Added Value Learning Innovation

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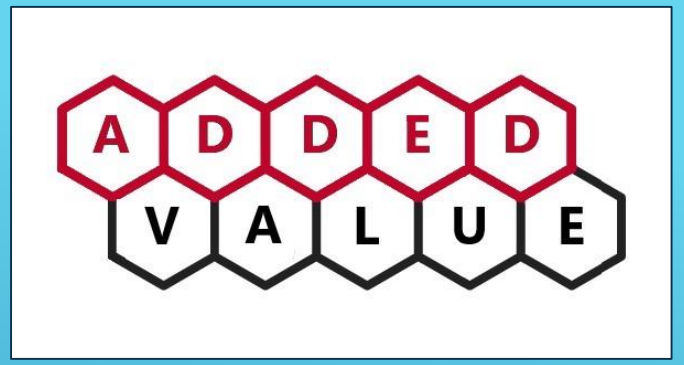
Pixel: The Future of Education June 2019

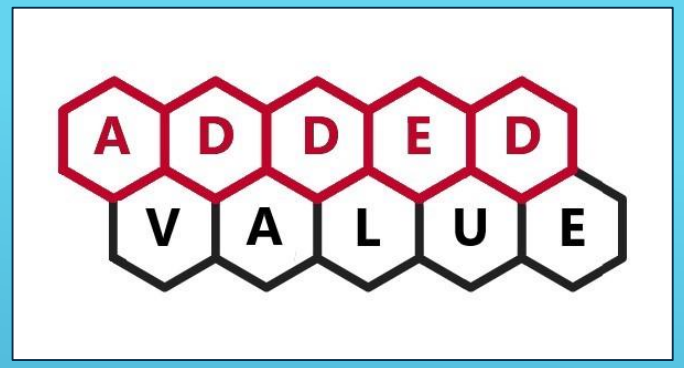
Co-funded by the Erasmus+ Programme of the European Union

Added Value Project: *Partners*



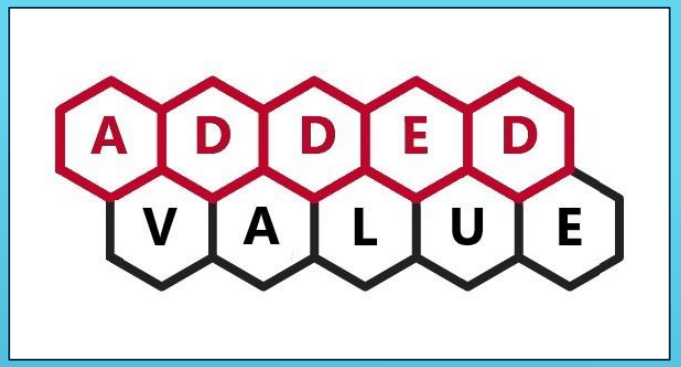
- School with Class Foundation (Poland)
- Universal Learning Systems (Ireland)
- Asociación Smilemundo (Spain)
- University of Applied Sciences (Holland)

Educational maths challenges based on the design thinking method



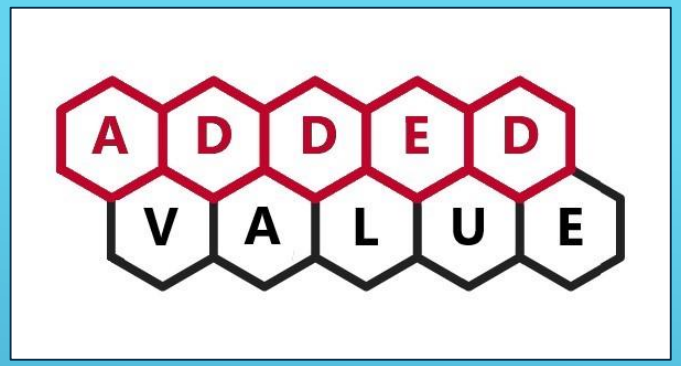
- Creating change in teaching Mathematics in Polish and European schools
- Overcoming the negative associations of mathematics as a ‘difficult’ subject
- Integrating mathematical competence into everyday life
- Instilling a sense of wonder and enthusiasm for the joy of learning in mathematics

Why?

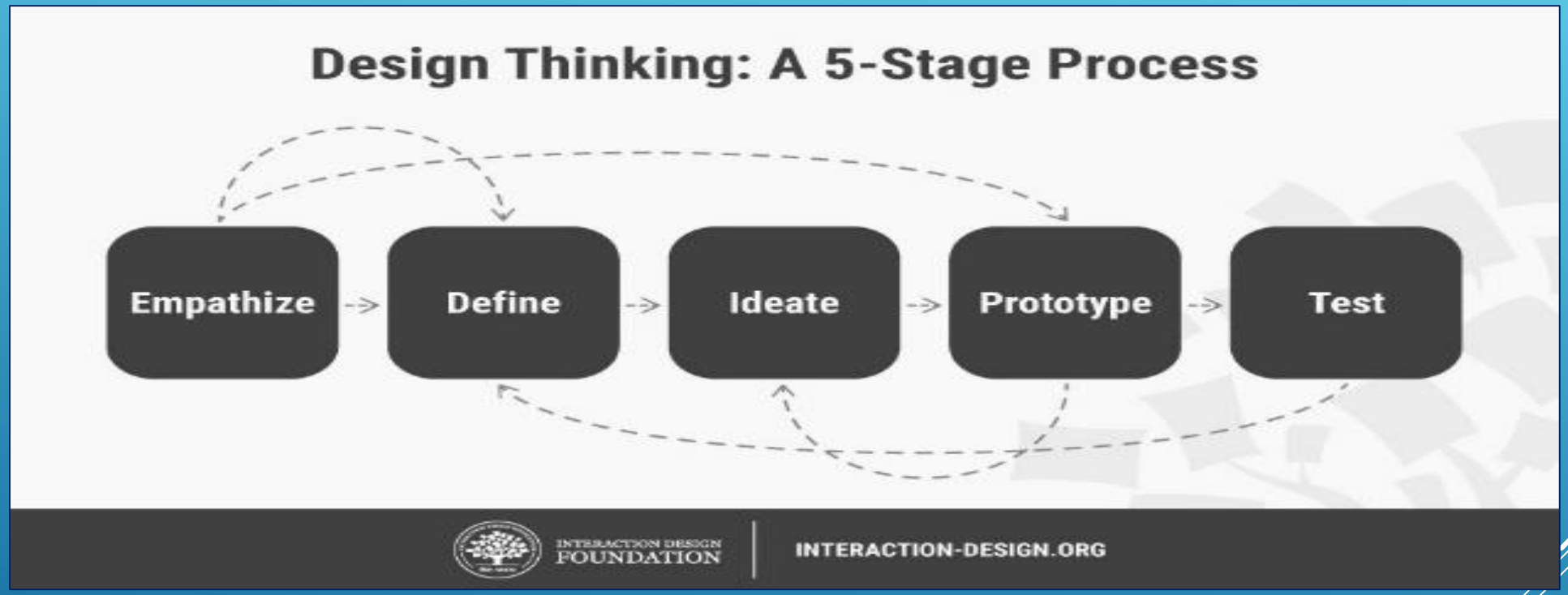


- A general decline in standards of mathematical competence in almost all population groups
- Mathematics is still considered by many students as a "blackboard subject", a subject aimed at abstract calculations with no link to reality
- Significant competitive pressures have been identified which detract from the general aim of creating what the Added Value project team described as "Sustainable Mathematical Competence and Numerical Literacy".

Project Methodology: Develop a Toolkit based on the Design Thinking method



- A map of mathematical problems with a brief explanation of what they serve in practice.
- A set of ideas for practical activities, experiments and projects corresponding to the issues covered in the map
- Based on a playful approach to learn that ***"Maths is Everywhere"***
- Design thinking to develop problem-based learning skills


Design Thinking: A 5-Stage Process
Empathize
Define
Ideate
Prototype
Test
INTERACTION DESIGN FOUNDATION
INTERACTION-DESIGN.ORG

Play and Learning Innovation

"Play in all its rich variety is one of the highest achievements of the human species, alongside language, culture and technology. Indeed, without play, none of these other achievements would be possible"

Benefits of Play

- Play is the original 'virtual reality' letting us explore, test, take risks
- Play helps us mediate the world
- Play lights up our brains
- Play supports novel neural connections
- Play changes the architectural structure

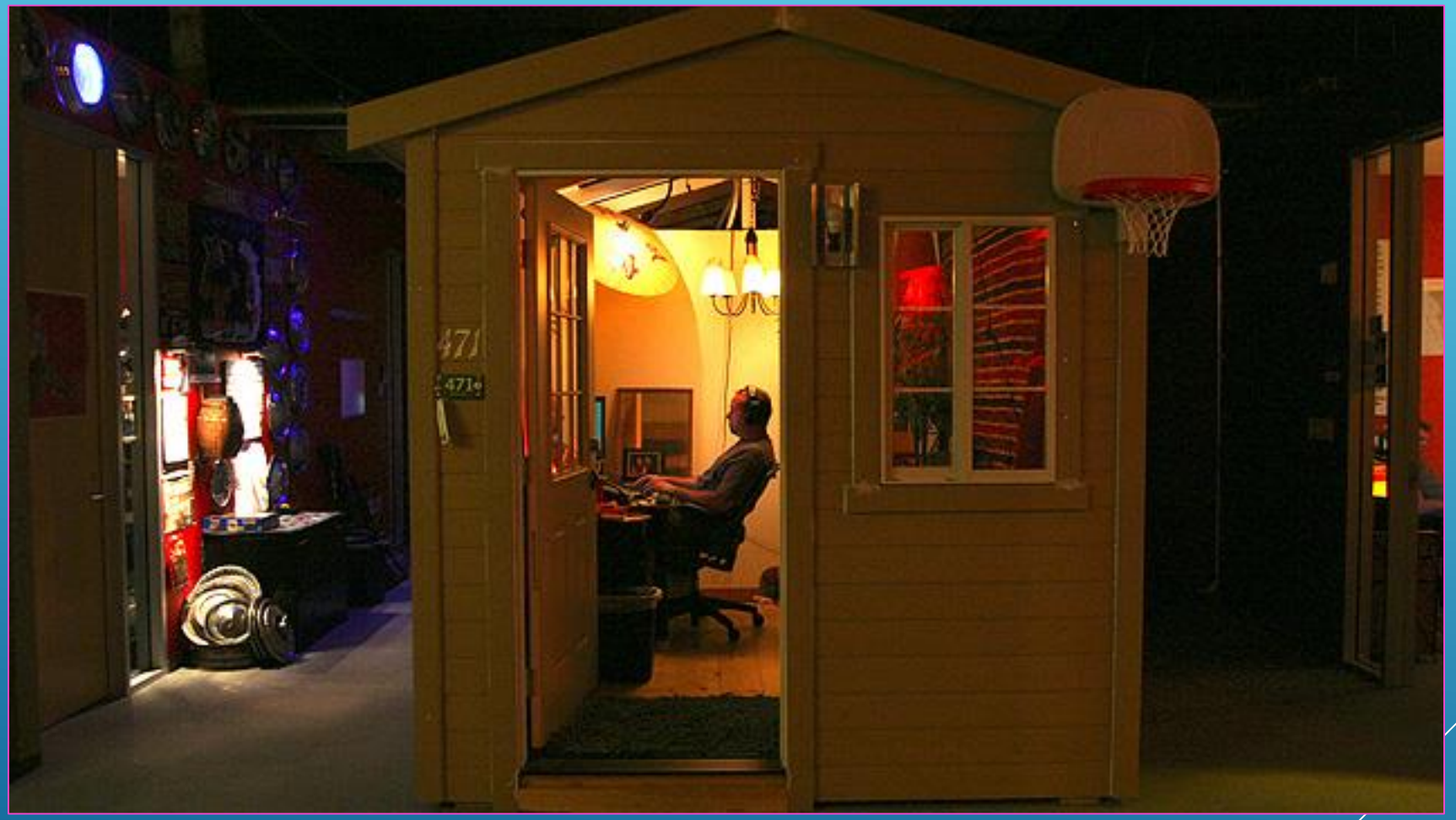
of brain regions

- Adults become energised, motivated
- Increase divergent thinking to create new ideas

https://www.facebook.com/ABCNews/videos/10154890841103812/

Play at work…..

Playful Animation Shed at Pixar



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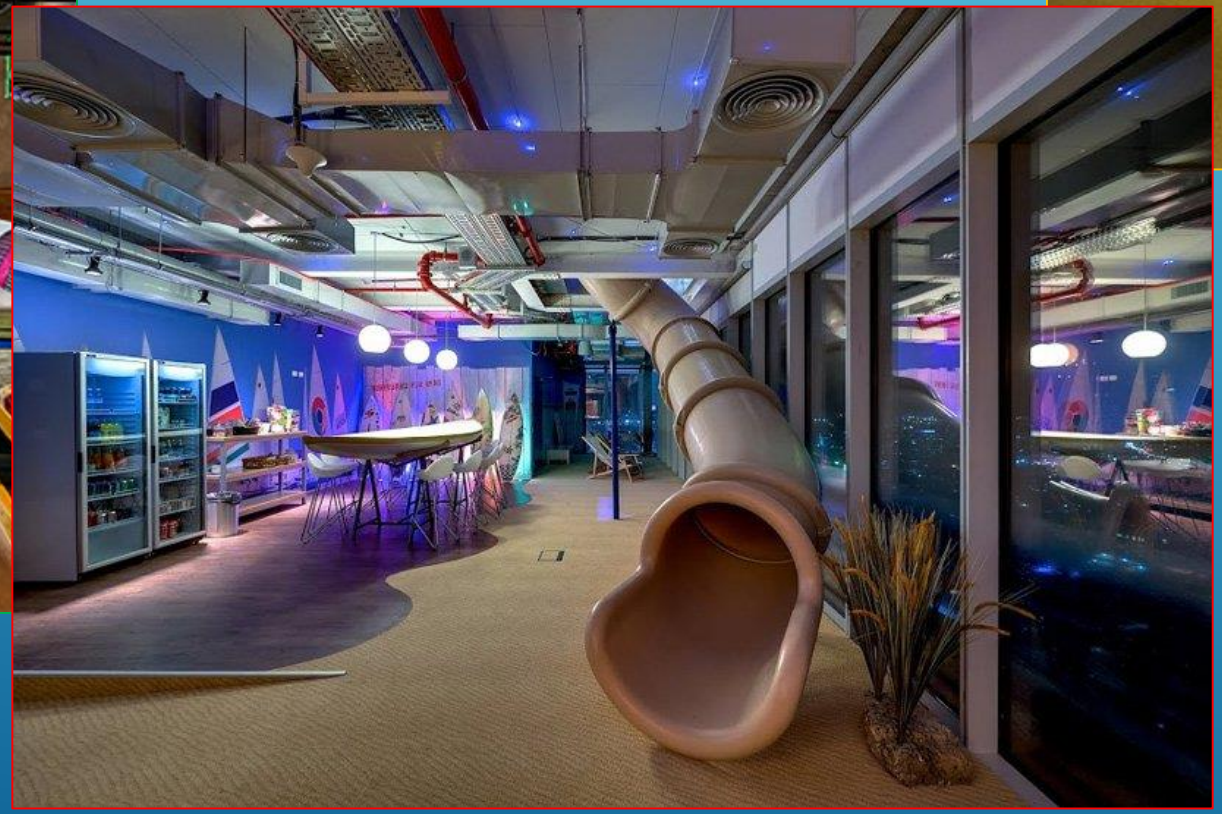

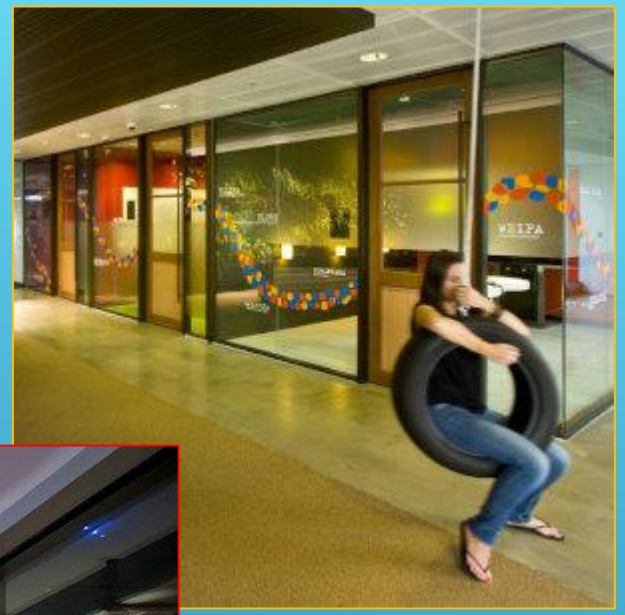

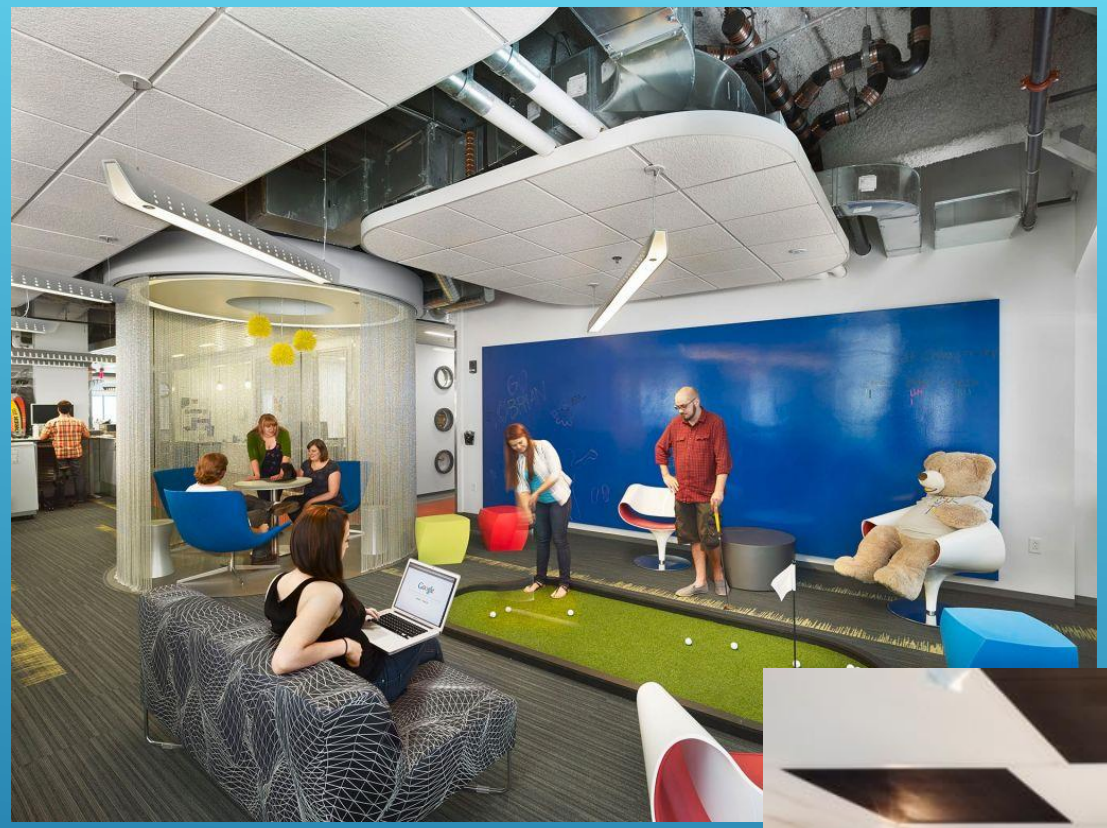

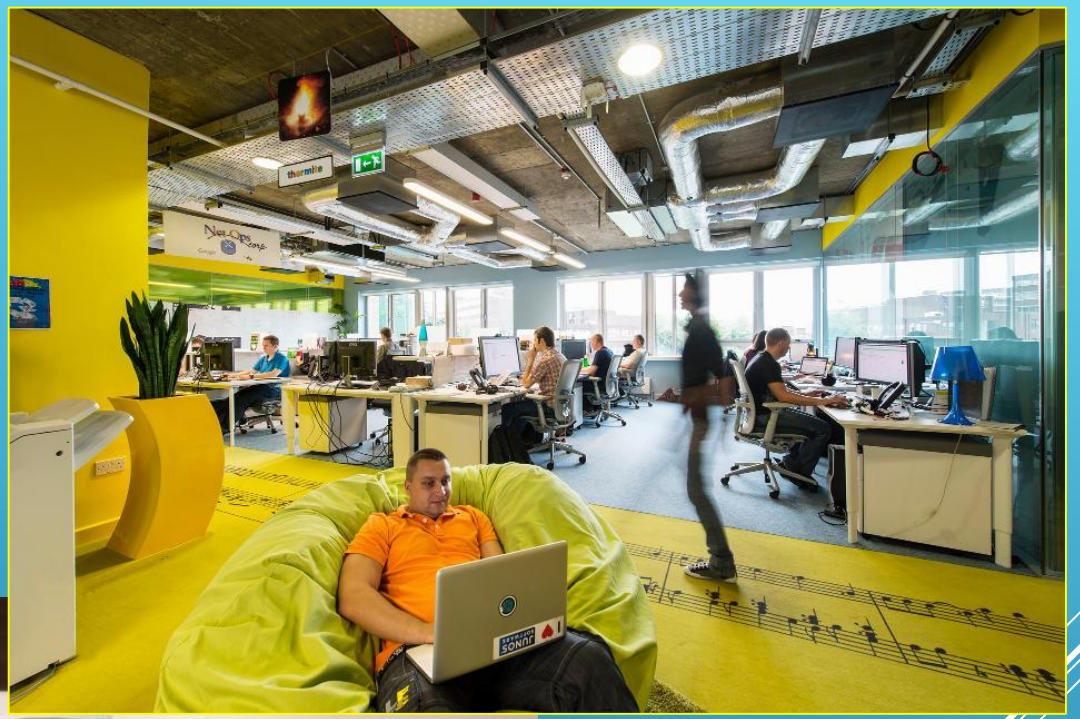

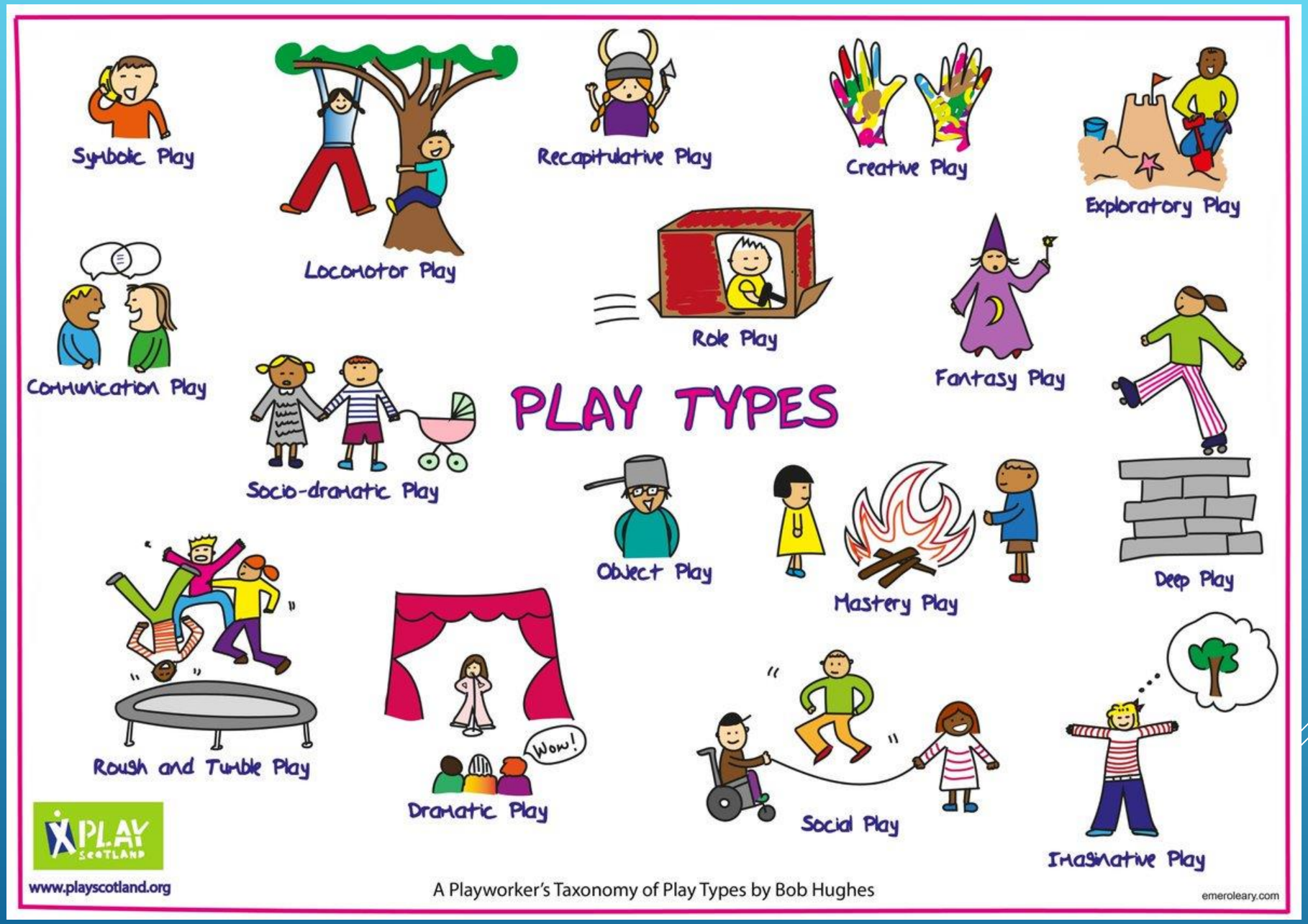
PLAY TYPES
Symbolic Play
Locomotor Play
Recapitulative Play
Creative Play
Exploratory Play
Communication Play
Role Play
Fantasy Play
Socio-dramatic Play
Object Play
Mastery Play
Deep Play
Rough and Tumble Play
Wow!
Dramatic Play
Social Play
Imaginative Play
PLAY SCOTLAND
www.playscotland.org
A Playworker's Taxonomy of Play Types by Bob Hughes
emeroleary.com

?

How will YOU introduce play into your teaching and workplace

Playful Feedback

- Please write comments, feedback, questions on your A4 blank pages……

……..Now fold the page into a paper aeroplane and fly it to us!

In conclusion:

Drawing on innovative, playful methodologies in education and training will enhance delivery of all content, effectively connecting in a deep manner and thereby maintaining the creative thinking of childhood into adulthood and lifelong learning

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