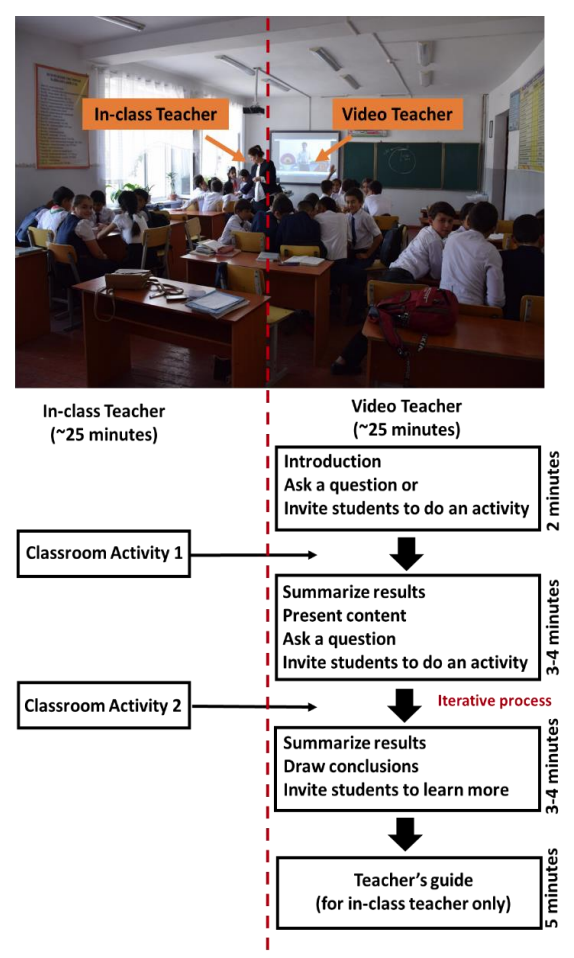
Before you write the architecture, please read the quick guide AND the protocols for Paired Teaching interactive video lesson, carefully.

**What you need to know about a paired teaching lesson**

* This lesson is not a lecture.
* This lesson presents a topic from an unusual, interesting angle.
* The video segments should be 3 minutes or less, and never more than 4.
* The first segment needs to be no longer than 2 minutes and must excite the interest of both teachers and students.
* With video technology, segments can be filmed in interesting locations. Stay away from the classroom as much as possible!
* A lesson must provide challenging, thought-provoking classroom activities for the video breaks.



**Figure 1.** Paired teaching (teaching-duet) pedagogy

**Extreme Climate Events: preparing for disaster**

(Come up with a title that is attention-grabber. It’s OK to use a main title and a subtitle.)

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**Istituto Santorre, Turin**

**SEGMENT 1 (2 minutes)**

**Introduction**

Scientist introduction

Difference between weather and climate.

Definition of extreme events (rare, unusual, causing damage)

**ACTIVITY 1 (3 minutes - 1 min per question)**

**What do you know about extreme events?**

Mentimeter questions:

1) List names of extreme events

2) How often do they occur (every year, 1-5 years, >5)?

3) Heatwaves - who is most at risk?

**SEGMENT 2 (4 minutes)**

**Examples and facts on extreme events**

Discussion of mentimeter results

Images (floods/drought/hurricanes etc)

Add extreme events not listed, facts on changes in event occurrence with climate change

**ACTIVITY 2 (6 minutes - 2 mins per group)**

**Extreme events in Torino and Piemonte**

Ask students to bring photos/articles/info on past extreme events in Torino and Piemonte. Students are grouped by event, each group presents their event (type, location, consequences, duration). What do extreme events look like? How would you describe them e.g. a heatwave? How would you know it is happening? Is this type of event more common?

**SEGMENT 3 (4 minutes)**

**Records of temperature over Torino and Europe.**

Discuss how we define heatwaves.

Plots of average conditions and temperature during heatwaves, maps.

Show plots for Torino.

**ACTIVITY 3 (10 minutes)**

**Plotting and analysing temperature data.**

Provide data for number of HW days per year for London, Lecce, Milano, Moscow. Students plot time series in Excel. Identify key years, trends. Share figures with teacher.

**SEGMENT 4 (4 minutes)**

**Discussion of HW records in European cities.**

How are the events changing in time, scale of events, comparison between cities. How many countries experience HWs together? How can a HW in another country affect us?

**Preparing for extreme events**

Introduce activity in planning for extreme events

**ACTIVITY 4 (7 minutes + 3 minutes for student feedback)**

**Preparing for extreme events.**

Split the class into groups/tables. What can be done in each example?

Example 1 (Headteacher/Principal): On Sunday evening, schools receive a heavy snow warning for Monday.

Example 2 (Mayor): At the beginning of August, the mayor is told that Ferragosto could be the hottest day on record.

Example 3 (Farmer): In January, farmers are told that drought conditions will begin in the spring.

Large sheets of paper for each group to design a plan.

**SEGMENT 5 (4 minutes)**

**Summary and Conclusions**

How to become a climate scientist/expert on extreme events.

Where to learn more (e.g. [www.cmcc.it](http://www.cmcc.it), Windy app, <https://www.arpa.piemonte.it/>)

Q&A

**REPEAT THE PROCESS FOR THE REMAINING SEGMENTS AND ACTIVITIES OTHER THAN THE LAST SEGMENT OF THE VIDEO, WHICH CONTAINS THE TEACHER’S GUIDE (SIMPLY COPY AND PASTE THE PREVIOUS BOXES AS MANY TIMES AS NEEDED AND INSERT THE CONTENT FOR EACH SEGMENT AND ACTIVITY).**

The last segment of the lesson should be a wrap up of the lesson by then all objectives of the lesson should be achieved. Note that the last segment of the lesson is the last segment of the video in which you will be addressing the students. The last segment of the video is a segment in which you will be addressing the teacher and you will be presenting the teacher’s guide.

**SEGMENT (Type the number here) (Type the time here)**

**TEACHER’S GUIDE**

After the lesson is completed, the final segment is a Video Teacher’s Guide, which is your ‘private conversation’ with the in-class teacher – stating learning objectives of your module, prerequisites and suggested activities during each of the breaks between your segments.

Type the content of the teacher’s guide inside this box; provide all details. Describe the settings where this segment will be presented. The size of the box will adjust as you type more text

Please report the following information

Total length of the lesson in minutes: 47 minutes

List any animations or simulations (these need to be of high quality), specify whether they are available or will be made. If from outside sources, please specify whether you have permission to use them.

List any videos that will be embedded (videos need to be of high quality), specify whether they are available or will be made. If from outside sources, please specify whether you have permission to use them.