

What does being digital in learning mean?

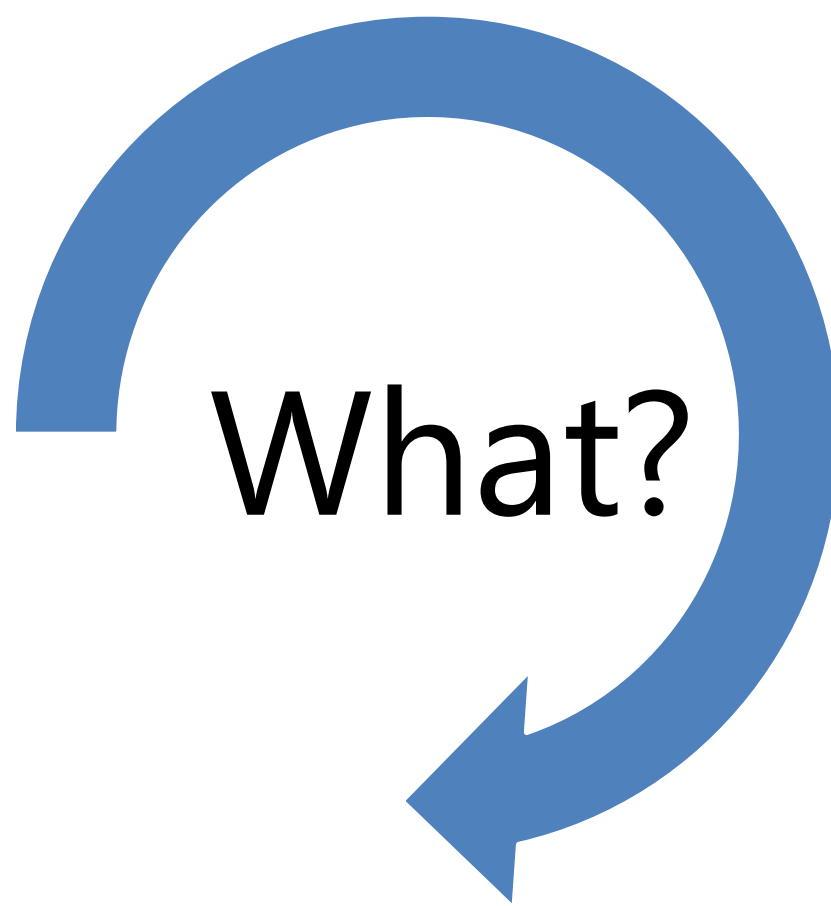
Professor Deirdre Butler
Institute of Education, Dublin City University



***"Education is the most powerful weapon
which you can use to change the world."***

Nelson Mandela









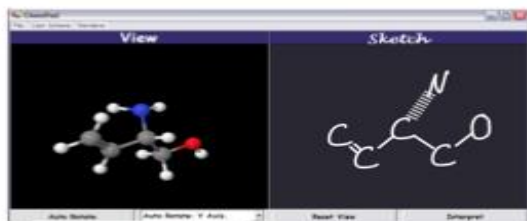
twitter



Tagxedo



WORDPRESS

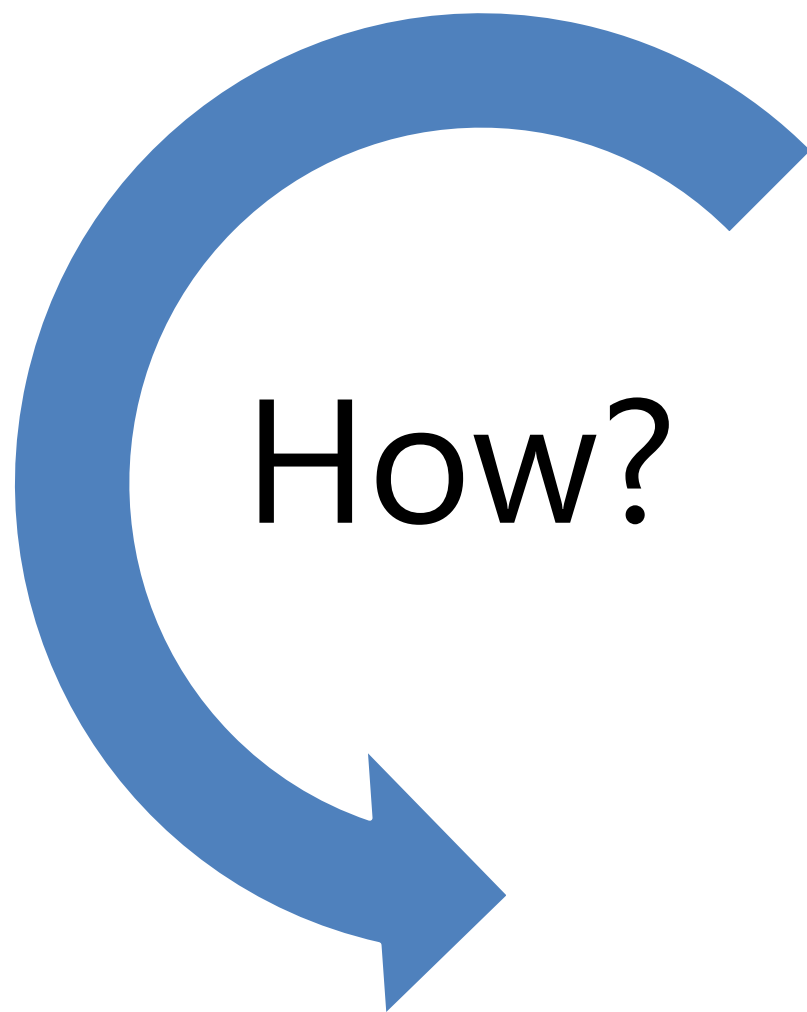


GAMMINDER

the education arcade

Wordle™

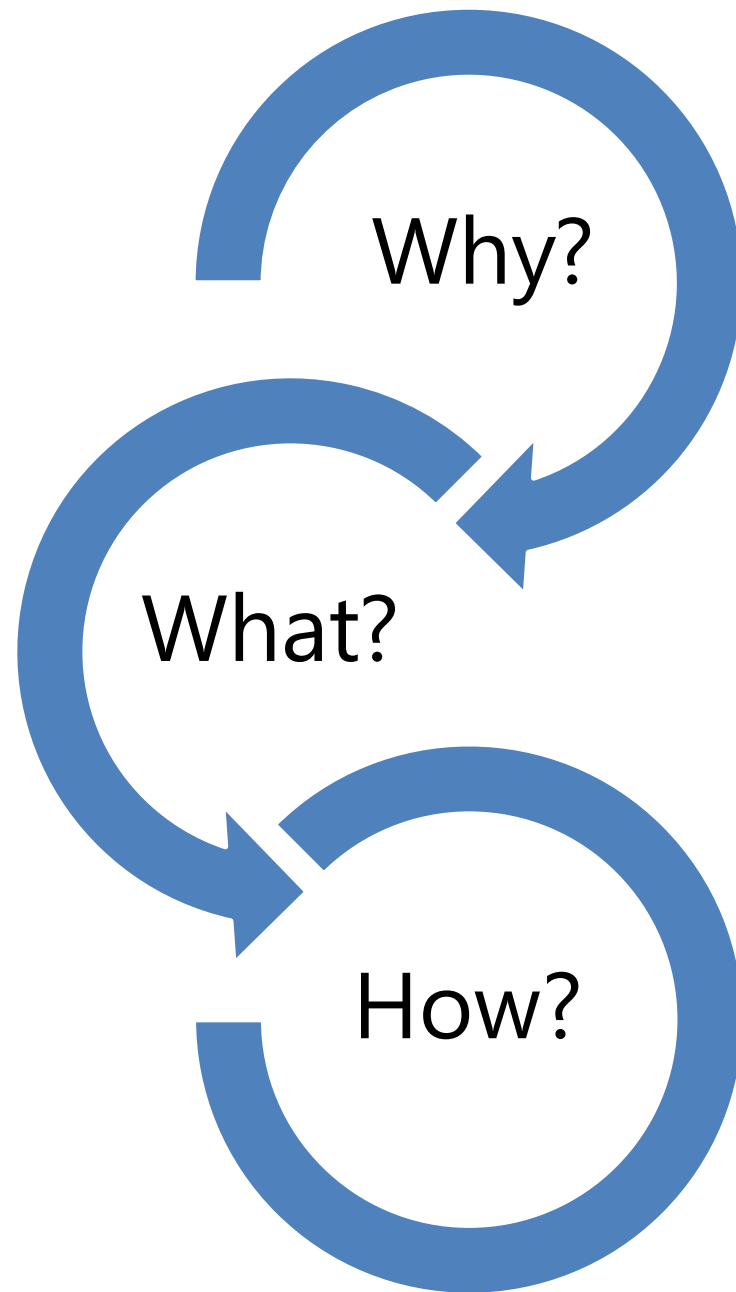








Why?



A young child with blonde hair is shown in profile, looking out of a window. The child's face is partially visible on the left side of the frame. The background is a soft, out-of-focus view of a landscape with trees and a bright light source, possibly the sun, creating a warm, golden glow. The child is wearing a grey sweater.

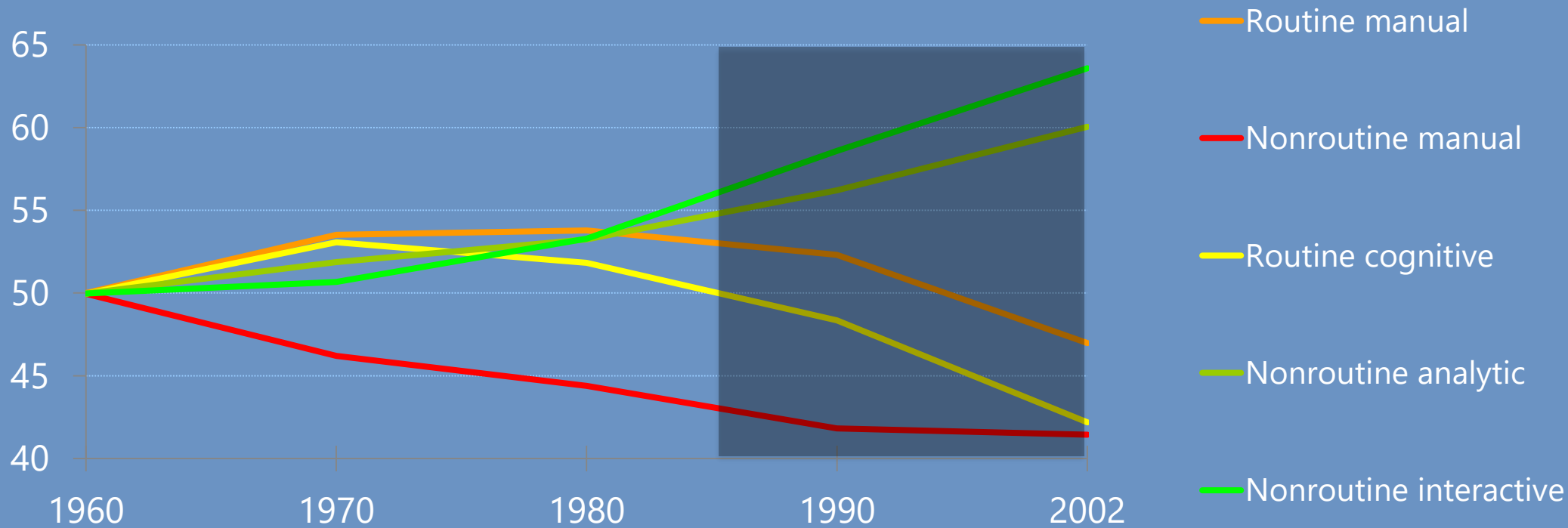
“

Why should I go to school?

And how will it support my
learning? ”

How the demand for skills has changed

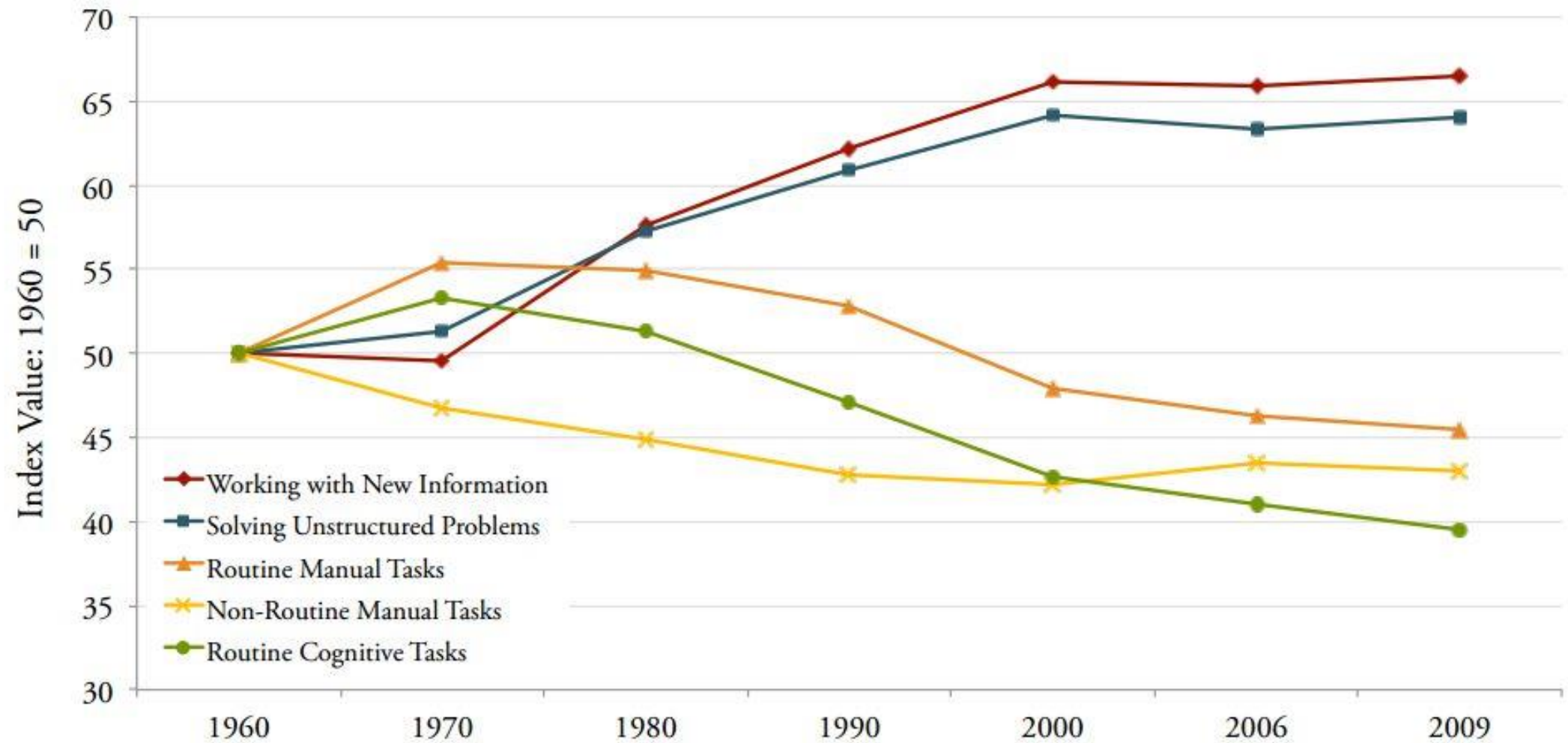
Economy-wide measures of routine and non-routine task input (US)



(Levy and Murnane)

Critical Thinking
Complex Communication

Figure 3: Index of Changing Work Tasks in the U.S. Economy 1960-2009²¹



What does being digital in learning mean?



A close-up, profile view of a young child with light brown hair, looking out of a window. The child's face is partially in shadow, and the background is a soft, out-of-focus view of the outdoors. The text is overlaid on the right side of the image.

Why should I go to school?

Do schools need to change?
If so why and how?

Values / Beliefs



style

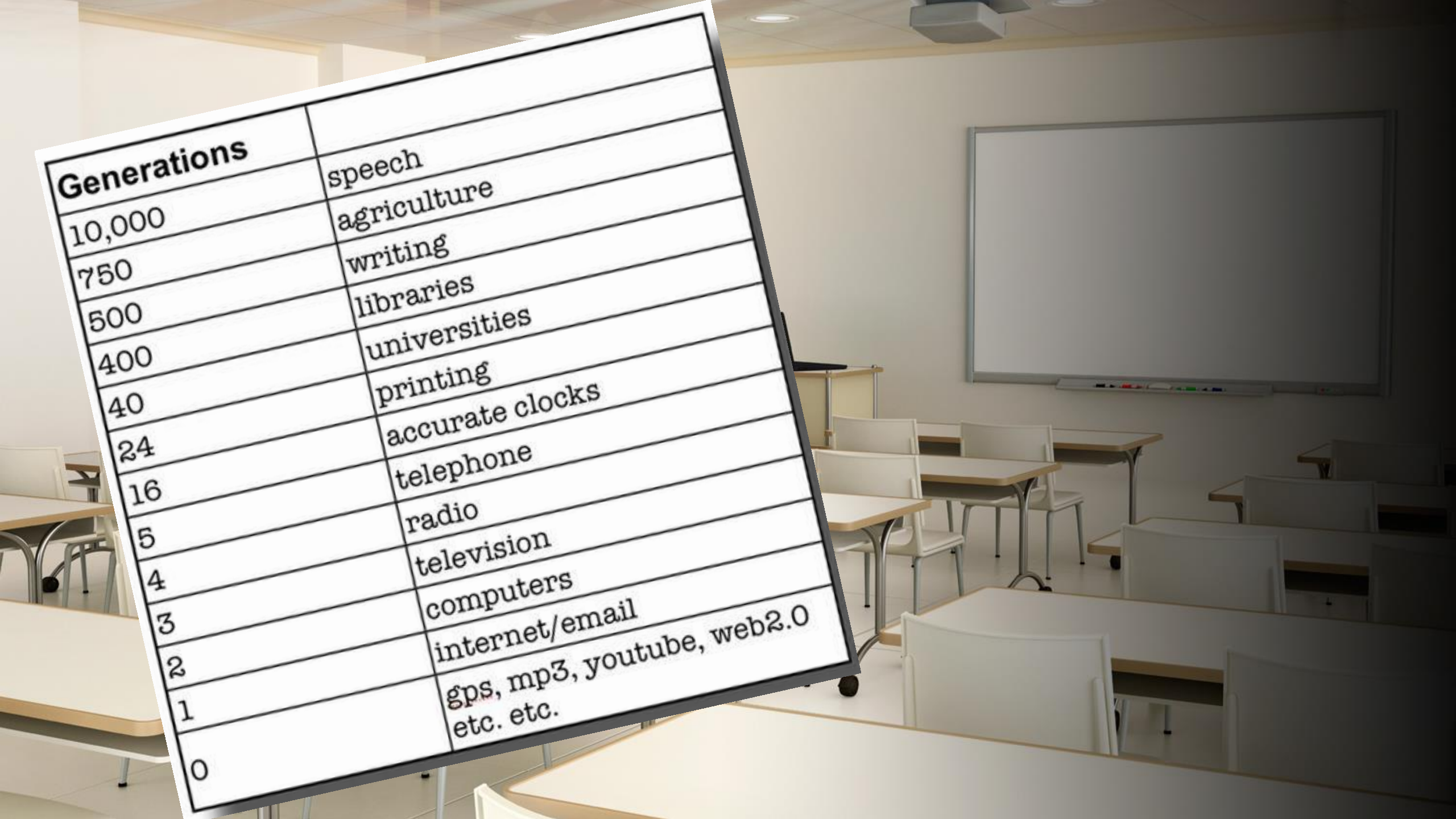
soldier

survivor

Learning in a Digital Era: Incremental Progress Or Fundamental Change in Thinking and Practice?



Generations	
10,000	speech
750	agriculture
500	writing
400	libraries
40	universities
24	printing
16	accurate clocks
5	telephone
4	radio
3	television
2	computers
1	internet/email
0	gps, mp3, youtube, web2.0 etc. etc.

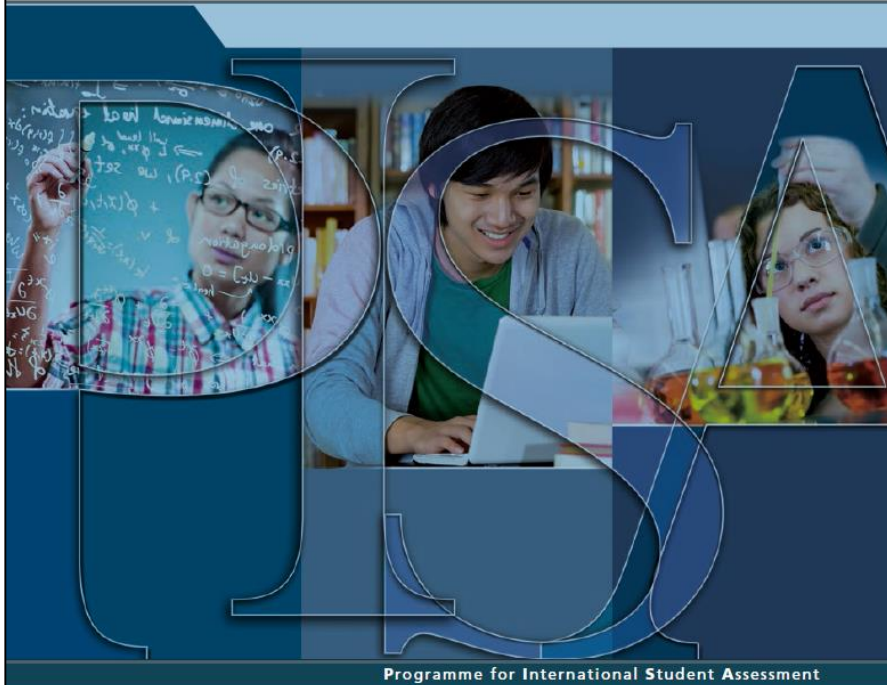






Students, Computers and Learning

MAKING THE CONNECTION



Programme for International Student Assessment



Students unable to navigate through a complex digital landscape will no longer be able to participate fully in the economic, cultural and social life around them.

- ...we have not yet become good enough at the kind of pedagogies that make the most of technology....
- Technology can amplify great teaching but great technology cannot replace poor teaching.
- ...technology can support new pedagogies that focus on learners as active participants with tools for inquiry based pedagogies and collaborative workspaces.
- ...it is vital that teachers become active agents for change, not just implementing technological innovations but designing them too
- To deliver on the promises that technology holds, countries will need a convincing strategy to build teachers' capacity.

Teacher Skills Forum 2015

'If there was a time when we are most in need of an educational renaissance to empower our youth, the time is now.'

Her Majesty Queen Rania Al Abdullah



ملتقى مهارات المعلمين
Teacher Skills Forum

ملتقى مهارات المعلمين
Teacher Skills Forum

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Teacher S

From What to How

Bridging the gap between
theory and practice

Dec. 5,6, Dead Sea
King Hussein bin Talal
Convention Centre

Dec. 4
Pre-conference
Institutes

[REGISTER NOW!](#)



Pivotal and sacred role of teachers

... entrusted with the minds of our children.

What a responsibility and what an influence you have on our future....

.....our future depends on you..



2030





Systems need to
change

how?

Systems need to **change**



Student-centered learning is the goal

Changing teaching practices is the key

School leadership is required

System change is a necessity

how?



My own philosophy is revolutionary rather than reformist in its concept of change. But the revolution I envision is of ideas, not of technology. It consists of new understandings of specific subject domains and in new understandings of the process of learning itself. It consists of a new and much more ambitious setting of the sights of educational aspiration

Papert, S. "Mindstorms: Children, Computers and Powerful Ideas" (1980).

Knowledge Society Skills



Problem solving and innovation



Global awareness



Knowledge construction



Skilled communication

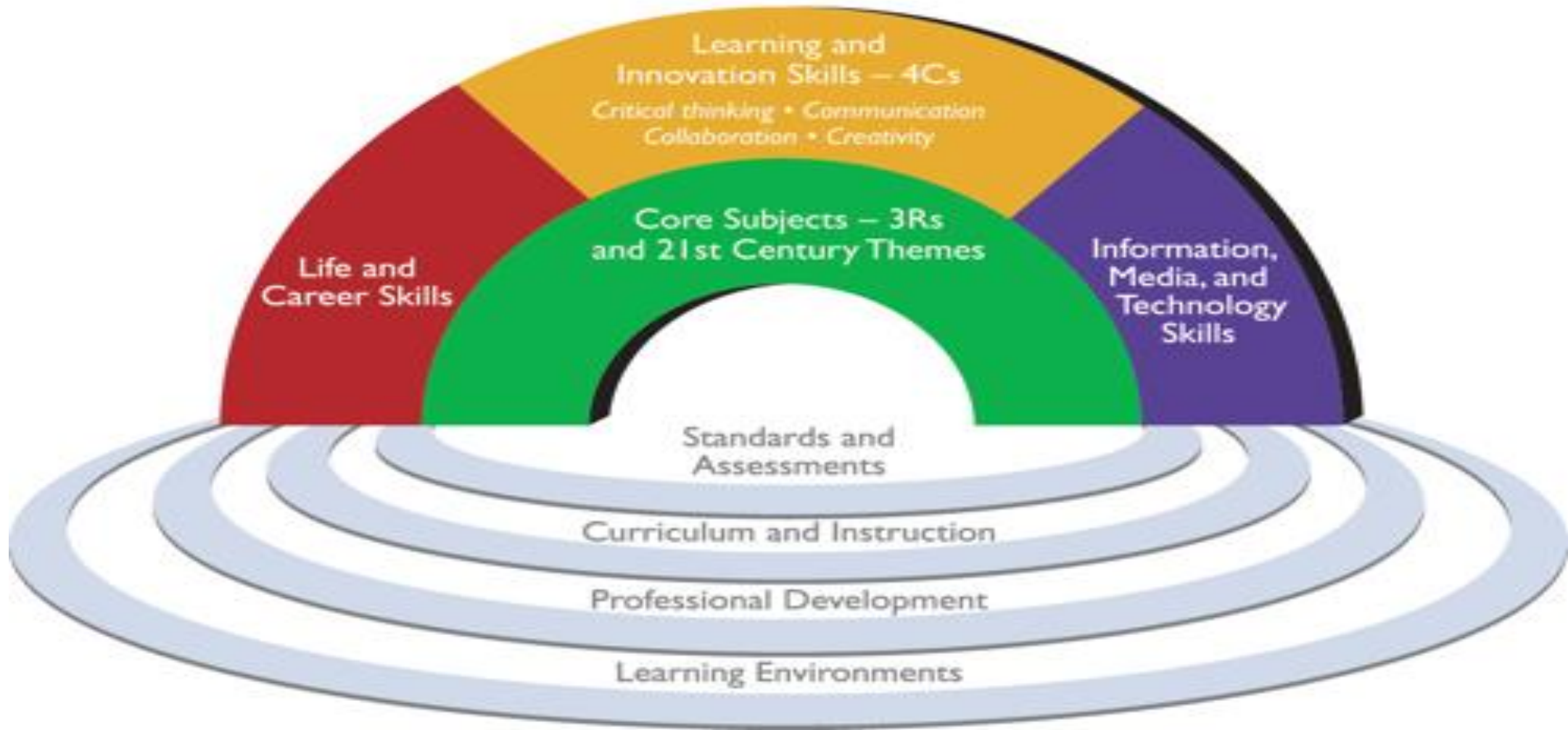


Self-regulation and assessment



Collaboration

21st Century Student Outcomes and Support Systems

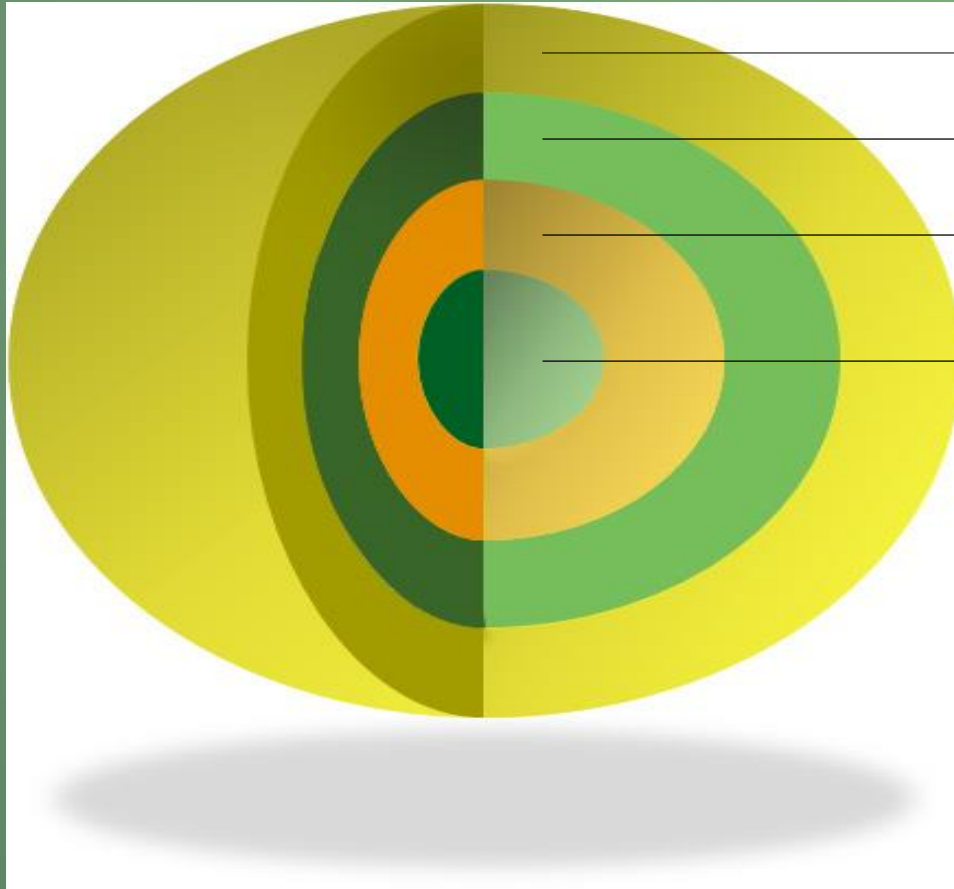


Partnership for 21st Century Skills

<http://www.p21.org>

<http://www.p21.org/route21/>

Assessment and Teaching of 21st Century Skills



Ways of thinking

- Creativity and innovation
- Critical thinking, problem solving, decision making

Ways of working

- Communication
- Collaboration (teamwork)

Tools for working

- Information literacy
- ICT literacy

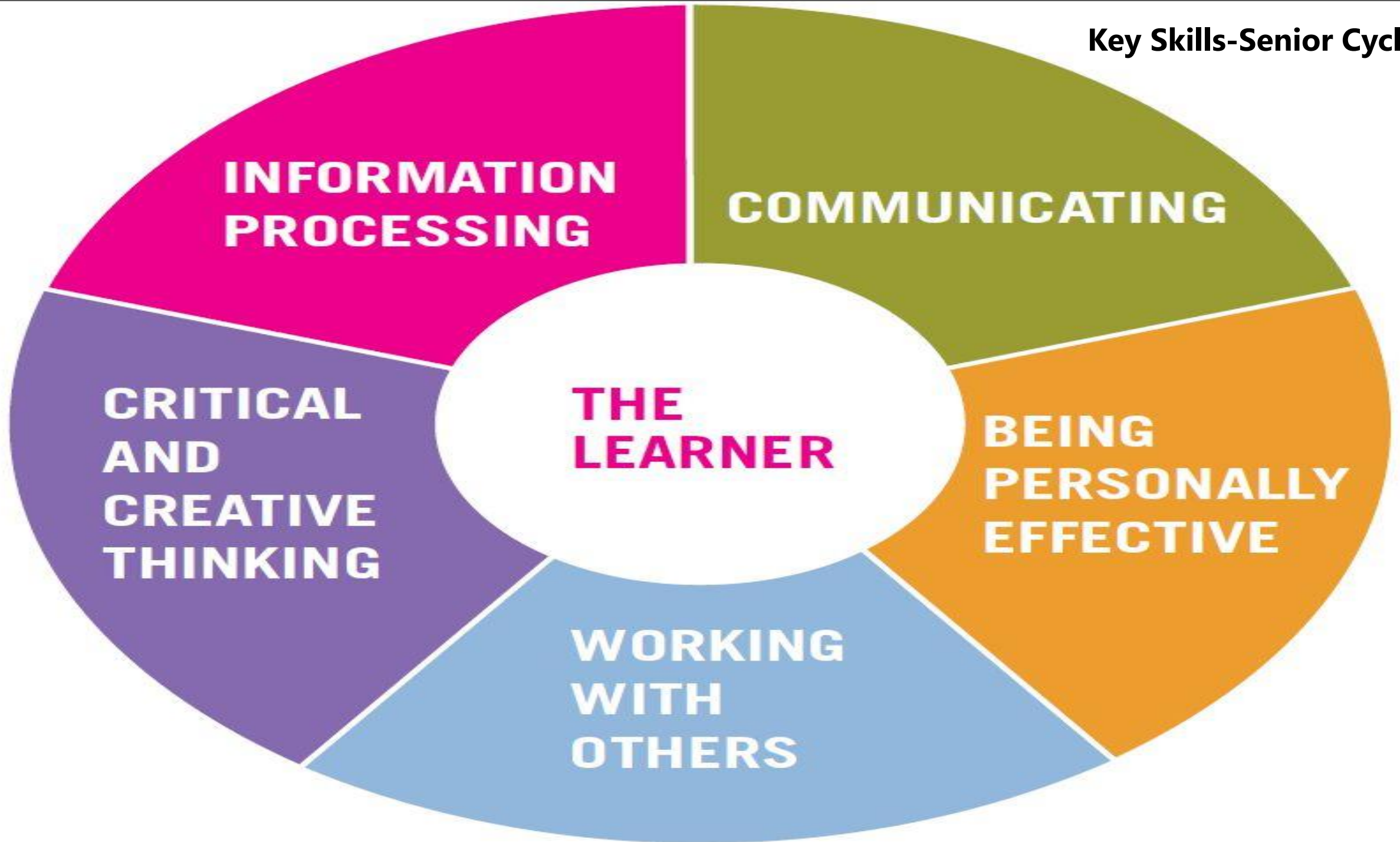
Living in the world

- Citizenship — local and global
- Life and career
- Personal and social responsibility
- Delivering high percentage of STEM-D Skills

Key Skills

Junior-Cycle





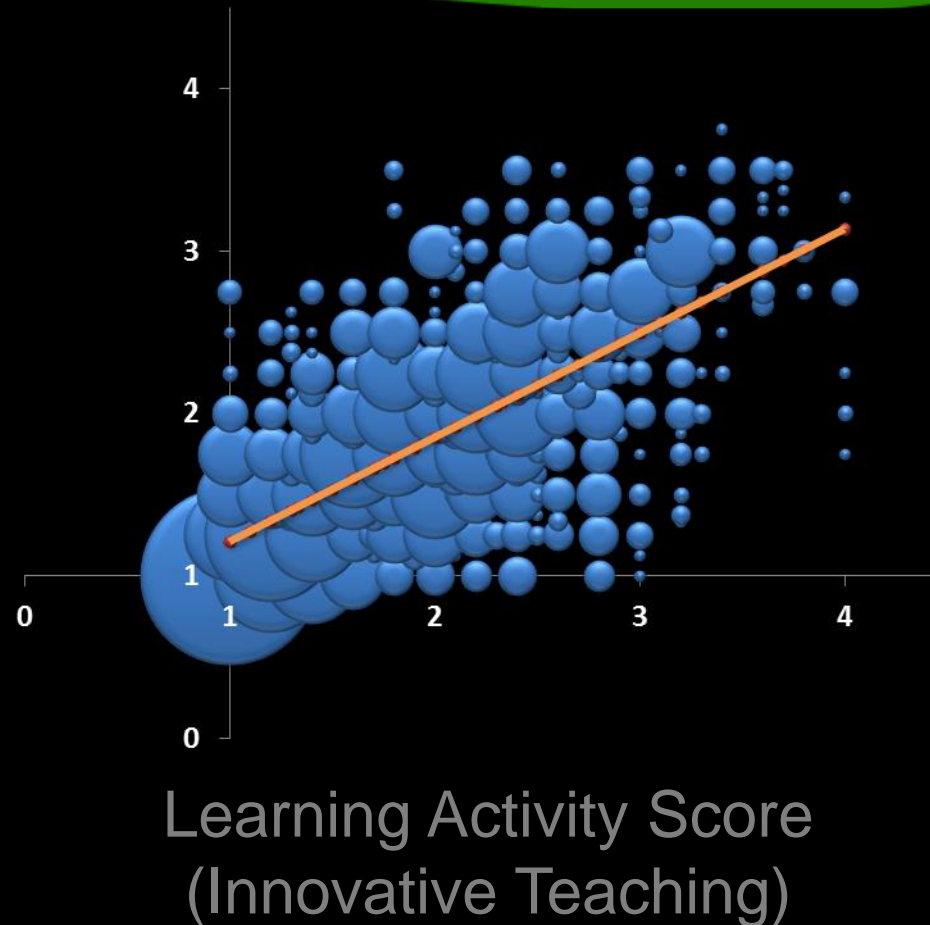


ITL Research Findings 2011

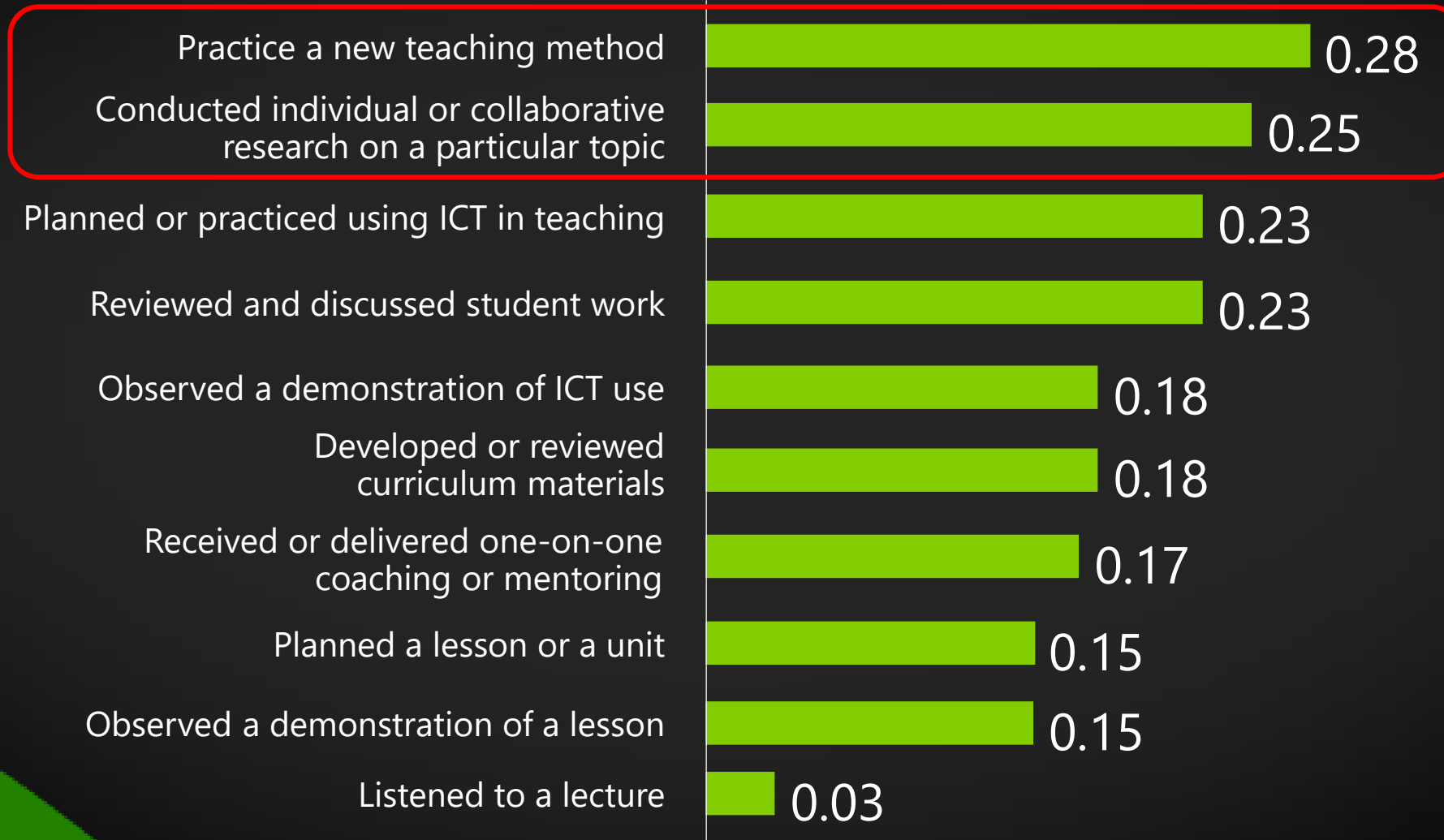
INNOVATIVE TEACHING PRACTICES ARE ASSOCIATED WITH 21ST CENTURY LEARNING OUTCOMES... BUT GOOD EXAMPLES ARE RARE

Students 21C
Skills Score

*When educators
provide learning
activities that ask
for 21 C skills,
students can and
do demonstrate
those skills.*



PROFESSIONAL DEVELOPMENT AND INNOVATIVE TEACHING PRACTICES



21CLD part of Microsoft in Education



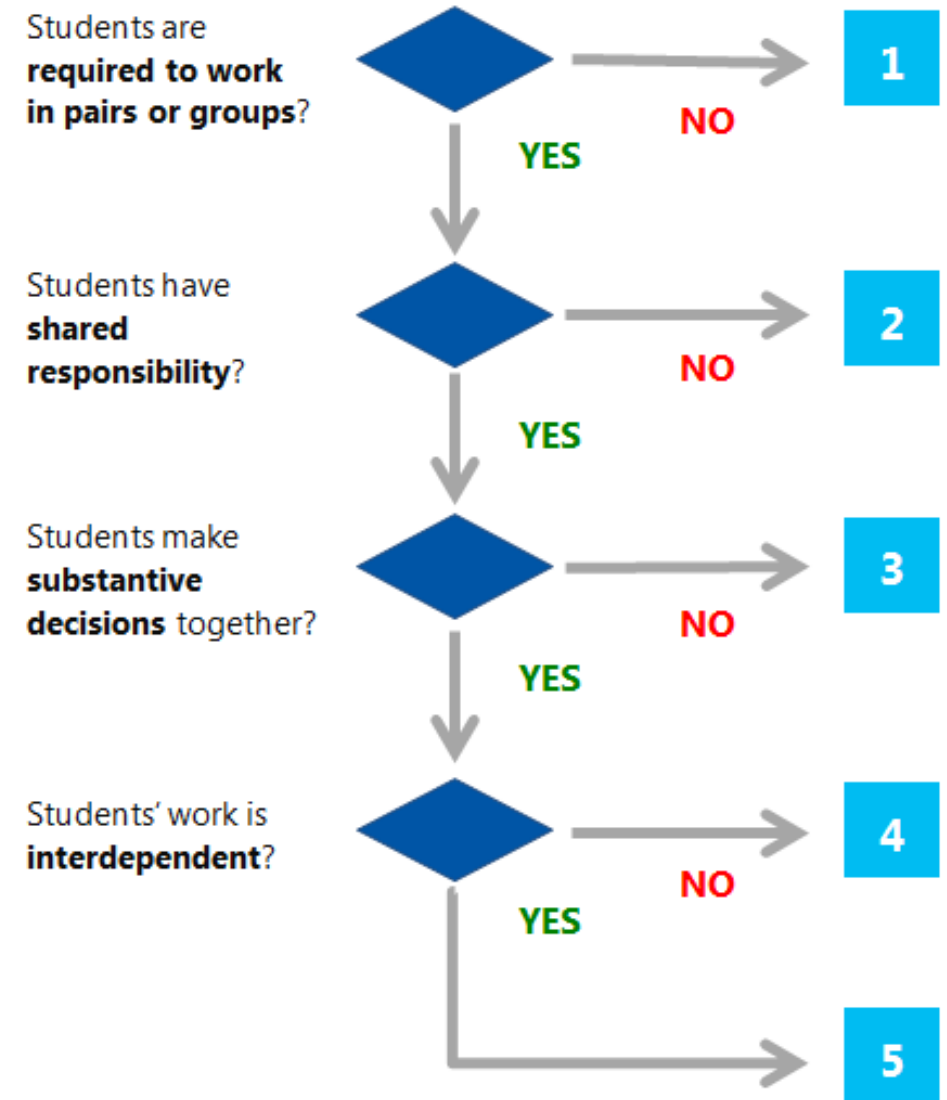
- 21st Century Learning Design (21CLD) provides educators with clear and practical ways to develop 21st skills using digital technologies with their students.
- The 21CLD curriculum builds on the significant investment in research development of 21CLD

Microsoft in Education's 21st Century Learning Design (21CLD)

21CLD Course 1 Introducing 21CLD	21CLD Course 2 Collaboration	21CLD Course 3 Skilled Communication	21CLD Course 4 Knowledge Construction
21CLD Course 5 Self-regulation	21CLD Course 6 Real-World Problem-Solving and Innovation	21CLD Course 7 Use of ICT for Learning	21CLD Course 8 Continuing the 21CLD Practice

Collaboration Decision Tree

Object to
think with



43 Office Mixes

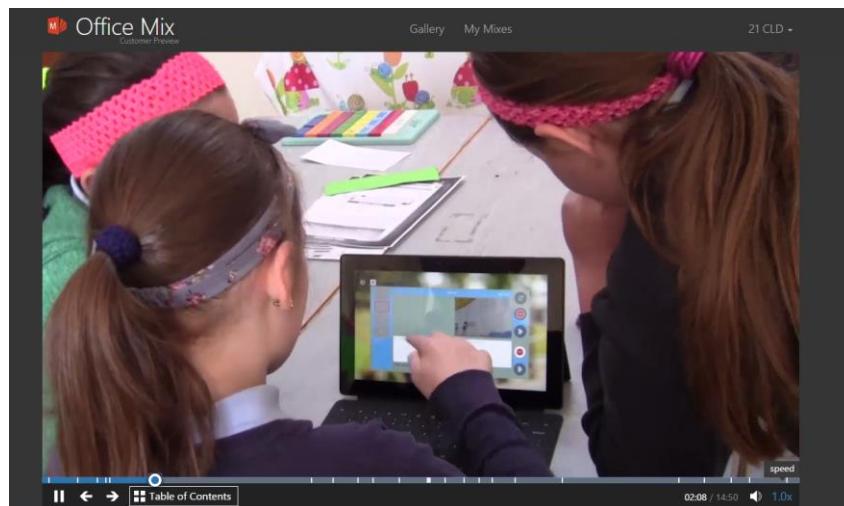
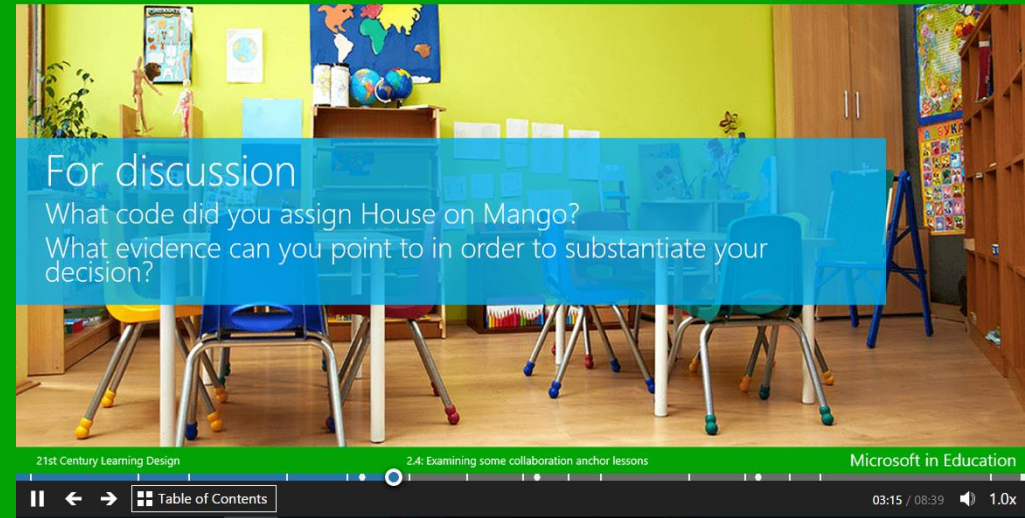
Classroom in action videos

Classroom practice analysis videos

21CLD Course OneNote

Testing for understanding

Activity



OneNote

Home Insert Draw View Table

B I U

21 CLD Introduction Collaboration Skilled Communication Knowledge Construction Self-Regulation ICT for Learning Real-World Problem-Solving and Learning

+ Pages

21CLD readings

What is 21CLD?
Students around the world need advanced skills to succeed in the globalized, knowledge based world of...

The 21CLD curriculum
Introduction
Transforming education by focusing on 21st century skills is one of Microsoft's...

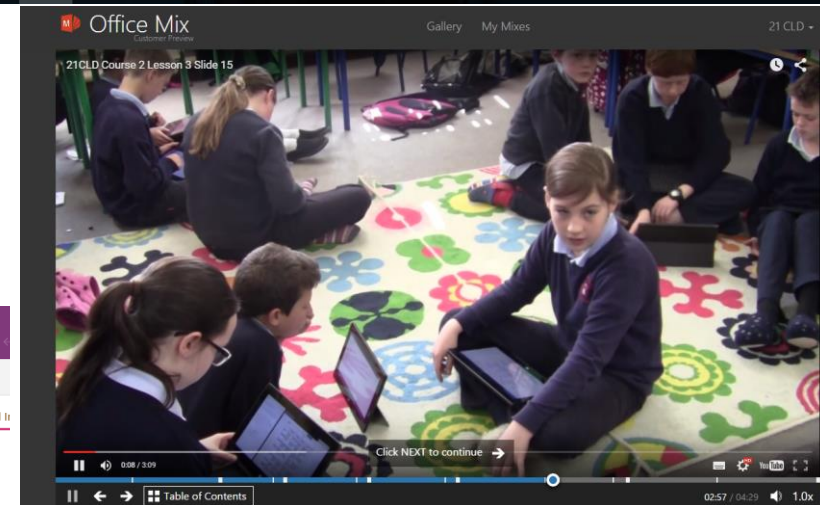
21CLD educator profile...
Introduction
Microsoft Expert Educators around the world were...

21CLD anchor lessons
Throughout the 21CLD curriculum, you will be introduced to what we call anchor lessons. These are used to exemplify...

21CLD readings
ITL Research 2011 Findings and Implications
21CLD is based on the...

ITL Research 2011 Findings and Implications
21CLD is based on the international [Innovative Teaching and Learning \(ITL\) Research](#) project and a model of professional development (embedded in teaching practice, collaborative among teacher school leaders, and ongoing).
Online: <http://www.itlresearch.com/images/stories/reports/ITL%20Research%202011%20Findings%20and%20Implications%20-%20Final.pdf>

Redesigning Education: Meeting the Challenges of the 21st Century
Is discussion paper authored by Dr Deirdre Butler, Dr Michael Hallissy, John Hurley and Dr Kevin M. paper was written to facilitate the education community to reflect on the challenges we are current and how we might redesign future learning environments.
Online: <http://www.p2-network.ie/docs/RedesigningEducationPaperMay13.pdf>



21CLD educator classroom practice & experience

- Analyse and 'code' learning activities to see how deeply they integrate 21st century skills
- Collaborate in designing new learning activities that provide deeper "21st century skills" development
- Examine the impact of these learning activities on students' work
- Digital technologies embedded as part of the learning process

IMAGINE THE **AWESOMEST** THING YOU CAN.

Imagine the awesomest thing you can:



0:03 / 1:57



<https://www.youtube.com/watch?v=W1K2jdjLhbo>



Any
Questions?