# K-12 EDUCATION SURVEY
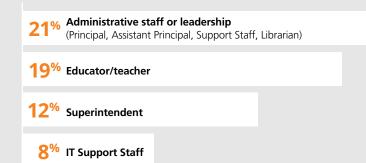
The Center for Digital Education is interested in understanding how K-12 districts and schools are strategizing around the implementation and deployment of digital learning environments.

**COMMSCOPE RUCKUS**

## PRIMARY ROLE

**31%** IT leadership, Director/CIO

- **21%** Administrative staff or leadership (Principal, Assistant Principal, Support Staff, Librarian)
- **19%** Educator/teacher
- **12%** Superintendent
- **8%** IT Support Staff

## 5 PHASES OF DIGITAL LEARNING TRANSITION

**58%** Of schools say that they are in Phase 3



### LAB
CURRENT 1% DESIRED 0%
**ACCESS**
- Lab-centric classrooms

**USAGE**
- Small files/PDFs

**INFRASTRUCTURE**
- Classroom switch
- 10/100Mbps edge
- 1Gbps backbone

**PHASE 1**

### TEACHER
CURRENT 26% DESIRED 2%
**ACCESS**
- Teacher-centric classrooms

**USAGE**
- Interactive E-Books
- Google Docs / Office 365

**INFRASTRUCTURE**
- 802.11ac (Cloud-managed)
- 1 Gbps edge with PoE
- 10 Gbps backbone

**PHASE 2**

### STUDENT
CURRENT 58% DESIRED 32%
**ACCESS**
- Student-centric classrooms
- Secure campus / remote access

**USAGE**
- Courseware and denser files
- VR, video and gaming

**INFRASTRUCTURE**
- 2.5 Gbps 802.11ac Wi-Fi
- 2.5 Gbps edge with 60W PoE
- 10/40 Gbps backbone

**PHASE 3**

### COMMUNITIY
CURRENT 11% DESIRED 40%
**ACCESS**
- Community and industry
- Collaboration between schools and nations

**USAGE**
- Pervasive video conferencing and streaming
- E-Sports

**INFRASTRUCTURE**
- 802.11ax
- 5 Gbps edge with 90W PoE+
- 40 Gbps backbone

**PHASE 4**

### GLOBAL
CURRENT 4% DESIRED 13%
**ACCESS**
- Global / Internet of things

**USAGE**
- Virtual classrooms
- Pervasive computing

**INFRASTRUCTURE**
- Cloud Analytics
- 802.11ax + LTE + IoT
- 5/10 Gbps edge
- 100 Gbps backbone

**PHASE 5**

### Digital Transition Timeline

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|
| PHASE 2 2015-2017 | | | | | | | |
| PHASE 3 2017-2019 | | | | | | | |
| PHASE 4 2019-2021* | | | | | | | |

*Expected transition time-frame

## PLAN TO REACH DESIRED PHASE

### Priorities for education administrators

- **#1** Implementing new digital learning tools for IT and educators.
- **#2** Investing in professional development for teachers.
- **#3** Addressing the digital equity gap.

### Priorities for IT managers

- **#1** Implementing new digital learning tools for IT and educators.
- **#2** Investing in professional development for teachers.
- **#3** Refreshing or enhancing network infrastructure.

## DIGITAL EQUITY

### What type of schools offer off-campus connectivity.

**55%** of schools with 10,000 students or more.

**36%** of schools with 1,000 - 10,000 students.

**28%** of schools with less than 1,000 students.

### What type of schools are planning on addressing digital equity in the near future.

**65%** of schools with less than 1,000 students.

**41%** of schools with more than 10,000 students.

**Who is leading the charge?**
**65%** EDUCATORS VS **57%** IT LEADERSHIP

## FACILITIES AND IT COLLABORATING

**55%** of schools surveyed say they have implement campus safety and security improvements through IT and OT collaboration.

**CCTV** IT/OT project for schools with more than 1,000 students.

**DoorLocks** IT/OT project for schools with more than 1,000 students.

* OT = Operational Technology, including facilities and building automation

## TOP BARRIERS OR CHALLENGES

**55%** IT Funding

**44%** Teacher Training

**36%** Insufficient IT Staff

**35%** Pushback From Teaching Staff

## VIRTUAL REALITY

**41%** of schools (>15K students) are using VR as a digital learning tool today.

**31%** of schools (1-5K students) plan to use VR in the next school year.

## HOW SCHOOLS ARE PRIMARILY FUNDING TECHNOLOGY SOLUTIONS

**<5K Students** Operational Budget

**5-15K Students** E-Rate

**>15K Students** Operational Budget and E-Rate