Digitalisation Plan in Health Education

Organised by the University of Genoa, Italy

Digital education, increasingly employed in continuing medical education and professional development, may offer a more flexible and accessible alternative to traditional learning as it transcends geographical and time constraints.

Worldwide, various components of Problem-based Learning (PBL) and Team Based Learning (TBL) are being increasingly delivered using digital technology. Digital education is changing the way in which health professions education, including PBL and TBL, is conducted. Digital education may comprise a variety of interventions based on learning tools, theories, content, objectives, teaching methods, and setting of delivery. In terms of the type of learning technologies, digital education includes, but is not restricted to, online and offline computer-based learning, massive open online courses (MOOC), virtual reality, virtual patient simulation, mobile learning, serious gaming, and gamification. Studies on the use of digital technologies in health professions education, in general, have reported advantages over traditional learning in terms of improved diagnostic reasoning skills, interpersonal and professional competencies, long-term knowledge retention, problem-solving skills, self-direct learning skills, higher-order thinking skills, self-perception, and confidence.

The course, divided into three modules, aims to prepare participants to plan and conduct some active and interactive teaching strategies, such as PBL and TBL, using digital technologies.

Training expected outcomes

The participants will be able to
1. How to prepare educational materials for Open Educational Resources (OERs).
2. How to create MOOCs for higher education from a technical and managerial perspective (as*Edraak*in in Jordan and Genoa has one).
3. How to Mastering DigiHEALTH tools.

One of the aim of the DIGIHEALTH project is to develop the ability of academic staff at health disciplines in Lebanese and Syrian HEIs to employ modern pedagogical and didactical methodologies for innovative ICT teaching and learning settings.

Professor Dr. Mosad Zineldin
Dep. of Medicine and Optometry
Linnaeus University-Sweden
Head of the DIGIHEAHT PROJECT

I would like to welcome you and you are in a very good hand with our the following presenter

The following modules are covered by the following collages/experts from University of Genoa-Italy
The coordinator is ***professor Guido Amoretti***

Dr. Michele Masini, PhD
Dept. of Education Sciences, University of Genoa.
Psychologist, Adjunct professor of general psychology at the Polytechnic School of the University of Genova (IT), Michele Masini has deep knowledge and expertise of innovative training methodologies such as TBL, PBL, simulation, flipped classroom and participative methods and approaches.

Dr. Tommaso Piccinno, PhD
Dept. of Education Sciences, University of Genoa.
Psychologist, Tommaso Piccinno is an experienced instructional designer. He has gained experience as a consultant in work-related stress assessment and as a trainer in Non-Technical Skills, team building and conflict management in various public and private companies.

Dr. Anna Siri, PhD
UNESCO Chair in Anthropology of Health. Biosphere and healing systems.Dept. of Education Sciences, University of Genoa.
Anna Siri, PhD, is a Founder Member of the interdisciplinary UNESCO Chair on "Anthropology of health – Biosphere and Healing systems", Università di Genova (IT). She has been teaching for 10 years in Medical School courses. Her research interests and expertise also cover innovative teaching methods and educational assessment and evaluation.

Dr. Diana Spulber, PhD
Full Professor, People's Friendship University of Russia, Mosca, (RF).
Adjunct Professor in Intercultural Education and Project Managing, Dept. of Education Sciences, University of Genoa (IT).

Diana Spulber, PhD, is a scientific advisor at UNESCO Chair on "Anthropology of health – Biosphere and Healing systems", her research interest is communication, mediated communication, LLL and intercultural education.

I MODULE
Team-Based Learning

9 December 2021 (10.00 – 14. 00)
10.00 - 10.15 Welcome by prof. Mosad Zineldin and prof. Guido Franco Amoretti 10.15 - 10.25 Presentation of the Training Programme (prof. Diana Spulber) 10.25 - 10.30 Introducing the First Module: TBL (prof. Anna Siri) 10.30 - 12.00 Team Based Learning (prof. Michele Masini and Tommaso Piccinno) 12.00 - 12.15 Coffee break 12.15 - 13.30 Team Based Learning (prof. Michele Masini and Tommaso Piccinno) 13.30 - 13.50 Questions & Answers 13.50 - 14.00 Conclusion (prof. Diana Spulber and Anna Siri)

Course Purpose	The purpose of the first module is to provide knowledge of the four essential elements of TBL: 1) Formed and Managed Groups, 2) Accountability, 3) Feedback, and 4) Assignment Design.
Learning Outcomes	Upon successful completion of the module, the trainees will be able to prepare students for pre-class preparation and manage most of the time during the lecture in solving problems with students through the process of ensuring readiness for readings, tests, mini-lectures and then application exercises. Also, the trainees will be able to prepare Individual Readiness Assurance Test (I-RAT) ad Team Readiness Assurance Test (T-RAT).
Course topics/outline	What is Team Base Learning? What is the TBL for and what is its use in medical education? What benefits does TBL represent for medical students? Practical exercises
Activities & Assessment	Frontal Lessons; Teamwork; Simulation of a lesson with TBL; Choosing a topic and justifying the possible use of TBL
Course methodology/ Instructional Strategies	Specific application exercises
Basic Technical/Media Requirements	ONLINE (Pc, Smartphone and Tablet)
Recommended Texts & Materials	Handouts provided by the UNIGE team
Workload	4 hours
Basic Technical/Media Requirements	English language Learning motivation

II MODULE **Problem-Based Learning**	
16 December 2021 (10.00 – 14. 00)	
10.00 - 10.15 Welcome by prof. Mosad Zineldin and prof. Guido Franco Amoretti 10.15 - 10.30 Introducing the Second Module: PBL (prof. Diana Spulber and prof. Anna Siri) 10.30 – 12.00 Problem Based Learning (prof. Michele Masini and Tommaso Piccinno) 12.00 – 12.15 Coffee break 12.15 - 13.30 Problem Based Learning (prof. Michele Masini and Tommaso Piccinno) 13.30 - 13.50 Questions & Answers 13.50 - 14.00 Conclusion (prof. Diana Spulber and Anna Siri)	
Course Purpose	The purpose of the second module is to train academics on how to guide healthcare students to obtain new information through self-learning and through complex situations in the real world, as well as to facilitate student group work.
Learning Outcomes	Upon successful completion of this course, the trainees will be able to prepare students: • to work effectively in groups • to practice evaluating their own work and that of their peers • for self-learning
Course topics/outline	What is Problem Base Learning? What is the PBL for and what is its use in medical education? What benefits does PBL represent for medical students? Practical exercises
Activities & Assessment	Frontal Lessons; Teamwork; Simulation of a lesson with PBL; Choosing a topic and justifying the possible use of PBL
Course methodology/ Instructional Strategies	Specific application exercises
Basic Technical/Media Requirements	ONLINE (Pc, Smartphone, and Tablet)
Recommended Texts & Materials	Handouts provided by the UNIGE team
Workload	4 hours
Basic Technical/Media Requirements	English language Learning motivation

III MODULE Course Design Structure: Pedagogical Approach and Planning

23 December 2021 (10.00 – 14. 00)

10.00 - 10.15 Welcome by prof. Mosad Zineldin and prof. Guido Franco Amoretti
10.15 - 10.30 Introducing the Module: Course Design Structure (prof. Diana Spulber and prof. Anna Siri)
10.30 - 12.00 Course Design Structure (prof. Michele Masini and Tommaso Piccinno)
12.00 - 12.15 Coffee break
12.15 - 13.30 Course Design Structure (prof. Michele Masini and Tommaso Piccinno)
13.30 - 13.50 Questions & Answers
13.50 - 14.00 Conclusion (prof. Diana Spulber and Anna Siri)

Course Purpose	The purpose of the third module is to provide knowledge on mapping different pedagogical approaches against specific characteristics of learning specifically towards student-centred approach.
Learning Outcomes	Upon successful completion of this course, the trainees will be able to develop: • a learner-centred syllabus for a course • a systematic approach for course redesign that ensures alignment between course outcomes, teaching units, daily lesson plans, and assessments
Course topics/outline	Pedagogical approach and planning Constructive alignment
Activities & Assessment	Concept maps Team works, role playing, flipped classroom
Course methodology/ Instructional Strategies	Specific application exercises
Basic Technical/Media Requirements	ONLINE (Pc, Smartphone, and Tablet)
Recommended Texts & Materials	Handouts provided by the UNIGE team
Workload	4 hours
Basic Technical/Media Requirements	English language Learning motivation