THE FUTURE OF LEARNING
EXPECT MORE, DO MORE
BE MORE

ANTHONY SALCITO

VICE PRESIDENT, MICROSOFT EDUCATION
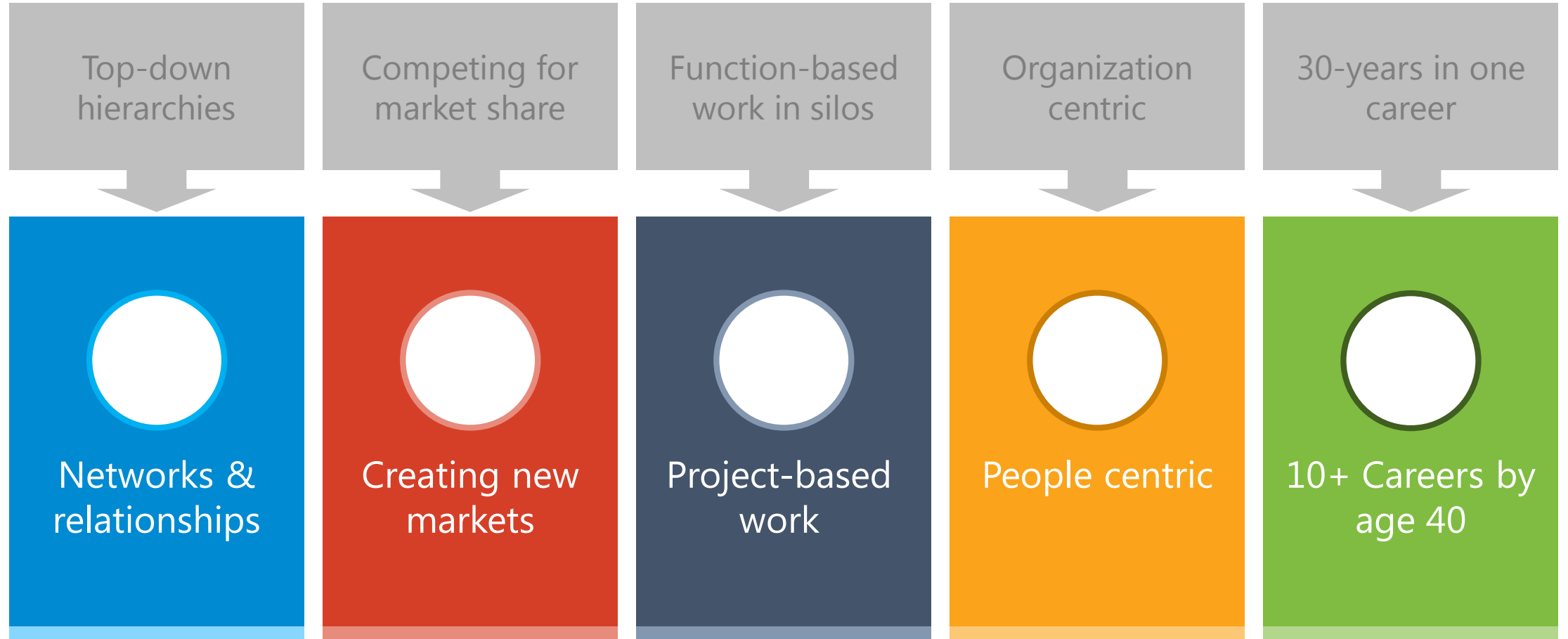
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EMPOWER EVERY STUDENT
ON THE PLANET TO
ACHIEVE MORE

THE WORLD OF WORK HAS CHANGED

Top-down hierarchies	Competing for market share	Function-based work in silos	Organization centric	30-years in one career
Networks & relationships	Creating new markets	Project-based work	People centric	10+ Careers by age 40

5C SKILLS | Needed to be future-ready

COMMUNICATION

COLLABORATION

CRITICAL THINKING

CREATIVITY

COMPUTATIONAL THINKING

14 MILLION

Estimated new jobs worldwide by 2015 due to spending on public and private IT cloud services.

IDC | Cloud Computing's Role in Job Creation, March 2012

CODE CAMPS
MAKER MOVEMENT
INCREASING IN GEOS
GAMIFICATION
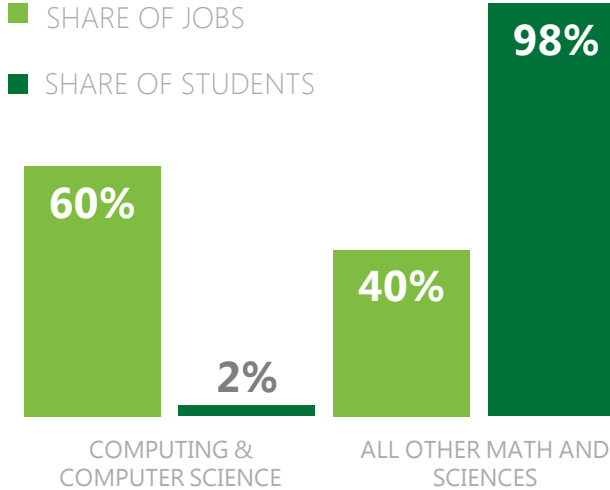AN INCREASING PRIORITY
IN STEM AGENDAS

GENERATION Z

26% of population under age 18

Swing +69 — 10.5
Gen Z <18 — 25.9
Baby Boomers 50-68 — 23.6
Gen X 38-49 — 15.4
Millennials 19-37 — 24.5
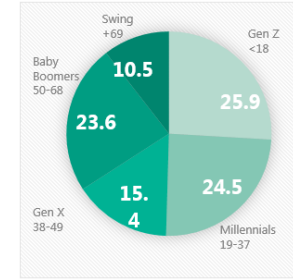
THERE IS A WIDENING
SKILLS GAP
AS FEWER COLLEGE STUDENTS GRADUATE WITH A DEGREE IN
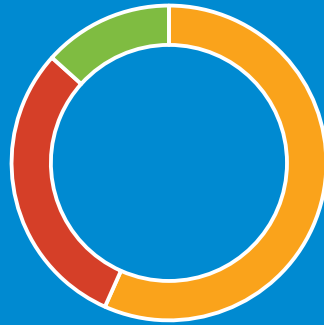# COMPUTER SCIENCE

■ SHARE OF JOBS
■ SHARE OF STUDENTS

98%
60%
2%
40%

COMPUTING & COMPUTER SCIENCE

ALL OTHER MATH AND SCIENCES

BY 2022 THERE WILL BE
6.2M
JOB OPENINGS
IN CLOUD-BASED TECHNOLOGIES

51% COMPUTING
27% ENGINEERING
18% OTHERS

COMPUTING A-LEVEL
90% MALE
10% FEMALE

STEM DEGREES AS A PERCENTAGE OF ALL 2011

49%	40%	37%	26%	25%	21%	12%
Singapore	China	S Korea	Germany	India	UK	US
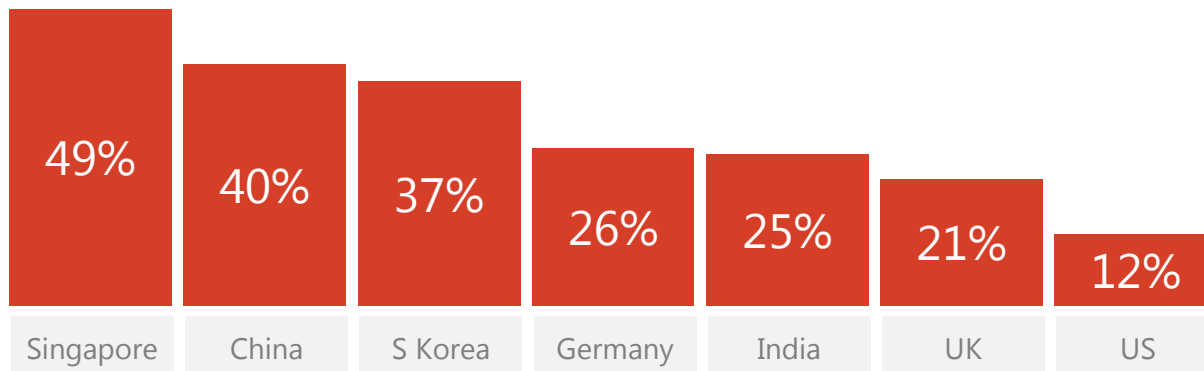
THE GLOBAL STEM RACE
COMPUTER
SCIENCE

COMPUTER SCIENCE GRADUATES 2015

MINECRAFT

Make more. Learn more.

もっと作って、もっと学ぼう

Blocks

Workspace: 2 / 3 blocks

↻ Start Over   </> Show Code

move forward

turn left ↺ ▼

turn right ↻ ▼

when run
move forward

Hit "Run" to try your program

▶ Run

Add a second "move forward" command to reach the sheep.

Need help? See these videos and hints

LEARN THE BASICS OF
COMPUTER
SCIENCE

Minecraft - Introduction

Video. Minecraft - Introduction   No video? Show notes.   ⬇

Minecraft - Hour of Code: INTRO

LEARN THE BASICS OF
COMPUTER
SCIENCE

🕐 ⤴

◀) 0:37 / 2:50   CC ⚙ ⛶

HAVE WE SEEN
HOLISTIC
TRANSFORMATION

?

WHEN APPLIED THOUGHTFULLY, TECHNOLOGY EMPOWERS US TO MAKE THE MOST OF EVERY

LEARNING OPPORTUNITY

WHEN APPLIED THOUGHTFULLY, TECHNOLOGY EMPOWERS US TO MAKE THE MOST OF EVERY
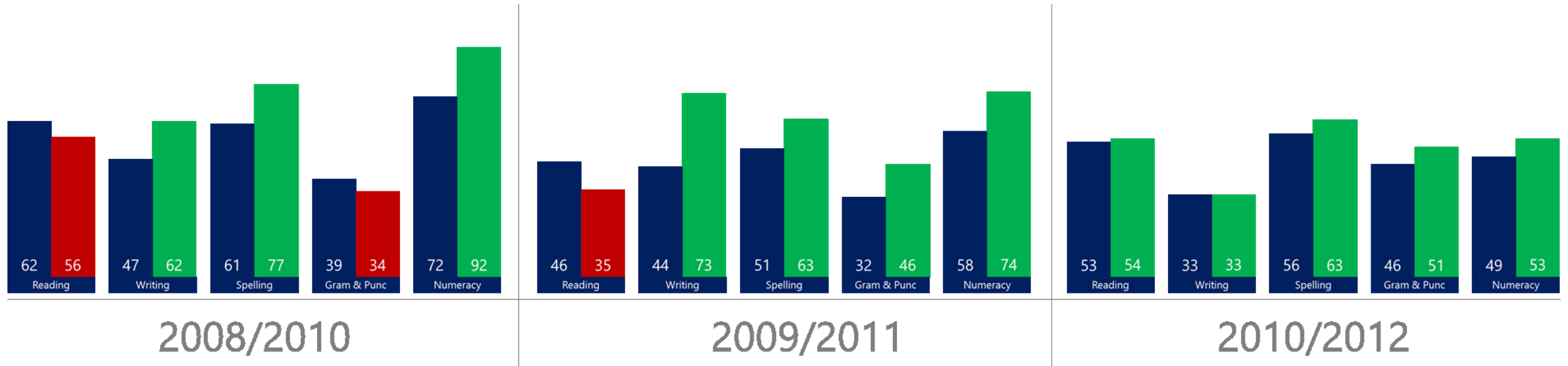
LEARNING OPPORTUNITY

1:1 LEARNING SINCE 2007

LEARNING OUTCOMES GROWTH YEARS 5-7

National Assessment Plan Scores*

2008/2010

Reading	Writing	Spelling	Gram & Punc	Numeracy
62 / 56	47 / 62	61 / 77	39 / 34	72 / 92

2009/2011

Reading	Writing	Spelling	Gram & Punc	Numeracy
46 / 35	44 / 73	51 / 63	32 / 46	58 / 74

2010/2012

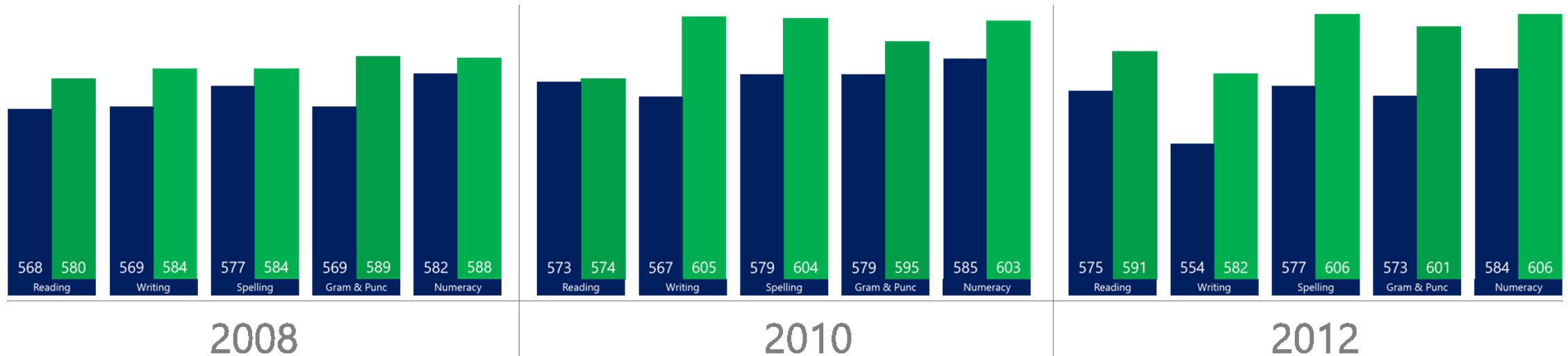| Reading	Writing	Spelling	Gram & Punc	Numeracy
53 / 54	33 / 33	56 / 63	46 / 51	49 / 53

■ National Growth
■ Varsity Below National
■ Varsity Exceed National

*Queensland State students are measured one year earlier than national standard

NATIONAL ASSESSMENT SCORES YEAR 9*

Varsity College versus national averages

2008

	Reading	Writing	Spelling	Gram & Punc	Numeracy
National	568	569	577	569	582
Varsity	580	584	584	589	588

2010

	Reading	Writing	Spelling	Gram & Punc	Numeracy
National	573	567	579	579	585
Varsity	574	605	604	595	603

2012

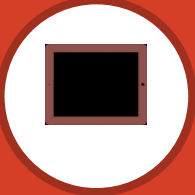|	Reading	Writing	Spelling	Gram & Punc	Numeracy
National	575	554	577	573	584
Varsity	591	582	606	601	606

■ National Average Score
■ Varsity Score

*Queensland State students are measured one year earlier than national standard

THE RIGHT DEVICE FOR EVERY CHILD

Delivering the necessary computing capability for the learning journey
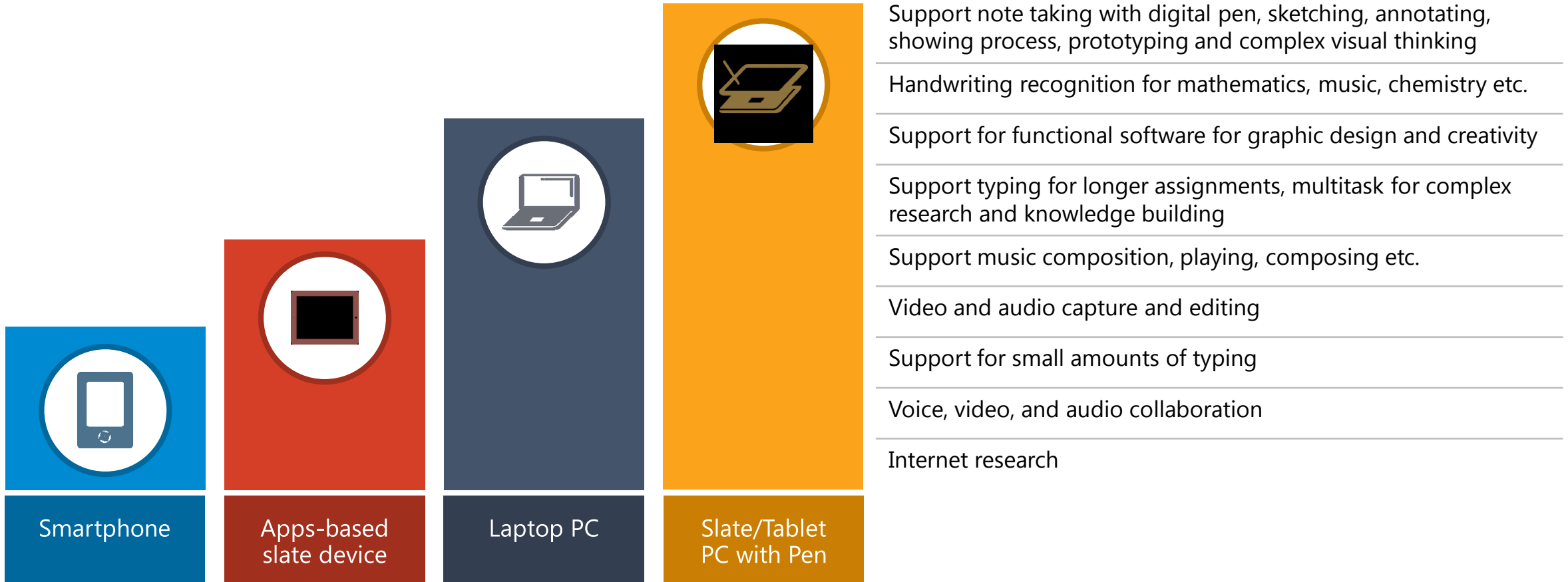
P1-3

Apps-based slate device

P4-6

Laptop PC

P7-9

Slate/Tablet PC with Pen

COMPUTING CAPABILITY

Pedagogical potential of hardware for today's learning environment

Support note taking with digital pen, sketching, annotating, showing process, prototyping and complex visual thinking

Handwriting recognition for mathematics, music, chemistry etc.

Support for functional software for graphic design and creativity

Support typing for longer assignments, multitask for complex research and knowledge building

Support music composition, playing, composing etc.

Video and audio capture and editing

Support for small amounts of typing

Voice, video, and audio collaboration

Internet research

Smartphone

Apps-based slate device

Laptop PC

Slate/Tablet PC with Pen

TODAY'S STUDENTS AND EDUCATORS DESERVE AND DEMAND THE VERY BEST

MODERN LEARNING TOOLS
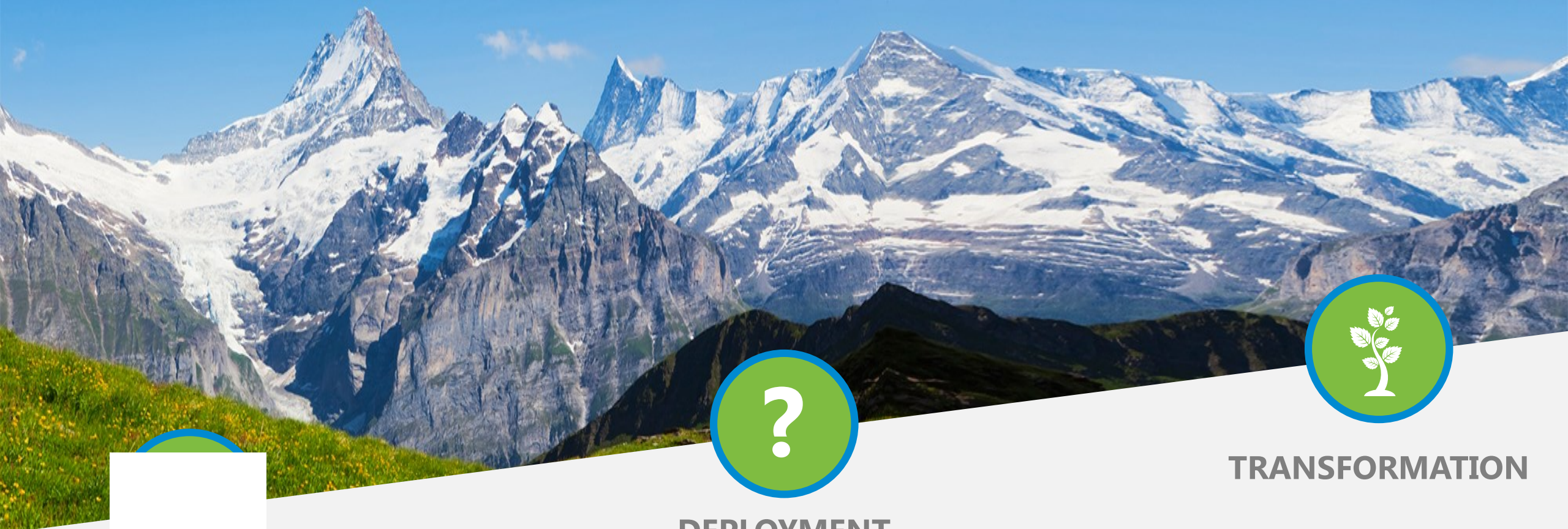
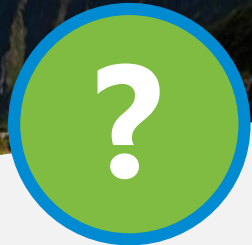**PRODUCTIVE**   **INTELLIGENT**   **PERSONAL**

"

SUCCESSFUL TRANSFORMATION

The key elements for success are the teachers, school leaders, and other decision makers who have the vision, and the ability, to make the connection between students, computers and learning.

-OECD 2015

**ACCESS
ASPIRATION**

?

**DEPLOYMENT
DILEMMAS**

TRANSFORMATION

THE JOURNEY | To education transformation

WHERE IS YOUR MOUNTAIN TOP

LESSONS LEARNED

1 Start with leaders	**2** Leverage process to drive plan	**3** Inside/out	**4** Set expectations for all	**5** Innovate first automate after
6 Use devices thoughtfully	**7** Rethink class Reinvent school	**8** Parents play a key part	**9** Use data to drive key decisions	**10** Celebrate teachers

SHOWCASE SCHOOLS

MIDDLE EAST & AFRICA

Mansoura College International School

Özel dünya koleji

Vizyon Koleji

Saint Fatima International School

Şehit Polis Volkan Sabaz İlkokulu

Port Said International Schools

Bahçeşehir Koleji

Dar El Tarbiah School

The Westminster School, Dubai

Lycée français du Caire

Al Amal school for the deaf

Riad Al Andalous

Gems Wellington Academy Silicon Oasis

L'école internationale les Alizés

Princess Haya bint Alhussain School

Grace Schools

AL Ghob School for basic education Cycle 2

Children's International School

BetaSefer

Mashrek International School

Vivian Fowler Memorial College for girls

Shimoni school

Antonine international school

Groupe Scolaire La Pointe des Almadies

Weitzmann School Beit Yeshua

SARM State Secondary School

Westlands primary school

Mary mount secondary school

Maralal Primary School

St Stithians College

St Mary's Diocesan School for Girls, Pretoria