

Microsoft Corporation

# Connected Learning



# We are Actively Learning Alaska...

## Big Alaska

- Largest State by landmass
- Coastline larger than all states in lower 48 combined
- Bestowed with natural beauty

## Unique Alaska

- Schools remote
- Limited Internet
- Teacher Hiring / Retention
- Teacher PD critical
- Native + academic knowledge key (e.g. North Slope)

## We believe...

- Education is a People business
- Every student - a Curious and Active Learner
- Every teacher supported in this mission
- Technology - an enabler



**Most Edu projects start with the technology acquisition...resulting in limited success.**

# We Believe....

Online / Offline Cloud  
Services are critical

Devices/technologies need  
to be affordable

Educators are key

Students are Learners

## Microsoft in Education





# Our Shared Imperative – Discussion for Today



**Skills for  
today and  
Tomorrow**



**Professional  
Development**



**1:1 Deployment  
Considerations**

Skills for today and  
tomorrow







# College and Career

## Trends impacting teaching and learning

Developing 21<sup>st</sup>  
Century Skills



New Content  
Dynamics



Personalization  
and 1:1 Access



Employability



# Here and Now: Skills for tomorrow's workforce

Insights into transformative teaching practices



Problem solving & innovation



Global awareness



Skilled communication



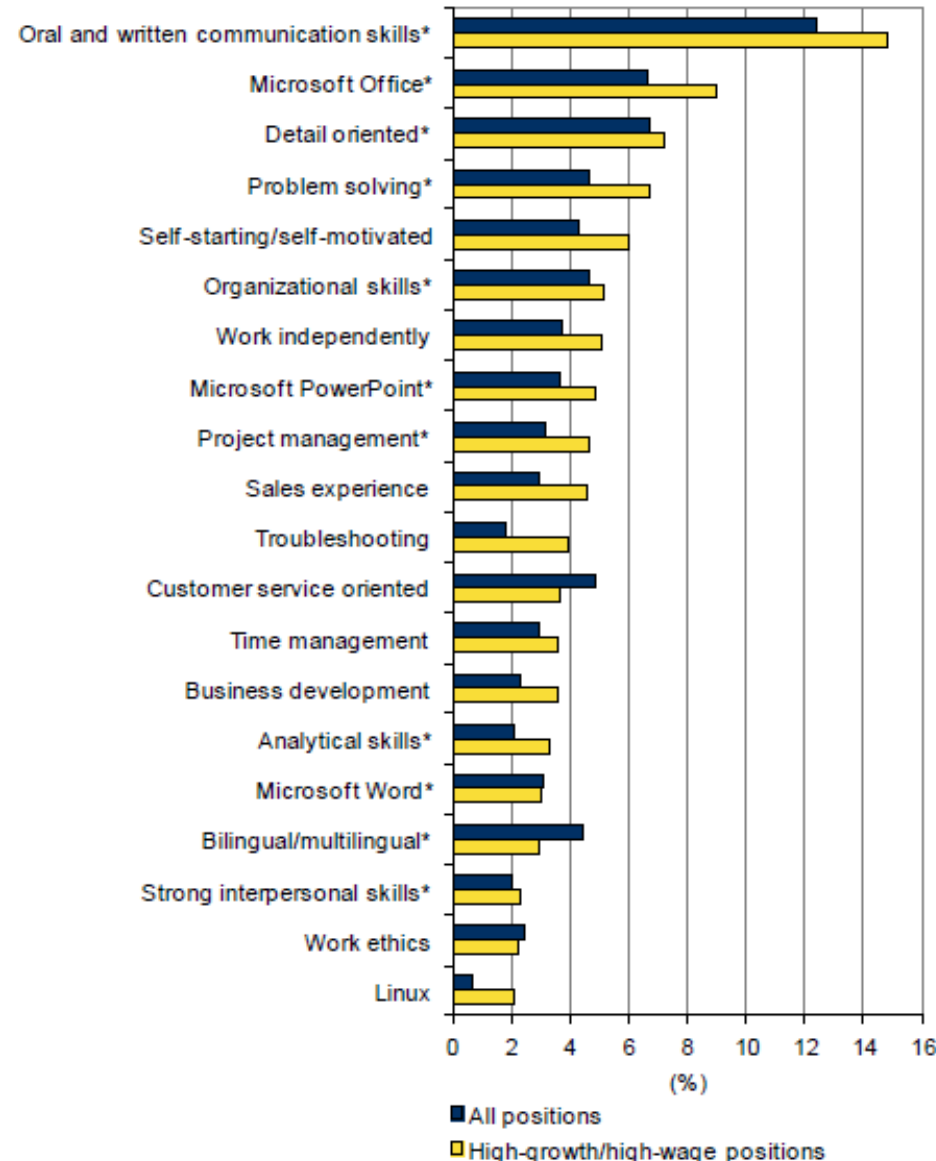
Collaboration

# IDC report: Skills requirements for tomorrow's best jobs

Comparison of Top Skills for High-Growth/High-Wage Occupations and All Occupations in the United States

High-Gro

2020

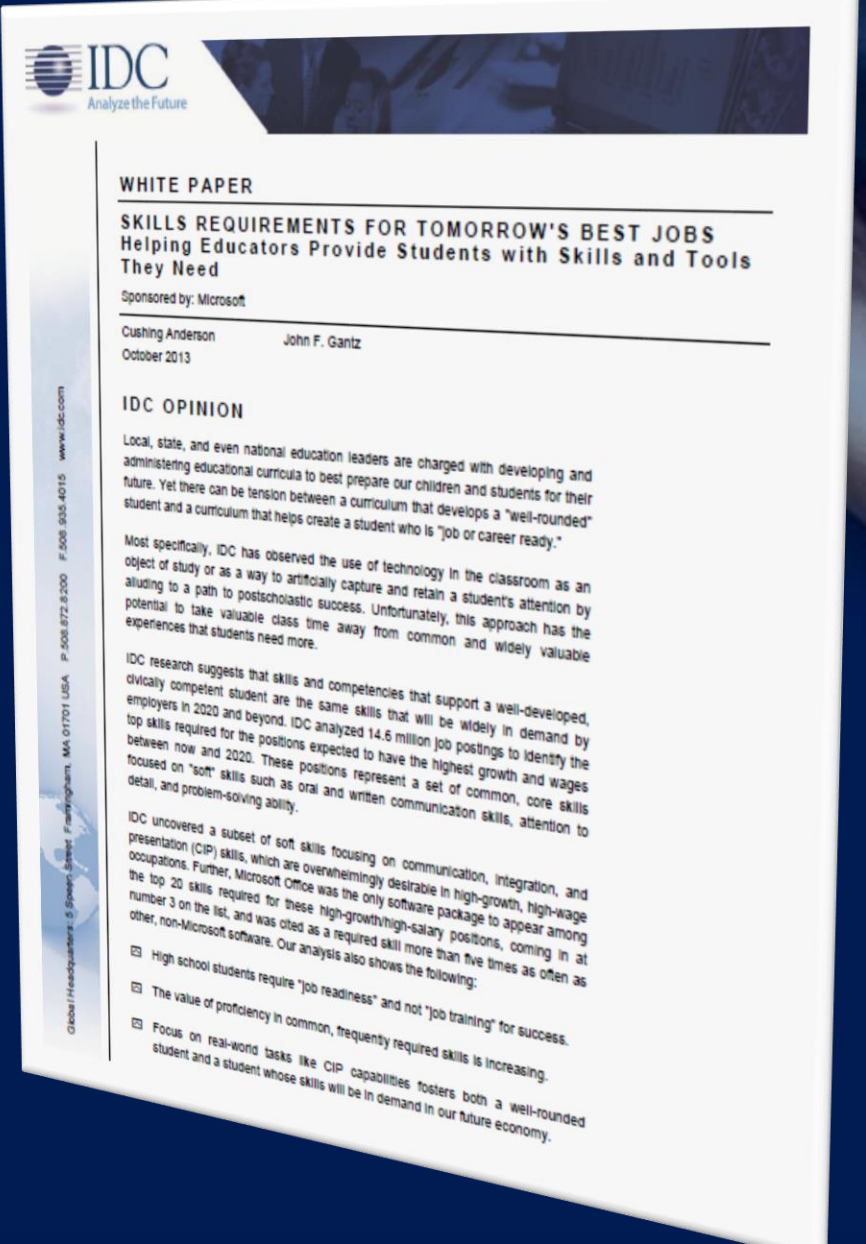


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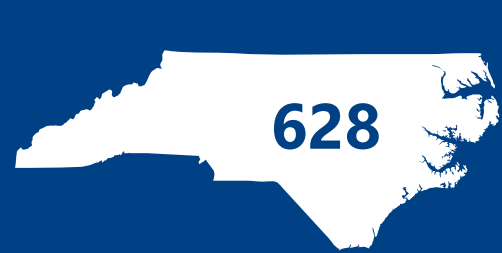
jobs



# IT Academy – U.S. State Adoptions

## North Carolina

Every high school across the state



## Hawaii

Libraries statewide – first in the world



## Arkansas

Every high school and workforce agencies



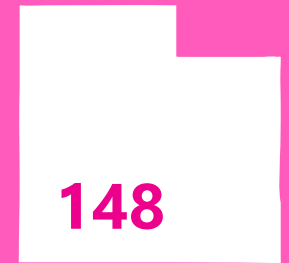
## Georgia

Every high school across the state



## Utah

High schools and Higher Education statewide



## Washington

Every high school -- statewide ITA and certifications



## Virginia

Every high school across the Commonwealth



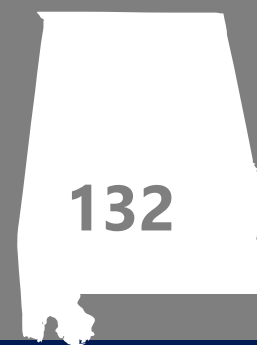
## Louisiana

High schools statewide



## Alabama

High schools in every local education agency in state



## Florida

High schools *and middle schools* statewide





# Microsoft's Value Proposition



## Immersive experience

- Involved **learning environment**
- **Integrated technology** in all aspects of the classroom



## Modern skills development

- Cross-student and cross-classroom **collaboration**
- Effective **communication**
- Global awareness
- Creative **problem-solving**



## Safety of children

- Proven **Device Security**
- Easy **Application Management**
- Secure **User authentication**



## Teacher development

- Free access to proven **teacher development programs**
- **Online resources** at PIL network.

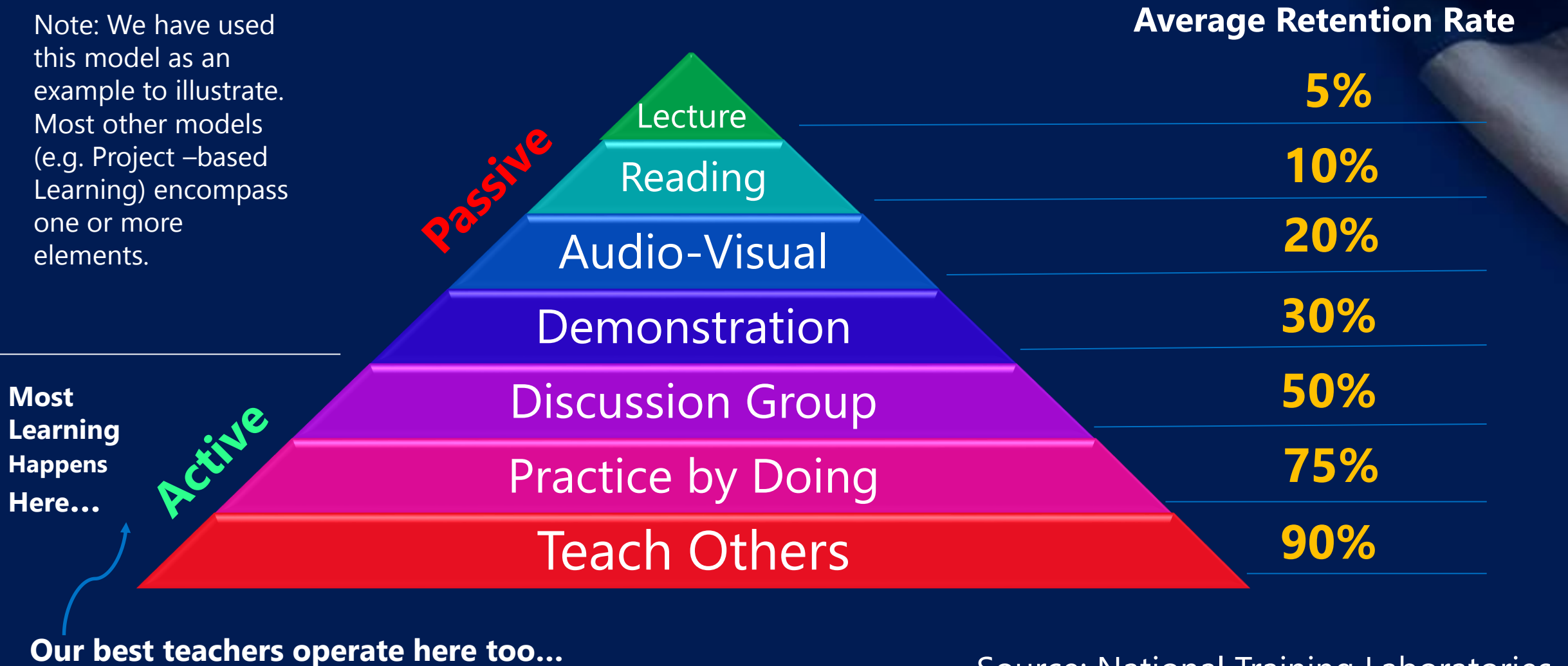


## Collaboration Tools

- Increased productivity with **Office 365**
- Facilitated collaboration to **SkyDrive**
- Enhanced communication through **Skype**

# The Learning Pyramid – only one of many...

Note: We have used this model as an example to illustrate. Most other models (e.g. Project –based Learning) encompass one or more elements.



Source: National Training Laboratories

# AROUND THE WORLD IN 80 SKYPEES

(A Distance Education and Active Learning Class)

## Class

- 4<sup>th</sup>/5<sup>th</sup> Graders in Atqasuk

## Goal

- 80 Skypes with Researchers or other Classes around the world
- Plan to cover 80 topics

## Format

- **Mystery Skype:** To guess the city of the class
- Culture
  - Foods
  - Customs
  - Celebrations, etc

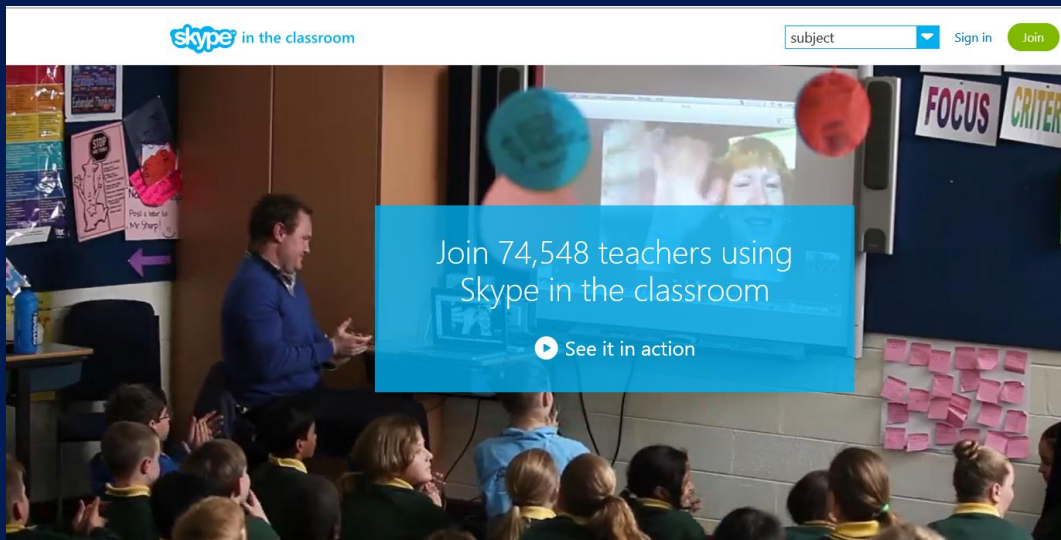
Skype uses Peer-to-Peer Networking – Great for low-bandwidth environments. And it is free.



Mrs. Megan Gunderson, Teacher  
Meade River School  
Atqasuk, Alaska









Teacher driven phenomenon. Over 3,000 lessons posted from teachers in 160 countries.


### Three ways to use Skype in the classroom



Collaborate with other classes, no matter where they are




Find guest speakers and invite them into your classroom



Take a virtual field trip anywhere in the world


Breaking down geographic and economic barriers to allow world class learning for all students.

### News from Skype in the classroom




How much do you love exploring oceans with Skype in the classroom?

[Read more >](#)



Skype lesson of the day: We want to meet a class from South Africa to learn more about Nelson Mandela


[Read more >](#)



Mrs Plummer's students love a game of Mystery Skype!

[Read more >](#)

Relevant and topical lessons posted daily, following trends and news of the world.



Skype lessons

Partners

Resources

Guest speakers


Help



Profiles

Collections

Mystery Skype

Categories

 English (International)

Easy search and navigation to hundreds of partners, guest speakers and collections available to all

# A Day in the Life...

**Unit:** African Savanna Ecosystem

**Goal:** To understand the causes of the catastrophic decline of the Lion population

**Guest:** Professor Craig Packer (Serengeti Lion Project)

**A Look at a Day in the Life of an Active Learning Classroom...**

# A Day in the Life...Lecture

- **Lesson Planning:** Ms. Sanchez plans her lesson with **Microsoft OneNote** and posts it onto her **Office365 Class Site**.
- **Lesson Plan Dissemination:** Students can go to the **Office365 Class Site** online any time to preview the next day's lesson and reading references.





# A Day in the Life...Reading

- Students are excited about meeting Prof Craig to hear about the new litter that were just born
- **Safe Search:** They use **Bing for Schools** to safely search for a background on the Lions
- **Interactive Textbooks:** They also use their **Kno Interactive Textbooks**



# A Day in the Life...Audio-Visual

- **Videos:** Students view videos about the Serengeti from the African Wildlife Foundation or go to Discovery Channel
- **Active Note Taking:** In preparation for their project, students make notes, copy links, voice record into **Microsoft OneNote**. They then save their notes into their secure, personal **Office365 Digital Locker**.
- **Interactive Apps:** They also downloaded an application about Africa from the **Windows App Store**.



# A Day in the Life...Demo/Discussion Group

- **Online Collaboration:** Students see a demo of feeding time with the Lions with Prof Craig Parker using **Skype for Classrooms**
  - They also get to ask Prof Craig Packer questions over **Skype**
  - They also can ask questions through Instant Messenger via **Microsoft Lync**
- **Peer Discussion Group:** They share drafts of their work with their peers using **Microsoft Yammer** (discussion forums)





# A Day in the Life...Practice by Doing

- **Writing the Proposal:** Students now use **Microsoft Word** to develop their proposals for Saving the Lions (Content, Biblio, etc)
- **Analyzing Data:** They do a cost / benefit analysis of designating and building out a Lion Sanctuary using **Microsoft Excel**
- **Proposal Submission:** They post their proposals onto the **Office365 Class Site**.
- **Peer Review:** They peer review each other; making comments into **Microsoft Word**.



# A Day in the Life...Teach Others

- **Student Presentation (“teach”)**: Students now “teach” their peers their findings by doing a presentation with **Microsoft PowerPoint**.
- **Online Presentation**: Students also present their findings to Prof Packer through **Skype**.



Recommend that every teacher given support to deliver  
1 “Active” Lesson per Week. Microsoft PIL can help  
support.

# One Final Note...

- **Teacher Professional Learning Communities:** Teachers use **Microsoft Yammer** to participate in online Professional Learning communities.
- **Informing Instruction:** Teachers use **Microsoft Analytics** to capture formative and summative evaluation to inform instruction

Addressing the Questions of Bandwidth  
and the Teacher shortage...

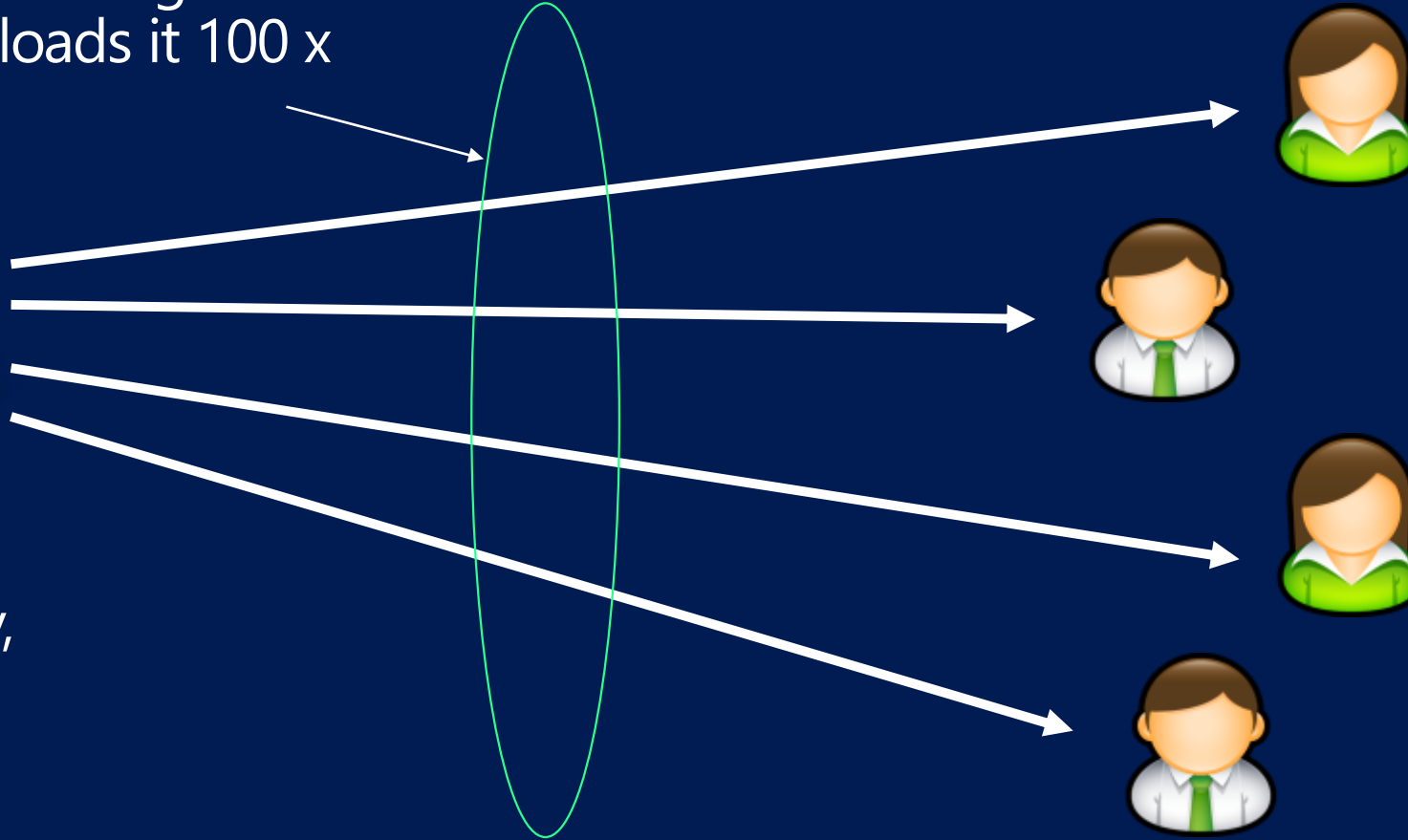


# Internet Bandwidth (Today)

Internet Today – 100 users  
downloading Content A  
downloads it 100 x

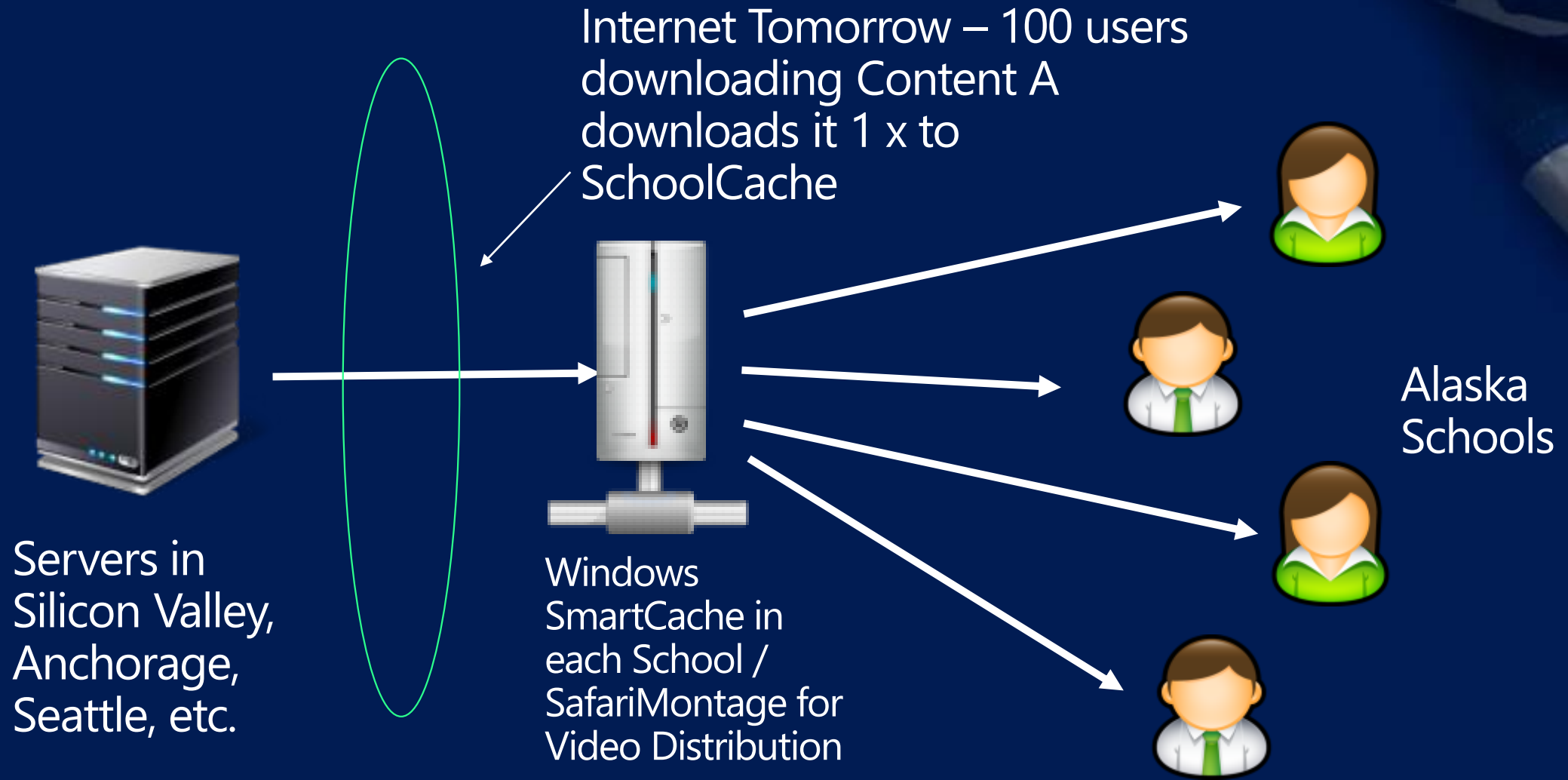


Servers in  
Silicon Valley,  
Anchorage,  
Seattle, etc.



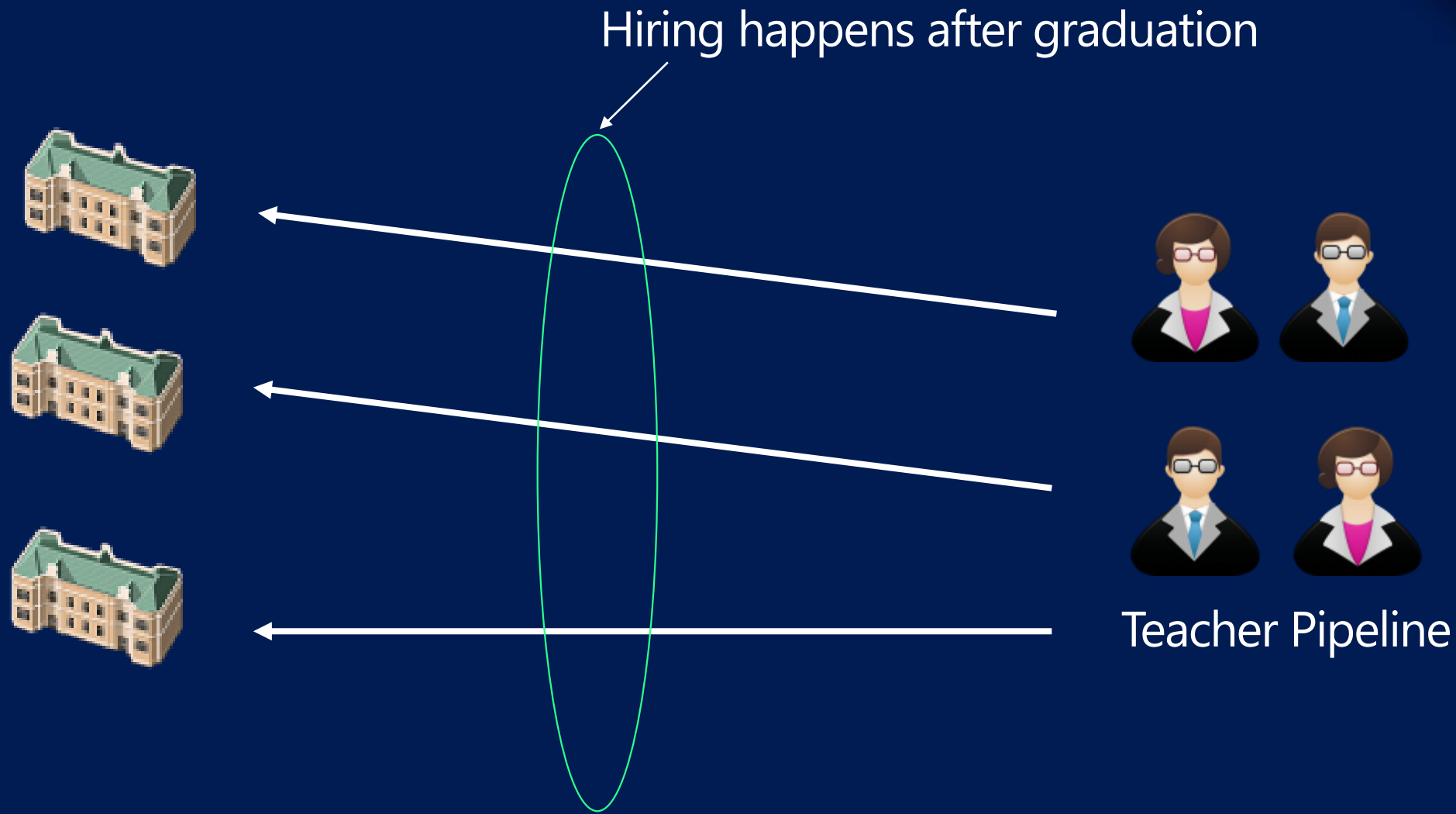
Alaska  
Schools

# Better Internet Bandwidth (Tomorrow)

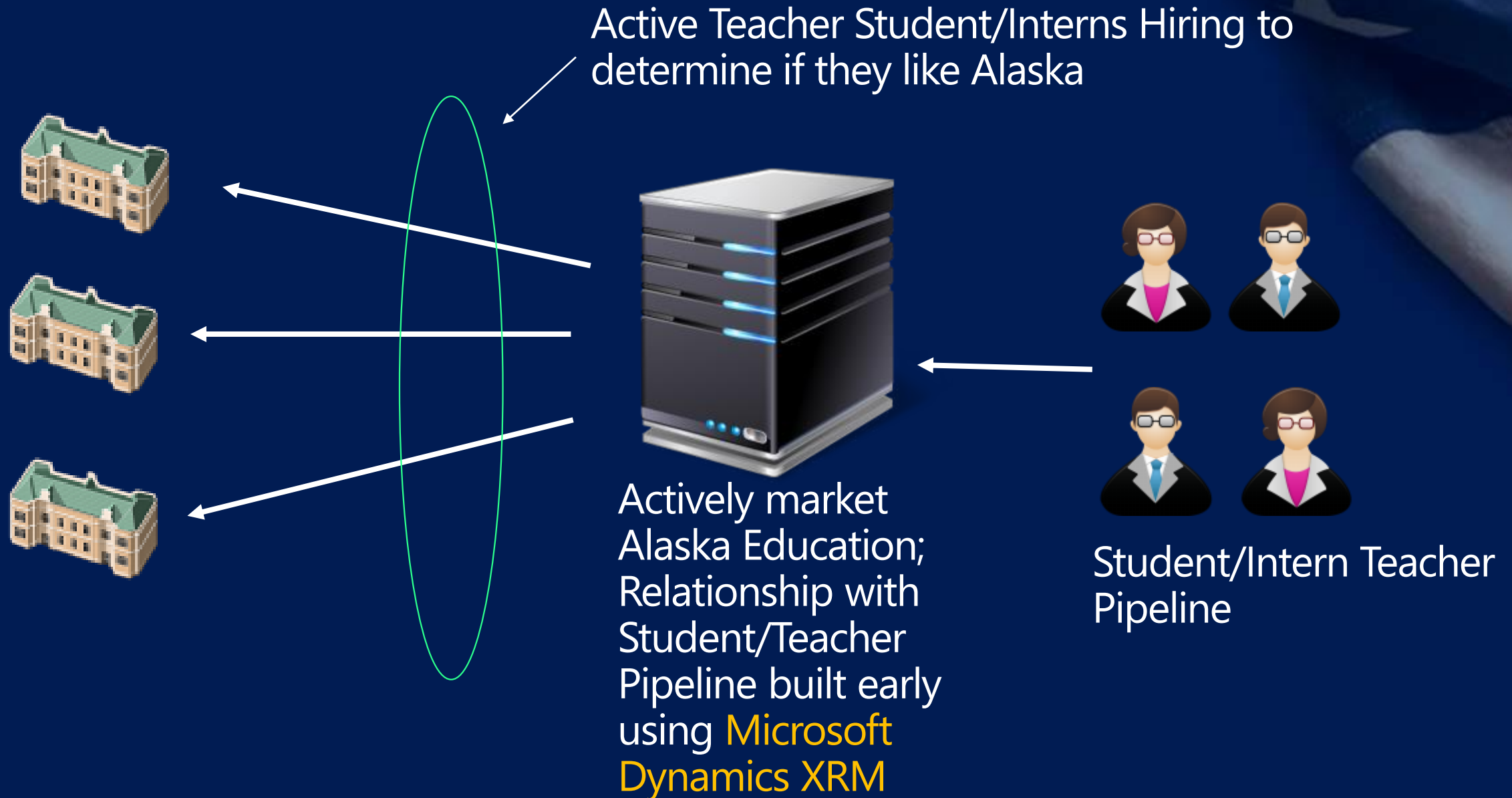


Recommend 1 SmartCache per school.

# Managing the Teacher Pipeline (Today)



# Managing the Teacher Pipeline (Tomorrow)





Recommend: Active Teacher  
Recruitment Campaign in Alaska

# Educational Resources from Microsoft

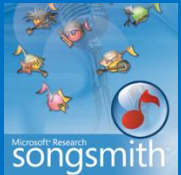
## Creativity



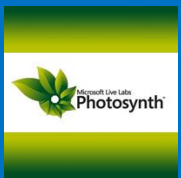
Movie Maker



World Wide Telescope



Song Smith



Photosynth

## Critical Thinking



Kodu



Touch Develop



Microsoft Math



Excel

## Collaboration



Office Web Apps



OneNote



Office 365

## Communication



Local Language Tools



Lync



Skype



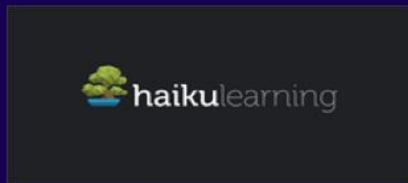
Bing Translator

# Elementary

## Start

atc 

### School Apps



### Science



### Math



### English

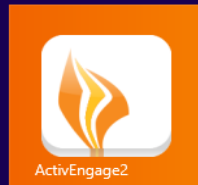
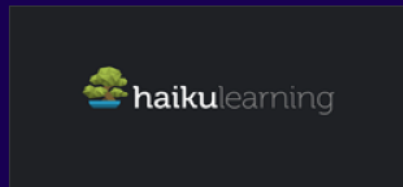


# Middle School

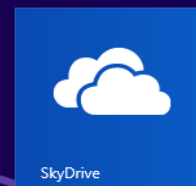
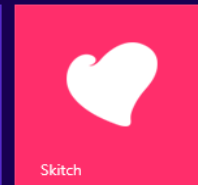
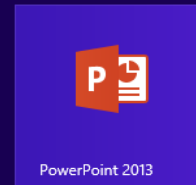
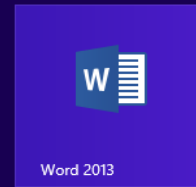
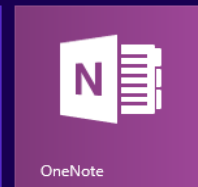
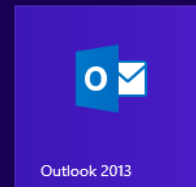
## Start

atc 

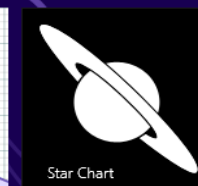
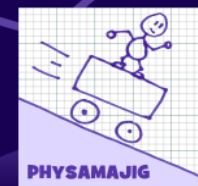
### School Apps



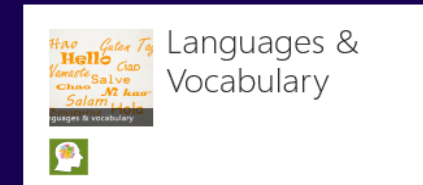
### Productivity



### Science



### English



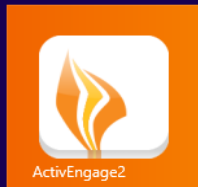


# Secondary

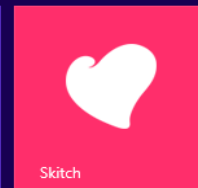
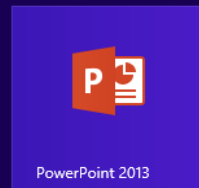
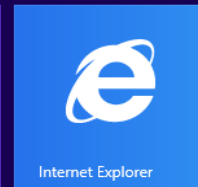
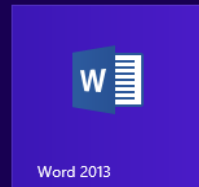
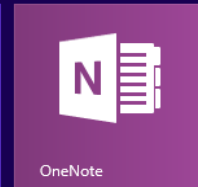
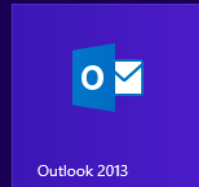
Start

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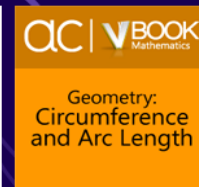
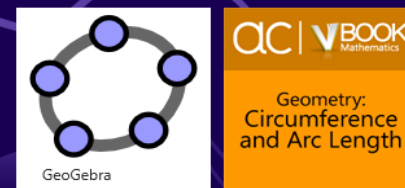
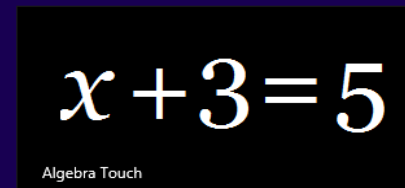
School Apps



Productivity



Math



English



# Demos

- Numeracy and Literacy for Elementary Students with Windows 8 Apps
- Distance Learning with Lync Video Conferencing
- Real-time Collaboration for Student Projects with Microsoft OneNote
- STEM Learning with microscopes and PowerPoint
- Sharing Class-created Content on a Office365 Class Site

# Professional Development

# Supporting the Whole System

Innovative Teaching and  
Learning Project



Innovative School Program





# Microsoft's Approach to Teacher Professional Learning

## Teacher Effectiveness

- **MIE Program**
- **Digital Literacy**
- **Teaching with Technology**
- **21<sup>st</sup> Century Learning Design**
- **Peer Coaching**


## Product Training

- **Windows in the Classroom**
- **Reimagine Teaching and Learning with Windows 8**
- **Get More out of Office 2013 with Office Web Apps and SkyDrive**
- **In the Cloud: File Storage, Collaboration, and Communication with Office 365**
- **The Ultimate Collaboration Tool: An Introduction to OneNote**

## Teacher Benefits

- ✓ **Badges**
- ✓ **Certificates**
- ✓ **Certification**
- ✓ **Opportunities for leadership through the MIE program**
- ✓ **Connecting with a larger community of educators through the PIL Network**

# PIL Network - [www.pil-network.com](http://www.pil-network.com)

[Select language ▼](#)[Join](#) | [Sign in](#) 


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## Monthly Virtual Educator Webcast Series


Presented by Microsoft & International Society for Technology in Education

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SPOTLIGHT




SPOTLIGHT

Get free tools for the classroom

[→](#)

### Tutorials



**Office 365 in the Classroom with Windows 8**  
Added 10/16/2013  
Language: English


### Popular Discussions

8 GENERAL

**Surface in Education**

### Stay connected

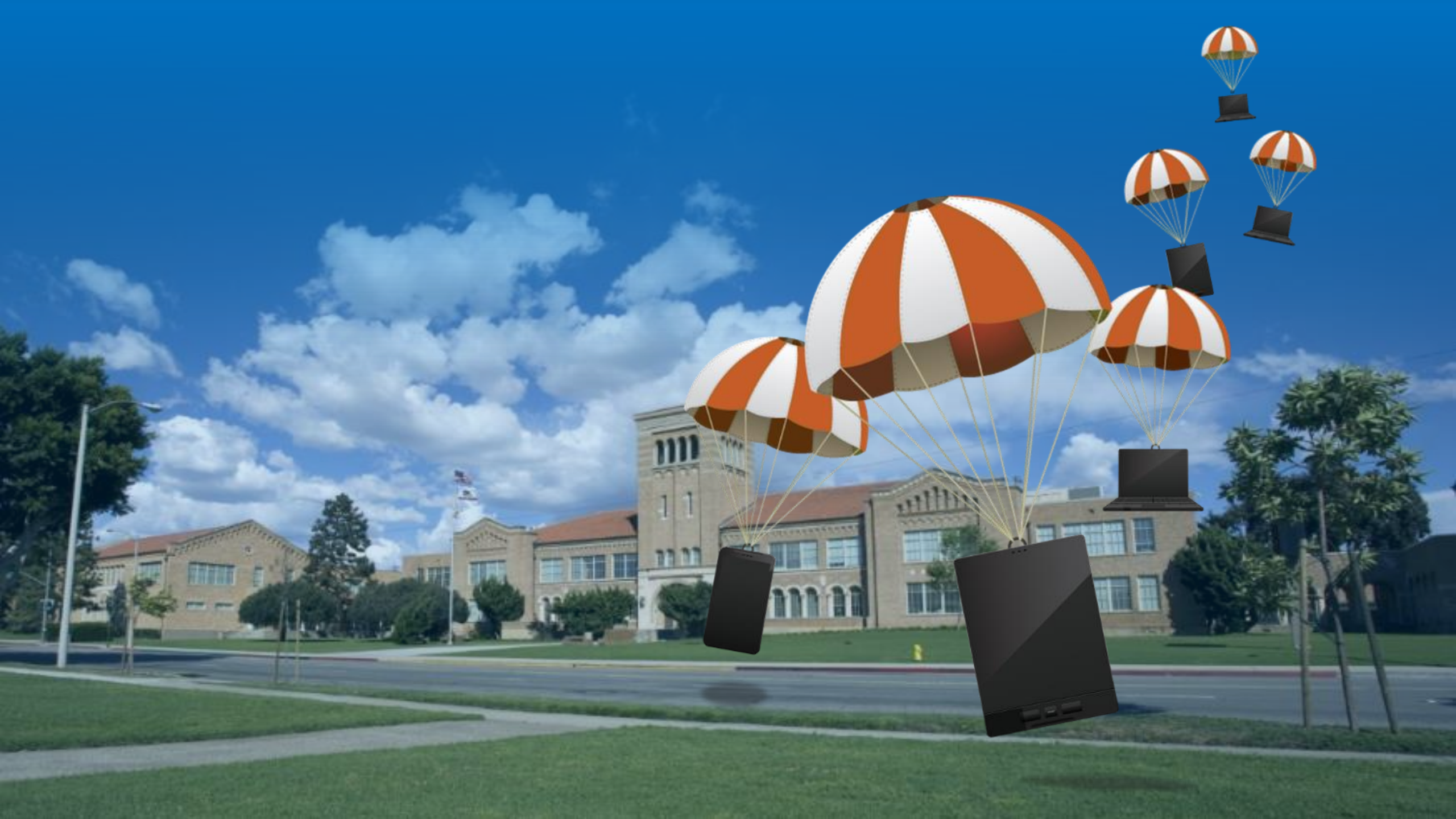
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"Education is the most powerful weapon which you can use to change the world" - Nelson Mandela

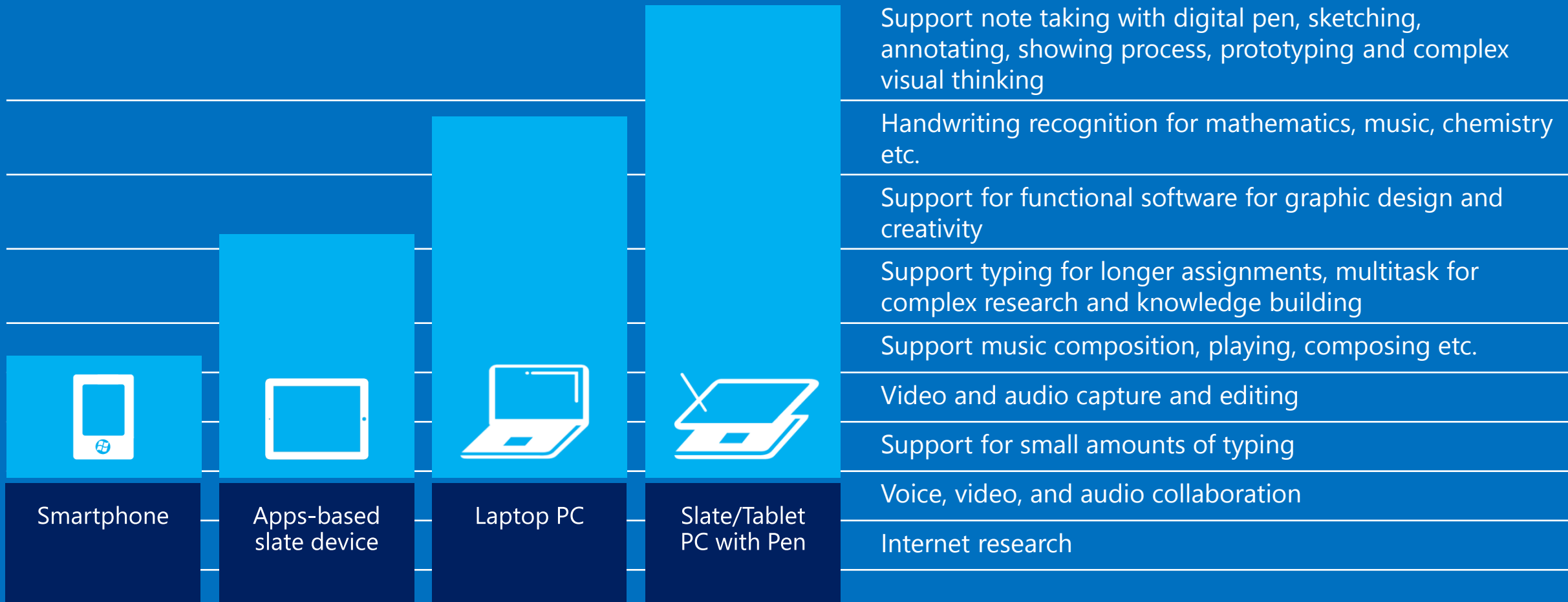
# Deployment Factors





# Computing Capability

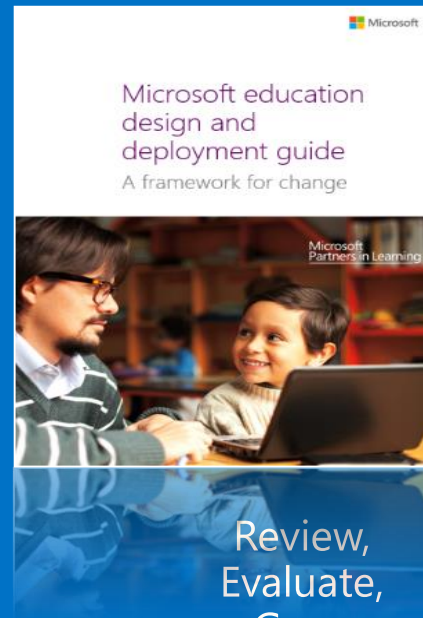
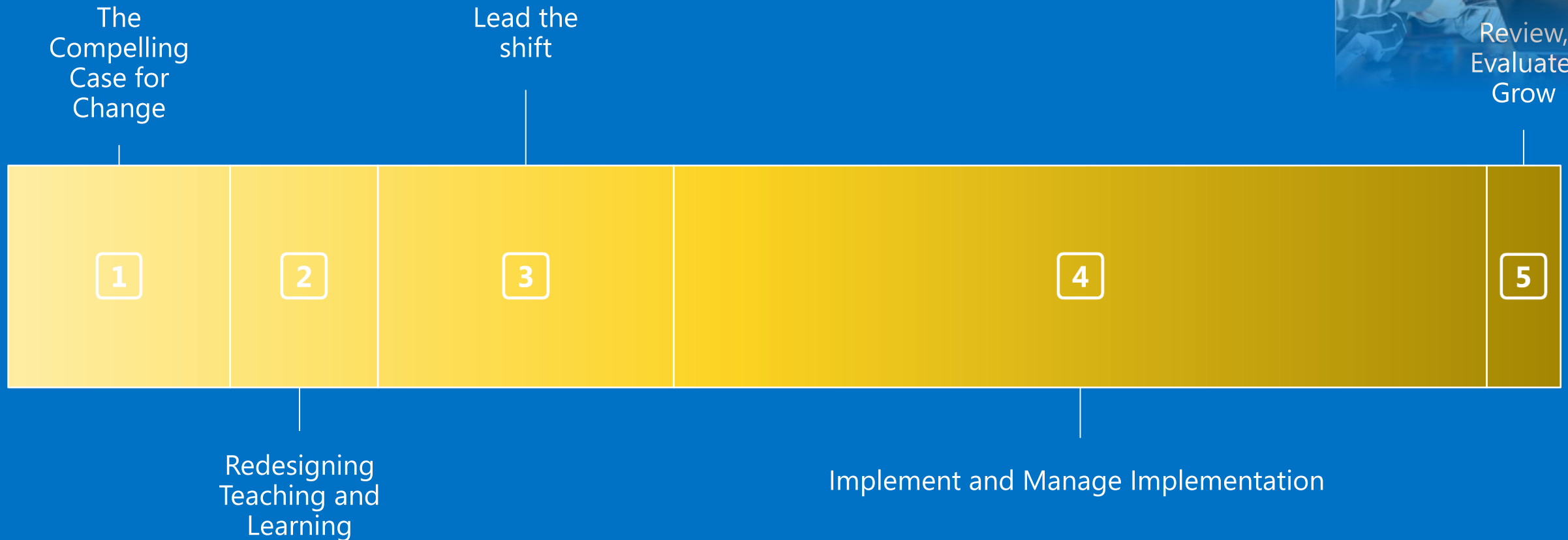
## Pedagogical potential for today's learning environment





# Microsoft Design and Deployment Guide

The Microsoft Education Design and Deployment Guide is for schools and school districts as they envision, plan, implement, evaluate and expand 1:1 learning in their schools. There are five phases to this process:



# Cornerstones of Professional Development

## For personal and relevant learning

Active learning  
and 21<sup>st</sup>  
Century Skills

Job-embedded,  
peer-to-peer  
local and global  
communities



Clear goals and  
champions to  
lead sustained  
change

Culture of  
innovation and  
inquiry

Thank You