



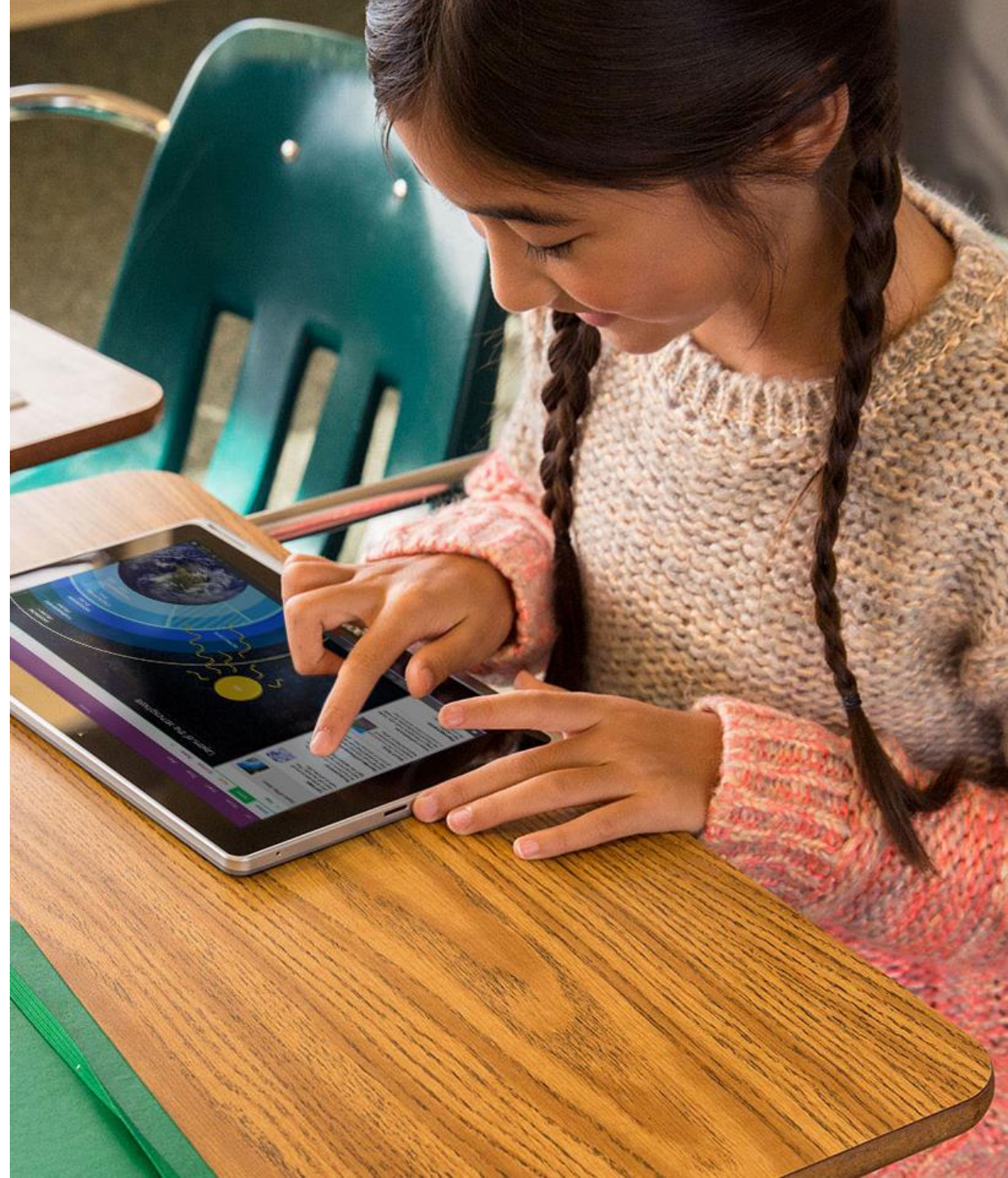
Education Transformation in Digital Era

Darul Hikam Education Conference

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Sampoerna Foundation Teacher Institute
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Mikroskil Robotic Center
- Kepala SMP & SMA (2004 – 2005)
Sekolah Kristen Petra, Jakarta
- Guru Matematika & Bahasa Inggris (2001 – 2004)
Jubilee School, Jakarta



A TOO FAMILIAR STORY

BBC News | Home | Video | World | Asia | UK | Business | Tech | Science | Magazine | Entertainment

NEWS

Education & Family

Computers 'do not improve' pupil results, says OECD

By Sean Coughlan
Education correspondent

15 September 2015 | Education & Family



Investing heavily in school computers and classroom technology does not improve pupils' performance, says a global study from the OECD.

The think tank says frequent use of computers in schools is more likely to be associated with lower results.

The OECD's education director Andreas Schleicher says a school technology had raised "too many false hopes".

Global education

Eskimology course faces big freeze

Social division stays in online learning

South Africa exports online courses back to the West

HEATSTREET | POLITICS | TECH | CULTURE WARS | R&Z | ENTERTAINMENT | LIFE | F | D

Dr. Jill Stein Thinks Wi-Fi is Frying Kids' Brains

By Emily Zavotti | 22 Sep 2014, August 1, 2016

Dr. Jill Stein, Harvard-educated medical professional and Green Party Presidential candidate, was already struggling this week with how to best define her stance on vaccines to appeal to both science-oriented Bernie Sanders voters, and "progressive" lefties with more interesting ideas.

Now, it seems, a YouTube video has surfaced showing Stein (not a medical professional), describing the inherent danger of putting wireless Internet in public schools.

THRIVE

Thrive in a volatile market

Now you can thrive in a volatile market. The Thrive app is here!

WIS...

The Sydney Morning Herald | NSW

Tablets fall out of favour in NSW classrooms

Eryk Bagshaw

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Once hailed as the poster child of digital interactive learning, tablets are falling increasingly out of favour in NSW schools after being found to be less practical than laptops.

Both private and public schools across the state have moved towards "bring your own device" (BYOD) policies and when parents and kids have been asked to choose, laptops have been the overwhelming favourite.

Towragi Public School has put in a new order for laptops. Photo: Sylvia Liber

In 2011, Trinity Grammar bought 360 iPads for its year 12 students and teachers.

That has since found that laptops have proved far more practical.



Towragi Public School has put in a new order for laptops. Photo: Sylvia Liber

FORTUNE

Maine Schools Dismiss iPads AS 'Toys,' Ready Laptops Instead

by Don Reisinger | 23 May 2016, 12:25 PM EDT

Apple's 9.7-inch iPad Pro, with Smart Keyboard and Apple Pencil.

Even the kids didn't want iPads.

Apple has long pushed for iPads in schools, but it appears that at least in one area of the country, it's falling flat.

The Maine Department of Education has decided that iPads should be replaced with notebooks, after conducting a statewide study that found both teachers and even students would rather not use the tablets in the classroom, according to local news outlet Sun Journal. The department says it will be offering schools a "refresh" at no cost.

After its launch in 2010, Apple soon pitched the idea that its iPad could be an appealing option for schools. And many schools around the country took the company up on the offer, bringing the tablets to students across all grade levels. The tablet was able to deliver textbooks, as well as easier communication with teachers.

In 2013, a study of kindergarten students in Auburn, Maine, of all places, found that the iPad actually improved

THE WALL STREET JOURNAL

I'm Banning Laptops From My Classroom

Students use computers to take notes, but that's not all one option—writing is better.

BY K.A. MONTGOMERY

ILLUSTRATED BY PAUL GRANGER



Los Angeles Times

L.A. school district demands iPad refund from Apple

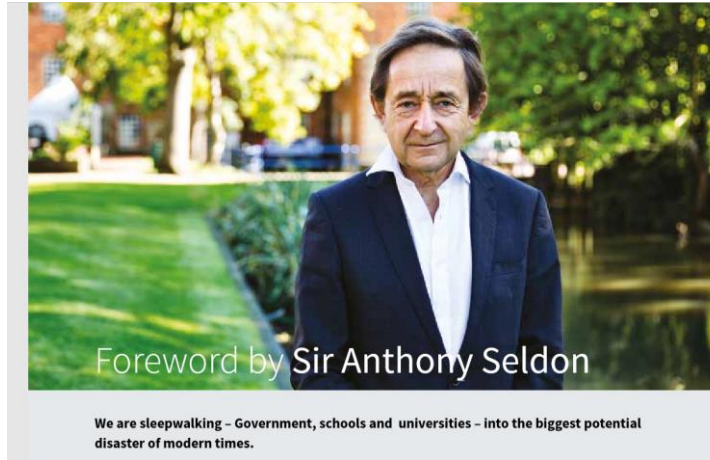
Roosevelt High School students check out their new iPads in the fall of 2013. The project to provide computers to all has since been scaled back and slowed down. (Irfan Khan / Los Angeles Times)

By Howard Blume • Contact Reporter

SHARE THIS

APRIL 16, 2015, 9:30 AM

The Los Angeles Unified School District is seeking to recoup millions of dollars from technology giant Apple over a problem-plagued curriculum that was provided with iPads intended to be given to every student, teacher and administrator.



Sir Anthony Seldon is a political historian, author and commentator on education and contemporary Britain. His first degree was PPE from Worcester College Oxford, his PhD was from LSE, where he became a Research Fellow “*We are sleepwalking-Government, schools and universities – into the biggest potential disaster of modern times,*”

Professor David Deming at the Harvard Graduate School of Education and a faculty research fellow at the National Bureau of Economic Research in the USA, has argued convincingly that **the very skills prioritized by linear thinking schools and universities** are precisely the ones that **algorithms** are able to perform much quicker, more profoundly and reliably than humans.

-David Deming

We need to focus far more, if we are to prepare our young for tomorrow’s economy, and to **optimize** its infinite possibilities, on **active as opposed to passive learning**, on **technical entrepreneurial skills**, on **personal and collaborative skills** that teach us how to live intelligent and fulfilling lives, and how to **work and live harmoniously with others.** –Kenneth Baker

Digital Transformation is a Collective Responsibility

- 👥 Shared understanding of our collective future
- 📋 Common set of objectives and values
- 🌐 Global view of technology
- 🧠 Reshaping the economic, social cultural and human context



Schwab, K. (2016). The 4th industrial revolution. In World Economic Forum. New York: Crown Business

<https://www.bing.com/videos/search?q=klaus+schwab+on+youtube&view=detail&mid=C55128D6E97FD30EB3C8C55128D6E97FD30EB3C8&FORM=VIRE> (click picture to view video)

How do We Transform?



Education should prepare students for **jobs that don't yet exist**,
using **technologies that have not yet been invented** to solve
problems we don't know yet.

<https://www.youtube.com/watch?v=W8lBMFw2xFA> (click picture to play video)

What do Education Leaders Care About?



Leaders Tell us They Care About...



Students engaged in deep,
measurable learning



Classrooms that
inspire learning



Skilled, equipped and
successful teachers



Students prepared for the
future world of work



Education unlimited
by time or place



Empowering efficiency,
productivity
and performance

The question then is...

How do we ensure we continue to develop what we care about



Students engaged in deep,
measurable learning



Classrooms that
inspire learning



Skilled, equipped and
successful teachers



Students prepared for the
future world of work



Education unlimited
by time or place



Empowering efficiency,
productivity
and performance

In a world we have never experienced?



The K-12 Education Transformation Framework

- We have recorded and analyzed **education transformation data from across the globe**, evaluating and learning from our successes and failures.
- We have **interviewed and consulted thousands of education stakeholders** in **developed and developing countries**.
- We believe **all stakeholders**, students, parents, guardians, teachers, campus & district leaders, policy makers, private industry and higher education institutions all **have valuable insights** into actions to promote **successful K-12 digital transformations**.
- We believe **success requires a systematic approach** (Fullan, 2014) coupled with a **growth mindset** (Dweck, 2006).

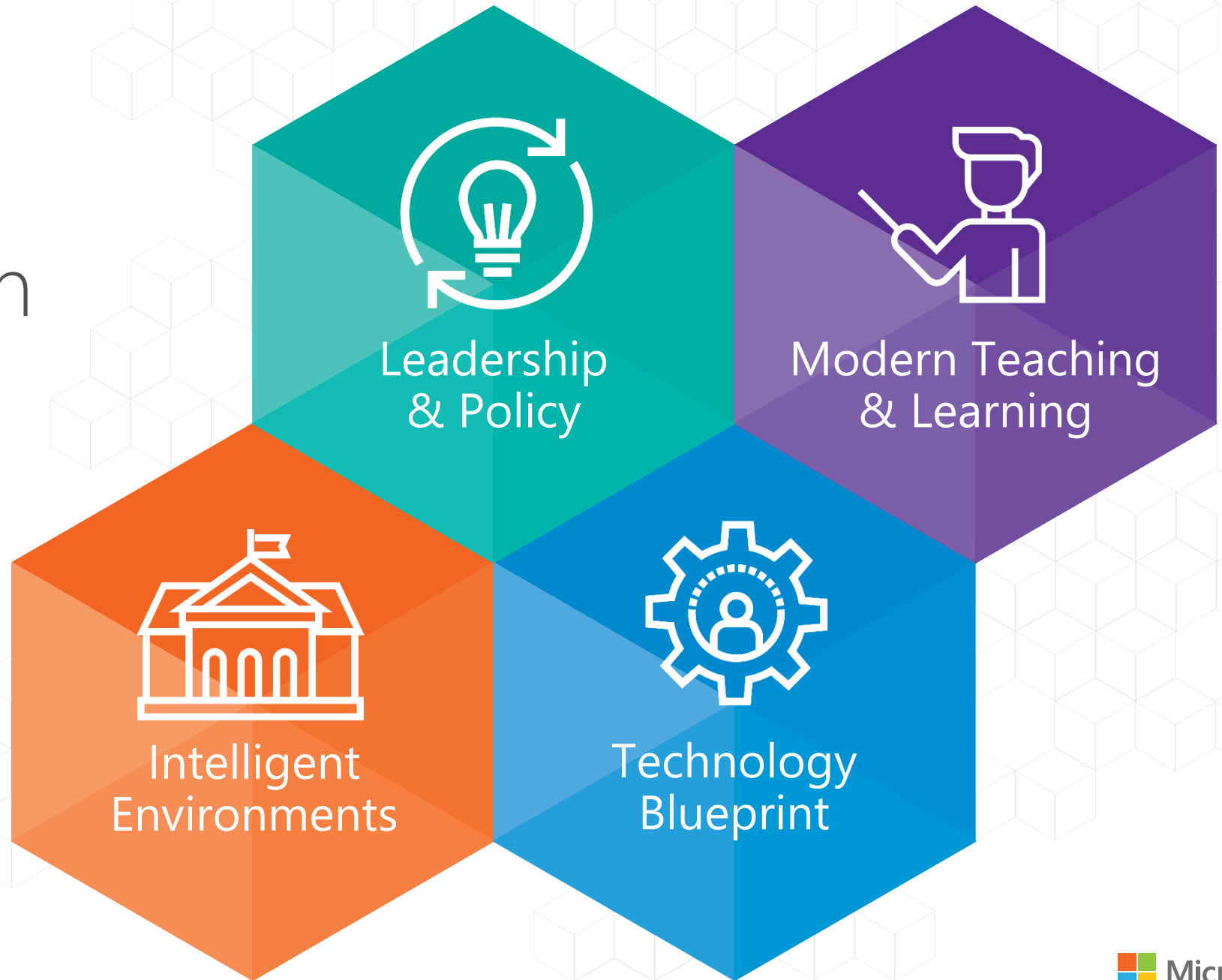
Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House Incorporated.

Fullan, M. (2014). *Leading in a culture of change personal action guide and workbook*. John Wiley & Sons.

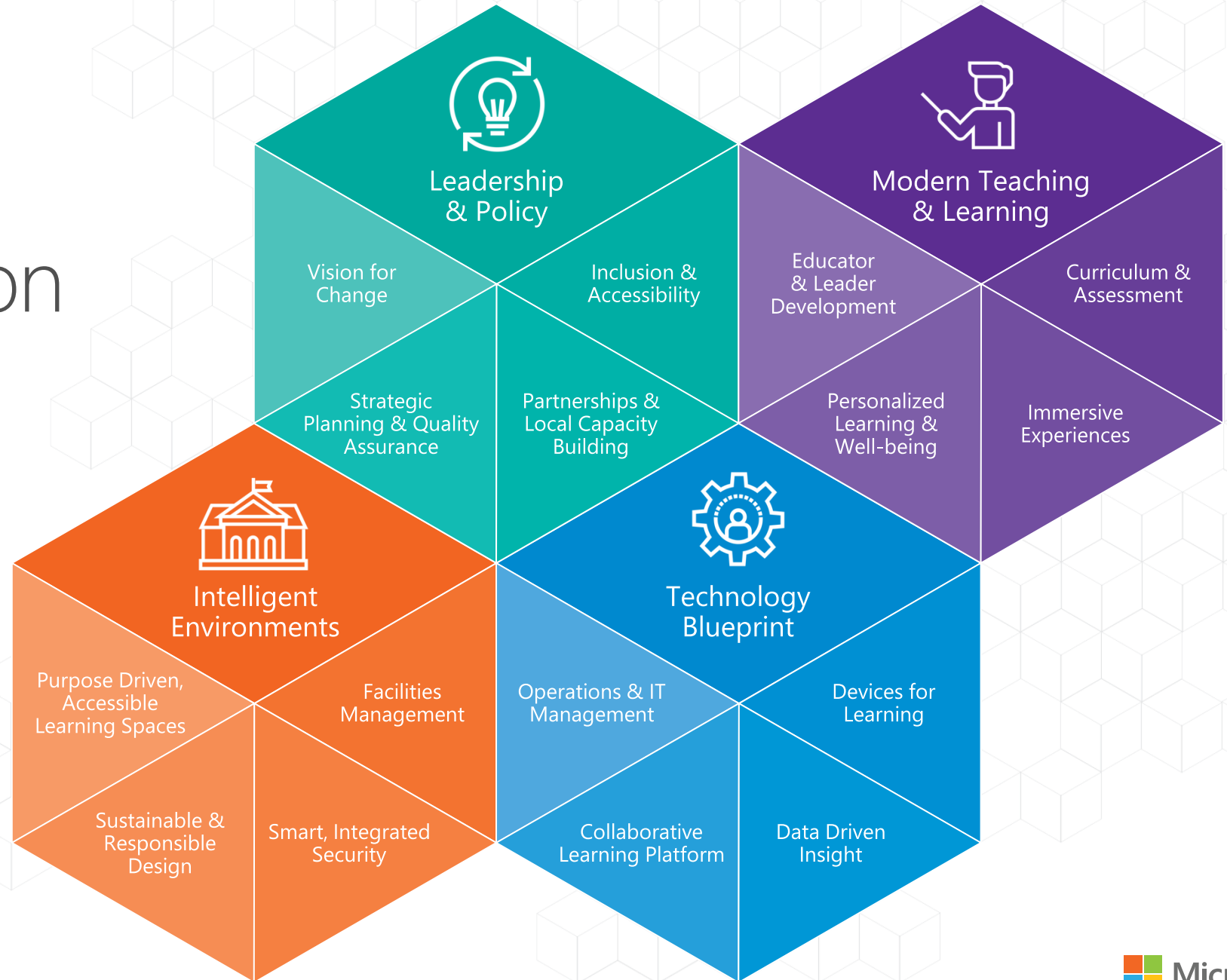


Education Transformation Framework

<http://aka.ms/etf>



Education Transformation Framework





Meet Ms. Ayu

Favorite English teacher

Teaching 24 hours per week

Student council advisor

English club advisor

Loves traveling

Problems that Ms. Ayu often met

Stacks of assignments that must be graded

Spent too much times only for grading students' works

Lost her USB flash drive which means lost all files inside

Limited hard disk storage capacity

Students cheat during quiz

Problems that Ms. Ayu often met

Stacks of assignments that must be graded

Spent too much times only for grading students' works

Lost her USB flash drive which means lost all files inside

Limited hard disk storage capacity

Students cheat during quiz

Not enough time to create presentation

Many of her students asked same thing repeatedly

She wants to create instructional video, but she doesn't know how to use video editor

She wants to work from anywhere (create lesson plan, teaching materials, questions for exam)

Students who got sick often left behind

The complexity of writing scientific paper

Identify

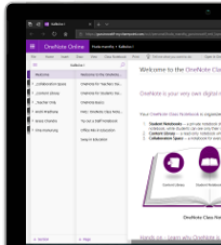
Problems	Focus
• Stacks of assignments that must be graded • Many of her students asked the same thing repeatedly • Students who got sick often left behind	Documents & Communication
• Spent too much times only for grading students' works • Students cheat during quiz	Assignments & Quiz
• Lost her USB flash drive which means lost all files inside • Limited hard disk storage capacity • She wants to work from anywhere (create lesson plan, teaching materials, questions for exam)	Security & Mobility
• Not enough time to create presentation • She wants to create instructional video, but she doesn't know how to use video editor • The complexity in writing scientific paper	Efficiency & Ease of Use

Solution

Solution: OneNote Class Notebook

Stacks of assignments that must be graded

- Digital notebooks for classroom
- Multimedia content
- Can be accessed online & offline
- Personalized learning and feedback
- Effective and efficient

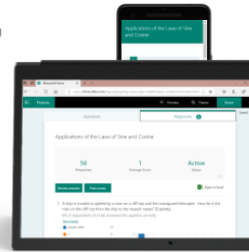


Documents &
Communication

Solution: Microsoft Forms

- Spent too much times only for grading students' works
- Students cheat during quiz

- Shuffle question & options
- Set up access on designated time
- Automatic grading*
- Export results in Excel format

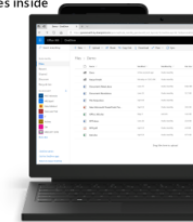


Assignments & Quiz

Solution: OneDrive for Business

- Lost her USB flash drive which means lost all files inside
- Limited hard disk storage capacity

- Automatic sync
- Multi devices access
- Large storage capacity
- Security



Security & Mobility

Solution: Sway

Not enough time to create presentation

- Focus on content
- Prepared design & animation
- Embed online content
- Collaboration capability



Efficiency & Ease of
Use

Solution



Minecraft: Education Edition



OneNote



Microsoft
Teams

Documents &
Communication



Forms



Excel

Assignments & Quiz



OneDrive for Business



SharePoint

Security & Mobility



Word



Sway



PowerPoint

Efficiency & Ease of
Use

Office 365



Outlook



OneDrive for Business



Word



Excel



PowerPoint



OneNote



Yammer



Microsoft Teams



Forms



Stream



Sway



Power BI



PowerApps



SharePoint



Flow



Planner



Minecraft: Education Edition



Azure Active Directory

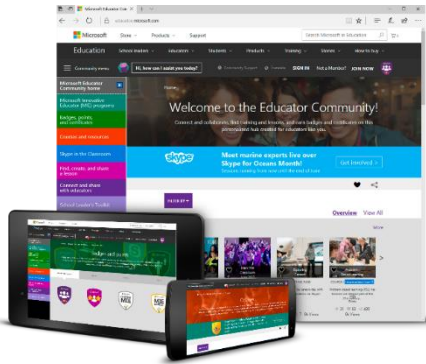


Azure Information Protection

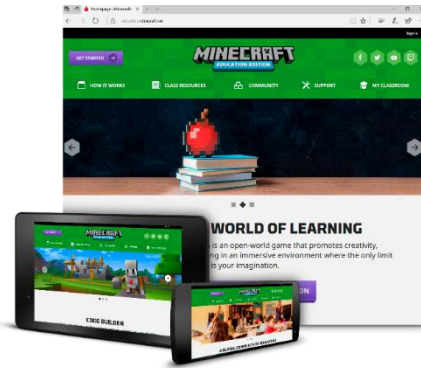
Featured resources



Microsoft Resources designed to help you build Future Ready skills into the learning experience for your students.



education.microsoft.com



education.minecraft.net



aka.ms/hackingSTEM





شكریه DĚKUJI ДЯКУЮ

БЛАГОДАРЯ 多謝晒 TAK

धन्यवाद GRAZIE

Terima Kasih

ありがとうございます TACK

감사합니다 TEŞEKKÜRLER

DANK U WEL СПАСИБО

ευχαριστώ OBRIGADO

THANK YOU DZIĘKUJĘ

הודות MULTUMESC நன்றி

HVALA SALMAT PO MERCI



Solution: OneNote Class Notebook

Stacks of assignments that must be graded



Digital notebooks for classroom



Multimedia content



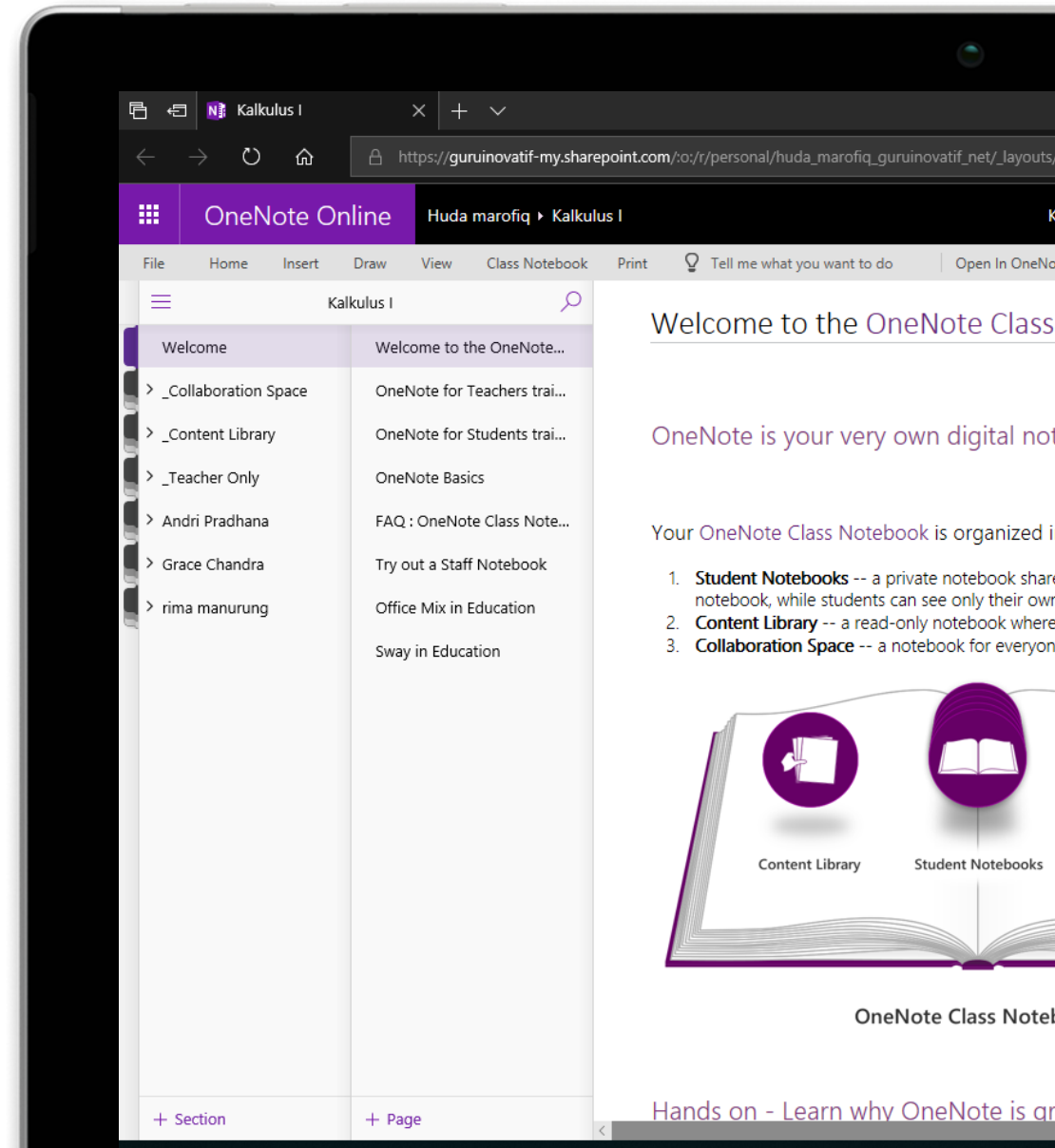
Can be accessed online & offline



Personalized learning and feedback



Effective and efficient



Solution: Microsoft Teams

- Many students asked the same thing repeatedly
- Students who got sick often left behind



Integrated communication



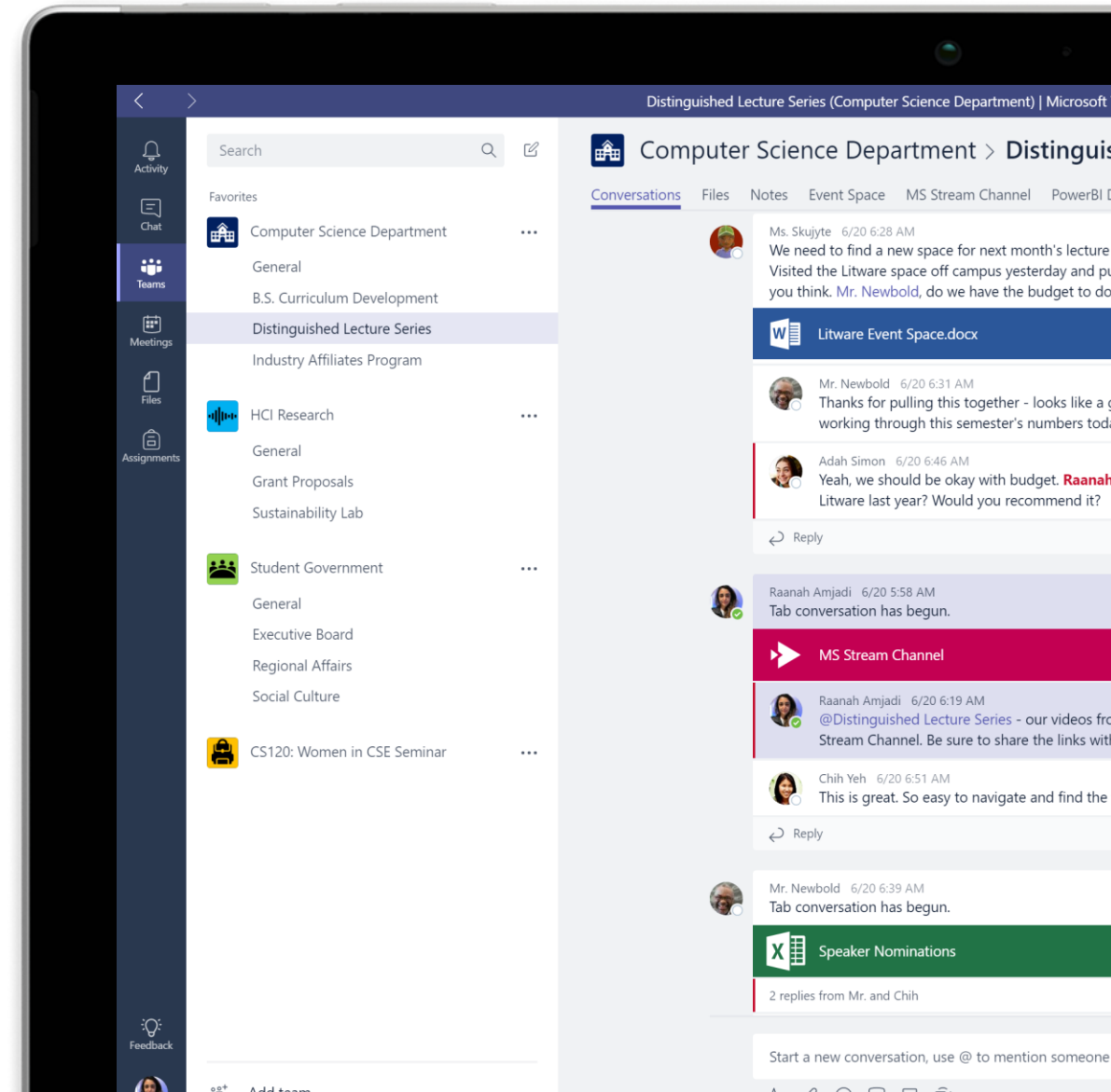
Multi-platform



Digital collaboration hub



Support multi-apps integration



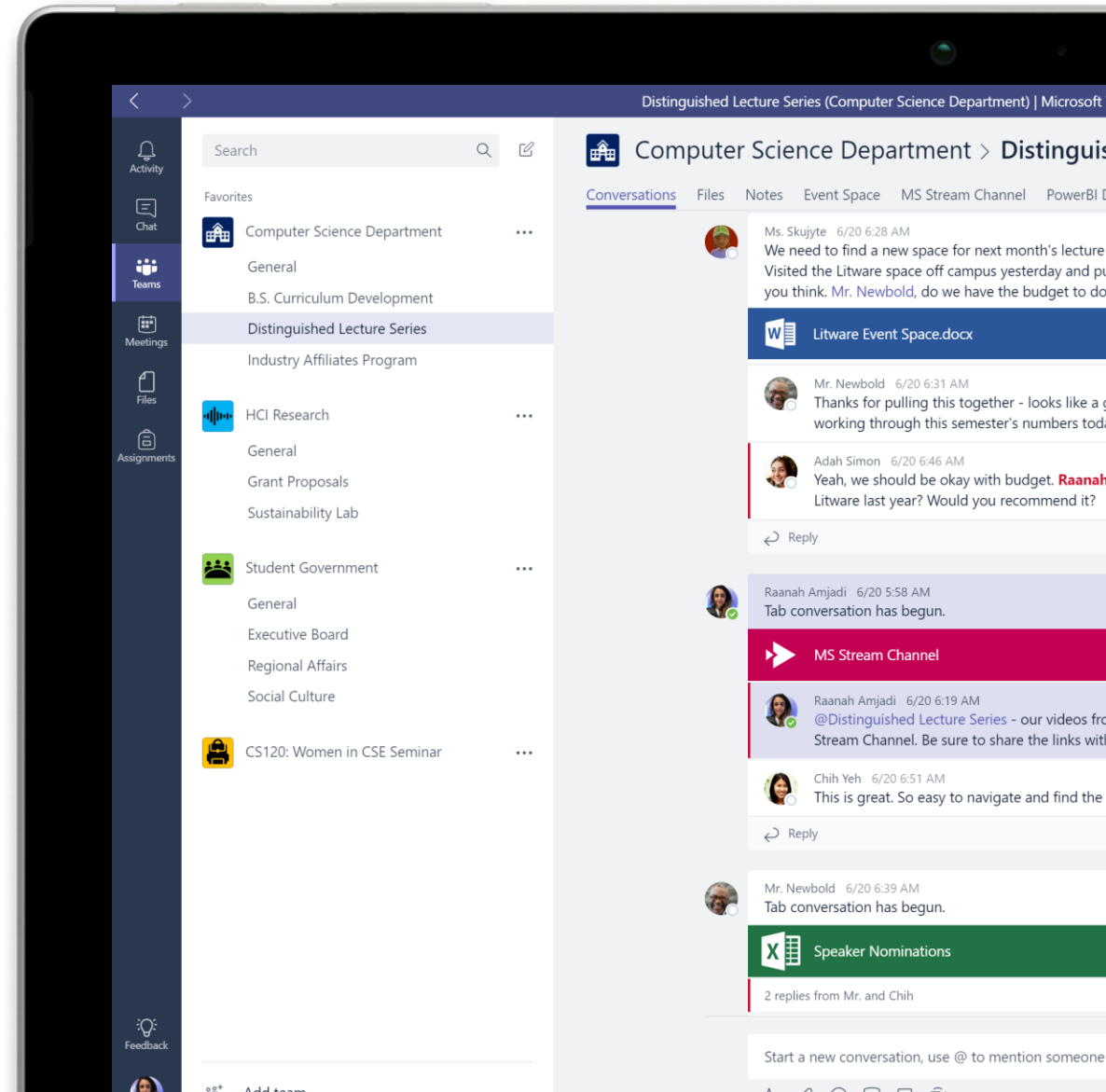
Solution: Microsoft Teams

- Many students asked the same thing repeatedly
- Students who got sick often left behind

 Integrated Class Notebook

 Audio dan video conference

 Assignments capability



Solution: Microsoft Forms

- Spent too much times only for grading students' works
- Students cheat during quiz



Shuffle question & options



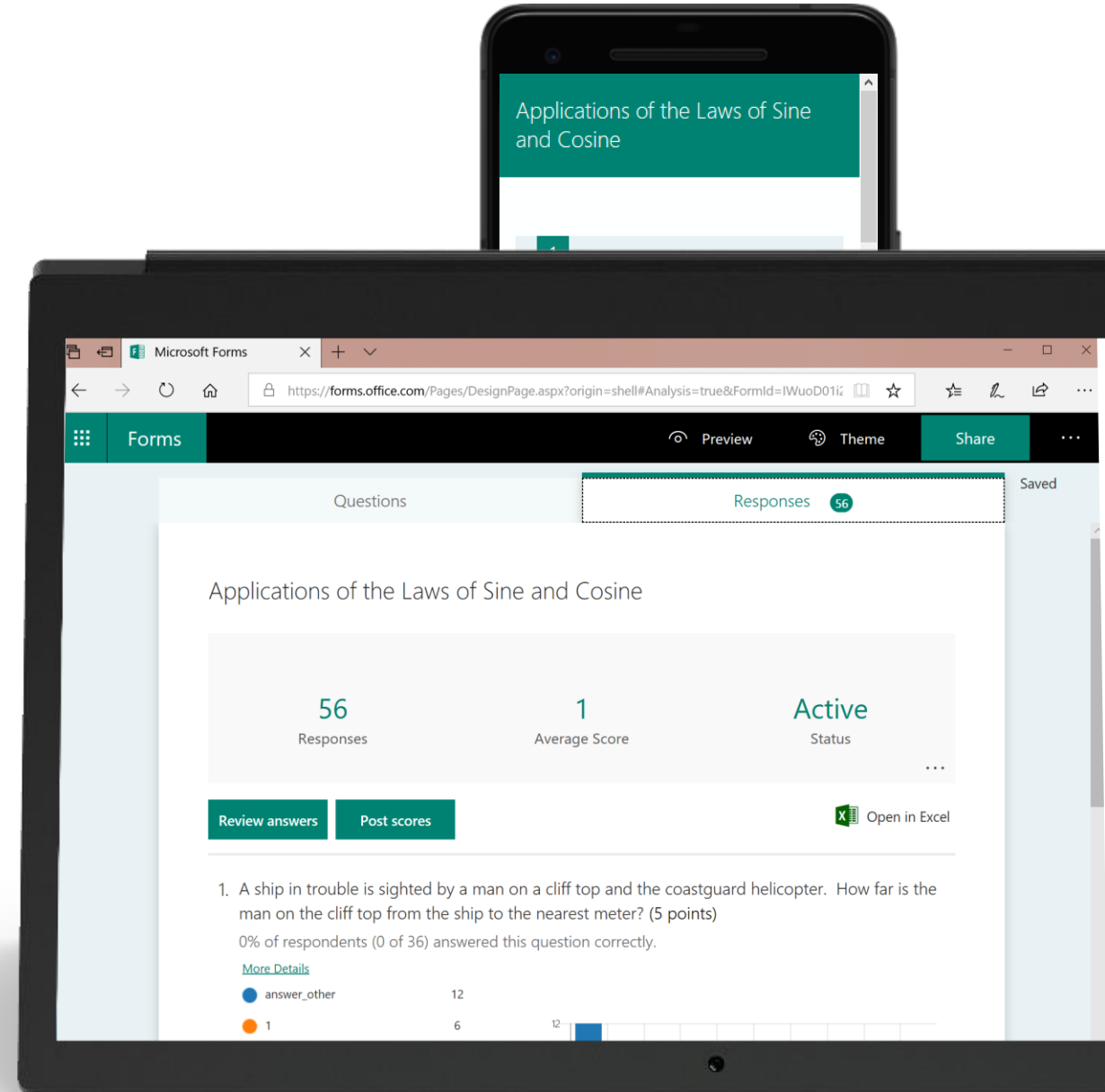
Set up access on designated time



Automatic grading*



Export results in Excel format



Solution: OneDrive for Business

- Lost her USB flash drive which means lost all files inside
- Limited hard disk storage capacity



Automatic sync



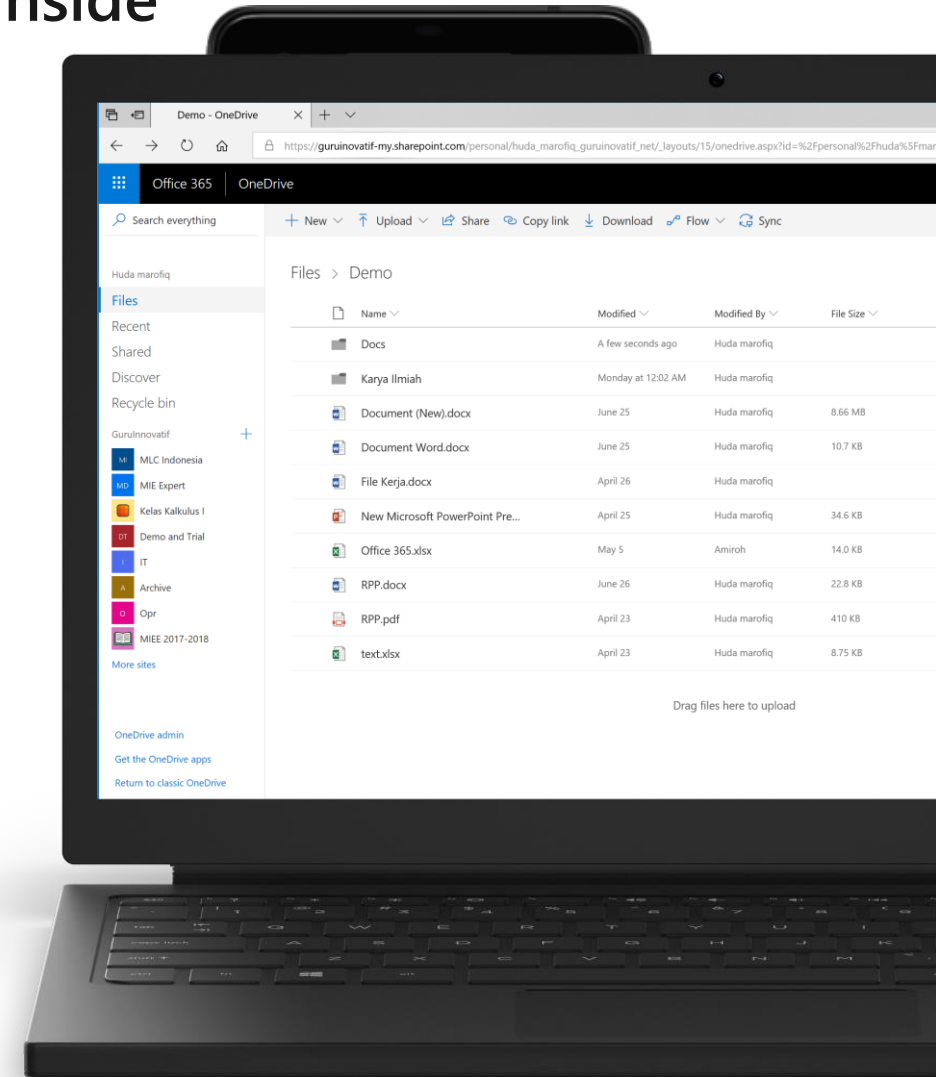
Multi devices access



Large storage capacity



Security



Solution: Office Online

She wants to work from anywhere (create lesson plan, teaching materials, questions for exam)



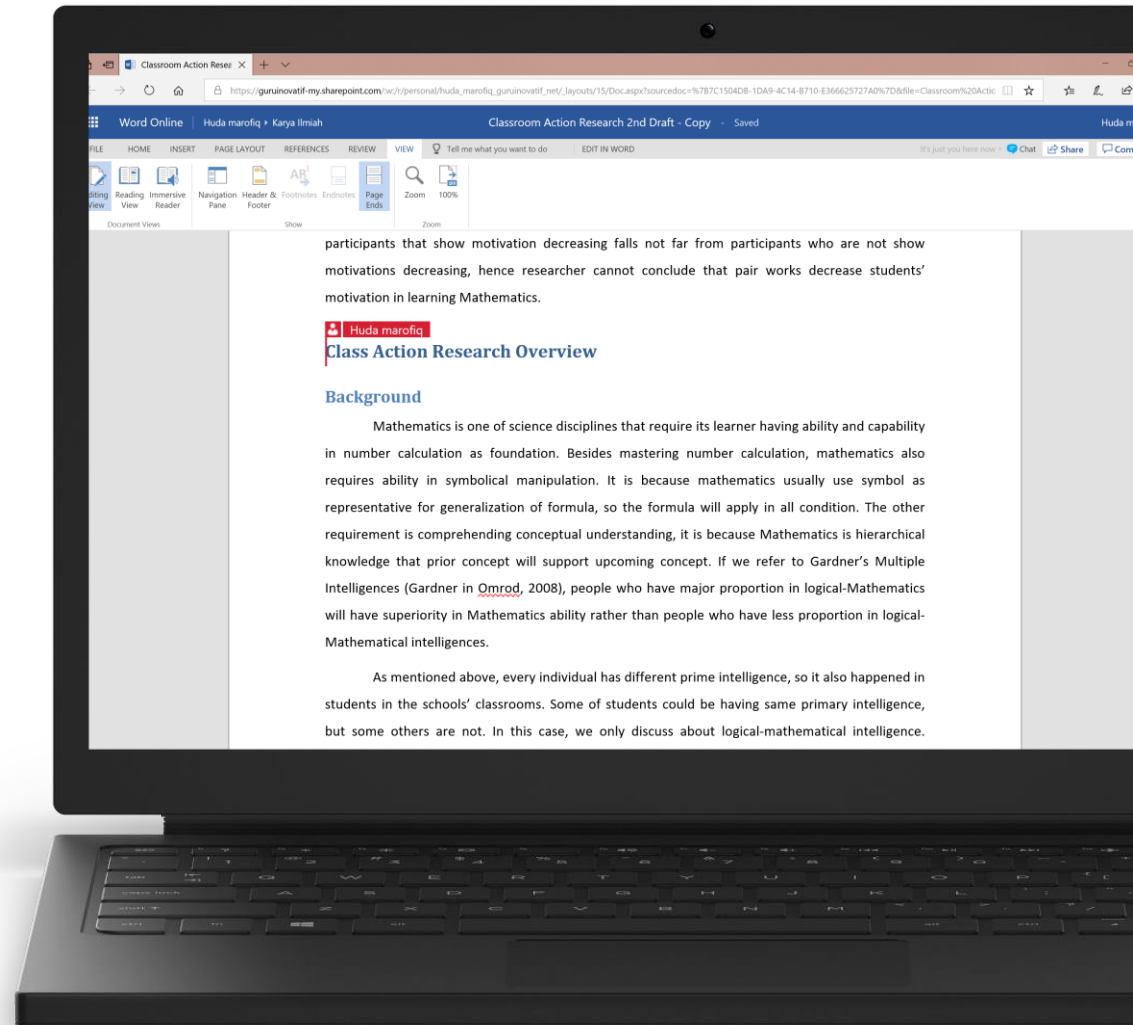
Access from anywhere



Create and edit document consistently



Collaboration capability



Solution: Sway

Not enough time to create presentation



Focus on content



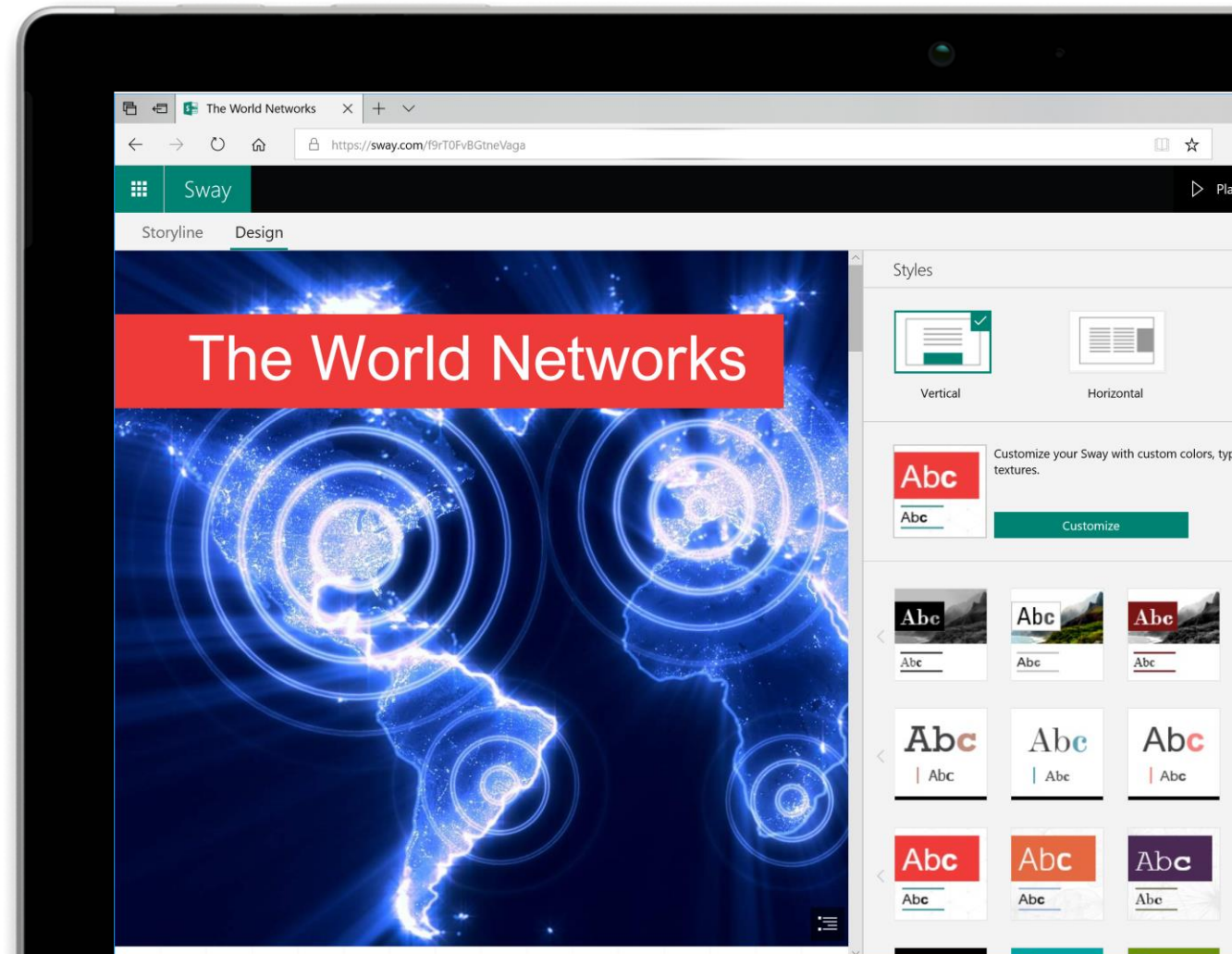
Prepared design & animation



Embed online content



Collaboration capability



Solution: PowerPoint

Not enough time to create presentation

She wants to create instructional video, but she doesn't know how to use video editor



Morph transition



Slide recording & screen recording



Insert multimedia content and 3D objects



Export to video file format



Solution: Paint 3D

Not enough time to create presentation
She wants to create instructional video, but
she doesn't know how to use video editor



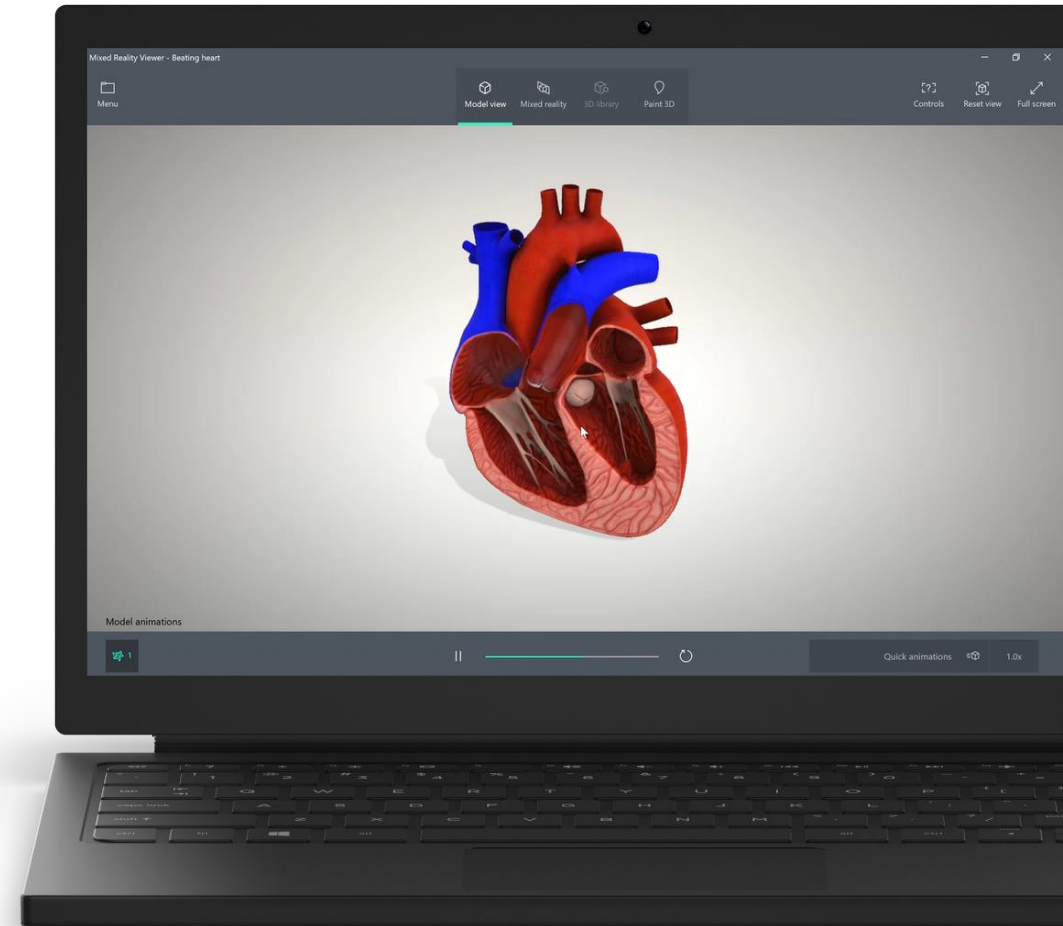
Create & design your 3D object Paint 3D



Show it in Mixed Reality



Export & insert to your PowerPoint
presentation



Solution: Microsoft Word

The complexity in writing scientific paper



Automatic table of content, citation, and bibliography with Reference



Searching references & definitions in app with Research & Smart Lookup



Online collaboration by connecting OneDrive for Business to Office desktop

