Invent the Future
Keith Krueger
CEO, CoSN
CoSN Mission

CoSN serves K-12 technology leaders who through their strategic use of technology, improve teaching and learning.

Core Value
The primary challenge is human, not technical

Audience
School system technology and education leaders

The CoSN Focus
Leadership and Policy
Technology Popular in 1992
KEY TRENDS ACCELERATING ED TECH

LONG-TERM TRENDS
• Advancing Cultures of Innovation
• Deeper Learning Approaches

MID-TERM TRENDS
• Growing Focus on Measuring Learning
• Redesigning Learning Spaces

SHORT-TERM TRENDS
• Coding as a Literacy
• Rise of STEAM Learning
SIGNIFICANT CHALLENGES IMPEDING ED TECH

SOLVABLE CHALLENGES
• Authentic Learning Experiences
• Improving Digital Literacy

DIFFICULT CHALLENGES
• Rethinking the Roles of Teachers
• Teaching Computational Thinking

WICKED CHALLENGES
• Achievement Gap
• Sustaining Innovation through Leadership Changes
IMPORTANT ED TECH DEVELOPMENTS

ONE YEAR OR LESS
• Makerspaces
• Robotics

TWO TO THREE YEARS
• Analytics Technologies
• Virtual Reality

FOUR TO FIVE YEARS
• Artificial Intelligence
• Internet of Things
# Ed Tech Trends

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<tbody>
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<td><strong>Near Term</strong> One Year or Less</td>
<td>Grassroots Video</td>
<td>Collaborative Environments</td>
<td>Cloud Computing</td>
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<td>Mobile Devices Apps</td>
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<td>BYOD</td>
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<td>Collaboration Webs</td>
<td>Online Communication Tools</td>
<td>Collaborative Environment</td>
<td>Mobiles</td>
<td>Tablet Computing</td>
<td>Mobile Learning</td>
<td>Cloud Computing</td>
<td>Makerspaces</td>
<td>Online Learning</td>
<td>Robotics</td>
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<td><strong>Mid Term</strong> Two to Three Years</td>
<td>Mobile Broadband</td>
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<td>Game-Based Learning</td>
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<td>Learning Analytics</td>
<td>Games and Gamification</td>
<td>3D Printing</td>
<td>Robotics</td>
<td>Analytics Technologies</td>
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<td>Data Mashups</td>
<td>Cloud Computing</td>
<td>Game-Based Learning</td>
<td>Open Content</td>
<td>Personal Learning Environments</td>
<td>Open Content</td>
<td>Learning Analytics</td>
<td>Adaptive Learning Technologies</td>
<td>Virtual Reality</td>
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<td><strong>Far Term</strong> Four to Five Years</td>
<td>Collective Intelligence</td>
<td>Smart Objects</td>
<td>Augmented Reality</td>
<td>Learning Analytics</td>
<td>Augmented Reality</td>
<td>3D Printing</td>
<td>The Internet of Things</td>
<td>Digital Bad</td>
<td>Artificial Intelligence</td>
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<td>Social Operating Systems</td>
<td>The Personal Web</td>
<td>Flexible Display</td>
<td>Personal Learning Environments</td>
<td>Natural User Interfaces</td>
<td>Virtual and Remote Laboratories</td>
<td>Wearable Technology</td>
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<td>Internet of Things</td>
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Key Trends

Trend 1: Digital Divide (devices & access)

Trend 2: Internet Safety

Trend 3: Acceptable to Responsible Use

Trend 4: Privacy

Trend 5: Digital Equity (broadband anywhere)
Trend 1: Digital Divide

- Devices
- Basic Internet Access
Trend 2: Safety

Safety concerns shape technology’s use in education over past two decades…
Trend 3: Acceptable to Responsible Use

Acceptable Use Policies (AUP) becoming Responsible Use Policies (RUP)
Trend 4: Privacy of Data

Greatest threat to personalizing learning
Privacy to Trust

Circle of Trust

YOU
Trend 5: Digital Equity

No longer is basic connectivity sufficient. Learning is digital. Students and teachers need broadband anywhere, anytime.
Digital Equity: Outside of School

70% of teachers say they require Internet for students to do their homework
Digital Equity: Outside of School

82.5% of U.S. homes with school-age children have broadband access (about 9 percentage points higher than average for all households).

Good news:

5 million households, with school-age children, do not have high-speed Internet service at home.

Bad news:
Low-income homes with children are FOUR TIMES more likely to lack broadband vs. middle/upper income families.

Black and Hispanic homes make up a disproportionate share of that 5 million.
The Homework Gap

www.cosn.org/digital-equity
Leadership & Vision
Educational Environment
Managing Technology

FRAMEWORK of Essential Skills of the K-12 CTO

www.cosn.org/framework
www.cosn.org/certification
Certified Education Technology Leader (CETL™)

cosn.org/certification
Transformation. Momentum.

From Digital Divide to Digital Equity

From Acceptable Use to Responsible Use

From Privacy to Trust

Become an education technology leader.
Crystal Ball

Less about the technology, more about the learning

More innovation in job titles and functional responsibilities
cosnconference.org

CoSN2018

EXPONENTIAL CHANGE
Designing Learning in the 4th Industrial Revolution

Washington, DC • March 12-15
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