



imagine education

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GLOBAL INNOVATIONS IN LEARNING

[jim@imagine.education](mailto:jim@imagine.education)



Thoughts ...











# 引き籠もり





# Vision?







The very purpose and consequent design of education systems

# From Knowledge to Using Knowledge

Testing in the past has focussed on knowledge recall

But

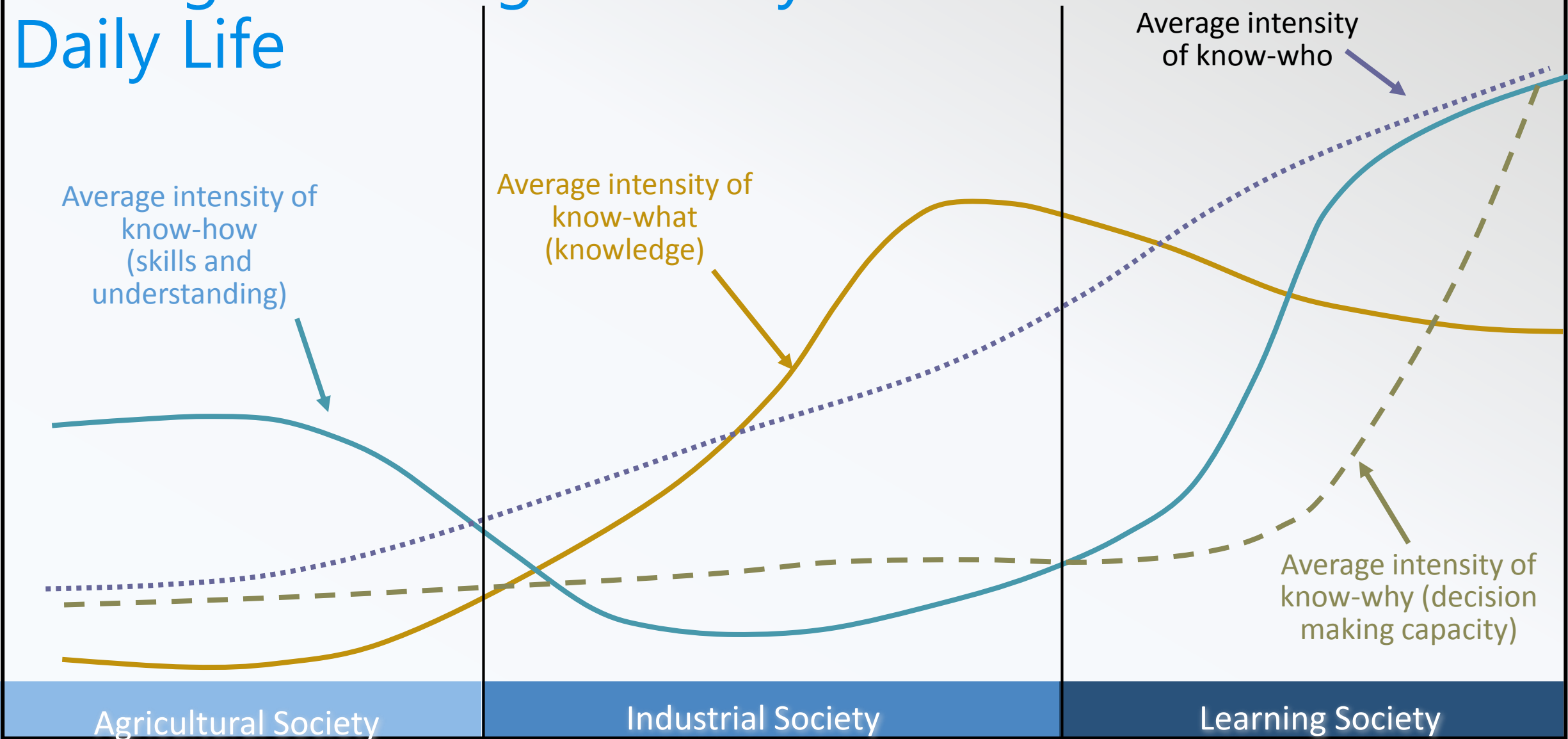
Deep learning comes when you observe a change in behaviour when people show skills in different situations over time

*“in the future you will not get paid for what you know but how you apply what you know”*

Andreas Schleicher  
OECD Education Special Advisor

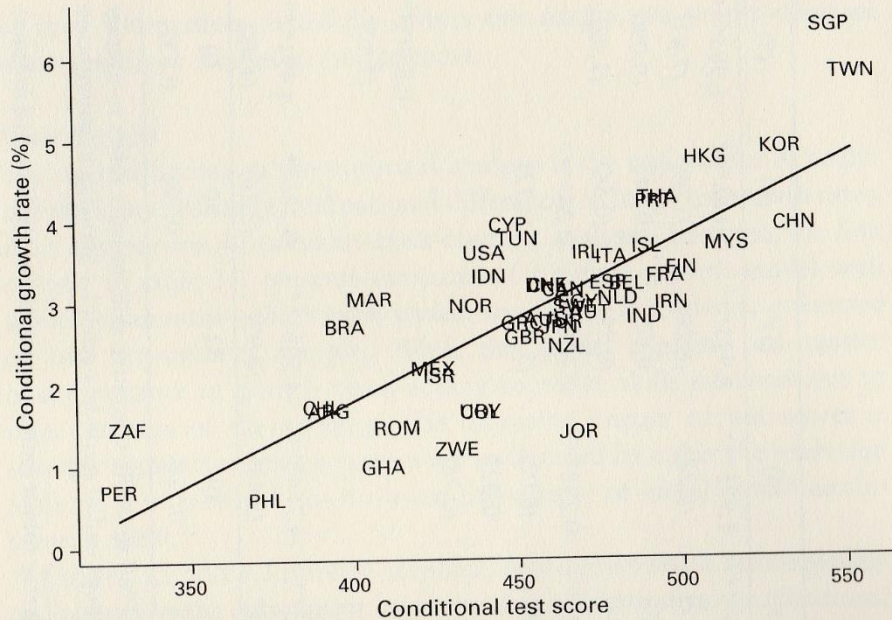


# Average Learning Intensity of Daily Life



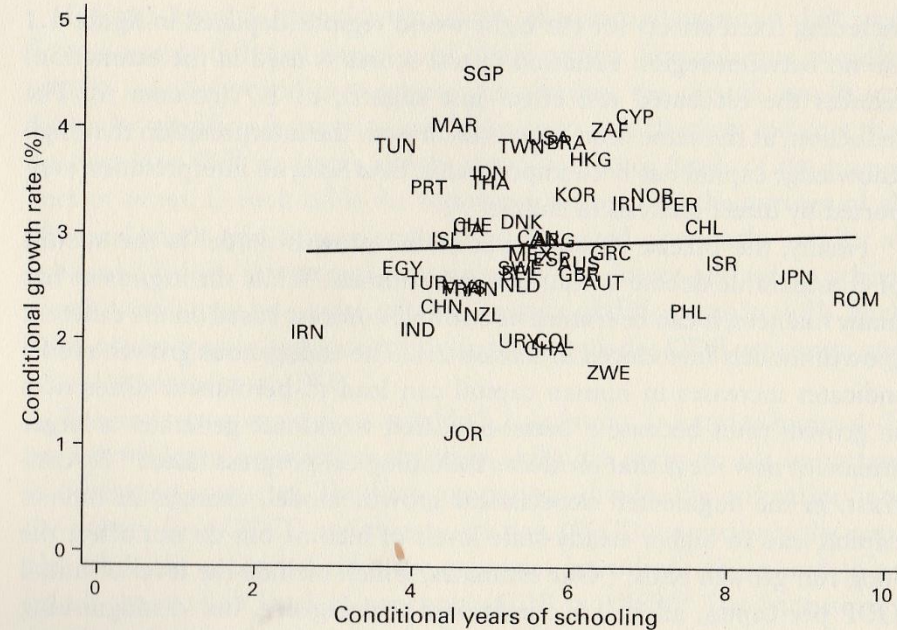


# Quality V Quantity



**Figure 3.1**  
Knowledge capital and economic growth rates across countries

Notes: Added-variable plot of a regression of the average annual rate of growth (in percent) of real GDP per capita in 1960 to 2000 on average test scores on international student achievement tests, average years of schooling in 1960, and initial level of real GDP per capita in 1960 (mean of unconditional variables added to each axis). Authors' calculations; see table 3.1, column 3. See table 2A.1 for country letter codes.



**Figure 3.2**  
Years of schooling and economic growth rates after considering knowledge capital

Notes: Added-variable plot of a regression of the average annual rate of growth (in percent) of real GDP per capita in 1960 to 2000 on average years of schooling in 1960, average test scores on international student achievement tests, and initial level of real GDP per capita in 1960 (mean of unconditional variables added to each axis). Authors' calculations; see table 3.1, column 3. See table 2A.1 for country letter codes.



# The Knowledge Capital of Nations Conclusions



Hanushek & Woessmann

Book commissioned in 2005 for 2006, finished in 2015



# The Power of Feedback

Retail has been transformed through feedback enabled by Point of Sale Systems (PoS)

Point of Learning (PoL) uses PoS technologies to capture and use feedback to support learning

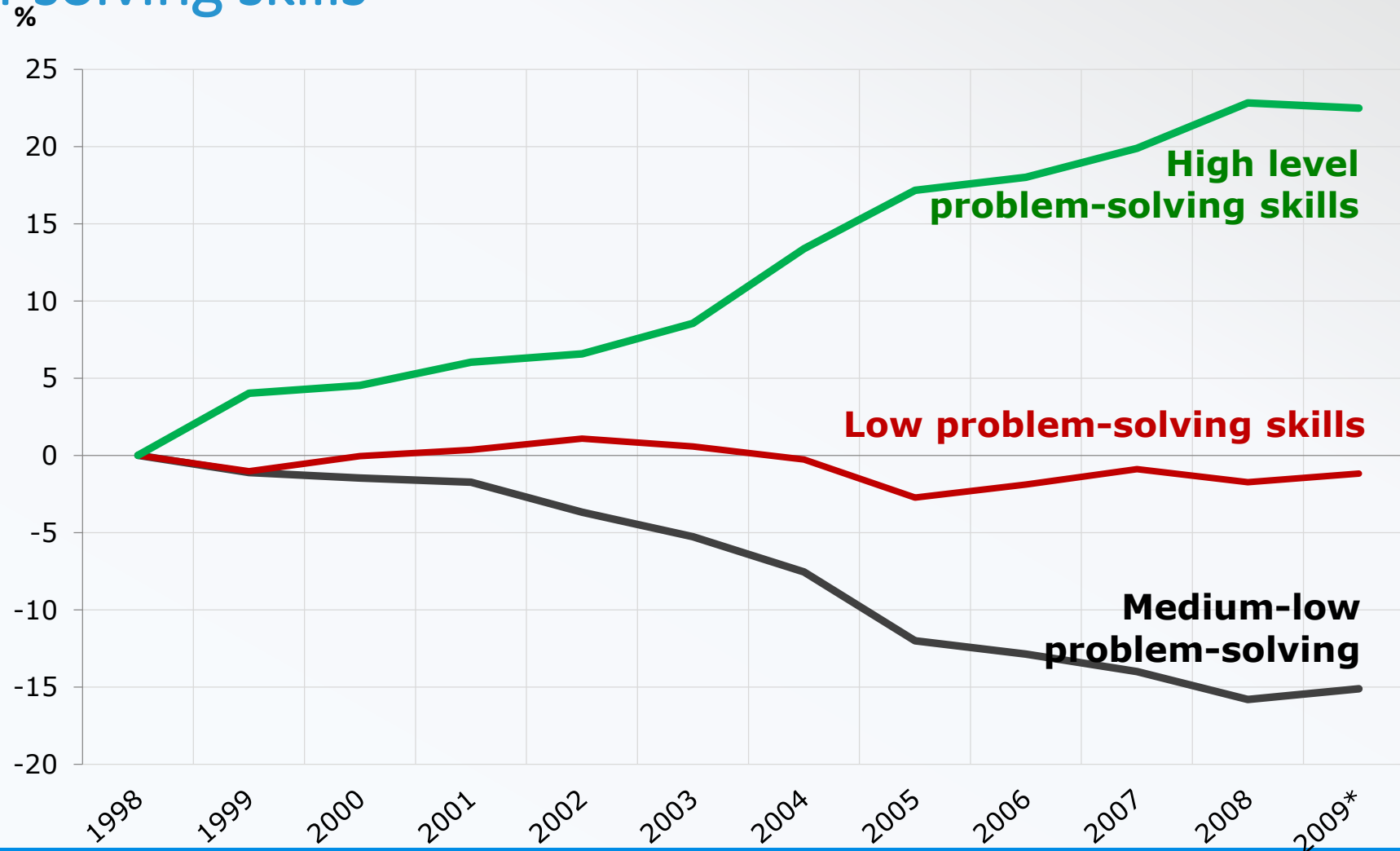






How well are we responding?

# Evolution of employment in occupational groups defined by problem-solving skills





# skills

## Basic Knowledge/Skills

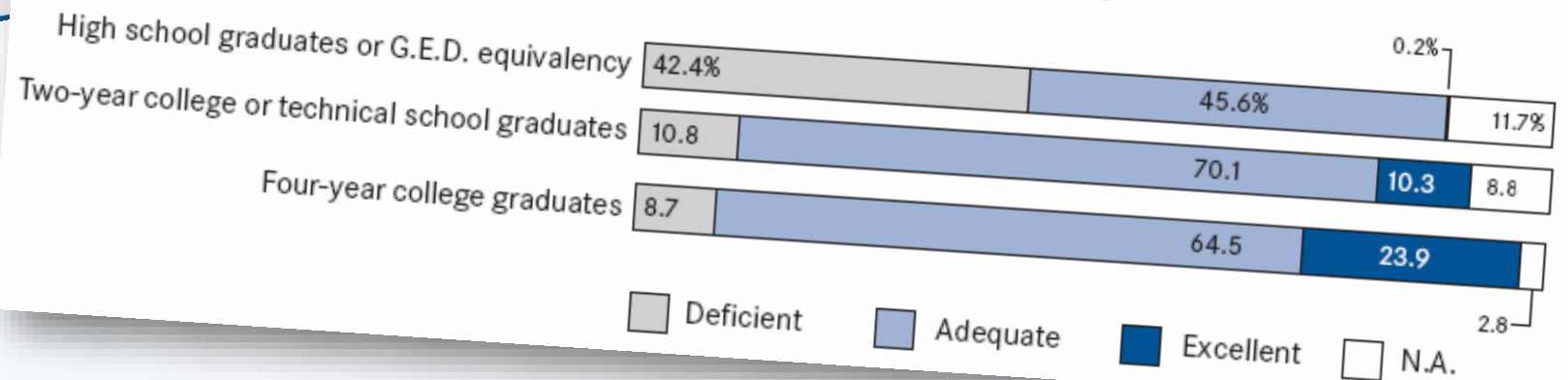
- English Language (spoken)
- Reading Comprehension (in English)
- Writing in English (grammar, spelling, etc.)
- Mathematics
- Science
- Government/Economics
- Humanities/Arts
- Foreign Languages
- History/Geography

## Applied Skills

- Critical Thinking/Problem Solving
- Oral Communications
- Written Communications
- Teamwork/Collaboration
- Diversity
- Information Technology Application
- Leadership
- Creativity/Innovation
- Lifelong Learning/Self Direction
- Professionalism/Work Ethic
- Ethics/Social Responsibility



Preparation level of workforce entrants



# Preparing Students today for the jobs of tomorrow

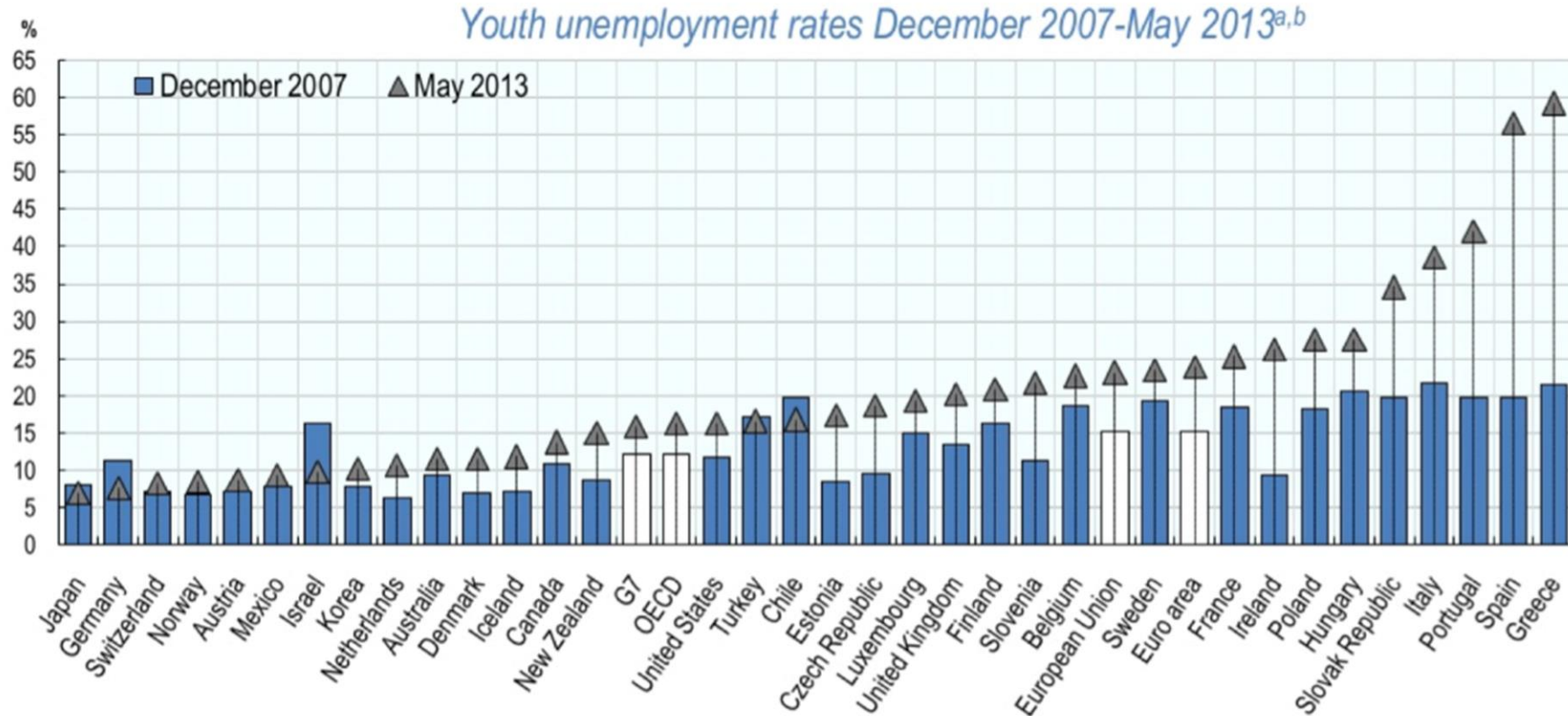
- Chief Learning Architect
- Media Ecologist
- New Media Director
- Social Media Editor
- Digital Ethnographer







## Youth have been hit particularly hard by the crisis and youth unemployment remains high in most countries



Note: Countries are shown by ascending order of the youth unemployment rate in May 2013.

\*: Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

a) For Israel, the series have been chained to take into account the break in the LFS series of the year 2012.

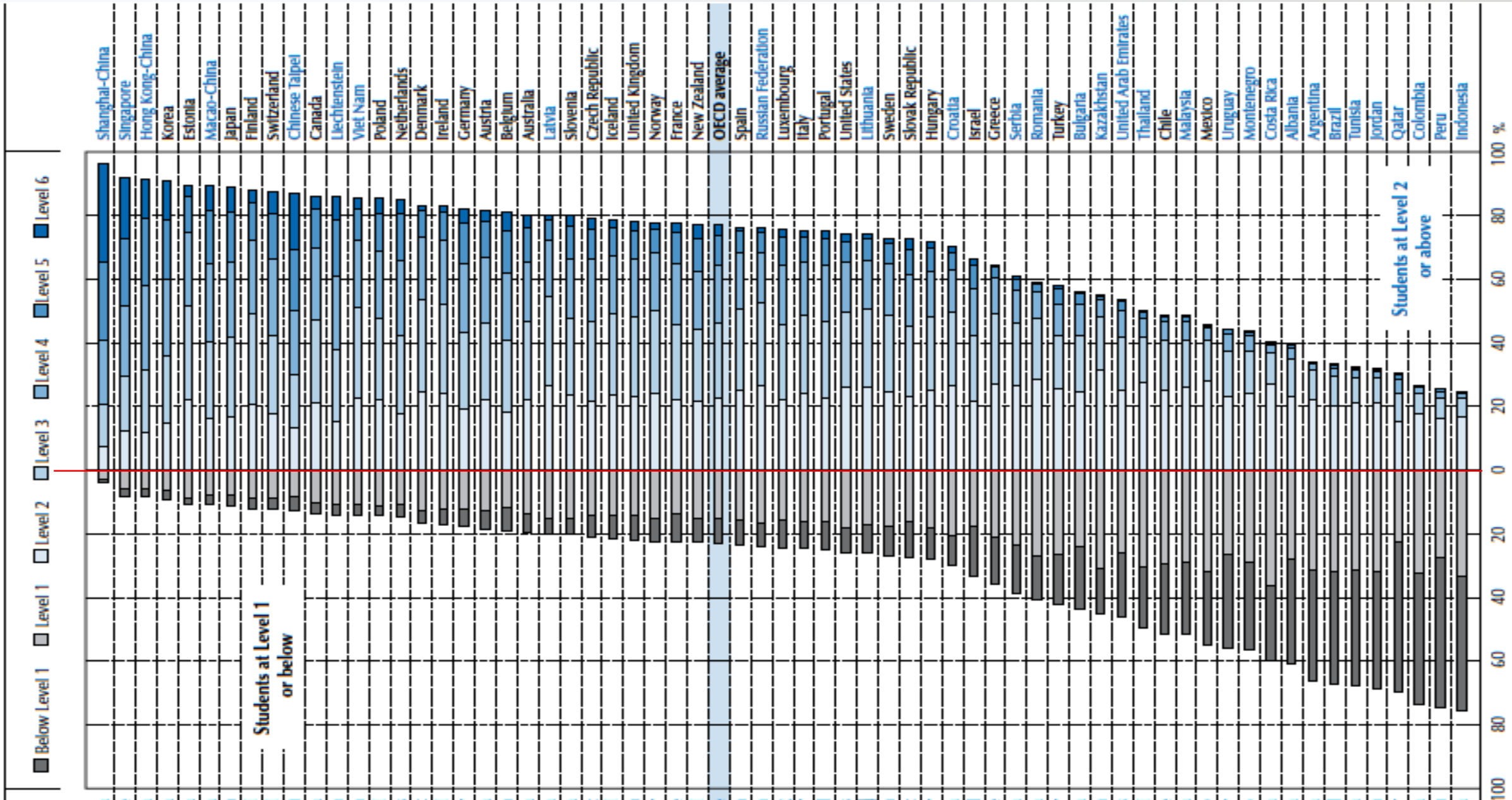
b) March 2013 for Greece, Slovenia, Turkey and the United Kingdom; April 2013 for Chile, Estonia, Hungary, Korea and Norway; June 2013 for Canada and the United States; Q1 2013 for New Zealand and Switzerland.

c) Source: OECD calculations based on the OECD Short-Term Indicators Database (Cut-off date: 12 July 2013)

# PISA is pushing the same agenda

## Proficiency in mathematics

Percentage of students at each level of mathematics proficiency







2

## Viewing the United States School System through the Prism of PISA

Target	Points	Impact on economy
an average increase achieved by other countries	25	41
To Finland level	-	103
OECD proficiency	400	72



Technology to the rescue?





imagine education

global innovations in learning

Beware  
technologists!

**BALTIMORE FIRM IS  
AMED IN HAYES DEALS**  
Baltimore, May 15.—That a Baltimore contracting concern was involved in building and financial operations which figured in indictment of Mrs. Myrtle Myrtle Hayes on a charge of forging the name of Charles M. Wab, was disclosed today. An associate, the H. D. Watts Contractors, has gone into liquidation.  
The Baltimore concern contracted to erect the Chatham Hotel at Woburn, Mass., which Mrs. Hayes was endeavoring to finance.

# KNIGHTS OF PYTHIAS ANNUAL CONVENTION GETS UNDERWAY

## Large Number of Delegates Attend Reception in City Hall—Mayors of Two Cities Play Role of Town Boosters—Davis of Denver in Masterly Address Terms K. of P. the Great American Fraternal Order

"The Knights of Pythias is the great American order," was the declaration of Charles S. Davis of Denver, Colo., past supreme chancellor, K. of P. grand lodge reception in Lewiston City Hall last evening, who spoke briefly and eloquently of the purpose and achievements of the order. Mayors Brann of Lewiston and Cummings of Auburn with much enthusiasm welcomed the delegates to the convention to what they declared the greatest industrial center of the greatest State in the Union.

Manter of Auburn was scheduled to preside but was unable to be present. The speaking commenced at 9 o'clock daylight saving time. Mayor Brann, the first speaker referred to Lewiston and Auburn, not as merely the Twin Cities, but as a great community comprising a population of 50,000 people within a radius of five miles. He extended an invitation to hold the next convention here in the new auditorium which is now under course of construction and which he said would have a seating capacity of 5,000. Mayor Cummings of Auburn, the second speaker, spoke to greater length, declaring that while Auburn might not have a great auditorium that it was the greatest shoe city in the State and the largest city in Maine. He declared it had the finest accounting system in the State.

The center of the hall was cleared for dancing which followed the speaking and reception of the Grand



### REARRANGE PORTLAND TRAFFIC REGULATIONS

Portland, May 15.—Rearrangement of Portland's traffic regulations to make passage through the city easier for auto tourists, will be made by Chief of Police Irving S. Watts.  
He will split traffic where it enters the city from the South, sorts over on route and those bound to the mountains and lake resorts by another.  
Certain streets will be named as one-way thoroughfares and parking regulations will be extended to clear them for the heavy summer

## HOT SPRINGS B AREA SWEPT BY AND FIRE; NO

### Damage Estimated In Excess of a Million Hotel in Ruins—Earlier Reports of Verified—Many Persons Carried by Raging Waters, But Are

Hot Springs, Ark., May 15.—(By The Associated Press.)—Hot Springs, and flame, tonight swept by flood and storm which late yesterday sent a torrent sweeping down from the mountainside, leaving in its wake a trail of destruction which in monetary loss is estimated well in excess of a million dollars.  
While the property loss will be heavy, only one person was reported seriously hurt.  
The Marquette hotel and nearly a score of business buildings were in ruins as a result of fire which came after the torrent.  
Store fronts smashed, bath houses wrecked and debris strewn about to night stood as mute evidence of the fury of the elements.  
Reports of Deaths Not Verified  
Earlier reports that there had been heavy loss of life were not verified. Officials was made by city officials and newspaper men.  
Destruction of the Marquette hotel cause individual loss of \$1 million dollars. In addition buildings were destroyed. Tonight National Building and fire. While from within side point day, many were toll at 17 sons had. Immedi service it was quite had been number a Centra thorough night was (Cos

### SAYS MOVIES WILL REPLACE TEXT BOOKS

#### Edison Predicts Children of Next Generation to Be Taught From Films

Declares 85% of All Knowledge Received Through Eye and Describes Recent Experiments

New York, May 15.—The children of today's school children will get their education at schools in which the movie screen will supplant the blackboard and the motion picture film will take the place of text books.  
Thomas A. Edison predicted today at the investigation by the Federal Trade Commission of charges that the Famous Players-Lasky Corporation and six allied organizations constitute a motion picture trust.  
The famous inventor was called for the purpose of developing the importance of the film industry and its possibilities for the future.  
He disclosed for the first time experiments with school children which, he said, had convinced him that 85 per cent of all knowledge is received through the eye and that motion pictures are 100 per cent for its dissemination.  
"I have made a good many experiments in the line of teaching children by other methods than books," Mr. Edison told the commission. "I made an experiment with a lot of pictures to teach children chemistry, from the pictures they had learned subject as chemistry was grasped by the children."

### BRICKLEY INDICTED FOR THEFT OF STOCK

#### Football Star Charged with Depositing Forged Certificates

Former Harvard Player Express Surprise at Charge—Confident of Vindication

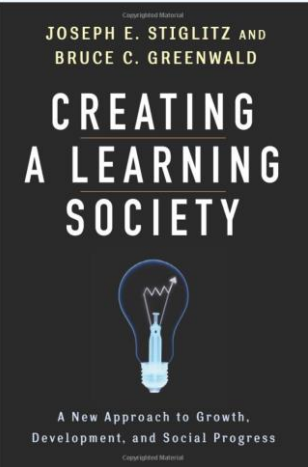
Worcester, Mass., May 15.—Charles E. Brickley, former Harvard football star, and Montgomery S. Wain, local stock brokers, were indicted today in Superior Criminal Court on charges of illegal stock negotiations to which they pleaded not guilty.  
Brickley is charged with the theft of \$10,000 from the Commercial Trust Co. of this city, arising from deposit of certain stock of the Lowell-Hartford Carpet Co. with the bank as securities for a loan. Wain is charged with the theft of \$10,000 from two clients. Both are charged with inducing Kurt R. Stern to forge the name of William J. Thompsonville and depositing forged certificates as security. Brickley was released in \$10,000. Wain was held until he is able to secure the same amount.  
The accusations as to the theft of the clients grow out of the placing of the money with Gibson for the purpose of investing the money for telephone stock. It is disclosed that this was never done by Wain.  
Brickley expressed surprise that charges should have been brought against him. "I am absolutely innocent of forgery or larceny and it will be my endeavor to clear my name. I am confident that my investigation will be complete," he declared.

### TERVILLE MAN GETS LIMIT LEGAL POSSESSION



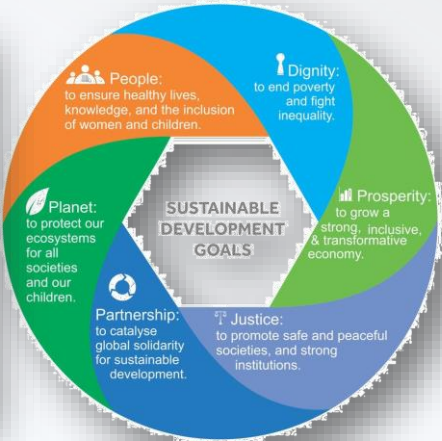
# From a Knowledge Economy to the Egypt Learning Society

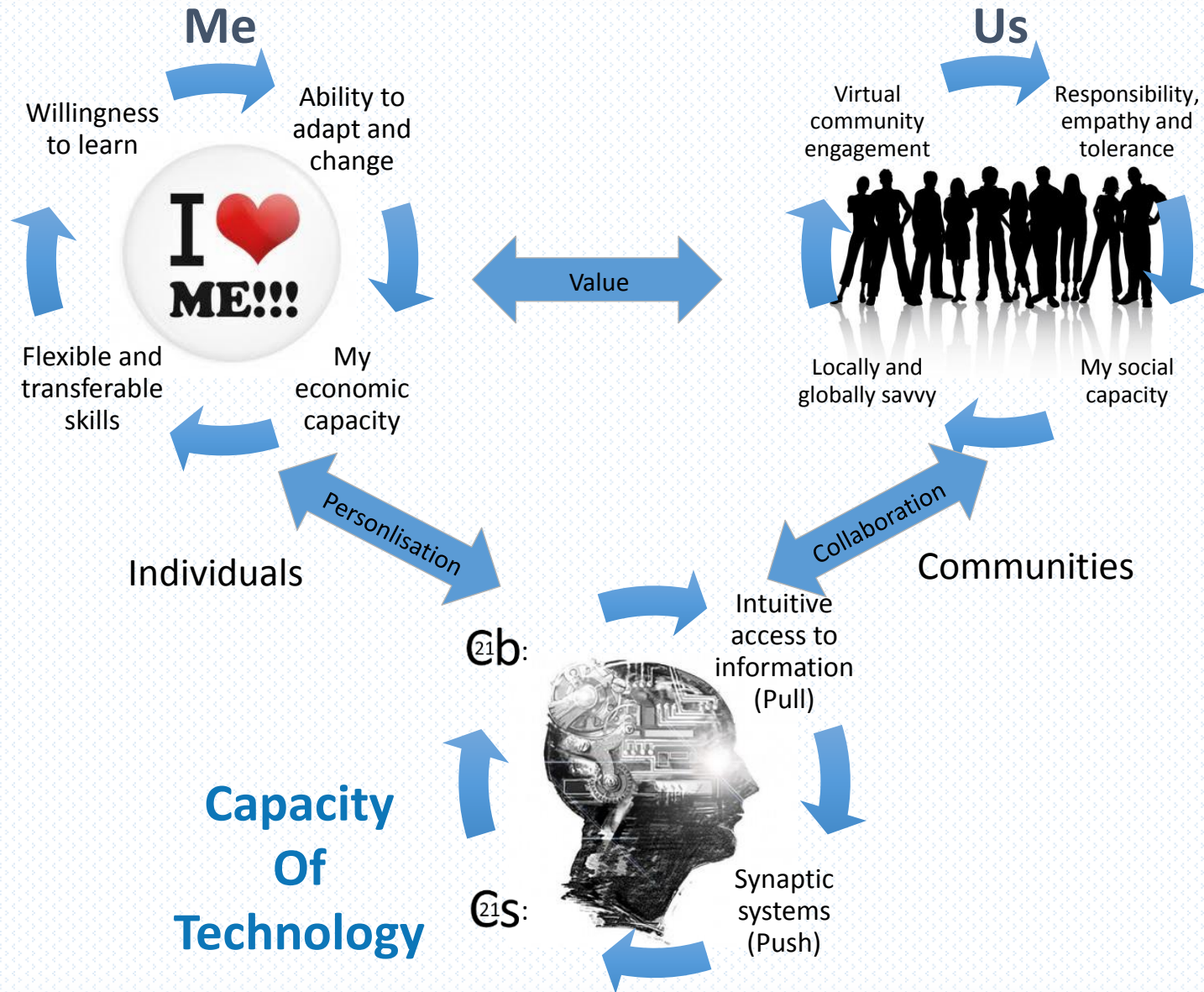
September 2015



### OECD

The skills that students need to contribute effectively to society are in constant change. Yet, our education systems are not keeping up with the fast pace of the world around us. Most schools look much the same today as they did a generation ago, and teachers themselves are often not developing the practices and skills necessary to meet the diverse needs of today's learners... Recognising that education is the great equaliser in society, the challenge for all of us is to equip all teachers with the skills and tools they need to provide effective learning opportunities for their students.

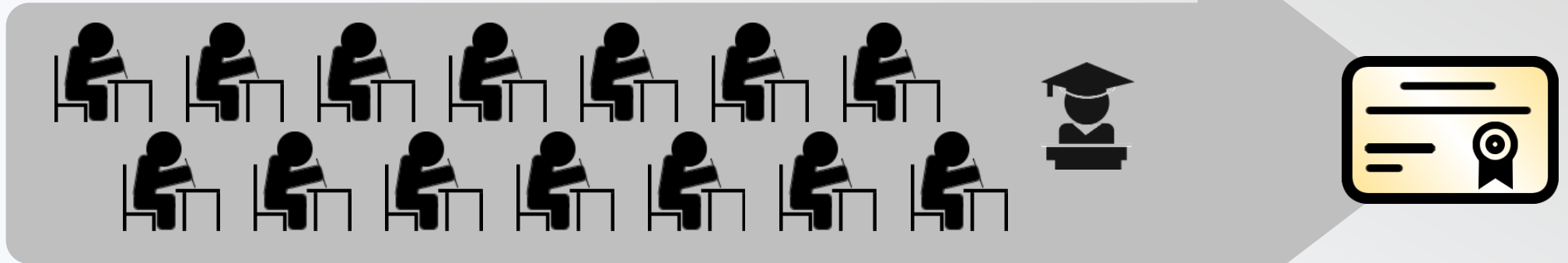




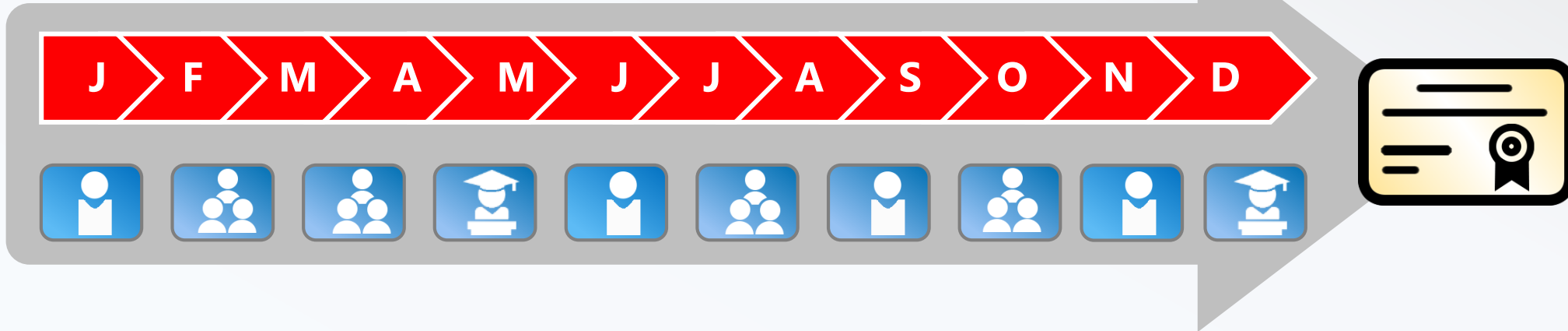


# Changing the face of assessment

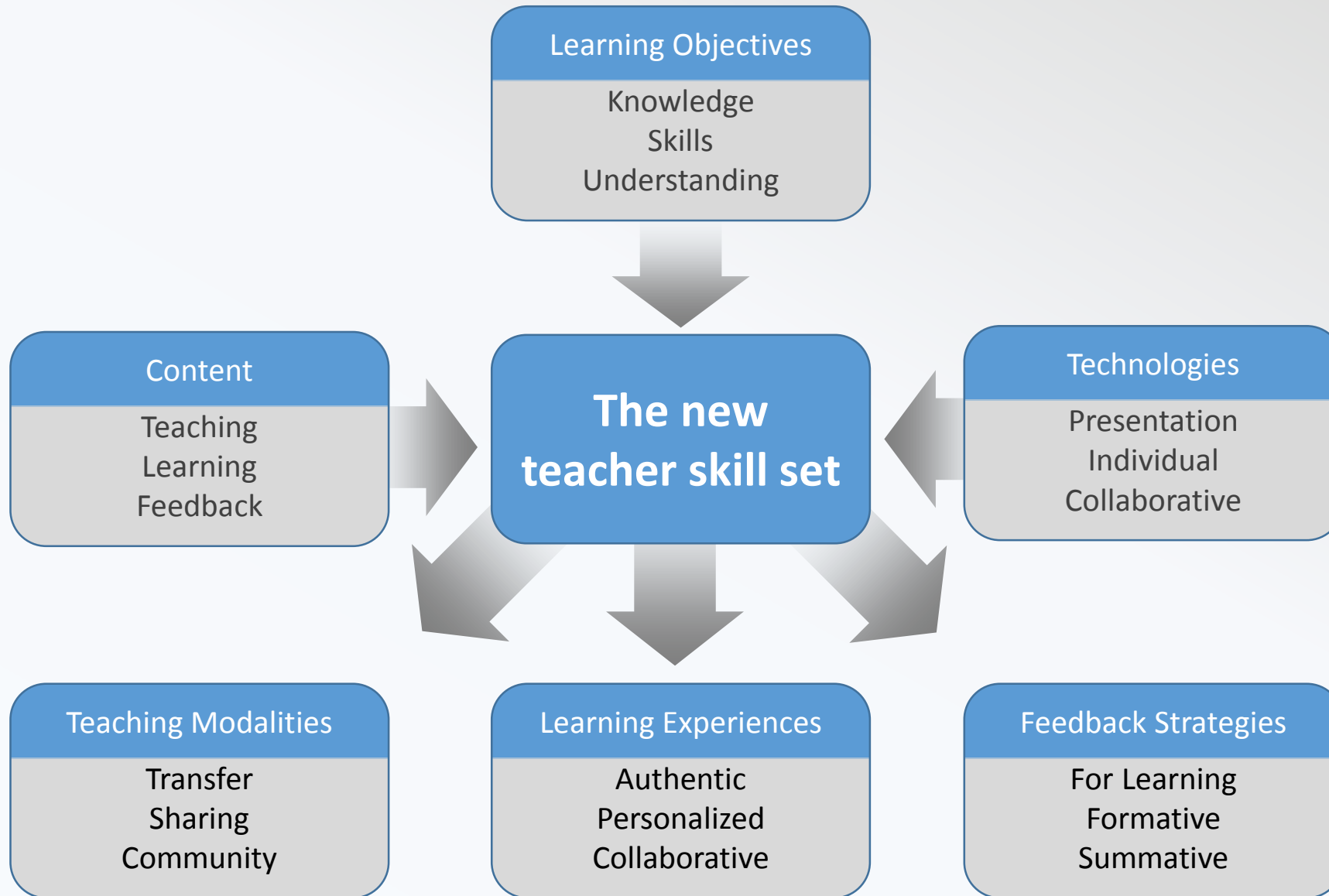
From a one off demonstration of knowledge



To capturing a change in behaviour over time



Which certificate gives you the highest confidence that an individual has particular skills and competence?





# Change the equation

Today's lessons



Tomorrow's lessons



Imagine changing the balance of a lesson which allowed the learner more time to think and reflect.

A lesson where the quality of the learner output increased.

This balance, first suggested by Dr Passey of Lancaster University in 1998 is now achievable.





Systemic and systematic change



# Our Approach

**Impact:**  
Governmental  
Policy  
Level



Knowledge Economy



Learning Society

**Dimensions:**  
Education  
System  
Components



System



Leadership



Teachers



Students

**Anchors:**  
Specific  
Focus  
Areas



1 - Leadership, Professional  
Development & Change



2 - Curriculum, Pedagogy  
& Assessment

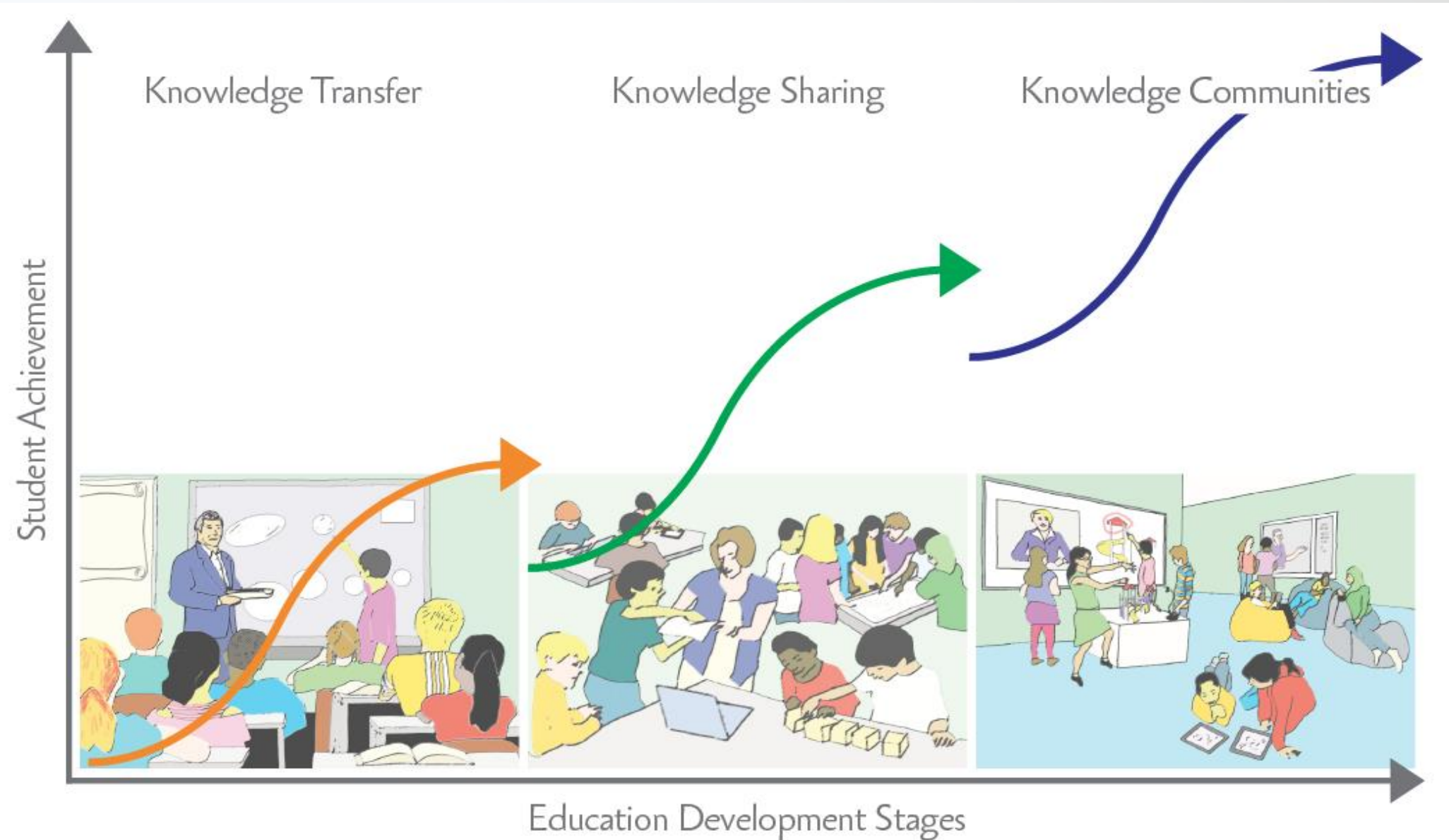


3 - Digital Technologies & the  
Learning Environment



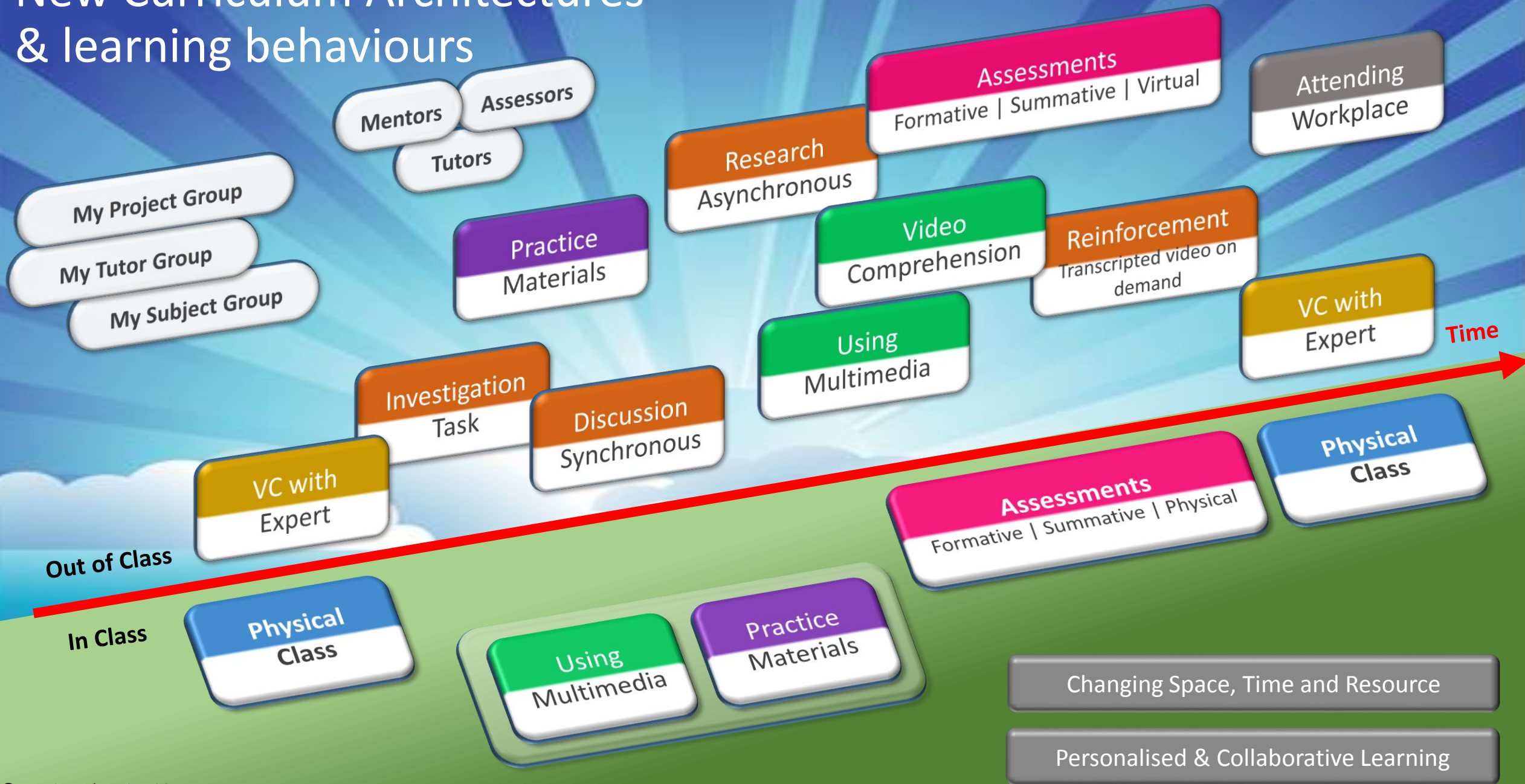
4 - Entrepreneurialism,  
Innovation & Creativity

# Reality in classrooms today





# New Curriculum Architectures & learning behaviours





People, people, people



**More**

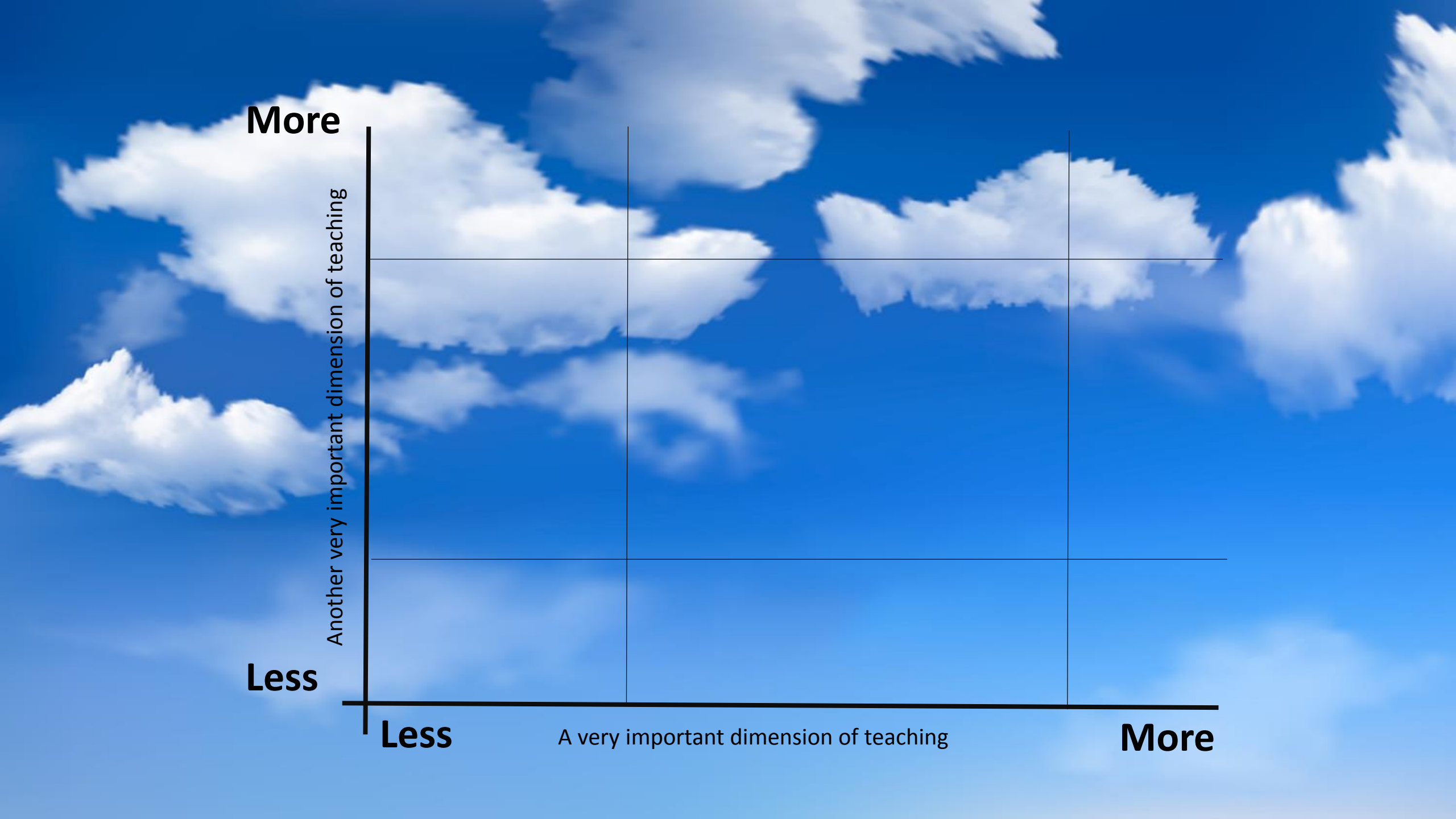
Another very important dimension of teaching

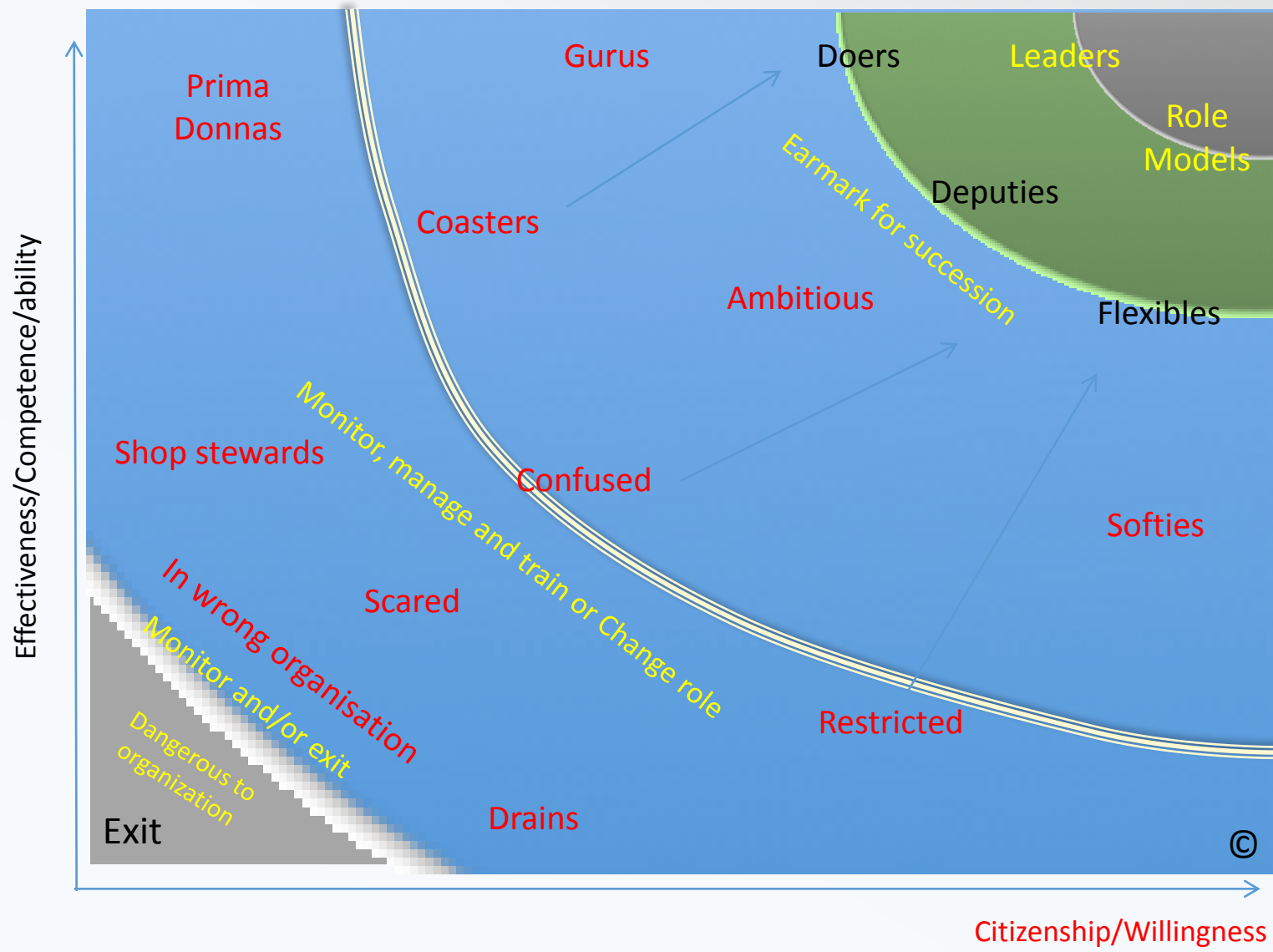
**Less**

**Less**

A very important dimension of teaching

**More**








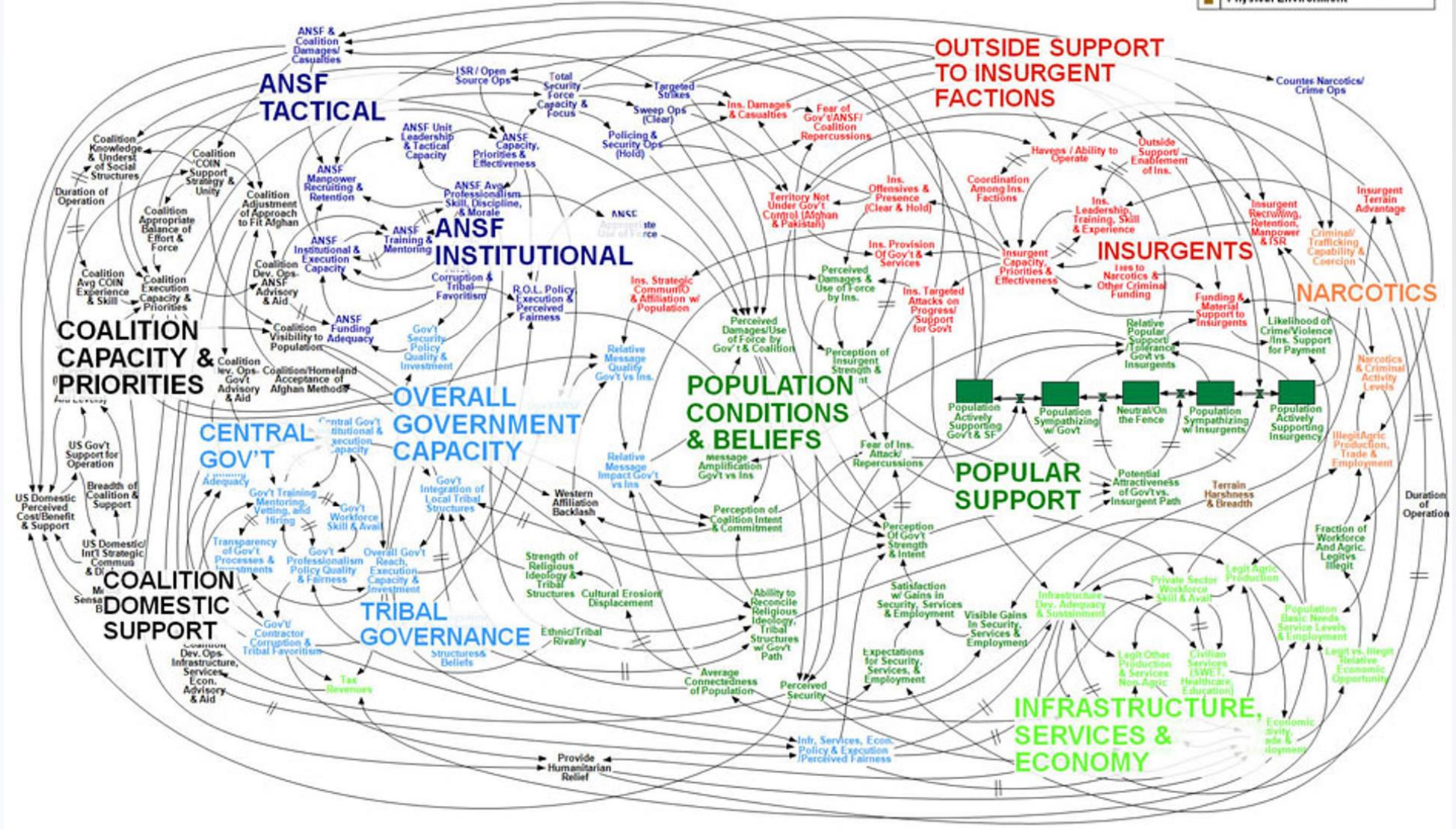
The most complicated slide in the world?



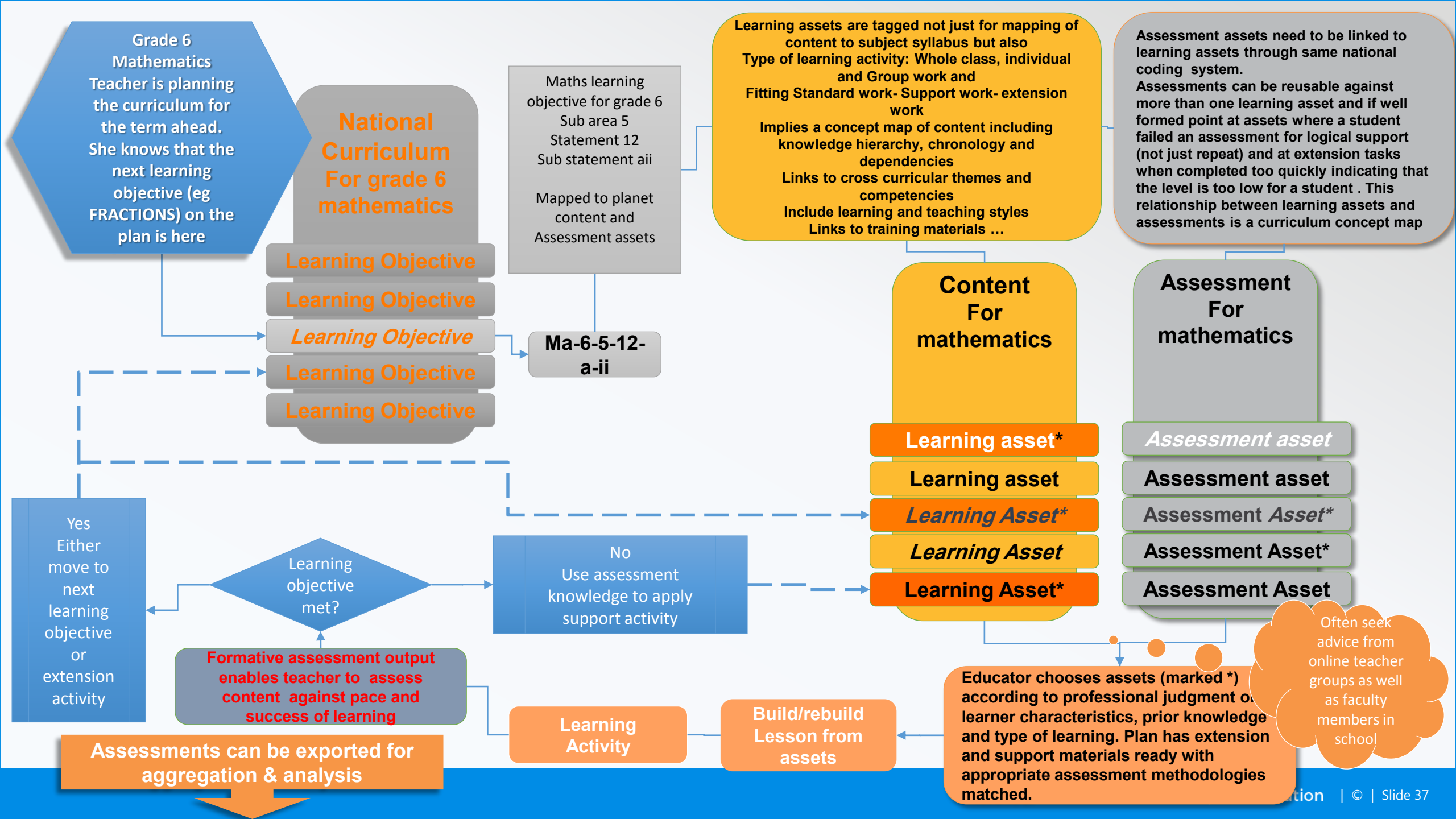
# Afghanistan Stability / COIN Dynamics

 = Significant Delay

- Population/Popular Support
- Infrastructure, Economy, & Services
- Government
- Afghanistan Security Forces
- Insurgents
- Crime and Narcotics
- Coalition Forces & Actions
- Physical Environment



WORKING DRAFT - V3







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[jim@imagine.education](mailto:jim@imagine.education)