HELMotion, our optimised podcast experience
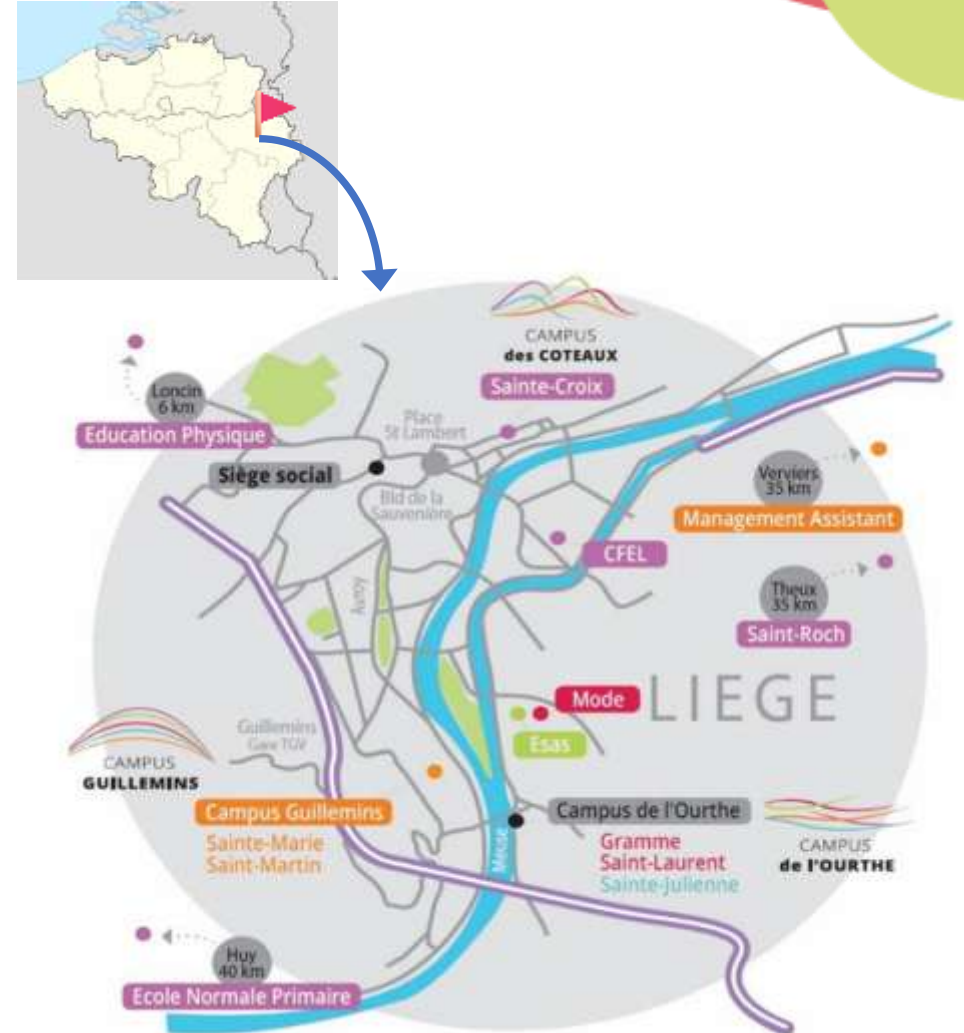
Frédéric Senny

Content

- Where are we ?
- Who we are ?
- Podcast, our story
  - A long time ago … a seed was planted
  - It grew
  - It is now a nice tree, each branch with a purpose
- What's next ?
- Conclusions

HELMo ? A Higher Education Institution in Liège

- ~10 000 students
- ~1000 teachers
- 5 departments
  - Economics
  - Informatics & Technics
  - Paramedical
  - Pedagogical
  - Social
- cross-functional services

Our Happy E-learning Team

The Boss

Our R2 unit

Me ☺
Jedi Master

Our Com' Lady

A funny Guy
who helped me
on this topic

The podcast

- Podcast = i**Pod** + broad**cast**ing = audio/video file on the web for on-demand listening/viewing (Roland, 2013)
- Added values ?
  [Teacher]
  - Keep a record of past courses (Temperman et al., 2009)
  [Students]
  - Review, fill in personal notes (Temperman et al., 2009)
  - Mobile Learning (Caron et al, 2007)
  - Additional supports, « wherever – whenever » (Nataatmadja et al., 2008)
  - Inclusion (Lemarchand et al., 2009)

The **podcast** @HELMo ?
Think about a **garden** …

2025
+ 3 rooms
+ Dji mobile kit
… *more and more …*

2017
A first research
A first seed …

2020
First 6 rooms
… *seeds grow …*

UBICAST

Financé par
l'Union européenne
NextGenerationEU

The seed was planted in 2017 …

Our question : *What about podcast in Higher Education ?*

- Mobile recording equipments (funded by the AdN)
- Development of *Streampad*
- Tested by some teachers

Results/Feedback (report)

- ➕ Added value (revision, catch up, …)
- 🏃 Students do not flee classrooms
- 💡 New ideas for teachers

MS Stream

Streampad

Learn
moodle
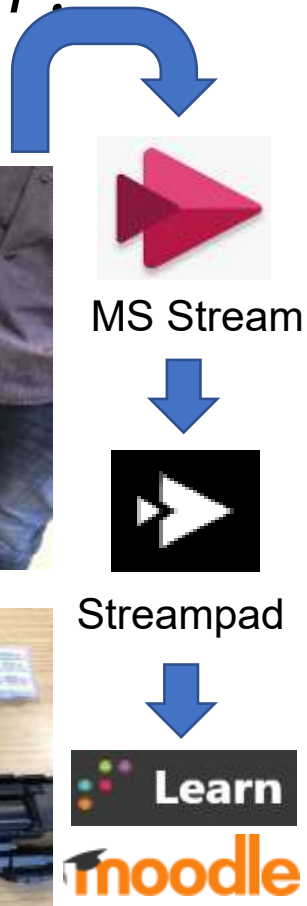
Design of the podcast garden @HELMo

- ***Fences*** 🪧 : We defined what [podcast is to us](#) and clarified the concept to our colleagues

- ***Flowers-vegetables-fruits*** 🍎 🥬 🌸 : different uses

- ***People*** 👨‍🌾 👩‍🏫 : E-team and colleagues

- ***Tools*** ⚒️ : In 2020, we chose Ubicast as fulfilling our technical needs
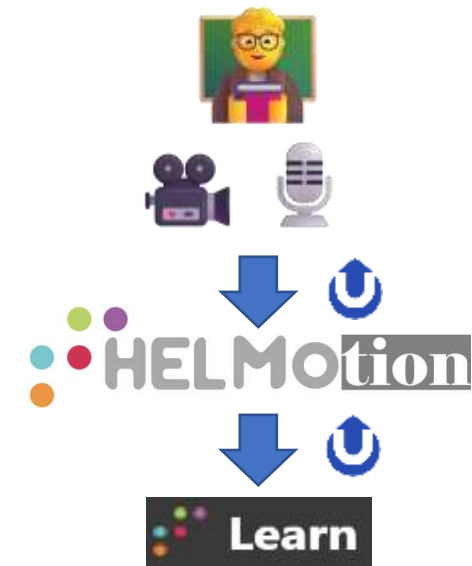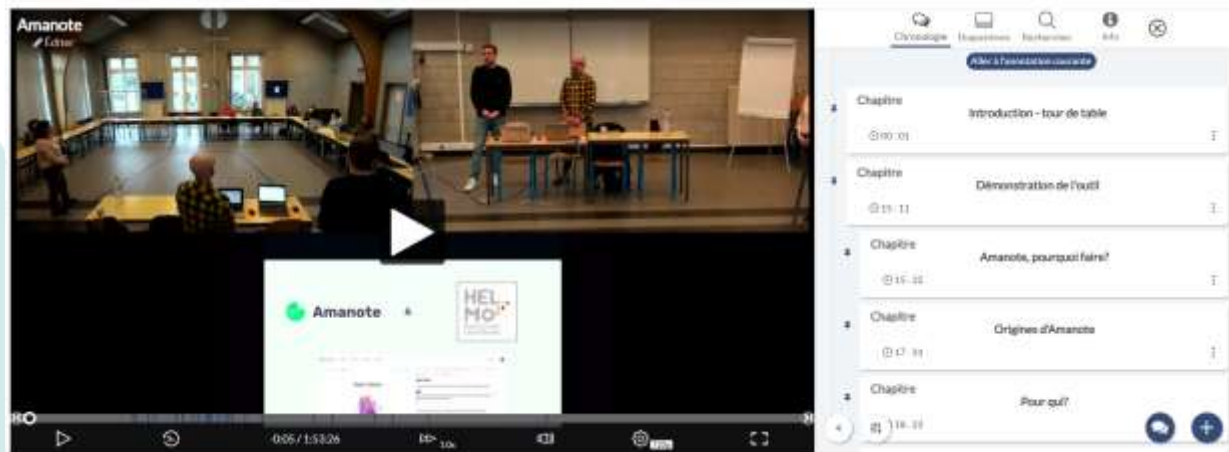
Our setup in 2020

- 6 rooms equipped with camera and microphone
- Recording procedure in four steps
- Media data pushed on HELMotion, powered by Ubicast
- Uses (colleagues' needs) : courses, conferences, …

Equipped room :

RRF as fertilizer and our setup grew in 2025

- RRF - Recovery and Resilience Facility - project started in 2023 until 2025

- It allowed to boost our setup
  - **+ 3 rooms**, including 2 with tracking camera
  - New recording procedure including **QR code**
  - **Dji Osmo Pocket 3** recording kit for nomad uses
  - Training, support, dedicated Learn/Moodle spaces, …

- So our ***flowers-vegetables-fruits*** 🍎 🥦 🌸 grew and cover many uses brought up from colleagues' needs …

Which ones for instance ?

The teacher-who-does-not-want-to-think-about-recording

- … and is in an equipped classroom
- … must follow the procedure
  (fill in a form to **schedule recording** 📅)
- … does not manage recording
  (🤖 **automatic mode – no pause**)
- … may cut some parts ✂️ 🎥
- … include its recording on the moodle course with Ubicast plugin

The teacher-who-wants-to-manage-recording

- … and is in an equipped classroom
- … *may* follow the procedure
  (fill in a form to **prepare data recording** 📅)
- … does manage recording by scanning
  QR Code (✋ **manual mode –** ▶️ ⏸️ ⏹️)
- … may *still* cut some parts ✂️ 🎥
- … include its recording on the
  moodle course with Ubicast plugin
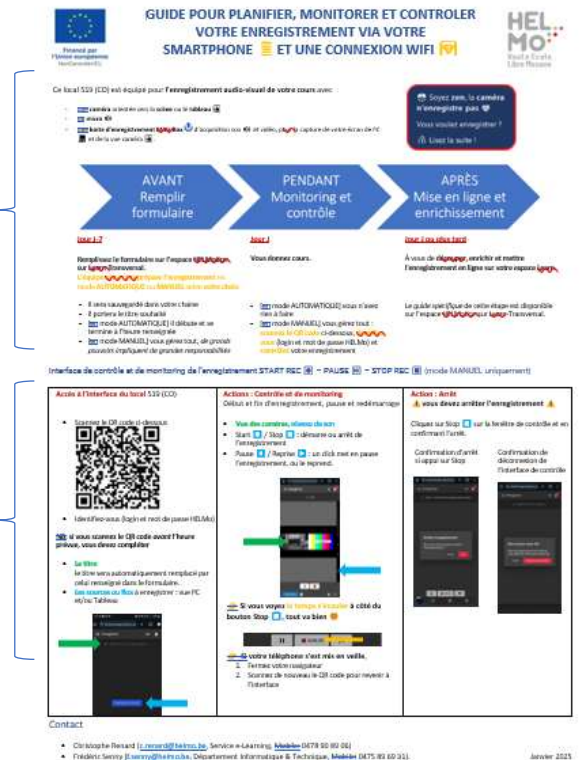
The teacher-who-is-not-in-an-equipped-classroom

teaching

interview

Lab handling

- … but still needs a camera + microphone
- … schedules a kit (1 per dpt) 📅
- … uses the kit ☺
  - as a standalone camera/webcam so … copy the files on computer 💻
  - use Ubicast plugin 🔵 to record directly into the moodle course
- … brings back the kit ☺
- … may edit the video ✂️ 🎥

The student-who-needs-a-camera

- … same as previous use-case
- … but cannot use the Ubicast plugin (does not have access to it, *teacher*'s role *only*)

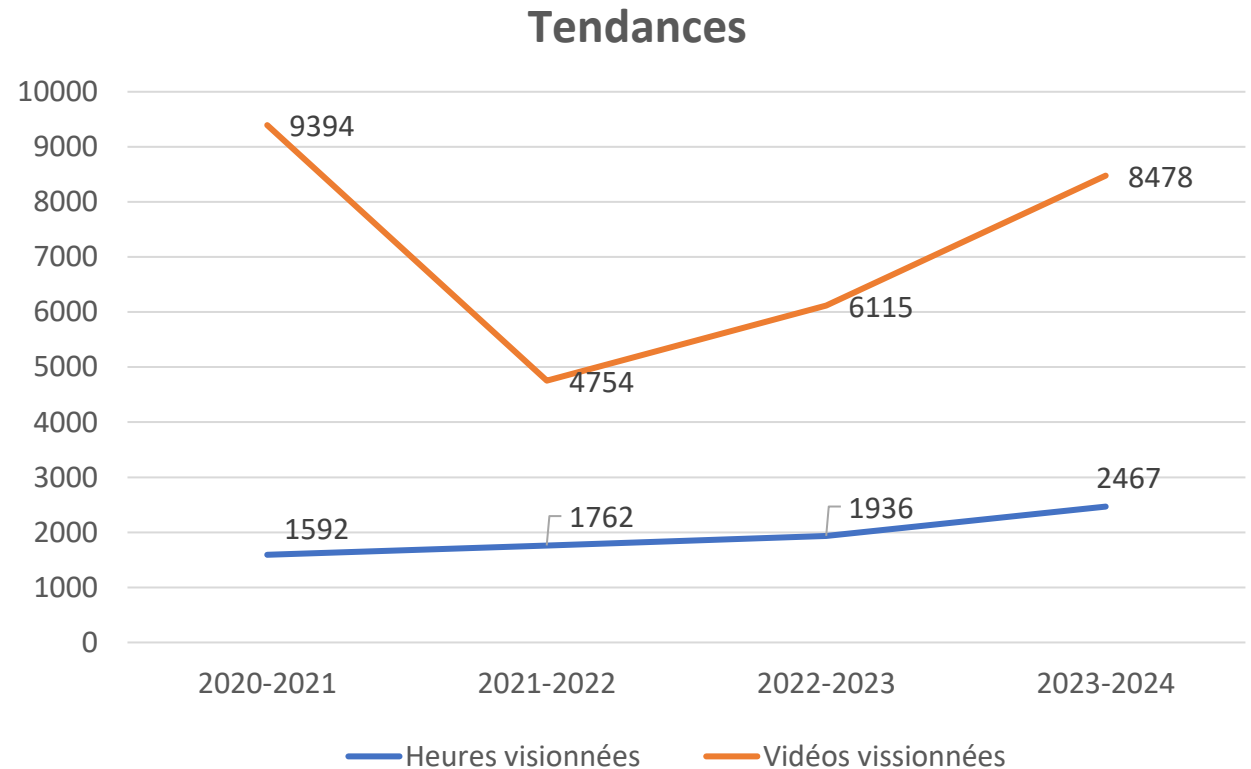# The teacher-who-works-from-home

- … is not in an equipped room
- … has forgotten to schedule the Dji Osmo Pocket 3 kit
- … still may use the WebStudio (Ubicast plugin) to record the computer screen

Ok, how many videos are pushed on the HELMotion system ? How many views ? How long ? When is it used ? …

Our uses with numbers

- 9000 videos
- 500 new media / year
- 2500 hours viewed
- 30 minutes average viewed per video (speed x1.7 ☺)

Tendances

	2020-2021	2021-2022	2022-2023	2023-2024
Heures visionnées	1592	1762	1936	2467
Vidéos vissionnées	9394	4754	6115	8478

— Heures visionnées — Vidéos vissionnées

Our uses with numbers

- Heavy use
  - October-December 📈
  - March-April 📊
  - January & June 🔥

- Low use
  - End January 🛷
  - July-August 🌞

2023-2024
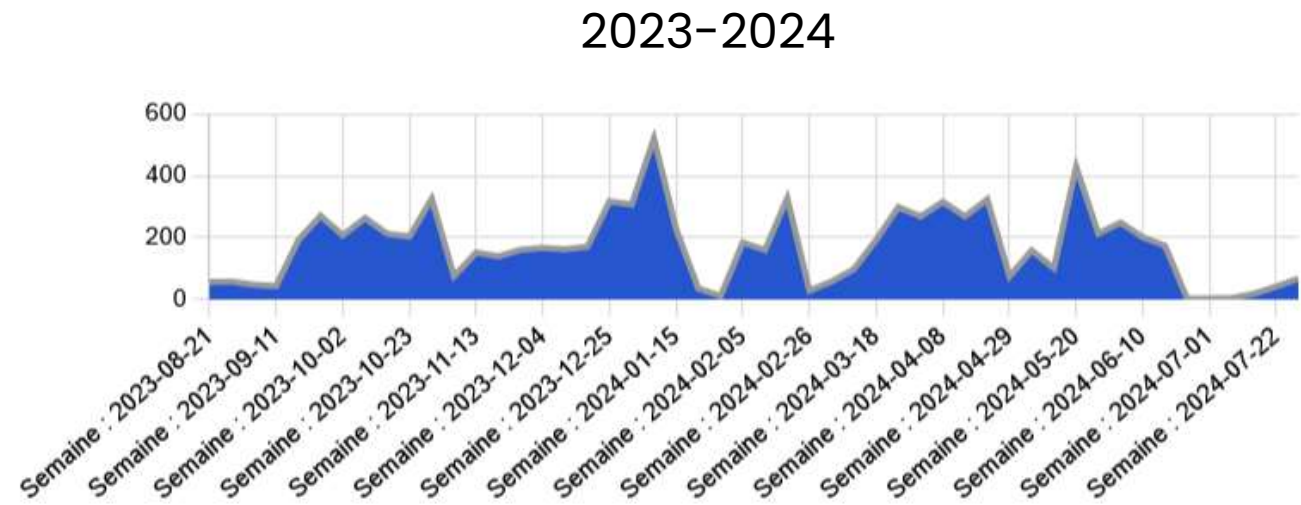
Discussion – light and dark sides

- [+] **light side**
  - Many uses covered
  - Recording on-demand
  - Platform used by teachers and students
  - Storage well used (1,5TB)

- [-] **dark side**
  - The use « Live transmission » is not covered
  - not as full potential (not all courses are recorded, neither all the videos are viewed fully,…)
  - Limited storage, hence video managment (delete each new academic year, except on demand)

What's Next ?

❏ QR code was used successully in I&T departement; So deploy this functionality in all departments

❏ ⚙️ Python scripts to
  ✅ Customise and automate tasks 🖥️
  ✅ time saving for IT service, E-Team and teachers ⏳

❏ 💾 Storage Optimisation
  ✅ Our IT service and e-learning team try to find a solution to store media on a custom and intern media server [WIP] 🖥️

❏ 📢 Promote our Podcast system and training
  ✅ Communicate on every campus of HELMo 🎤
  ✅ Training teachers 🎥

Final thoughts

- Well-done to our Team, especially Christophe Renard (the funny guy) ! Thanks to the support of Ubicast / ESI / RRF (EU) to make it work

- Podcast and videos are a real need for students
- Wide variety of video uses
- Record-on-demand is respectful
- Our colleagues may pick (almost) whatever their needs
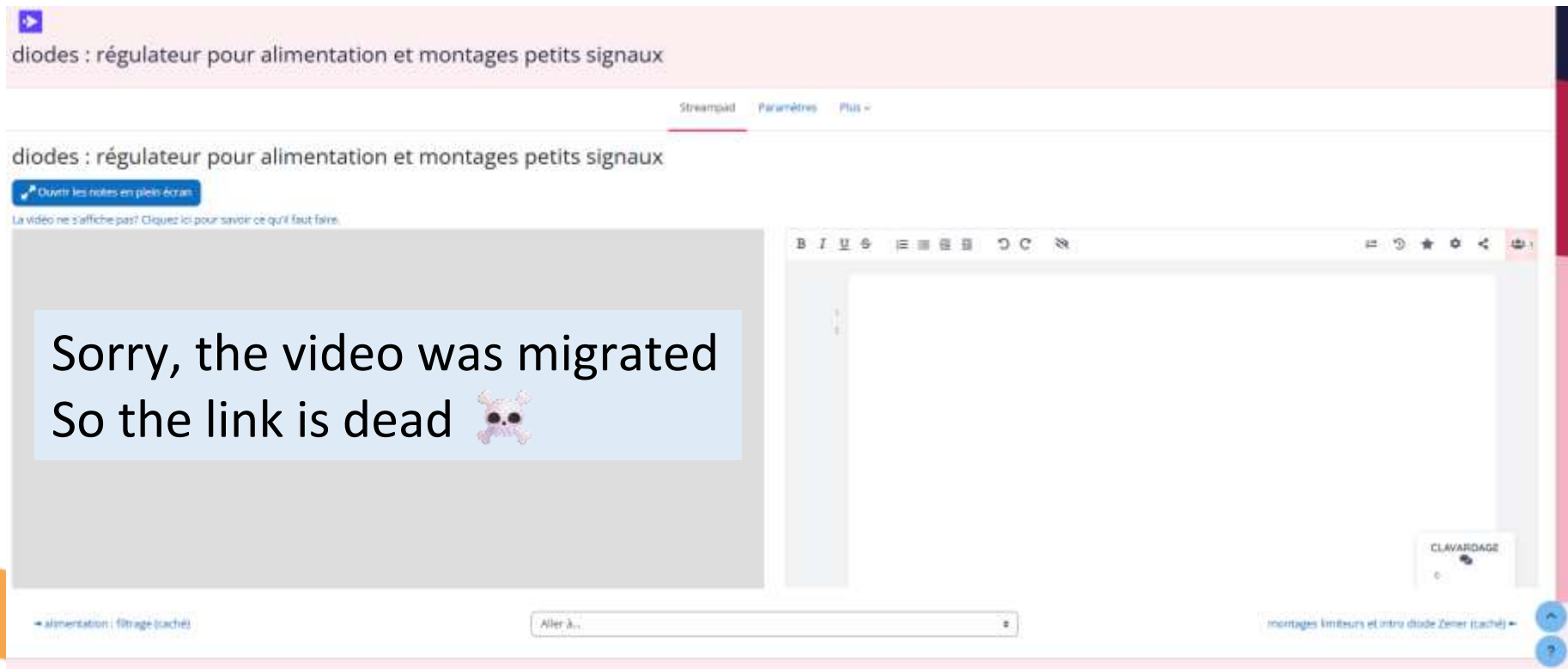
- Happy to share our experience

Thank you

www.helmo.be

Streampad

- A custom plugin that integrate a video from Stream into our Moodle LMS

Sorry, the video was migrated
So the link is dead 💀

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How is podcast defined @HELMo (sorry in FR)

✓ C'EST :	✗ CE N'EST PAS :
du podcast **un outil de diffusion d'un cours en <u>présentiel</u>** **qui a été enregistré**	**Pour donner un cours à distance**
une activité HELMo Learn **pas de droits d'accès à gérer, pas de vidéo à déposer,... Accessible uniquement aux personnes inscrites dans l'espace de cours.**	**pour donner un cours en comodal** **les étudiants à distance pourront visionner le podcast dès qu'il sera disponible**
de riches possibilités d'interactions **commentaires, chapitres, lien, pièce jointe, …**	**pour faire du montage vidéo** **la diffusion est "brute"**

Come back

The 2 classrooms with tracking camera (Aver PTC310U)

The field of view of the the camera switches between 3 defined zones

💪 Tracking of teacher between left area ↔ center area ↔ right area

🤳 If teacher's tracking is lost ➡️ come back to center area and find someone to track

[Come back](#)