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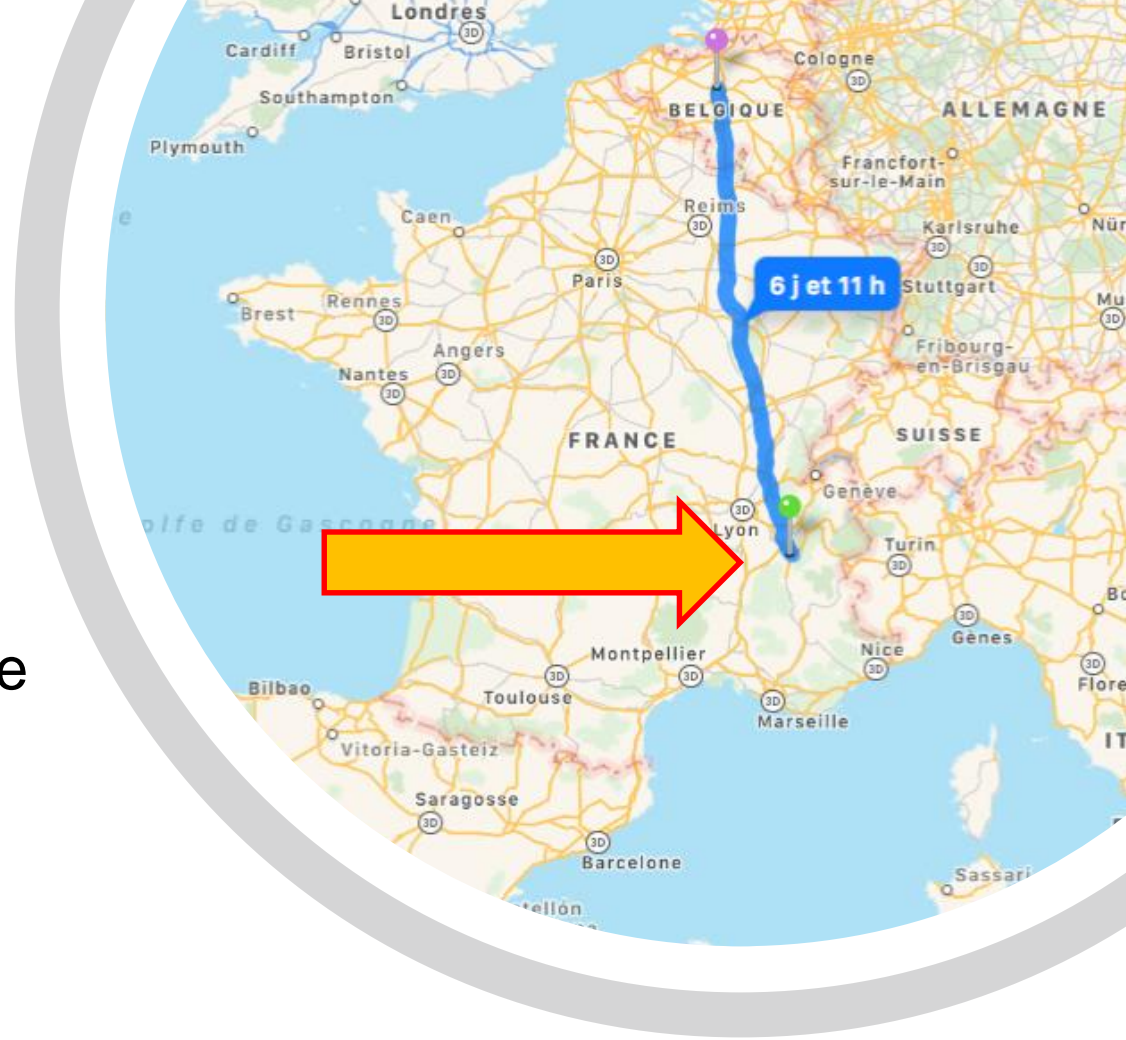
CHUGA - Univ Grenoble Alpes

17th of Nov 2017, Brussel, BE



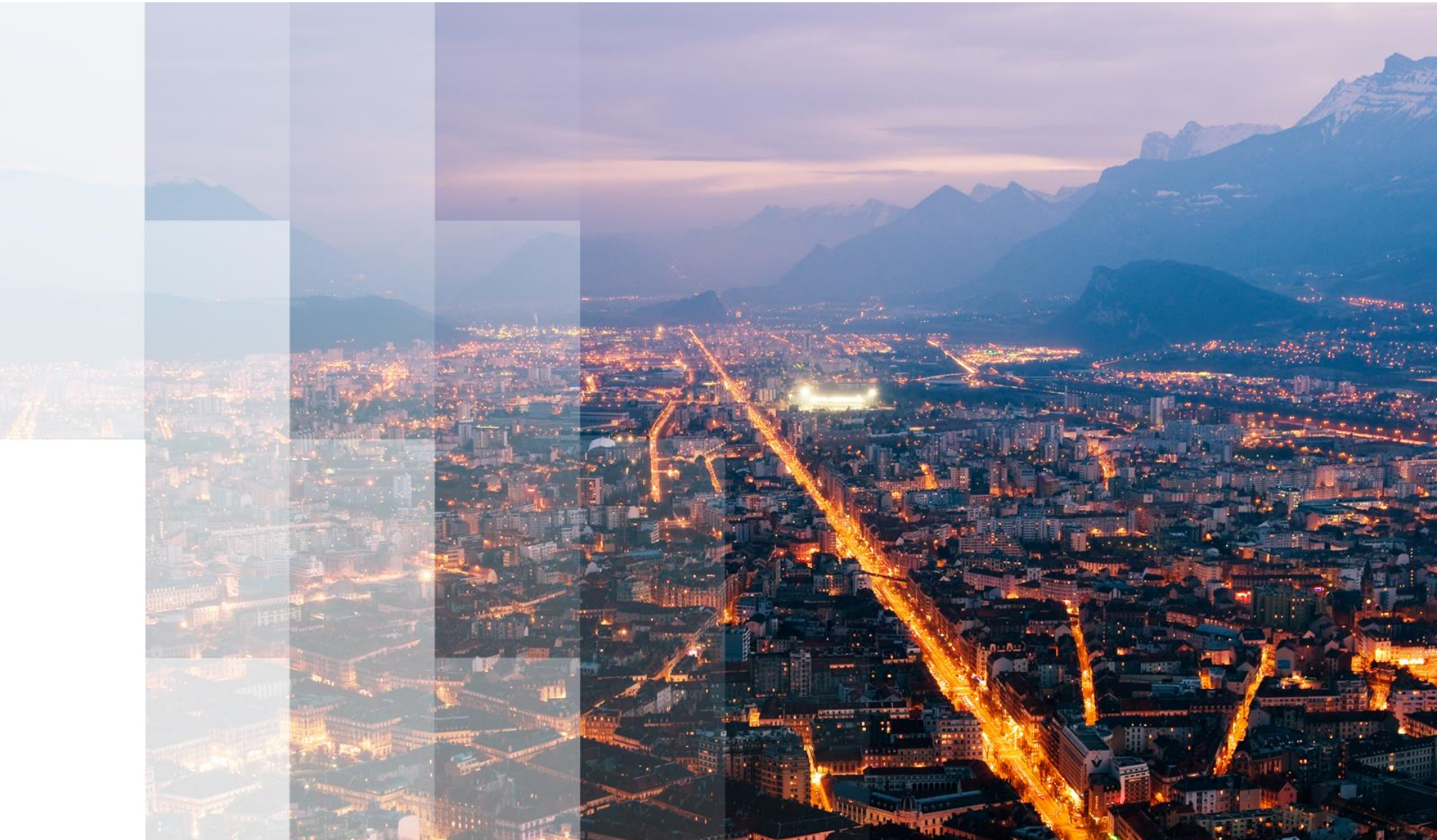
- Findable on a map...
 - Olympic games 68 ... many sky stations....
 - Ranked well as research and education
 - Ecosystem with **lots of international industrial**
- Reuters Top 100:
 - The World's Most Innovative Universities: 93

Grenoble?
Here
South Est of France



Near...
Ski station 30', Geneva 1h20,
Lyon 1h, Sea 2h

Feel the pulse of innovation
in the heart of the Alps.



Some numbers?

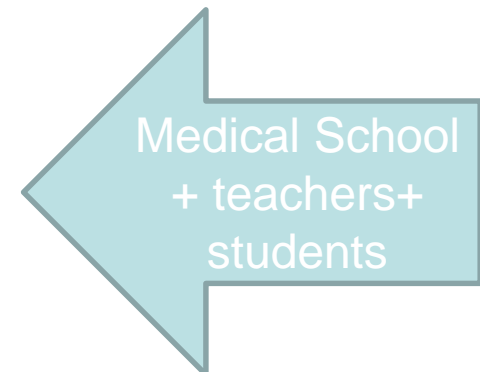
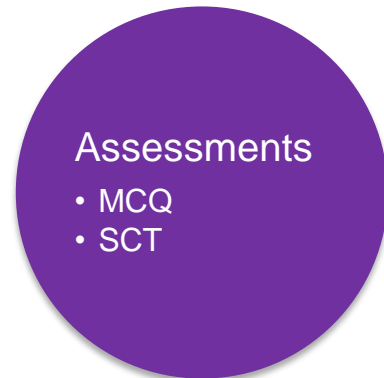
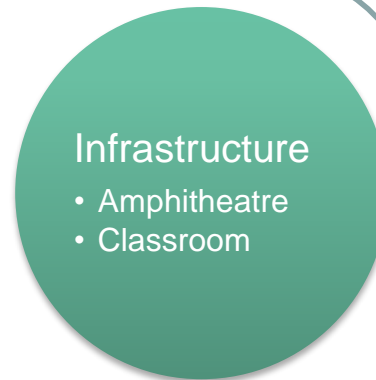
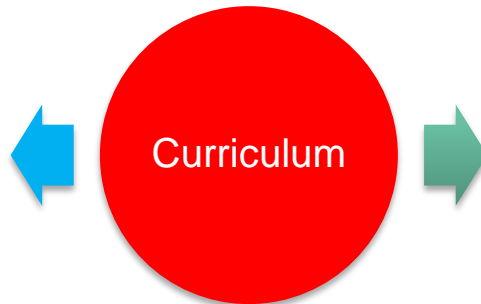
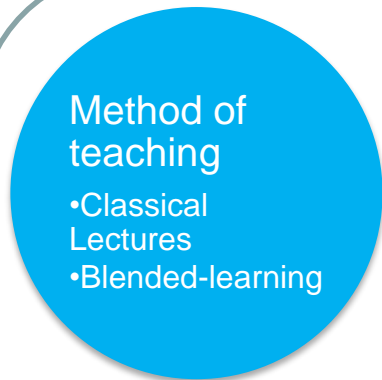
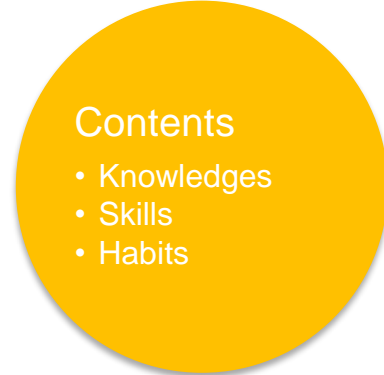
- **45 000 students - 5 500 staff**
(3000 teachers and research- teachers et 2500 administrative et technique staff)
- **24 faculty, schools or institutes**
- **80 laboratories**
- 20 languages taught, 53 dual degrees
- 5 Erasmus Mundus master's degrees
- 982 international internships

So a lots of curriculum!!

LET START A SMALL JOURNEY INTO GRENOBLE EDUCATION'S LAND



FIRST STEP IN HEALTH



Curriculum

- Who decide of the **contents** ?
 - ⇒ knowledges and competencies **framework** from **Health Ministry**,
 - ⇒ In fact Health Professionals (Deans Conference, Teachers, Delegate students...) → Ministry validation
 - ⇒ in **details** the **Medical School Board**
- **Infrastructures?**
 - **No change in short terms**

Let discuss about 2 others
method of teaching and assessment

Reminder In French Health

- 2 contests:
 - First year (year 1) => *numerus clausus* ~10%
 - Last year of second cycle (year 6) => **National ranking contest** ~9K Students
- Each university – medical school decide the ways of teaching and assess...
- But final goal is to get the best ranking for our local students...

Take a look to my medical school...

- **Limited size of classroom** campus,
- **Limited number of teachers,**
- Increase the **number of students**
 - Med ~ 3.000 (2.000 1st year -> 200/next), Pharm & Midwife ~1 000
 - Master in “health engineering” (400 students)
 - Paramedics ~5 000 students (nurses, physiotherapist, ...)
 - => **10 K students each year** to teach, to follow
 - **x2 in 15 years...**
- Dean's goals : **Quality of teaching, Equality, Equity, Fairness, More active, Focus on skills, Centred to learners , Not wasting time..**
- Impossible mission??? No, A **challenge!!** Yes

LET'S ANALYSE THE “CLASSICAL” SYSTEM

Before



Supports
cours



Questions aux
enseignants



Enseignement
explicatif
interactif



Enseignement
applicatif

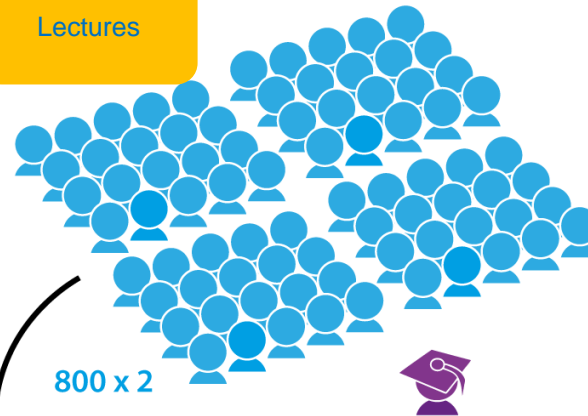
Classical Blind learning

Home works



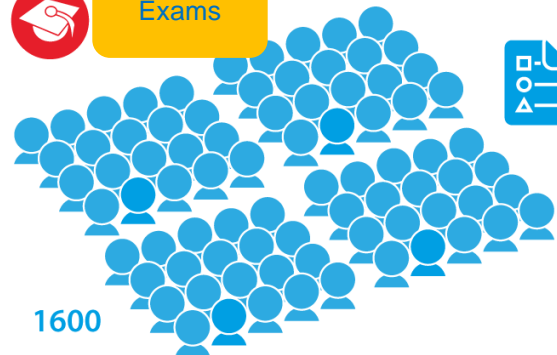
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Lectures



800 x 2

Exams



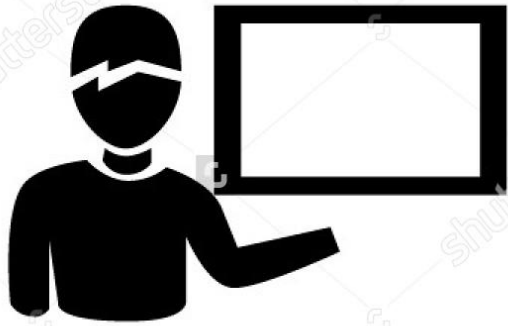
1600

No supports
No questions
No interaction with
teacher
No application in
practice
**So “blind learning”
until final exams**

EFFICIENCY?

Poor for students and also teachers...

Teachers-centric



Install the slide show on the master computer.



Remembers?

- Overloaded amphitheatre ... pedagogical?



Empty amphitheatre – One or two students instead of more!



Movies?No just Classroom

Teacher
video

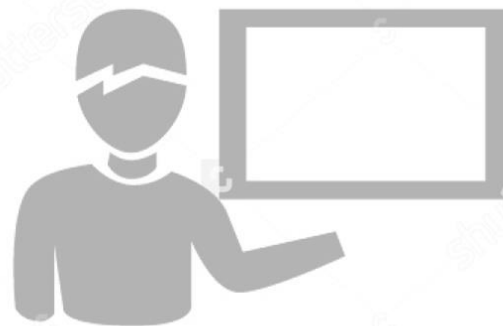


Teachers, do you remind? (non-exhaustive list)

- Size of the amphitheatre lower than the registered students
- Lost time to install slides show, plug the computer...
- Manage a mass (noise, interruption, movement, plane...) or empty amphitheatre...
- **Exotics questions asked at the end**
- Efficiency of the knowledge transmission ? (3 main ideas per hours)
- **No practical activates-** weak skills development with lecture
- No direct health professional applications
- **No quality return** on the support and the messages
- To hope that the learners follow the asked tasks, as to read the basic knowledge as pre-required tasks
- To get an evaluation of the learners group

.... Lots of more, I'm sure!!!

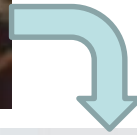
Learner-centric



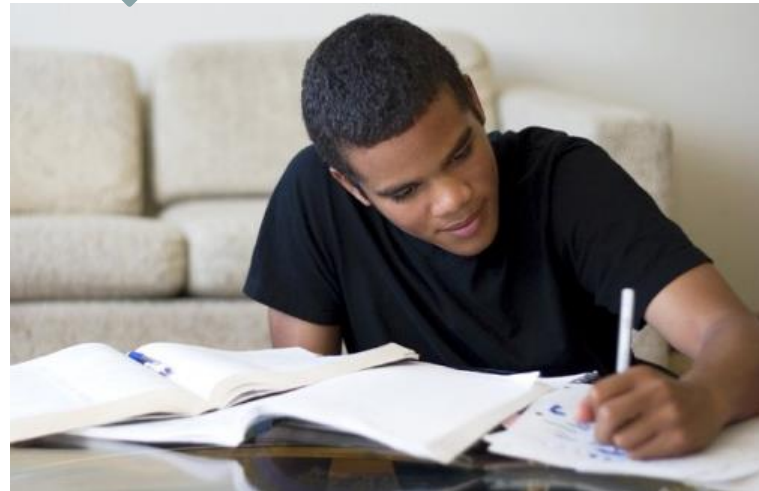
Easy notes writing and home exercise training



Amphitheatre



Home works



Do you read??? Need Ophthalmologist or Binoculars? Telescope?



Focus to the speech?

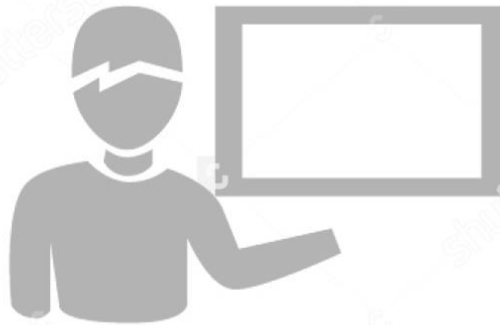


Learners, do you remind? (non-exhaustive list)

- To awake 3h before the lecture to get a **good place** & fight to keep it
- To time- lost into transport
- **No social life** through the education module
- To fight with your pen to get all the words of the teachers...
- To try to **understand our last notes** after at home
- To desperately tearing his hair out with the teacher exercises at home
- No follow-up inside the module and no evaluation of his-her work methods
- Not to understand the interests of this module into your professional development (Bio-Statistic?, ICT?)
- To not interact (a lot) with teachers, do not dare ask a question
- To be “as been” with the interaction tools (no Facebook, no twitter...)

.... Lots of more, I'm sure!!!

Institution-centric



Exam organization? Cost? Supervisors?
=> Paper anonymised and management



Institution, if you were ? (non-exhaustive list)

- To manage the “free” classroom into the campus
- To manage diffusion of the last change (teacher, times, classroom...)
- To **get the final exam subject** from the teacher not only 6 hours before the exam to print it
- To **anonymise the exam papers** after and send it to the teacher
- To **call back the teacher to get the score** and the exam papers before the jury

**“WHY GRENOBLE MEDICAL
SCHOOL
DECIDE IN 2006
TO STOP ALL CLASSICAL
LECTURES?”**

**SOME OTHER MODELS EXIST,
MORE THAN 10 YEARS AGO
GRENOBLE CHOOSE ONE IN
BLENDED LEARNING...**

Know it?

Some solutions from out of the box?

- 1 – To record the classical lectures and organise Video broadcast per more small group?
- 2 - Ask the teacher to present twice, third (more?) time, the same lecture?
- 3 - others... ?

NOT for Grenoble

DISRUPTIVE EDUCATION...?

OF COURSE

CLEARLY!

**Blended learning model based on
flipped classroom with a
Continuous dual assessment
system providing personal follow-up**

UGA Health Key points?

- No less teacher involvement, but much more!!
 - => critics : “teachers are fired and replaced by DVDs...” ????
- Provide **personal Follow-up** (students, teachers, institutional..)
- Provide **Continues week evaluation => study board**
- **Active learning (learning by doing)**

FEW SEQUENTIAL STEPS FIRST...

P Gillois - 17th Nov 17 - Brussels



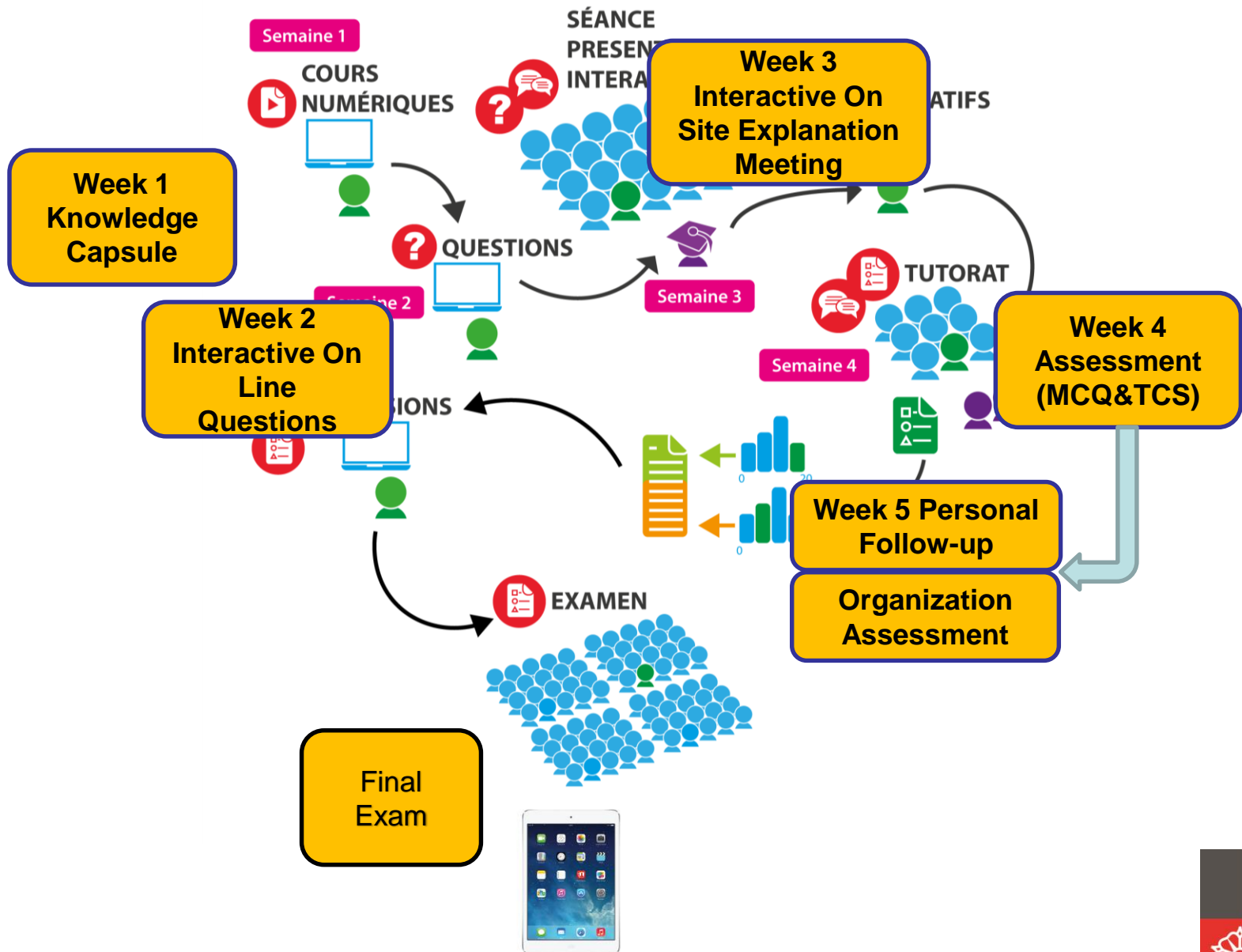
Étudiant



Enseignant



Tuteur

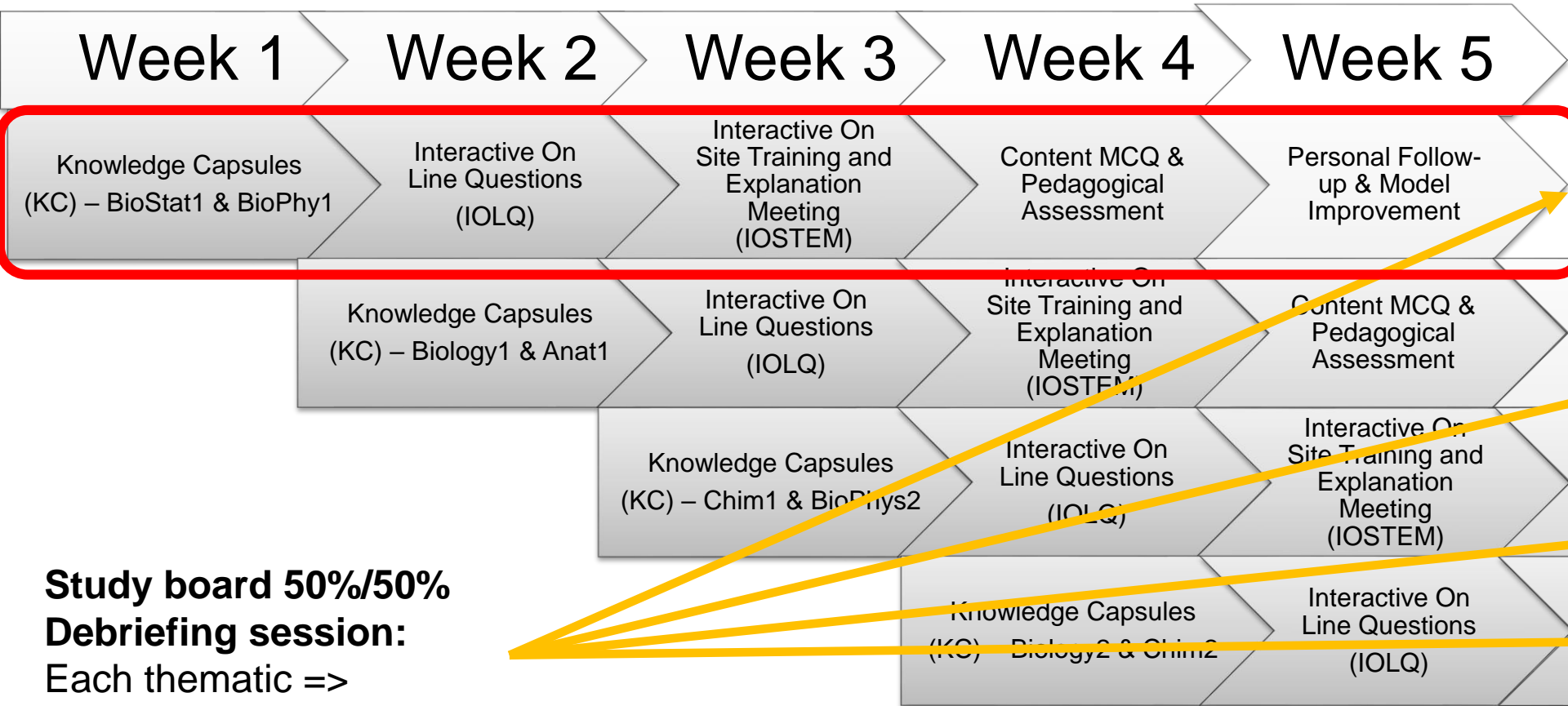


QUITE COMPLEX?

NO JUST OPTIMIZED!!

**CENTRED ON LEARNING BY
DOING**

The 12 cycles: 2 parallel themes – 5 weeks



Study board 50%/50%

Debriefing session:

Each thematic =>

24 sessions each year

Impact?

33% Knowledge Capsule are modified each year...

Adapt the contents to the method of teaching and learning

For update, who decide finally?

- The dean, always...
- But on proposals of the study board

Outside Med School?

- It's also works
 - Master In Health (400 stud)
 - Sport Faculty (5K stud) <= not links to health
 - ICT UGA (5K stud) <= not links to health
 - Math , Physics, Firemen, Paramedics...

ALSO IN ASSESSMENT...

(DOCIMOLOGY)



TWO OPTIONS MAINLY

Close vs Open Questions
and
Paper vs Digital Supports

Ancient times - before?
Paper exam.. Dissertation.. Open question!
Personal interview?



Heavy logistics.... Unfair, Limitations, Cheating...

Sometimes Closed Questions such MCQ still on paper



MCQ Answers

ACCÈS
CONCOURS

BANQUE D'ÉPREUVES ÉCRITES
CONCOURS D'ENTRÉE 2013

Veillez reporter, en noircissant les cases ci-dessous, votre **numéro de candidat** (chacun des cadres codant un caractère de ce numéro)

Coder

C00 C10 C20 C30	C00 C10 C20 C30	C00 C10 C20 C30	C00 C10 C20 C30	C00 C10 C20 C30	C00 C10 C20 C30
C40 C50 C60 C70	C40 C50 C60 C70	C40 C50 C60 C70	C40 C50 C60 C70	C40 C50 C60 C70	C40 C50 C60 C70
C80 C90	C80 C90	C80 C90	C80 C90	C80 C90	C80 C90

NOM : _____

Prénom : _____

Nom de l'épreuve en clair : _____

481516

1	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	2	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	3	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	4	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	5	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>
9	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	10	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	11	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	12	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	13	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>
17	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	18	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	19	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	20	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	21	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>
25	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	26	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	27	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	28	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	29	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>
33	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	34	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	35	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	36	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>	37	A <input type="radio"/> V <input type="radio"/> F <input type="radio"/>

Or new way of Closed questions on Digital support!

- **MCQ,**
- **Professional Case** : Health electronic record one way sequential questions series (5 to 15 questions on the same case report),
- **Script Concordance Tests** (Assessments of the reasoning)
- Switch to digital support : **Wi-Fi Tablet**
- **Advantages?**
 - No more cheating :
 - Display MCQ randomly,
 - Display MCQ items such as the 5 items (ABCDE - DCBEA.....) also randomly...
 - Correcting exam? => Few sec

Same Exam using tablet



Real MCQ & SCT series



Not only in Grenoble, But also
ALL French Medical School

National ranking examination (health speciality)

- All 34 French Medical School
 - Same dates (2 full days + 2 save the dates)
 - Same questions, same cases...
 - 8500-9000 students each year
- Infrastructure part
 - Wi-Fi infrastructure challenge
 - Secured network challenge (resist to hacking..)
 - Exam server challenge
- It works !!



DISTORTED VISION OF GRENOBLE?

NO

JUST PRAGMATIC

In conclusion

- Adapt the Health Ministry Decisions to a quality model of teaching and assess.
 - **blended learning** model based on **flipped classroom** with a
 - continuous **dual assessment** system (**Digital Wi-Fi tablet assessment**) providing **personal follow-up : learning analytics & teaching analytics**
 - **Systematic study board each cycle 50%/50% students**

Each year

- 24 debriefing sessions => update and upgrade each year of the curriculum
- Student centred curriculum,
- Learning by doing ratio Knowledge/Skills decrease : Good
- Even 85% of students will follow other way, they don't waste their times => linked to Science, Biologie, Chim....

**“IF YOU WANT
SOMETHING NEW, YOU
HAVE TO STOP DOING
SOMETHING OLD”
(PETER DRUCKER)**

The best way to predict the future is to
create it (Anonymous)



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