

GEETS: Global Education -European Teaching Strategies 2018-1-ES01-KA101-049441

# **Educating for the 21st century: re-imagining our schools for our children's future.**

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“Preparing our students for life  
beyond the classroom  
in a world that doesn’t exist.”

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*Educating for the 21st Century*

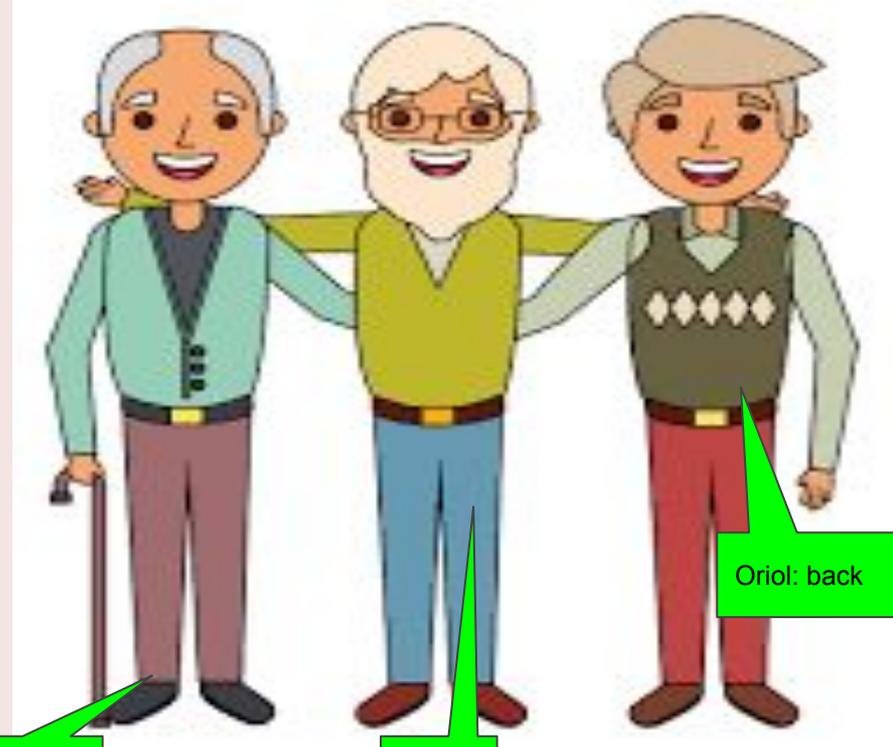
## CONS & PROS

### CONS

- GEOGRAPHICAL CONCENTRATION OF PARTICIPANTS
- PARTICIPANTS FROM PRIMARY SCHOOLS
- TOO MANY ITEMS TO BE TREATED

### PROS

- OUR TEACHERS
- NEW TOOLS AND PERCEPTIONS
- ORIOL & COLLEAGES... & JAMESON'S DISTILLERY!



Joan Carles:  
ankle

Liam:  
leg

Oriol: back

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**PROGRAM**

1st WEEK	Induction & needs analysis	21st century skills	Challenges of CLIL	Limited resources environments	Issues in ELT
	The development of theory & methodology in education	Reflective teaching practice	Concepts of autonomous education	The importance of multiculturalism	Promoting responsible citizenship
2nd WEEK	School gardens, sustainability and permaculture	Technology for teachers	Becoming a more autonomous teacher	Promoting critical thinking skills	Forum
	Project based learning	What is problem based learning?	Technology for teachers	ICT in the classroom/	Feedback and review session

## OBJECTIVES

### AIMS OF THE COURSE

- To provide with an overview of assessing pedagogical developments in the 21st
- To provide with a toolbox to enhance our own 21st skills
- To get opportunities to explore 21st global issues and their impact on our schools
- To promote responsible citizenship
- To establish contacts and share information with other teachers and facilitate future networking among us
- To produce high-quality learning outcomes for participants and reenforce our school's scope

### AIMS AT SCHOOL

- To make **lifelong** learning and mobility a reality
- To improve the **quality and efficiency** of education and training
- To promote equity, social cohesion, and active **citizenship**
- To enhance creativity and innovation, including **entrepreneurship**, at all levels

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## OUR TEACHERS:

- SENSE OF HUMOUR
- OPTIMISM
- PERFORMERS
- USE THEIR OWN BIO AND EXPERIENCES
- LEARNERS BY DOING
- **TENIEN UN ANGLÈS DE CATEGORIA,**

**S'ENTENIA TOT, TOT, TOT!!!**



Hi, lovely  
people!!!

How are you  
today?

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**THE DEVELOPMENT OF THEORY  
& METHODOLOGY IN EDUCATION:**



**Behaviorism**

**Cognitivism**

**Constructivism**

**Humanism**

**Social constructivism**

**Connectivism**

<b>Education then</b>	<b>Education now</b>
Content at centre of learning	Learner at the centre
Teacher as expert, instructor, tester	Teacher as guide, coach, resource
Subject textbook	Variety of materials
One-size-fits-all curriculum	Personalised learning
Perfection expected for Ts and Ls	Errors as learning opportunities
Summative assessment	Formative, ongoing (self-) assessment
Learning based on brain and memory	Learning through doing
Learners as consumers	Learners as producers and consumers
Maximum TTT (Teacher Talking Time)	Maximum LTT (Learner Talking Time)
Technology as add-on	Integrated technology
Socio-emotional aspect ignored	Integrated socio-emotional development

**21st CENTURY SKILLS: EU ET 2020 (EU Education Training 2020)**

**For instance: P21 MODEL**

<b>Learning Skills</b>	<b>Literacy Skills</b>	<b>Life Skills</b>
Critical thinking Creative thinking Collaborating Communicating	Information literacy Media literacy Technology literacy	Flexibility Initiative Social skills Productivity Leadership

# UN SDGs: 17 steps to achieve a better world

Sustainable  
Development  
Goals



[Examples of learning approaches and methods for any SDG](#)

## REFLECTIVE TEACHING PRACTICE (I)

### “Be aware of our personal PATHWAYS”

- What were your initial theories of teaching?
- How have they changed?
- What changed them?

### Kirkpatrick's evaluation model

- Feeling:** How did I feel?
- Learning:** What did I learn?
- Behaviour:** How will I change?
- Results:** What did that change?

### 3 types of qualities

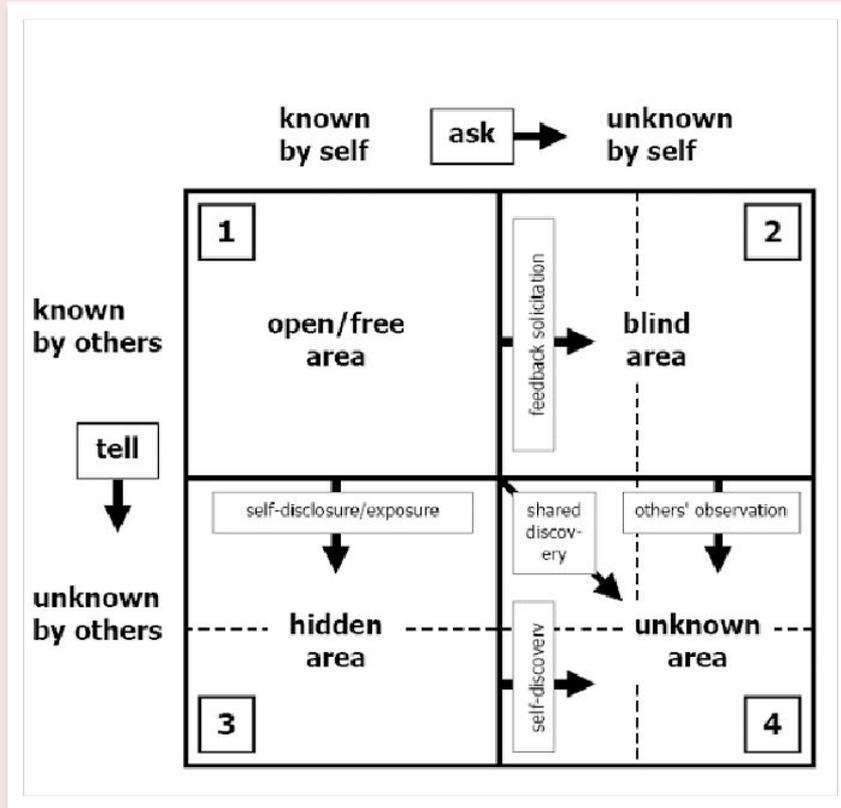
- Personal
- Professional
- Knowledge



REFLECTIVE  
TEACHING

**Ser  
conscients  
del nostre  
currículum  
ocult...**

## REFLECTIVE TEACHING PRACTICE (II)



Examples of RTP:

**Self-Assessment:** *Teaching diary, video recording*

**External Assessment:** *Peer observations, Student evaluations*



*Is this reflective practise?*

## CONCEPTS OF AUTONOMOUS EDUCATION

### Autonomous Learners:

- Independence
- Interdependence
- Decision-making
- Responsibility
- Action
- Reflection

### How can it be developed?

- Needs analysis
- Class contracts
- Learner diaries
- Self-reports
- Promoting reflection
- Promoting evaluation and self-evaluation
- Promoting self-awareness
- Promoting discovery
- Project and problem-based learning
- Promoting interactive and interdependent learning
- Being a reflective teacher and transforming your own learning and teaching

## THE IMPORTANCE OF MULTICULTURALITY

— — —

### KEY CONCEPTS

**Cultural** – related to social behaviour

**Cross-Cultural** – comparison between 2 or more different cultures

**Multi-cultural** – containing different ethnic or cultural groups

**Intercultural** – mutual exchange and understanding of different cultures

**Transcultural** – combining elements of different cultures

## THE IMPORTANCE OF MULTICULTURALITY

— — —

### EQUALITY VERSUS EQUITY



In the first image, it is assumed that everyone will benefit from the same supports. They are being treated equally.



In the second image, individuals are given different supports to make it possible for them to have equal access to the game. They are being treated equitably.



In the third image, all three can see the game without any supports or accommodations because the cause of the inequity was addressed. The systemic barrier has been removed.

## Intercultural Inductive method

- \*Development of a socio-natural calendar
- \*Seasons-weather -environment-adults-children
- \*Daily social activities starting point of pedagogy
- \*Recovery of previous knowledge
- \*Selection of materials
- \*Selection of activities
- \*Reflection and systematisation

**create their own  
syllabus.**

**Igualtat vs Equitat,**  
quin model volem/podem aplicar?

## SCHOOL GARDENS, SUSTAINABILITY AND **PERMACULTURE**

Through school gardens we can promote: RESPECT, COLLABORATION, SOCIAL SKILLS.

TO BEGIN with we need to...

**WORK WITH THE LAND NOT  
AGAINST HER**

- Have a reason
- Dream
- Research
- Plan
- Prepare



## SCHOOL GARDENS, SUSTAINABILITY AND PERMACULTURE

- **GETTING STARTED** – estimating, measuring, soil analysis, planting, counting
- **KEEP IT GROWING** – caring, composting, weeding, cleaning, collaborating
- **HARVESTING** – new products, new tastes, nutrition, new skills, new materials
- **ACADEMIC SKILLS** – maths, literacy, science, technology, art
- **LIFE SKILLS** – awareness of natural world, self-awareness, collaboration, sense of territory, responsibility

## TECHNOLOGY FOR TEACHERS & LEARNERS

[QUIZLET](#)

– ‘matching’ is good to introduce a lesson; ‘live’ is good for revising

[FLIPGRID](#)

– It can be used for voice response

[RUBISTAR](#)

– to create rubrics

[TED-Ed](#)

– Lessons from TED videos

[GOOGLE SUITE](#)

– to share info and tasks

[STORYBIRD](#)

– to develop creative writing

[WORDLE](#)

– Word clouds

[JASONDAVIES](#)

– Word clouds

[PLICKERS](#)

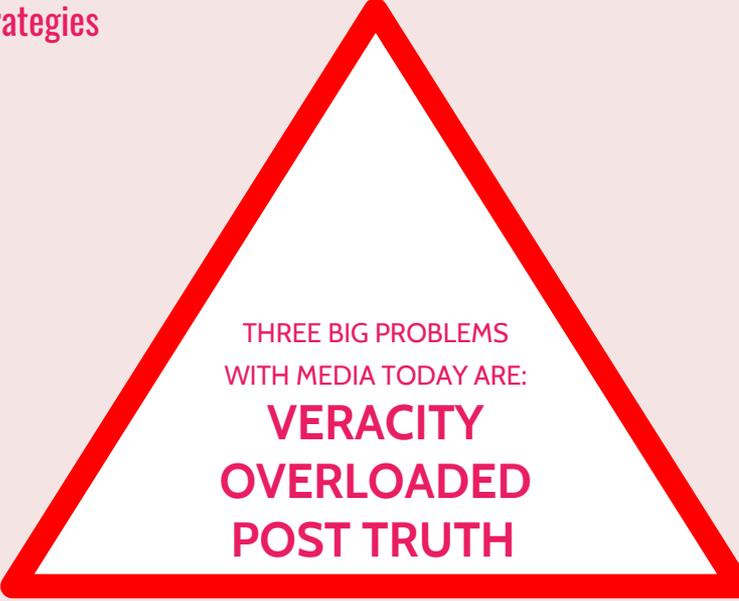
– Assessment in class

## PROMOTING CRITICAL THINKING SKILLS (I)

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CRITICAL THINKING: analysis and evaluation of an issue in order to form a judgement. It involves:

- **Interpretation**
- **Analysis**
- **Inference** (recognise the important elements that are inferred in a text – tone – metaphorical sense...)
- **Evaluation** (measure the information – **veracity**)
- **Explanation**
- **Autonomy** (self-regulation, reach own conclusions)



THREE BIG PROBLEMS  
WITH MEDIA TODAY ARE:

**VERACITY**  
**OVERLOADED**  
**POST TRUTH**



**Media literacy:** ability to access, analyse, evaluate and create media in a variety of forms.

# PROMOTING CRITICAL THINKING (II)

Simple questions to work with learners:

- EVIDENCE** – What makes you think that ... ?
- EXPLAINING** – What are some of the causes that/for...?
- RELATING** – How does that compare to ...?
- PREDICTING** – What will happen / will you do next?
- DESCRIBING** – What did you observe happening?

What prevents **CRITICAL THINKING**?  
**STUBBORNNESS, PREJUDICE, FEAR, LAZINESS**



## RESOURCES (fake news)

[Snopes](#)

[Politifact](#)

[All sides.com](#)

[Fact Check](#)

[Hoax Slayer](#)



## PRINCIPLES OF CRITICAL THINKING

- Gather complete information
- Understand and define alternatives
- Question methods, conclusions, the source of facts
- Examine causes and effects
- Understand our biases and values
- Don't expect an answer
- Examine the big picture
- Watch for thought stoppers

### How to spot FAKE NEWS

- ✓ Check the source
- ✓ Check the date
- ✓ Check the author
- ✓ Check your own biases
- ✓ Read beyond the headlines
- ✓ Check supporting sources
- ✓ Ask the experts

## PROJECT-BASED LEARNING (I)

— — —  
**KWL** : graphic organizers that help students organize information before, during, and after a unit or a lesson.

### KWL Chart

Select a topic you want to research. In the first column, write what you already know about the topic. In the second column, write what you want to know about the topic. After you have completed your research, write what you learned in the third column.

What I <b>K</b> now	What I <b>W</b> ant to Know	What I <b>L</b> earned

## 5 KEYS TO RIGOROUS PBL:

- 1 Real-World Connection
- 2 Core to Learning
- 3 Structured Collaboration
- 4 Student Driven
- 5 Multifaceted Assessment

## Driving Questions:

## PROJECT-BASED LEARNING (II)

### What is the difference between doing projects and PBL?

#### Should be...

- engaging
- open-ended
- aligned to your learning standards or goals

#### Can be about...

- solving a problem or task
- creating a product
- educating others
- convincing others
- forming an opinion
- philosophical
- role oriented

Doing Projects vs. Project Based Learning

#### Traditional Unit with Culmination Project



#### Project Based Learning Unit



## PROJECT-BASED LEARNING

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### Driving questions

1. How do we create a podcast to discuss how hobbies can improve our quality of life?
2. How do I as a scientist design an experiment to debunk a common scientific myth?
3. How do stories from the past define who we are today?
4. How can we create a greener school?
5. What would it like to be friends with a historical figure?
6. What makes a city great?
7. How can we, as students, help others recognise fake news?
8. How does population affect quality of life?
9. How will global warming affect our community?
10. What does the study of our local pond teach us about the oceans?

## PROBLEM-BASED LEARNING vs PROJECT-BASED LEARNING

4C's

Critical thinking

Communication

Collaboration

Creativity

### Project Based Learning vs. Problem Based Learning

#### Similarities

##### Both PBLs:

- Focus on an open-ended question or task
- Provide authentic applications of content and skills
- Build 21<sup>st</sup> century 4 C's competencies
- Emphasize student independence and inquiry
- Are longer and more multifaceted than traditional lessons or assignments

#### Differences

Project Based Learning	Problem Based Learning
Often multi-disciplinary	More often single-subject
May be lengthy (weeks or months)	Tend to be shorter
Follows general, variously-named steps	Follows specific, traditionally prescribed steps
Includes the creation of a product or performance	The "product" may simply be a proposed solution, expressed in writing or in an oral presentation
Often involves real-world, fully authentic tasks and settings	More often uses case studies or fictitious scenarios as "ill-structured problems"

## TEACHERS AUTONOMY: Teacher autonomy involves self-guided professional action - **FREEDOM!!!**

### Main roles of the teacher in our classroom

- EXPERT
- ROLE MODEL
- FACILITATOR by guiding, by providing opportunities for learning
- MODERATOR judgement
- PROVIDER

**STAGE 1** ➔ Dependent learners – teachers are who coach

**STAGE 2** ➔ Interested learners – teachers who motivate and guide

**STAGE 3** ➔ Involved learners – teachers who facilitate

**STAGE 4** ➔ Self-directed learners – teachers who consult

Transforming roles – [C. Rogers](#) (Humanism)

### FACTORS in developing TEACHER AUTONOMY

- Subject expertise
- Ability to observe oneself
- Cooperation
- Action on learners
- Peer
- Self awareness



The [JOHARI WINDOW MODEL](#)

### [EAQUAL PROFILE GRID](#)

The EPG, is a framework with descriptors spanning six 'development phases' in a language teacher's professional evolution

## IMPLEMENTATION



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TO BE THOUGH...

GEETS or *GEEKS*?

