

Flipping Physics classrooms using Padlet

I teach **Physics and Chemistry** in a **high school** in France.

16

age of pupils
on average

450

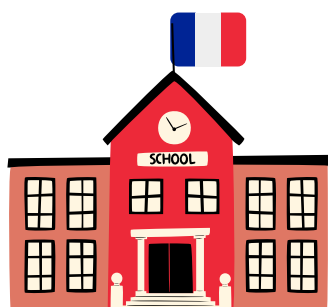
pupils

35

pupils per class
on average

8

classes



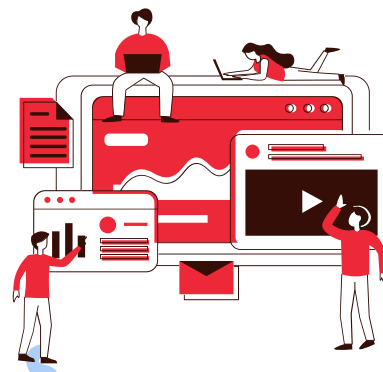
Teaching environment

The school where I teach is located in a town of less than 3,000 inhabitants.
It is a boarding school.

Digital tools

Every student has a laptop thanks to the "Lycée 4.0" regional program.

My school has access to a **digital workspace**, which facilitates communication and provides a space where students can submit their work.



Experience with digital tools before Covid-19

I am a trainer for my subject and a digital education expert. I have been working with the DRANE (Local Delegation for Digital Education) for 10 years. I devote about **20% of my working time** to training (institutional training and self-training). I exchange practices with colleagues of the same subject and **I read and publish articles** on the website of the local education authority.

The tool: CNED

<https://www.cned.fr/l-actualite-de-la-formation/le-cned-de-a-a-z/mes-classes-virtuelles>

The CNED, the French National Center for Distance Learning made available its online courses for all students and a video conferencing tool called "Virtual Classroom of the CNED" to allow teachers to organise remote classes with their students.



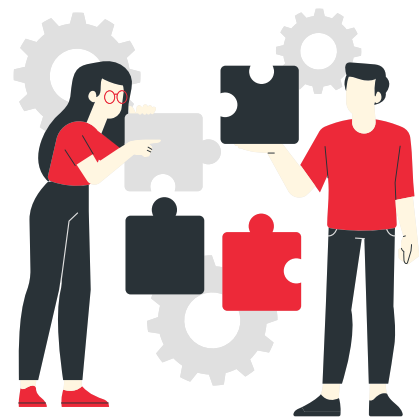
Needs before this teaching practice

The challenge was to **keep teaching** at a distance while maintaining contact with my students.

Needs solved

Communication, continuity, motivation and commitment !

I used the same tools I used in the classroom, namely **Classroomscreen** to welcome my students in virtual classes, and **Kahoot** to make distance learning more lively.



Audience targeted

- The whole class for **daily lessons**.
- Groups for **specialised teaching**.
- Small groups of pupils for **tutoring** during the holidays.

Organisation

The news of the **school closures** came as a shock and it was a bit of a panic.

I handed out class resources and guidelines to all my classes before school closure.

At the same time, I **took pictures of the PTs** that were scheduled for the next week and went home with some lab equipment.

I then scheduled **virtual classes** with my students.

Since it was allowed to go to my school during lockdown and my high school decided to invest in desktop cameras, I **provided video lectures from my school when I needed to do experiments**. I used the camera to explain a vector plot, for example.

Since we did not report missing students in our digital workspace anymore, I **created a tracking tool**. I took screenshots of the list of students in the virtual classroom, and after the class I **checked who was present or absent** in my Excel file, which helped me keep track of absenteeism.



Practice activity

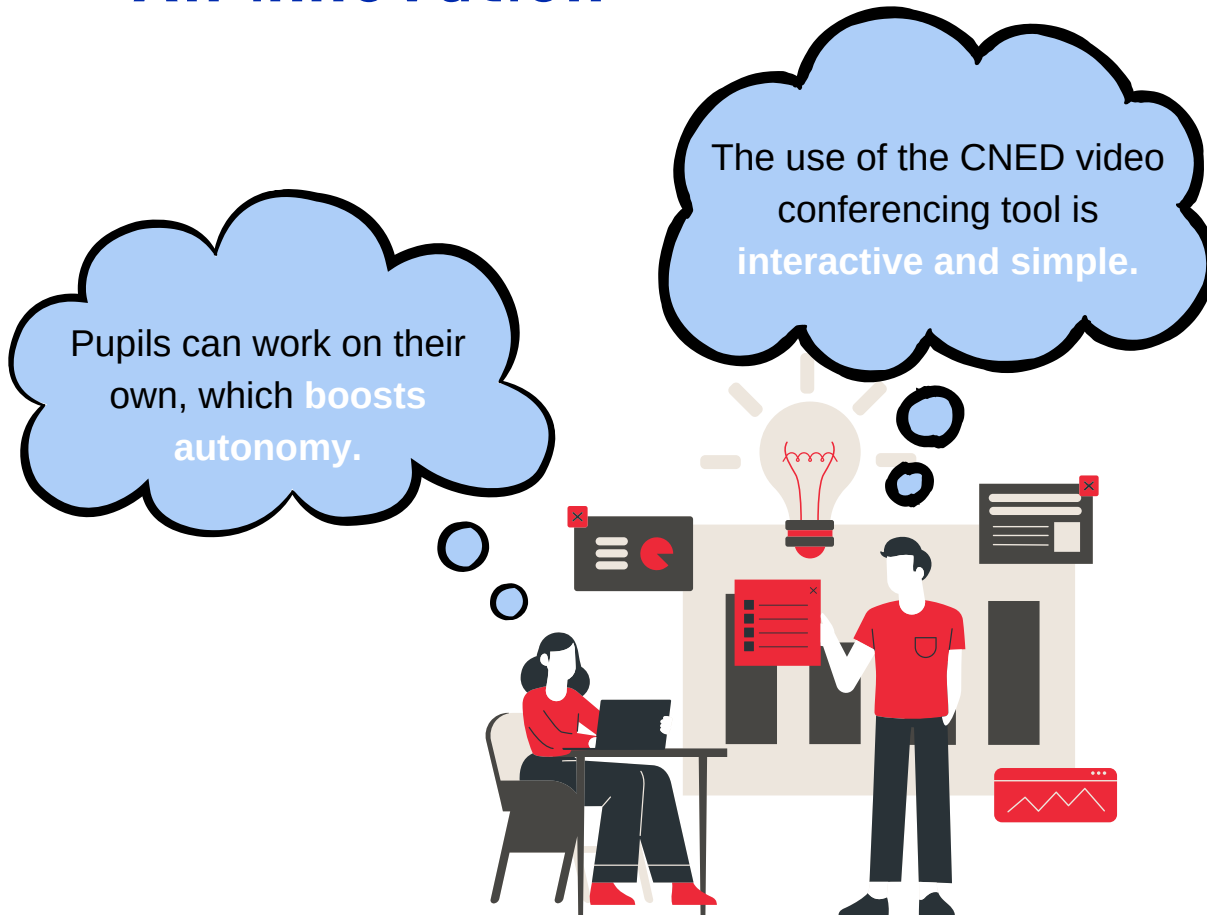
I used the method of **flipped classrooms**, using **Padlet**. Before each class, I prepared a Padlet page with **steps to follow in autonomy**, like a guide with exercises to prepare, questions on the course, audio and video files.

Then, my virtual class always began with **a welcome phase for my pupils** and an introduction. My pupils still had access to the Padlet and could follow the slide show but the **synchronous teaching hours** were **dedicated to the correction of exercises and practical work**. For example, we corrected the exercises done at home with screen sharing of a pupil for more interaction (rather than projecting the answer on the slide show). **The most frequent mistakes** were also projected and discussed.

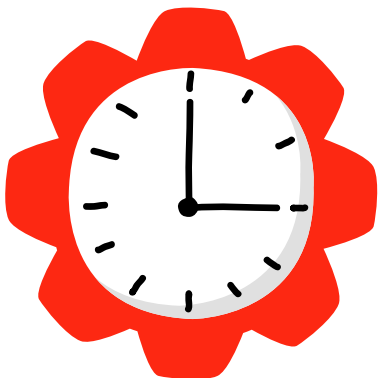


Impact of the tool

An innovation



An efficient practice



- I **kept in touch** with my students.
- The absence and assignment tracking sheets provided me with **reliable indicators of pupil engagement**.
- This practice was also effective because the 2019-2020 school year **was not a blank year** even though there were learning gaps due to lack of focus during videocalls.

Keys to success

Structured lessons
are a must.

Let everyone know the
schedule of virtual classes.

Remind pupils of any
unreturned work.



Benefits



The different tools allow to **have a dynamic lesson** that make pupils want to come to class.



My pupils knew exactly **where we stood** in the course as they had a global vision.



Students **understood their mistakes** and **improved their skills**.

Ready ?

Do not hesitate to try this method with your pupils, asking them for help with digital tools if necessary. They appreciate being asked for help.



Resources

Screenshots

Example of a screen of a distance learning course with Classroom Screen: content of the session announced, QR-code to the Padlet or document of the day, mood wall, agenda, time...



Example of a rally with Padlet: it is a work plan that represents a course of one hour and a half, in autonomy (one week to do it), and which ends with a quiz.



This portrait gives a representation of the teacher's choices which are not our own.

The statements in this portrait are not direct quotations but have been adapted from an interview which took place in 2022.