HOW TO USE TECHNOLOGY TO IMPROVE TEACHING AND LEARNING
- Education is not a mechanical system

- It is a human system

- Some people do want to learn

- Some people don’t

- Some people find it boring

- Some people find it irrelevant
- Some students are hearing

- Some students are visual

- Some students are both hearing and visual

There are trends

But their stories are unique and we have to offer many possibilities.
Today, two tools offer us tremendous opportunities to develop effective and personalized teaching strategies:

- Elearning
- Classroom design
1- E-learning environment to increase students’ motivation

- Motivation is a very important topic of pedagogy

- Ramsden has shown that motivation of learners conditions their vision of their studies.

- Brophy has shown that motivation is an essential element for students’ success

- University students motivation decreases with time

- Literature shows that motivation can be increased through the environment
Indeed, Motivation can be well-described in three dimensions:

- Motivation is related to the consequences of the action
- Motivation is linked to needs
- Motivation is proportional to the sense of personal competence which the student feels facing a learning task

Then we have:

\[
\text{Motivation} = \left[\text{competencies perceived by the student}\right] \times \left[\text{value attributed to the activity}\right]
\]
1- E-learning environment to increase students motivation

Viau shows that pedagogical activities should therefore:

- Be significant to the eyes of the students
- Be diverse
- Represent a challenge for the student
- Be authentic
- Demand cognitive involvement from the student
- Allow the student to interact and to collaborate with others
- Have clear guidelines
E-learning environment to increase students motivation

E-learning allows that because of:

- New Learning Management System (LMS) such as Moodle for example
- Virtual classroom
- Chat session
- Forum discussion
- Interactive online whiteboard

- And so on...
2- Classroom design to improve learning and teaching

A picture speaks a thousand words:

![Graph showing attention levels over time](image_url)
2- Classroom design to improve learning and teaching

2 or 3 decades ago, we thought that:

- Students learn only by listening
  But it’s false
- Topics we teach are interesting enough to captivate students’ attention
  But it’s false
- Students are sure enough of themselves to tell us if they don’t understand
  But it’s false
- Students can put into practice what they hear
  But it’s false
What happens in an “in-rows” classroom?

- They want to listen and to participate
- They want to listen but they don’t want to participate
- Neither one, nor the other
2- Classroom design to improve learning and teaching

What happens in an “in-rows” classroom?
2- Classroom design to improve learning and teaching

What happens in “intelligent classroom”? 
Classroom design to improve learning and teaching.

What happens in "intelligent classroom"?
The death Valley

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