

## Inspiring examples of educational innovation with ICT

Team Digital Learning and Innovation Erasmus University Medical Center

P	RO	GR	ΔM	
			$\langle \vee \rangle$	

**Opening** 

Parallel sessions II

Wrap-up

Lunch

#### Prof.dr. Walter van den Broek Director medical education Erasmus MC Introduction Dr. Mary Dankbaar Program manager e-learning Erasmus MC Coffee break 10.15 hr Parallel sessions I 10.30 hr

11.15 hr

12.00 hr

12.10 hr

**■** Mentimeter www.mentimeter Who are .com you? Code 86 25 9



## **Program 'Quality** impulse with e-learning'

#### **Innovation approach**

- Plan with general goals, activities, a budget to improve the quality of education with e-learning
- ► Advisory board E-Learning: stimulate & evaluate (teachers from different academic programs, students, team DLI)
- ► In collaboration with academic directors: define <u>specific goals</u> for ICT in bachelor/ master
- > Framework to assess plans and initiatives

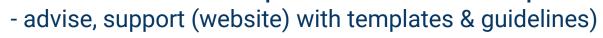
#### **Program**

'Quality impulse with e-learning'

#### Stimulate, staff development & support

- 1. Invite students to come up with new ideas
  - competition with prices –







3. Staff development





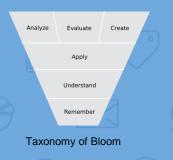
- 4. Support by instructional designers, monitoring
  - feedback on plan, written manuscript,
  - produce, evaluate and adapt





#### **Example**

#### Master Medical Education



#### 'Flipping the Classroom'

#### Goals:

- more engaging, personalized and flexible learning
- small-group learning; more time for application of knowledge









Online preparation

(assignment)

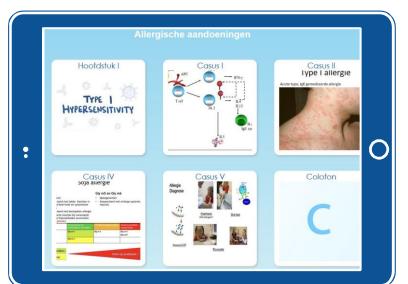
Interactive session

assessment



#### online formats

E-modules & video for knowledge acquisition

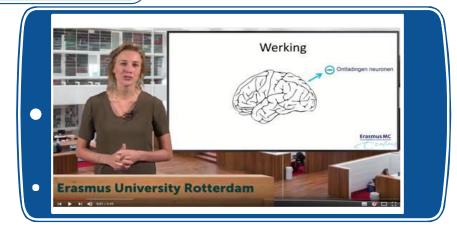


E-modules

8 per week

Videoclips

2-5 per week



Simulation programs & games for skills training





Serious games

Simulation cases

4-6 per week





## **Evaluation** results

(n=79, 2 groups)

#### **Evaluation 1st Master block (7 wks)**

	Mean rating
Appreciation 'flipped classroom' concept	7.9
stimulates active learning?	8.0
e-modules instructive?	8.3
virtual patient cases instructive?	8.5
videoclips instructive?	8.3
Possibility to discuss questions	8.8
Interactive character education	7.4

"e-modules were extremely instructive" "very well designed" "combination of online preparation and discussing the cases during the session was great, very stimulating; it activates you to think"



### Lessons learned



#### Development

Good support of teachers and staff training is essential

#### **Implementation**

- Comunicate your expectations to students ('prepare!')
- Make sure it is feasable
- Do not repeat online stuff (too much)
- Supporting teachers in their different role takes time!

# Research on technology-based learning

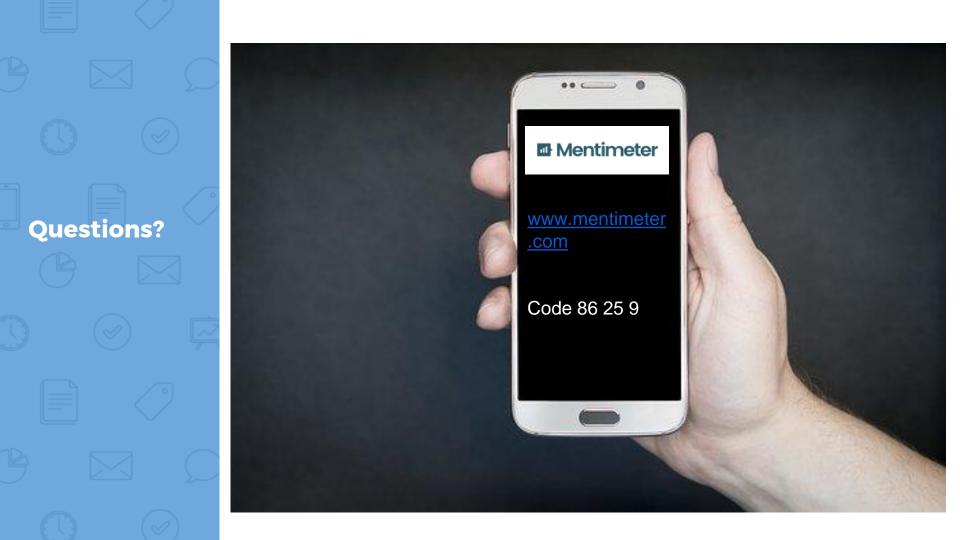
#### Design of game-based learning

How can non-cognitive indicators (eye-movement, stress) and cognitive indicators (game data) be used to offer adaptive learning in game-play? (NWO funded study, with Maastricht)

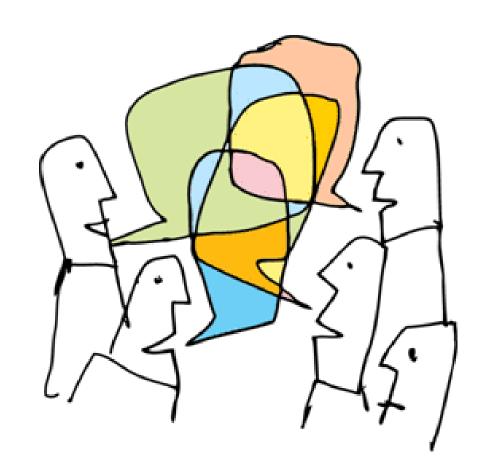
- ► Online vs. F2F feedback for skills learning
  Is online video-based feedback equally effective compared
  to face-to-face feedback in learning complex communication skills?
- ► What does AR add for understanding anatomy?

  Is AR more effective than traditional anatomy? (with LUMC)

More information: m.dankbaar@erasmusmc.nl



What are your experiences?





#### **SESSIONS**

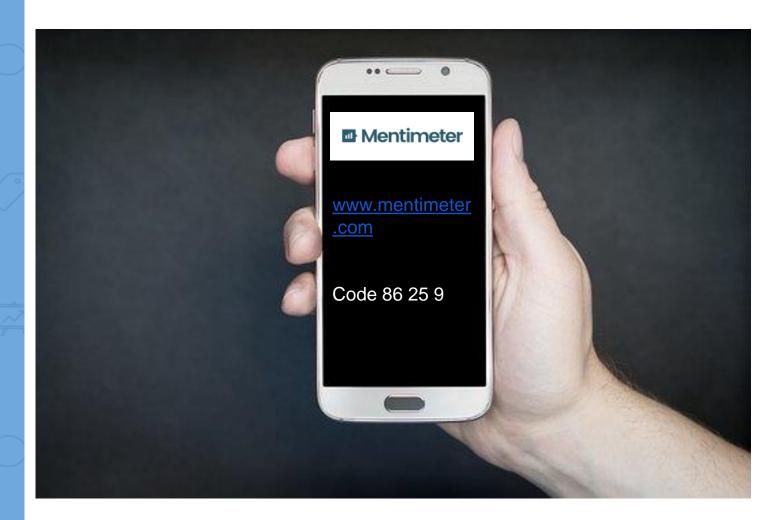
45 minutes

#### 2 rounds:

- -10.30
- 11.15

- A. Design and implementation of blended learning with e-modules and video
- B. Design and implementation of blended learning with simulation and serious games
- C. Digital assessment (Testvision, E-portfolio)

Your interest in parallel sessions



#### PROGRAM

#### Parallel sessions I start 10.30 hr

A: E-modules and video Room
B: simulation and serious games Room

C: Digital assessment Room

#### Parallel sessions II start 11.15 hr

A: E-modules and video Room
B: simulation and serious games Room
C: Digital assessment Room

Wrap-up **12.00 hr** 

Lunch 12.10 hr