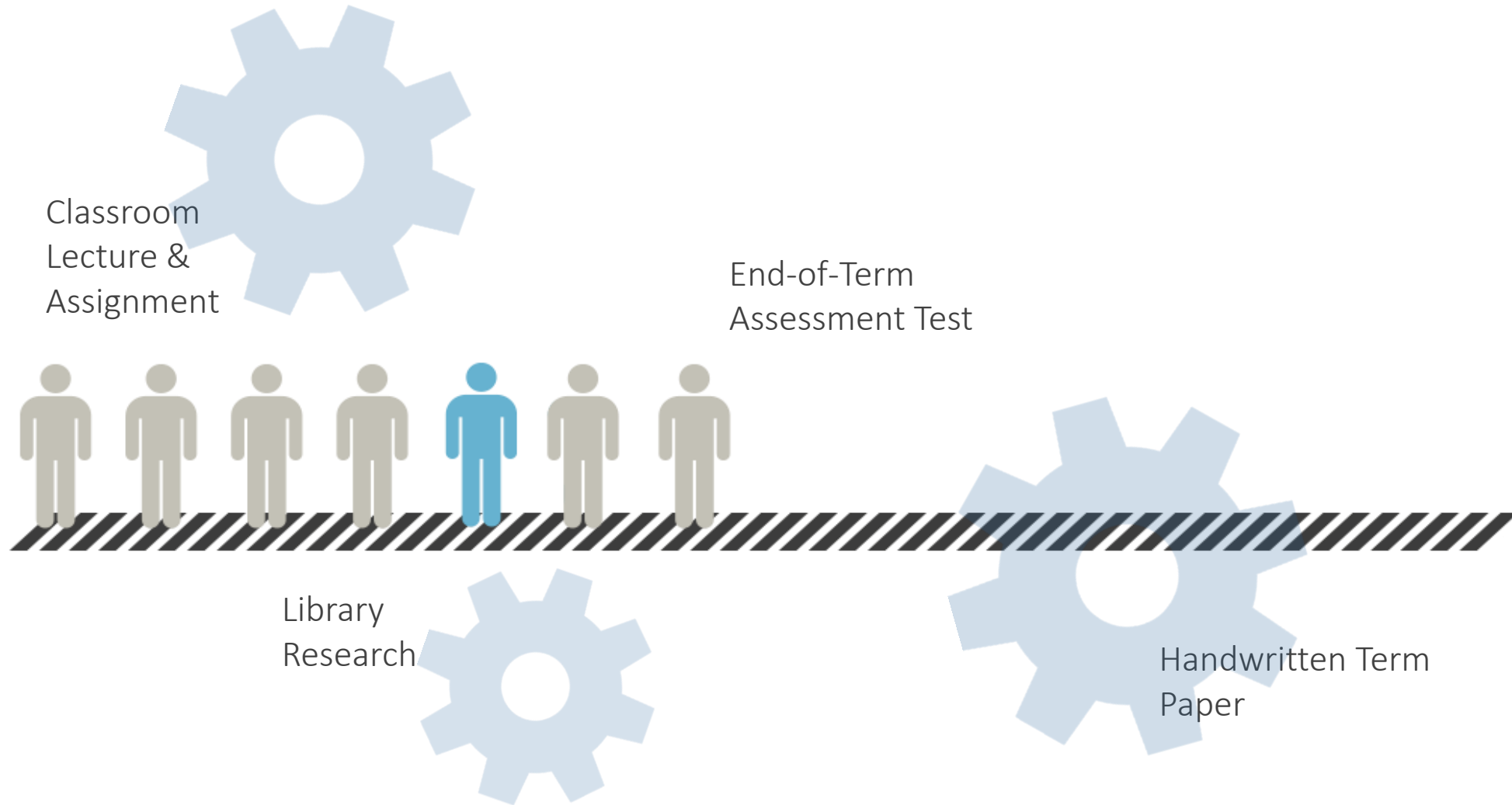Importance of Digital Literacy & Computer Science

Three Impact Areas:
- Technology in Schools
- Internet Access in Communities
- Computer Science in Schools

How You Can Get Involved

20ᵀᴴ CENTURY TOOL KIT

Classroom Lecture & Assignment

End-of-Term Assessment Test

Library Research

Handwritten Term Paper

21st CENTURY TOOL KIT

Internet

Interpret & Analyze

Research & Collaborate

Online Collaboration Tools

Respond, Write, & Create

INTERACTIVE LEARNING

TOP PAYING SECTORS IN NASHVILLE

1. Management ($95,000)

2. Legal ($77,000)

3. Engineering ($68,000)

4. Computers ($67,000)

5. Healthcare & Technical Operations ($65,980)

6. Business & Finance ($62,000)

7. Arts / Design / Media ($58,000)

8. Life, Physical, & Social Science ($54,000)

1,500+ Open IT Positions Locally

4,000+ Projected IT Jobs by 2020

822 Skilled Graduates Annually

TN READY 2015-2016

TNReady replaces TCAP and begins this school year.
The test will be administered *online.*

7 Online tools will be available to every student during the test to support them as they answer questions.

TNReady will be taken online to prepare students with technology skills they will need to succeed in postsecondary education and the workforce. **8**

http://www.tennessee.gov/education/topic/tnready

SUCCESS LOOKS LIKE…

Students prepared to **succeed** on school testing & college prep exams

Graduates **prepared** for success in college and at work

Nashville has a highly **skilled** workforce

Impact area one:
TECH IN SCHOOLS

MNPS & WCS

District Data	MNPS	WCS
Students	85,000	36,000
Teachers	5,500	2,000
Title 1 (poverty indicator)	79.5%	7.7%

Technology Data Points	MNPS	WCS
Devices	42,000	15,000
Bring Your Own Device (BYOD) Policy	No	Yes
Student : Device	2:1	3:1
Leasing Abilities	No	Yes
Blended Learning Standards	Yes	No
Instructional Designers	4	8
Digital Literacy Standards	ISTE*	ISTE
Virtual School	Yes	No
Online Testing	Yes	Yes
Digital Literacy Test	Yes	No**

*Aligned to ISTE, created in public-private partnership
**Discontinued 2015 because student scores consistently high across levels

POCKETS OF INNOVATION

Buena Vista Enhanced Option Elementary School
(MNPS)
- 1:1 Classrooms

Trinity Elementary School
(WCS)
- Programming Clubs

Hunters Lane High School
(MNPS)
- First Fully Blended Learning School MNPS
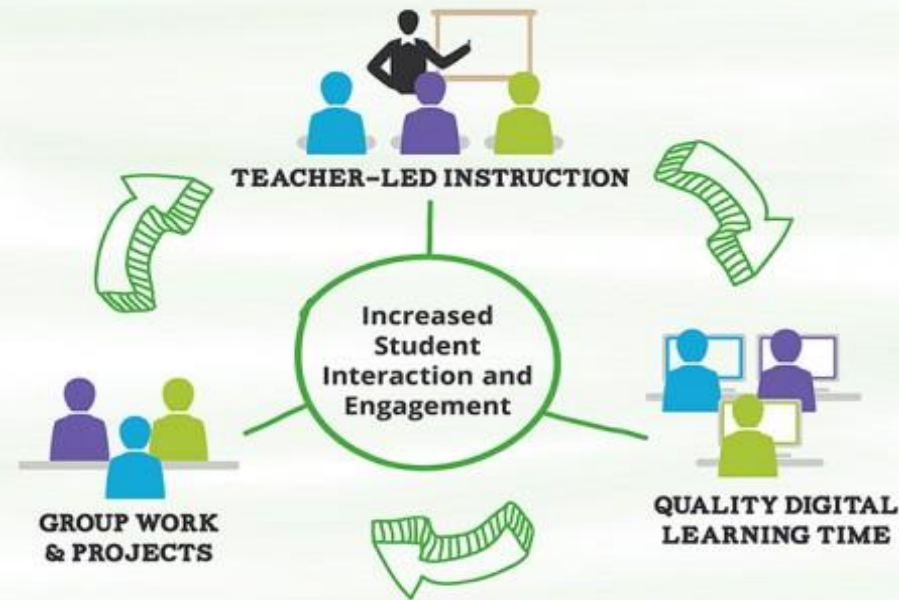
Centennial High School
(WCS)
- Dual Credit Partnership with Columbia State Community College

BLENDED LEARNING

HARNESSING THE POWER OF **DIGITAL CURRICULUM** IN THE **BLENDED LEARNING** CLASSROOM

Blended Learning incorporates multiple methods of instruction — teacher- and student-led, online and offline — in order to customize the learning experience for each student.

TEACHER–LED INSTRUCTION

Increased Student Interaction and Engagement

GROUP WORK & PROJECTS

QUALITY DIGITAL LEARNING TIME

Unable to connect to the Internet

More

Impact area two:
INTERNET ACCESS

ACCESS

221,851

Estimated Nashvillians
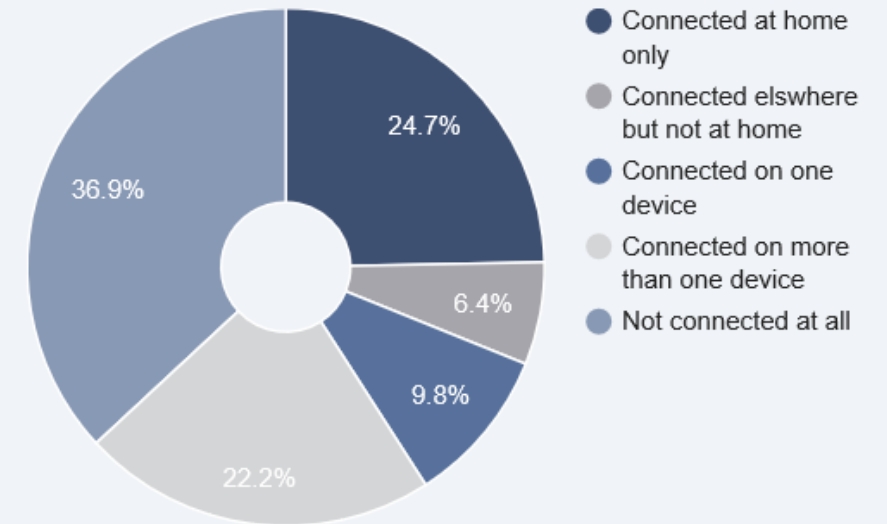with zero internet access

6.4%

Estimated Nashvillians
with no home access

45th

TN national rank for % residents
with internet access at home

Nashville Internet Connectivity

Nashville: 63.1% of residents are connected, with
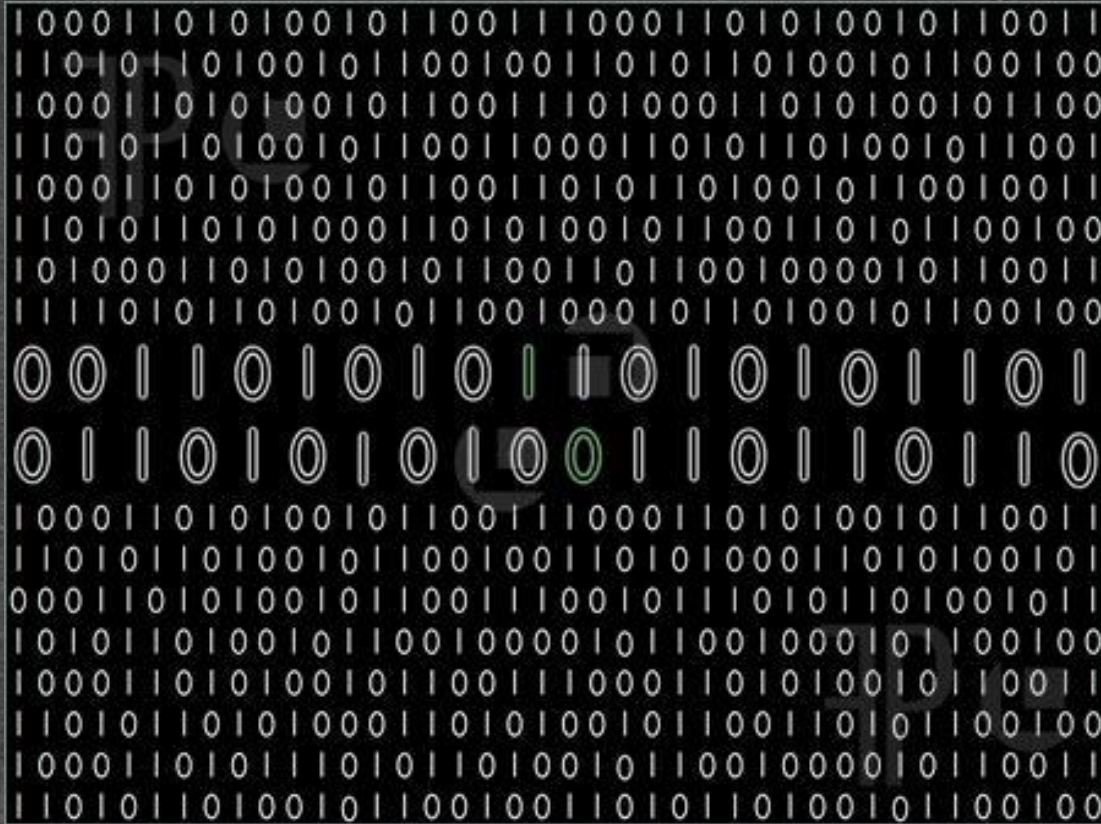22.2% of the population connected on multiple devices
[1].

- Connected at home only — 24.7%
- Connected elswhere but not at home — 6.4%
- Connected on one device — 9.8%
- Connected on more than one device — 22.2%
- Not connected at all — 36.9%

http://internetaccesslocal.com/states/tennessee/

DIGITAL DIVIDE

40%

Estimated Nashville students
with no home access

$400,000

Digital Inclusion Fund in
Nashville, est. Sept 2015

http://internetaccesslocal.com/states/tennessee/

Impact area three:

COMPUTER SCIENCE

COMPUTER SCIENCE TRENDS

PRESS RELEASE
For Immediate Release

CONTACT: Gentle Blythe, 415-241-6565

Board Approves Plans to Expand Computer Science Curriculum to All Grades

June 10, 2015 (San Francisco) – The San Francisco Unified School District (SFUSD) plans to phase-in teaching computer science to all students, at all schools, from preschool to 12th grade.

Last night the San Francisco Board of Education unanimously adopted the resolution to expand Computer Science classes, citing that the knowledge and skills learned in those classes will help students understand underlying technologies they will faced in any profession.

"Information technology is now the fastest growing job sector in San Francisco, but too few students currently have access to learn the Computer Science skills that are crucial for such careers," said Board President Emily Murase. "We are proud to be at the forefront of creating a curriculum that will build on the knowledge and skills students will need starting as early as preschool."

BUSINESS INSIDER   TECH

New York City's mayor will require all of the city's public schools to teach computer science

Dan Turkel
Sep. 15, 2015, 8:07 PM   4,872   17

FACEBOOK   LINKEDIN   TWITTER   EMAIL   PRINT

New York City Mayor Bill de Blasio will announce Wednesday that the city's public schools will be required to offer classes in computer science to all students within the next 10 years, The New York Times reports.

The announcement will come as part of a greater speech on education policy, which focuses on sending resources to the schools and children most in need, according to The Wall Street Journal.
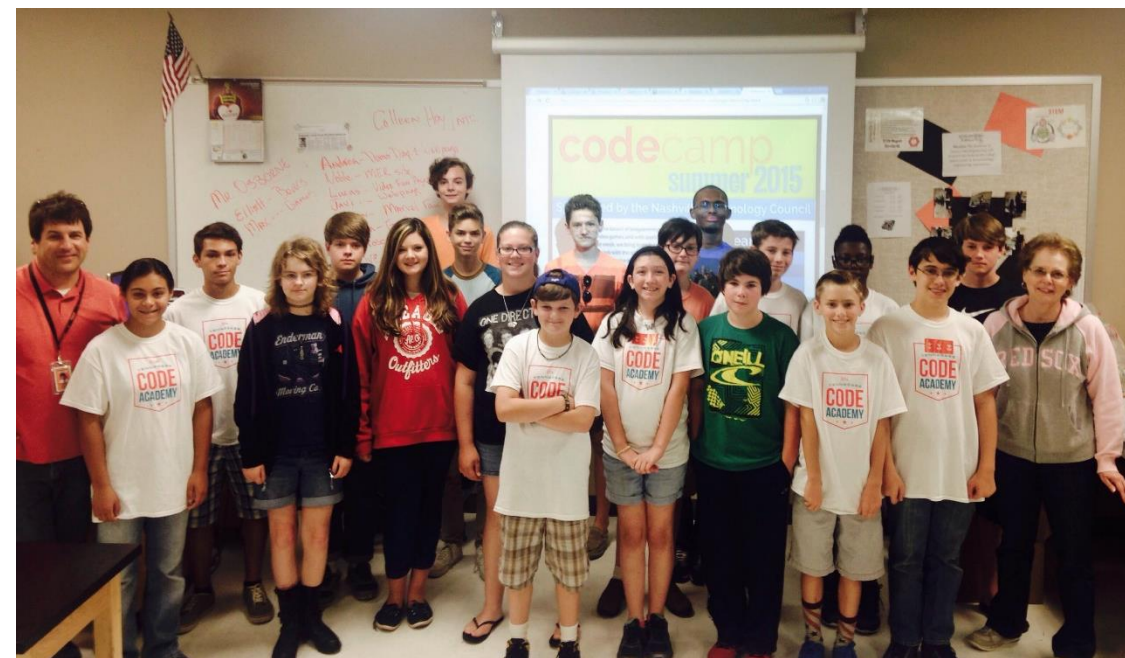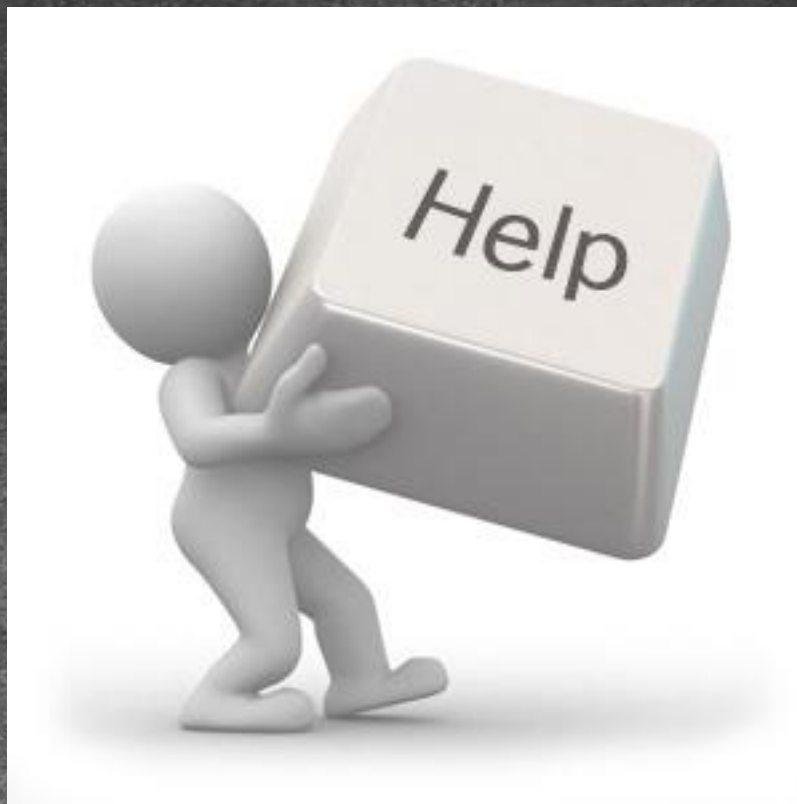
Twitter/@TechCrunch

New York City Mayor Bill de Blasio.

TEACHING TECH: MNPS & WCS

- MNPS IT Academies
  - Networking, Programming, Web Design, Design Pathways
- WCS WIT Center
- Programming / Computer Clubs
  - 400+ students in WCS 2015-2016 (grades 3-8)
  - 120 students in NTC summer code camps MNPS & Rutherford County
- Dual Credit & Dual Enrollment
- Certification Exams
  - Java, Adobe, etc. for Computer Science Students
- Nashville Public Library, Studio NPL

GET
INVOLVED

HOW TO GET INVOLVED

At School:
- Raise Importance with PTO
- Start a club, after school class, or camp

Volunteer:
- Mentor students for certification exams
- Speak to students about tech careers
- Help out at a club, after school class, or camp
- Coach teachers on technology use

Your Company:
- Sponsor a club, after school class, or camp
- Mentor students for certification exams
- Host students for job shadow days and field trips
- Host teachers for externships
- Sponsor student attendance to area conferences
- Offer student internships

Anytime Access for All Initiative:
- Davidson County
- All students and households benefit from internet access, access to devices, and quality digital learning opportunities

Contact Nashville Technology Council

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sandi@technologycouncil.com

COMING SOON: WE BUILD TECH

http://webuildtech.com

Community platform serving the Middle TN technology ecosystem, led by the Nashville Technology Council

- Career Exploration
- Skill Development
- Find & Post Jobs, Internships, Volunteer Opportunities
- Education & Career Pathways
- Connecting Students, Education Institutions & Programs, Tech Professionals, and Businesses

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