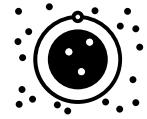


. Goals .

Rapidly generate innovative pedagogical solutions
on the theme of hydrogen energy



. Principles .

All you have to do is draw 1 card from the 4 card families :

1 : Learning event

2 : Final work

3 : Transversal Comp.

4 : Knowledge on hydrogen energy

Each selected element corresponds with what the students will have to mobilise

It is imperative to integrate the imposed elements in
the design of the learning session or sequence

However, you are allow to change one of your cards if necessary



Duration

2h



Participants

4 to 8

including 2 teachers min.

ID CARDS

Participants' Rules



think, act as
be, a/an ...

Conceptor

Novice

Optimist

Curious

Have confidence in your
creative abilities
Start with what requires
your attention
Take this opportunity to
participate in change

Give yourself the right to learn
Have desire to discover
Accept the possibility of not
having the "right" answer
Have confidence in
your ability to find one

Think first, "What can I do? »
rather than "What's wrong?
Be insatiable
Believe in the possibility of
creating together

Break the routine
Inspire yourself from the
outside world to your
habits
Be inspired by others.

...

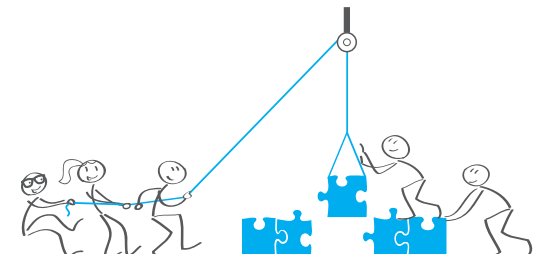


Be respectful of the other participants and their proposals.
Feel free to participate!

ID CARDS

Card-Based Instructional Design method

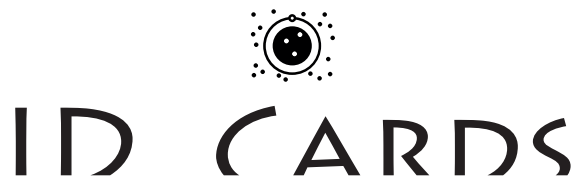
*to create innovative
teaching on Hydrogen energy*



Participant Guide



ID CARDS



ID CARDS

The development of this instructional design method was carried out as part of the HySchool project

The HySchools project aims to provide European teachers with a set of pedagogical and professional resources for teaching concepts related to hydrogen energy

This project is supported by the European Union within the framework of the Erasmus + projects

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



HySchools

Inspiring the
talent of tomorrow



This method was developed by
Stéphanie Fleck - Associated Professor (France)



ID CARDS

. The 4 card families .

1 : The learning events



A learning event, as defined by D. Leclercq and M. Poumay (2008), corresponds to the action that students use to learn. You have to design a learning session that enable the students to :

- (1) Receive information (e.g., listen to a lesson, a peer presentation, a video document, etc.)
- (2) Observe, imitate (e.g., a behaviour, a natural phenomenon, practices of another person, etc.)
- (3) Practise, do exercises (e. g., do application exercises, practise/train a technical gesture, etc.)
- (4) Explore, document (e.g., interview an expert, do literature research, etc.)
- (5) Experiment, solve problems (e. g. test hypotheses, do a case study, propose solutions, etc.)
- (6) Create, enhance (e. g. design a poster, a journal, a book, a research synthesis, a prototype, etc.)
- (7) Debate, discuss (e.g., discuss regulations, compare ideas, argue, try to convince, persuade, etc.)



ID CARDS

. The 4 card families .

3 : Transversal competencies



Beyond theoretical knowledge, students have to build and mobilise various transversal competencies. These competencies enable them to be, in the long term, autonomous in their learning and in their lives. Your learning session should support the implementation of at least one of these skills defined by UNESCO.

- (1) Critical thinking
- (2) Innovative thinking
- (3) Global citizenship (e.g., respect for diversity, intercultural understanding, tolerance, etc.)
- (4) Information & ICT literacy (e.g., locate and access information, analyse and evaluate media content , etc.)
- (5) Interpersonal skills (e.g., communication skills, organizational skills, teamwork, etc.)
- (6) Intrapersonal skills (e.g., motivation, self-managing of work, of emotions, self-assessment, etc.)



ID CARDS

. The 4 card families .

2 : The final works



The final production corresponds to what the students must achieve at the end of the learning session. You have to design a learning session that will allow them to complete this production.

Feel free to propose some variants !



ID CARDS

. The 4 card families .

The major areas of knowledge on hydrogen energy



Hydrogen energy challenges several major areas of knowledge. You have to design your learning session in such a way that students can explore, discover and learn about the selected field in a way that respects the curriculum. The various domains are formulated as keywords to inspire you and find their place in different disciplinary fields (e.g. physics, chemistry, economics, social sciences, history, geography, etc.)