In the name of God

TEHRAN UNIVERSITY OF MEDICAL SCIENCES

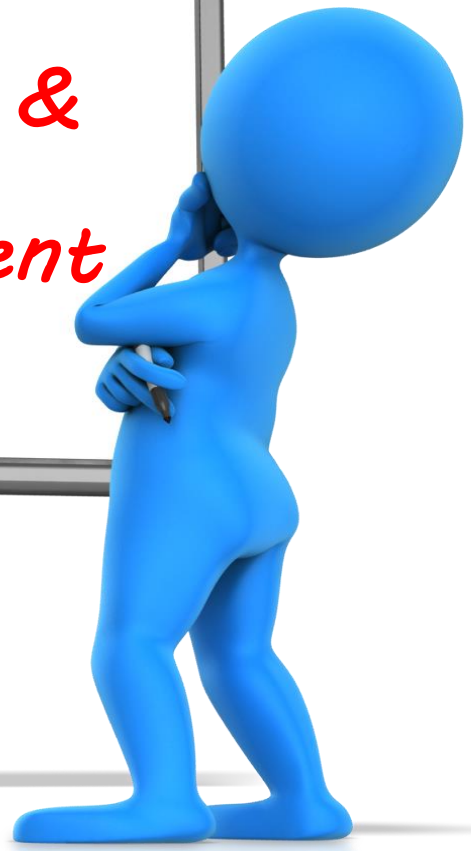
Rita Mojtahedzadeh, MD, MPH, PhD

Department of e-Learning in Medical Education, Virtual School, Tehran University of Medical Sciences, Second affiliated faculty member, Virtual University of Medical Sciences


Practical tips on
e-learning system design

Tip 1

Instructional design & curriculum development



What is the difference between curriculum development and instructional design?

Lesson plan

برنامه درسی

طراحی آموزشی

Course plan

برنامه آموزشی

Curriculum

طرح دوره

Instructional design

طرح درس

Terminology

Curriculum

- برنامه آموزشی
- برنامه درسی
- کوریکولوم

Terminology

Instructional design	طراحی آموزشی
Course plan	طرح دوره
Lesson plan	طرح درس

Instructional design and curriculum

1

2

Instructional design and curriculum

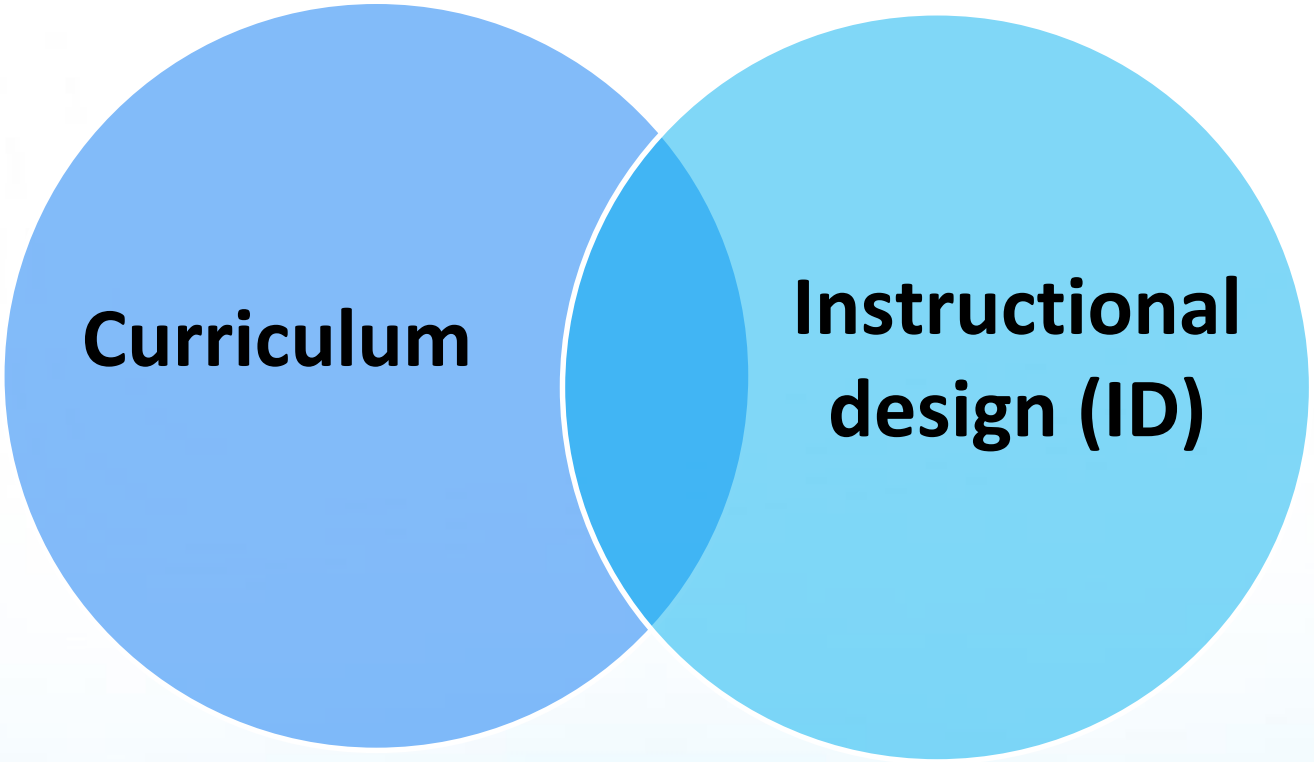
1

Curriculum

- Macro level — A specific degree
- Meso level — A course
- Micro level — A lesson

Instructional design and curriculum

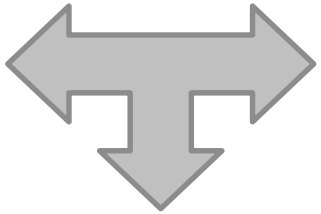
2



Instructional design and curriculum

2

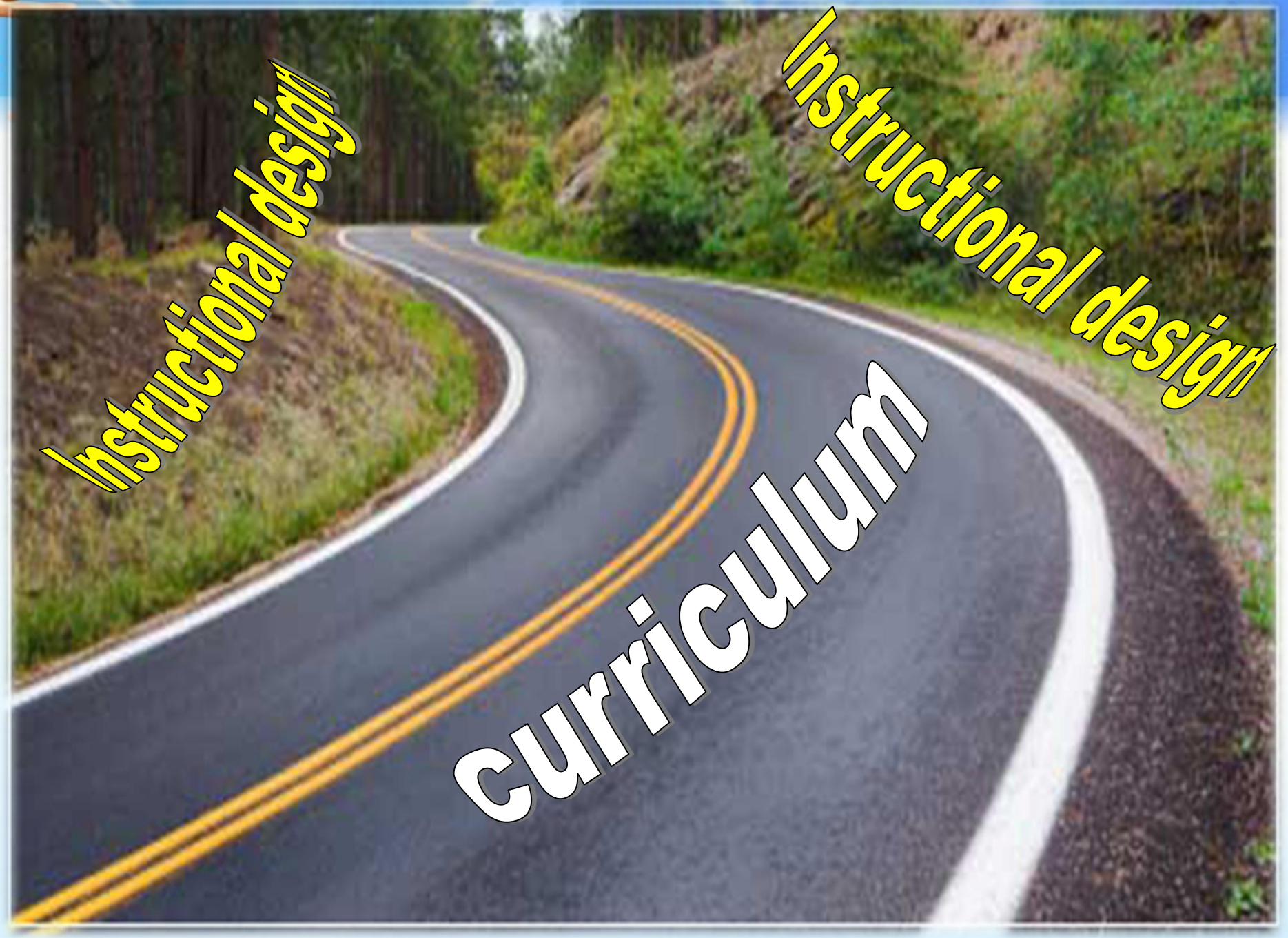
Curriculum



Instructional design

Course plan

Lesson plan


Instructional design
Instructional design
curriculum

Instructional design and curriculum

If there is no approved curriculum, all elements are generated during ID process.

Instructional design and curriculum

If there is no approved curriculum, all elements are generated during ID process.

If there is an approved curriculum, some ID steps are answered beforehand.

ID definition

Instructional Design is the process of determining:

who, what, when,

where, why and how

for teaching-learning process.

What about your project?

Which models are you going to use?

1. Curriculum development
2. Instructional design
3. No need to model

Tip 2

Instructional design purposes

ID purposes

1. Teaching-learning design
2. Educational product design
3. Educational system design

What about your project?

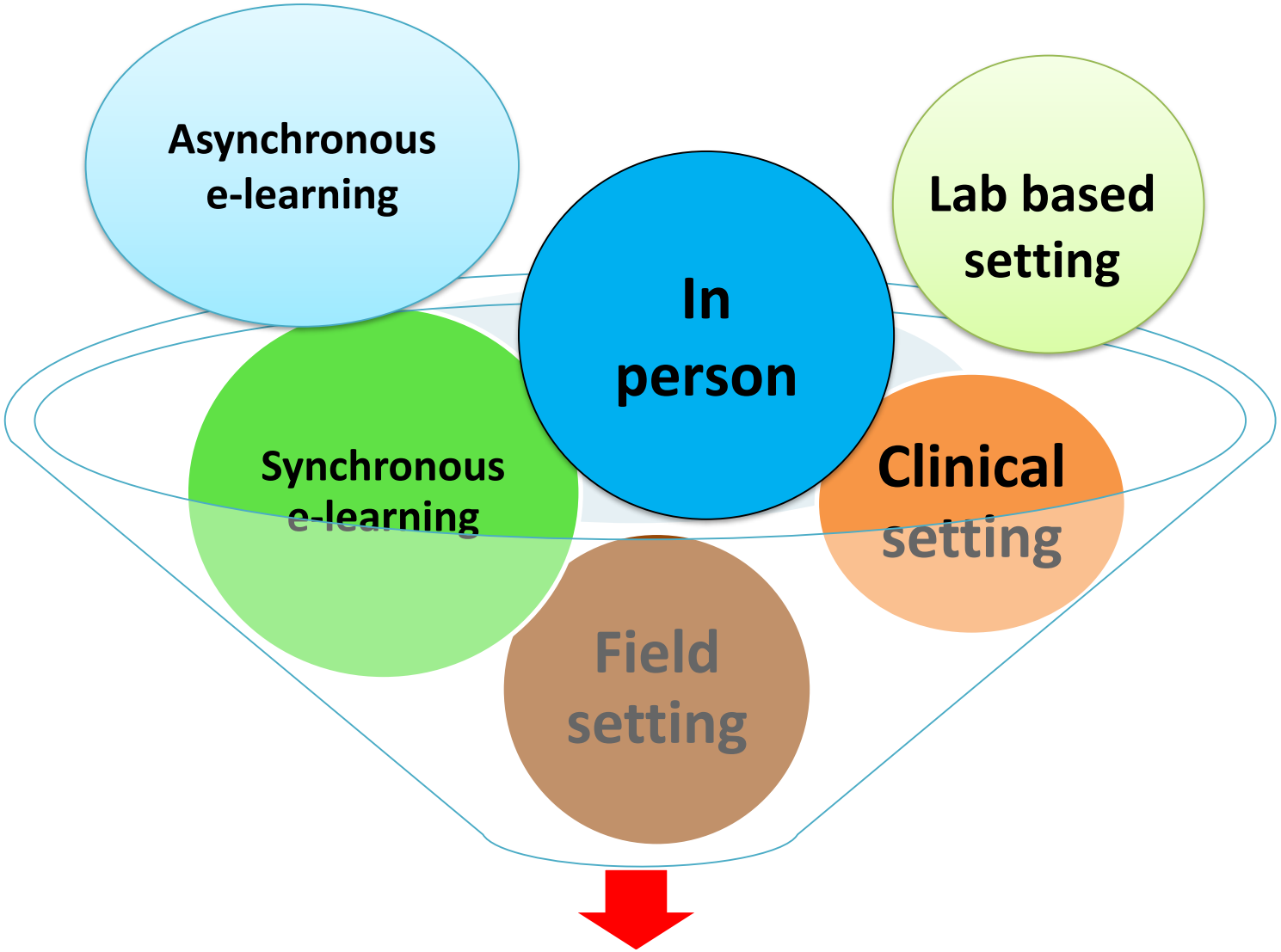
What are you going to design?

1. Instruction
2. Educational product
3. System

Tip 3

A sample scenario

How to design a blended learning system for a clinical ward in Corona time?



Effective clinical teaching-learning

Objectives

…

Media

Lecture

Flipped classroom

…

Oral exam

…

Problem based learning

…

MCQ

e-Learning

Clinical edu.

Activities

Tasks and duties

procedures

Evaluation

Objectives

…

Media

Lecture

Flipped classroom

…

Oral exam

…

Problem based learning

…

MCQ

e-Learning

Clinical edu.

Activities

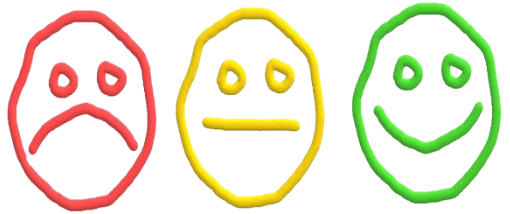
Question & answer

Assessment

Evaluation

Firstly,

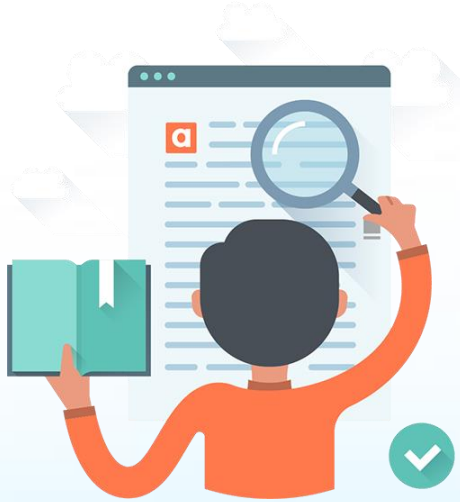
Make sure you have understood the scenario correctly!



Blended learning ID at department level

Step 1

Gather relevant information (rules, students, professors, curriculum, …)



Blended learning ID at department level

Step 2

List “activities”, “tasks” and “must knows” for your target students.

Blended learning ID at department level

Step 3

Categorize them into four groups:

- Should be in person
- Better to be in person
- Could be in e-learning environment
- Better to be in e-learning environment

Blended learning ID at department level

Step 4

Determine your tools and facilities (in person facilities, e-learning software, e-content development, and …)

Blended learning ID at department level

Step 5

Select <u>appropriate setting</u> for each category:

- Should be in person
- Better to be in person

Class room, clinic, skill lab, laboratory, field and …

- Could be in e-learning environment
- Better to be in e-learning environment

Synchronous platforms, asynchronous platforms, social media and …

Blended learning ID at department level

Step 6

Select <u>instructional strategies:</u>

- Should be in person
- Better to be in person
- Could be in e-learning environment
- Better to be in e-learning environment

…

Lecture

…

PBL

Clinical/practical teaching strategies

…

Flipped classroom

…

e-Lecture

Project based learning

Self-learning

…

Blended learning ID at department level

Step 7

Finalize all the elements of the design system, i.e.:

- Modalities sequence
- Contents and materials
- Time table
- Grouping
- Requirements
- …

Blended learning ID at department level

Step 8

Plan students and program evaluation.

Blended learning ID at department level

Step 9

Ask students’ opinion on the program.

Blended learning ID at department level

Step 10

Pay attention to other details, whenever necessary

(e.g. teacher training and …)

A sample scenario in Corona time

- Target group: pre clerkship students
- Number in each rotation: 10
- Ward: internal medicine

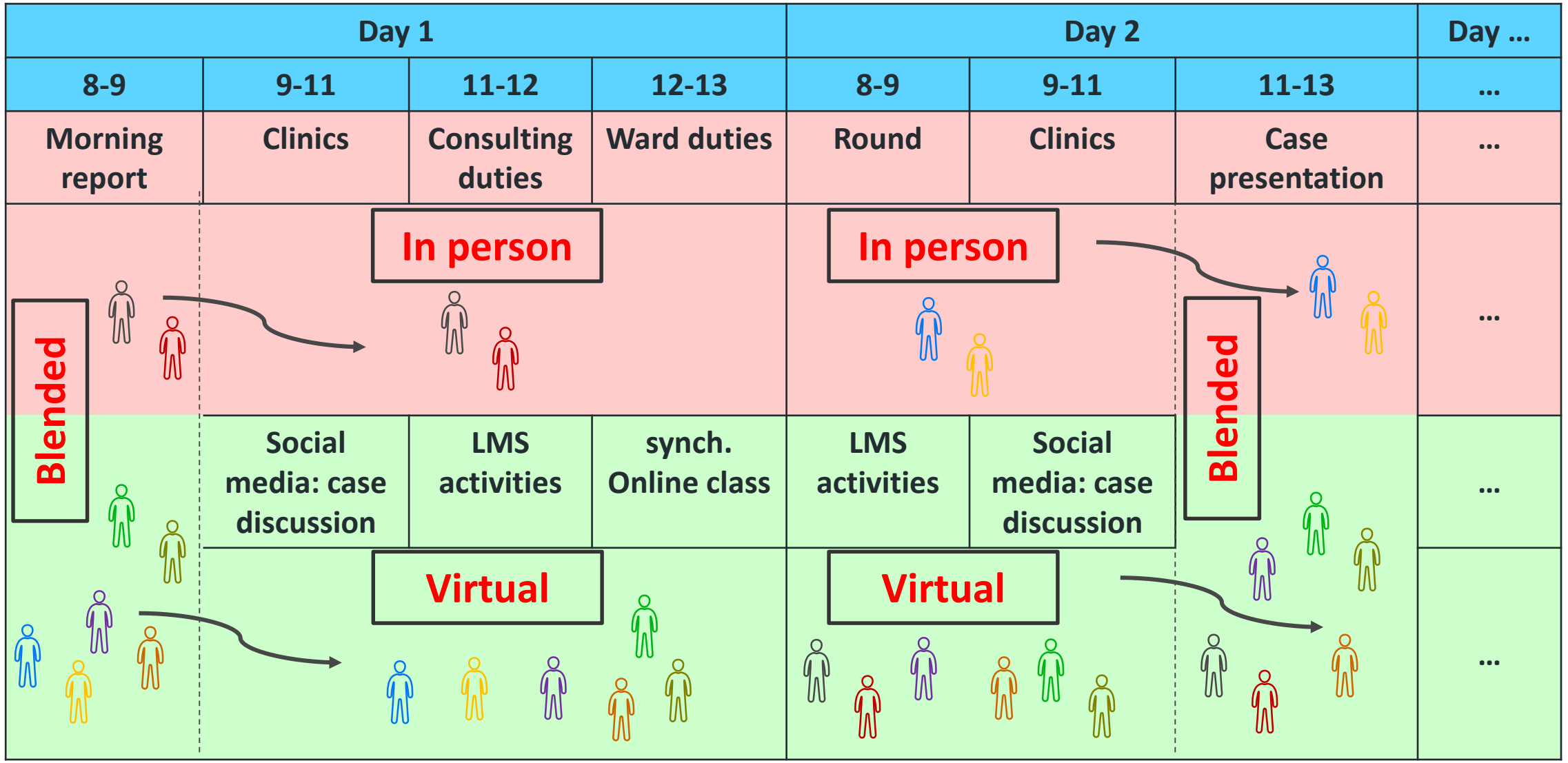
A sample scenario in Corona time

Virtual part

- Providing the facility to participate in activities like morning reports online
- Case discussion in social media or forums
- Multimedia e-content and micro assignments via LMS
- Collaborative virtual team works
- Some simulations, e.g. virtual patient

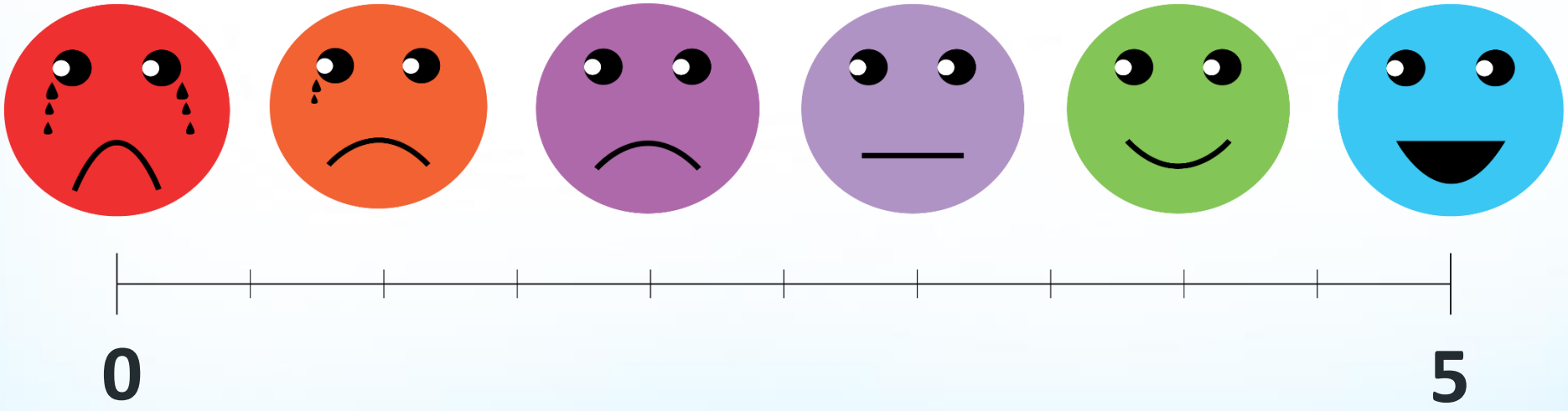
In person part

- Each learner two days a week planned for must be in person activities


Day 1
Day 2
Day ...
8-9
9-11
11-12
12-13
8-9
9-11
11-13
...
Morning report
Clinics
Consulting duties
Ward duties
Round
Clinics
Case presentation
...
In person
In person
Blended
Blended
...
Social media: case discussion
LMS activities
synch. Online class
LMS activities
Social media: case discussion
...
Virtual
Virtual
...

What about your project?

How do you evaluate your team’s performance till now?



Any Questions


Conclusion

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Thank You

r_mojtahedzadeh@tums.ac.ir