Google for Education

Tom Sayer - Head of Global Adoption and Impact Programs
“We are currently preparing students for jobs that don’t yet exist, using technologies that haven’t been invented, in order to solve problems we don’t even know are problems yet.”

Richard Riley, Former U.S. Secretary of Education
What we’ll talk about...

1. The world and workforce are changing
2. Education is changing
3. So what is Google for Education?
4. Building a culture of innovation
The World and Workforce are Changing
The rules of the game are changing

Time to 50 million:

<table>
<thead>
<tr>
<th>Product</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone</td>
<td>75 years</td>
</tr>
<tr>
<td>Automobile</td>
<td>62 years</td>
</tr>
<tr>
<td>TV</td>
<td>14 years</td>
</tr>
<tr>
<td>Spotify</td>
<td>8 years</td>
</tr>
<tr>
<td>Netflix</td>
<td>7 years</td>
</tr>
<tr>
<td>Twitter</td>
<td>9 months</td>
</tr>
</tbody>
</table>
Digital transformation is disrupting industries worldwide.

Average time US corporations remained on the S&P 500 index:
- 1958: 61 years
- 2011: 18 years

Some companies are being replaced approximately every 2 weeks.

Sources:
1. American Enterprise Foundation
How will you drive change?

1990s
Computers on every desk
Limited storage and processing power

2000s
Access to unlimited computing resources in the cloud and adoption of mobile devices

Next...
Evolve to new ways of working

Digital transformation
Top Skills Currently Needed in the Workplace

- Problem solving: 51%
- Team-working: 33%
- Communications: 26%
- Critical thinking: 21%
- Creativity: 18%
- Literacy: 15%
- Digital literacy: 15%
- Leadership: 14%
- Foreign language: 14%
- Emotional intel.: 7%
- N/A: 2%
Education is Changing
RESEARCH OVERVIEW

Exploring how schools can best prepare K-12 students for the 21st century workplace

Research included:

- Literature review
- 10 interviews with experts in education, workplace skills and business
- Survey of 1,200 educators in 16 countries
KEY FINDINGS

It is crucial for teachers to consider 21st century skills and a range of teaching strategies is needed to effectively develop them.

Teacher autonomy and quality are significant factors in shaping schools’ preparedness to teach 21st century skills.

Technology can support key teaching strategies and can be a critical tool in the classroom.

Budget limitations are the most frequently cited barrier to adopting new teaching strategies and technologies.
21ST CENTURY SKILLS ARE CRUCIAL AND A HOLISTIC APPROACH IS ESSENTIAL

Teachers need to consider **future skills needs** to better prepare students for the modern workplace.

Challenging students to exceed their own performance expectations achieves better results.

For students to succeed professionally, having soft skills is as important as foundational literacies.
TEACHER AUTONOMY BOLSTERS SENSE OF PREPAREDNESS TO TEACH 21ST CENTURY SKILLS

How well equipped are teachers at your school to teach the following skills? (% very well equipped)

- Educators who rate their school as having “much better” teacher autonomy
- All other educators

- Foundational literacies
  - 49%
  - 28%

- Communication
  - 48%
  - 25%

- Values and ethics
  - 47%
  - 26%

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A RANGE OF TEACHING STRATEGIES IS NEEDED

Top four strategies

- Active learning
- Project-based learning
- Personalised learning
- Cognitive activation
Laptops are most often cited as effective

- Laptops: 35%
- Educational games: 32%
- Interactive whiteboards: 29%

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BUDGET LIMITATIONS ARE THE COMMONEST BARRIER TO INNOVATION

Most significant barriers to adopting new teaching strategies and technologies

- Adopting new teaching strategies
- Adopting new technologies

- Budget limitations: 51%
- Lack of technology access in schools: 27%
- Lack of policy support at a national level: 27%
- Lack of technology access in schools: 29%
- Lack of policy support at a national level: 22%

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MOST EDUCATORS WANT TO SEE INNOVATION

- **Completely overhaul**: 16%
- **Cautiously investigate**: 39%
- **Technologies**: 13%
- **Teaching strategies**: 40%

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More than a technological change...

Beyond that, it's a cultural change that requires organizations to continually challenge the status quo, experiment often, and get comfortable with failure.

- The Enterpriser Project

Businesses don't transform by choice because it is expensive and risky. Businesses go through transformation when they have failed to evolve.

- The Guardian

So What is Google for Education?
Google for Education

Shareable devices and collaborative tools built for teachers and students

chromebook + G Suite for Education + Google Classroom
Boot up in less than 10 seconds, and the battery lasts all day

Designed to be simple, affordable, secure, and shareable

Shareable devices designed for learning, made for the classroom

Lightweight, durable laptops designed for students

Boot up in less than 10 seconds, and the battery lasts all day

Designed to be simple, affordable, secure, and shareable
G Suite for Education

Tools your entire school can use together, anytime and anywhere
What is Google for Education?

Why choose Google for Education?

What is the impact of Google for Education?

Get started with Google for Education
Easy

Simple for teachers and students

Automatic updates and multilayer security
Unique cloud-based management
Includes Google Classroom
Every Chromebook has security built in

Verified Boot checks security at every login

Every user's data is encrypted

Makes every Chromebook infinitely shareable
Security = **Shareability**

1. Wheel in Chromebook cart
2. Pick any Chromebook
3. Sign in → personalized
4. Sign out → data secure
5. Repeat
For teachers, simple starts here

G Suite for Education

Google Classroom

Google for Education
G Suite for Education

Easy for teachers to manage their classroom and students to keep track of their work

Collaborate  Comment  Share  Saves automatically
By allowing students to submit their work with Classroom, I can keep track of my sections, view grades easily, and mark assignments during any free time I have, without having to carry stacks of paper around. Classroom has made this process so easy and convenient.

Laura Barton, Science teacher, Fontbonne Hall Academy
Affordable

Infinitely shareable and truly accessible

- Lowest total cost of ownership in the market
- G Suite and Classroom are free for schools
- 24/7 support from Google included
The biggest cost savings we’ve experienced are our time and resources. With Chromebooks, my team can push out an app or software to thousands of Chromebooks at the same time and remotely manage those devices.

Dr. Lessell Martiny (Marty) Bray, Chief Technology and Information Officer, Forsyth County Georgia
Calculate your total cost of ownership

- 61% 3-year lower TCO than alternate PCs & tablets
- 68% Reduction in staff time needed to manage devices

- 52 teacher hours saved/year
- 90% less labor to support
- 99.9% uptime
- 329% return on investment
- $0 cost per user

Source: 2017 IDC Whitepaper
“G Suite is free, easy to use, works with the district’s existing software, and offers platform neutrality.”

Terry Korte, Technology Integration Planning Coordinator, Edmonton Public Schools

Free to schools  
Free 24/7 support  
Best-in-class security
A free solution for all of your educational needs

G Suite for Education

Manage your classroom with ease
Create classes, distribute assignments, give quizzes, send feedback, and see everything in one place

Administer with confidence
Add students, manage devices, and configure security and settings so your data stays safe

Communicate your way
Connect with email, chat, and video conference

Collaborate anywhere
Co-edit documents, spreadsheets, and presentations in real time

Manage all your tasks
Build to-do lists, create task reminders, and schedule meetings
Versatile

Meets the needs of every classroom

Essential suite of tools and a diverse range of devices
Content and tools that build on collaboration, communication, and creativity
Help teachers collaborate anytime and anywhere
The power of G Suite for Education

Collaborative tools that spark learning from anywhere, at anytime, on any budget

**Instant feedback** and tracking improves student performance
**Frees up time** so educators can focus on teaching
**Machine Learning** helps to streamline writing and research
Collaborate anytime, anywhere

1. Get to your documents anywhere, anytime, from any device
2. Everyone can work together in real time
3. Helpful features so teachers can collaborate with students
Access on the go

With G Suite and Classroom, teachers and students can work on their own or collaboratively, wherever they are and on any device.
G Suite for Education

Creation ▪ Collaboration ▪ Communication ▪ Critical thinking

Mission control for teachers and students
Versatile form factors to support all learning

Find the right Chrome devices for your school, in a range of shapes, sizes, and price points
Apps to inspire students

Google for Education

Apps that work
#withClassroom

Next generation
classroom
Google Cast for Education

Teach and learn from everywhere

Cast video and audio wirelessly
No new hardware required
Teachers invite students and set permissions

Integrated with Google Classroom
What is Google for Education?

Why choose Google for Education?

What is the impact of Google for Education?

Get started with Google for Education
Impactful

Frees up students to focus on learning

Less time on organizational tasks, more time learning
More collaboration and hands-on assignments
Personalized learning and increased student engagement
Millions of Chromebooks are transforming districts

- Montgomery County: 157,000
- Milwaukee Public: 84,000
- Edmonton: 45,000
- Charlotte-Mecklenburg: 154,000
- Arlington ISD: 58,000
- Richland Two: 28,000
- Chicago Public: 146,000
- Chesterfield County: 56,000
- Baldwin County: 25,000
Google for Education around the world

UNITED STATES
50 deployments
over 25,000

MEXICO
State of Baja
California bringing
G Suite to students

BRAZIL
G Suite in 50% of states
Adoption of Chromebooks in private schools is increasing

UNITED KINGDOM
Many Education Trusts* going Google in England
*Networks of schools

SWEDEN
Chromebooks were the #1 selling school device in 2016

AUSTRALIA & NEW ZEALAND
Increasing adoption of G Suite & Chromebooks
What is Google for Education?

Why choose Google for Education?

What is the impact of Google for Education?

Get started with Google for Education
You may have Chromebooks and G Suite
However, getting technology into schools does not in itself lead to impact on student outcomes. **Technology is a tool for educators**, and is not in itself educational.
71% of teachers attribute workplace stress to the “adoption of new initiatives without proper professional development”

American Federation of Teachers
Explore the Transformation Center Framework

Vision

Professional development

Learning

Culture

Technology

Community engagement

Funding & sustainability

Ideas & resources
Google’s programs help you transform and use technology effectively!
Professional development

**Support**
PD partners

PD Partners deliver professional development to teachers and provide long-term PD strategy

**Embed**
Certified trainers

Teachers and coaches become Google for Education Certified Trainers and benefit from a variety of support and training from Google

**Differentiate and scale**
Training center/GEGs

Free access to globally applicable and locally relevant materials via an online platform and communities

**Measure and motivate**
Certifications

One set of Google teacher development standards with clear and consistent certification levels

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Google for Education
Professional development

Choose the path that’s right for you

**EDUCATOR LEVEL 1**

**Fundamentals Training**
For educators who are new to Google tools, this course will teach you the best strategies for integrating Google in your classroom.

**Devices Training**
Get up to speed on using Chromebooks and Android tablets in your classroom with these structured training paths.

**Certified Trainer Course**
Improve your skills as a trainer as you learn to create and deliver inspiring training sessions on Google tools.

**Digital Citizenship and Safety Course**
Learn how to stay safe online and equip your students to become responsible digital citizens with this free and interactive course.

**EDUCATOR LEVEL 2**

**Advanced Training**
Moving beyond fundamentals, this advanced course teaches cutting-edge strategies for integrating Google in your classroom.

**Devices Training**

**Certified Trainer Course**

**Digital Citizenship and Safety Course**

**Educator Level 1**
For educators who have learned the fundamentals of using Google tools in the classroom, the Level 1 certification validates standard technology implementation skills.

**Certified Innovator**
Help a group of educators transform education at Google and across the world.

**Educator Level 2**
For educators who are super users and enthusiasts of Google tools in the classroom, the Level 2 certification validates advanced technology integration skills.

**Certified Trainer**
Help educators and schools better integrate Google tools by providing direct training and other services.

Distinguish yourself as an educator
Choose a resource for professional development

**Educator certifications**
Clear and consistent standards for teachers around the globe

- 75,000 certifications
- 81 countries

**Online training and courses**
Free online access to useful global and local materials

- 500,000 enrolled
- 16 languages

**Partner and trainer network**
Customized PD for a long-term training strategy

- 48 partners | 20 countries
- 3,130 trainers | 71 countries

**Learning communities**
Google Educator Groups provide grassroots teacher development

- 349 active GEGs
- 39 countries
Creating a culture of innovation

Learn the **Principles**

Set your **Vision**

Make a **Plan**

Choose a **Challenge**

Know your **User**

Innovate a **Solution**
The Chromebooks just work. They are reliable, and give you quick and easy access to *G Suite for Education*. Students love collaborating on projects both in and outside of classes.

*Mark Brandish*, Head of IT services, Coleg Cambria
No matter where you are in the world, school hasn't changed (much) in the last 50 years.
Technology must support learning principles.
Pedagogyal Principles

- **Personalized + Measured**
  Tailoring learning to individual needs and interests

- **Collaborative + Diverse**
  Learning is a collaborative and social process

- **Project-based + Self-managed**
  Giving students ownership of their learning

- **Authentic + Experiential**
  Beyond simple knowledge is conceptual understanding
Building a Culture of Innovation
Four foundations for a culture of innovation

- Curiosity
- Agency
- Risk-Taking
- Collaboration
Curiosity is the spark of innovation. It’s the habit of constantly wondering why things are the way they are, looking at them from different perspectives, and questioning how they might be different. People and organizations that encourage curiosity can generate an abundance of new, innovative ideas—plus it’s a lot of fun!
Curiosity at Google:
TGIF

Treat employees like owners

Question the status quo

Share ideas across organization

Promote transparency and trust
Curiosity at Google: GROW

On-demand courses
Self-serve resources
Employee-generated resources
Promote transparency and trust
Curiosity at Google:
PHYSICAL SPACE

Encourage playfulness
Break up routines
Inspire out-of-the-box thinking
Curiosity: REFLECTION

How might we encourage more curiosity and playfulness among our teachers and staff?
Agency

When people are empowered to take ownership over their work and working environments, they become more motivated and open to new ideas. By promoting agency, school leaders harness the collective intelligence of their entire staff to find innovative solutions to complex problems.

Own
Initiate
Problem-solve
Create
Agency at Google: 20% PROJECTS

- Explore areas of interest
- Build new skills
- Collaborate across silos
- Gain insight into bigger-picture challenges
Agency at Google: GOOGLEGEIST

Honor employee voice

Promote transparency and trust

Confront real issues

Use data to prioritize and solve problems
How might we empower our teachers and staff with more agency?
Risk-taking

Trying ambitious new things is inherently risky. Innovative cultures recognize that considered risk-taking and thoughtful failure are part of learning and arriving at truly transformative solutions. These cultures reward people for trying new things and dreaming big, even when their best efforts fall short.
"Psychological safety is a belief that one will not be punished or humiliated for speaking up with ideas, questions, concerns or mistakes"

- Amy Edmondson
Teams that feel safe beat their sales targets

- Safe team: +17%
- Unsafe team: -19%
“Unsafe” teams

“Our team meetings don't always feel like a safe zone for questions or thoughts. The tone in meetings can be condescending and aggressive at times.”

“I sometimes get a bit scared to speak my mind. I feel like there are so many individuals here that have been on the team for so long that it gets intimidating to say something.”

“I think it is harder to take big risks on this team. We are rewarded on completing our deliverables and moving things along. There hasn't been an example of a big risk or failure that we all agreed was the right thing to do.”
“Safe” teams

“The response to mistakes on this team is consistently in the spirit of ‘gotta break eggs to make omelettes.’”

“The team is very supportive if someone makes a mistake. We just find a way to fix it or deal with the consequences, whatever they are, when they come up.”

“We make it pretty obvious that it's OK to be wrong and not to know something.”

“We frequently ask each other questions about difficult privacy issues throughout the day. Everyone is open to questions from anyone at any time, and no question is considered a dumb question.”
Set the tone for psychological safety

1. Frame work as a series of learning problems, not execution problems.
2. Model curiosity and ask more questions.
3. Admit your own fallibility.

Google for Education
Risk-taking at Google: GTHANKS

Encourage frequent appreciation

Reward risk-taking

Foster psychological safety
Think 10X
(not 10%)
Risk-taking at Google: Innovation Labs

Focus on the user

Think 10X

Be prototype-driven
Risk-taking at Google: OKRs

Encourage ambitious goals
Support agency and ownership
Align goals across the organization
Measure progress and troubleshoot
Risk-taking: REFLECTION

How might we better support considered risk-taking and thoughtful failure among our teachers and staff?
Collaboration

Innovation flourishes in environments where ideas can flow freely between people, teams, and different levels of an organization. After all, good ideas can come from anywhere. Amazing things happen when diverse people work together and build on each other’s ideas.

Connect
Synergize
Share
Cross-pollinate
Collaboration at Google: g2g

Magnify your internal experts

Grow in-house talent

Connect people across the organization
Collaboration at Google: MEETINGS

Maximize collective brainpower
Minimize friction
Increase transparency
Connect across the organization
Our tools make it easy to collaborate

Talk to each other, from anywhere

Collaborate + share

Ask, measure, respond
Collaboration at Google:
Physical space

- Bring people together
- Mix people up
- Create serendipity

Google for Education
Collaboration: REFLECTION

How might we expand the depth and breadth of collaboration throughout our schools?
Thank you