

Co-funded by the  
Erasmus+ Programme  
of the European Union

---

# *DIGIHEALTH*

## **Innovative Digital Skills & Teaching Methods 4 Effective Health Education in Lebanon & Syria**

[digihealth.education@gmail.com](mailto:digihealth.education@gmail.com)

# Agenda

Expected Outcomes & Benefits



DIGIHEALTH Work Packages



DIGIHEALTH Funding and Partners



Why DIGIHEALTH?



What is DIGIHEALTH Project?



# What is DIGIHEALTH Project?

- “Promoting excellence, creative and innovative digital teaching and learning approaches, through advanced ICT solutions to **improve quality of health education**, in order to prepare well-qualified graduates able to adapt to changing healthcare environment, meet societal expectations and sustain healthy environment in Lebanon and Syria”.



# Why DIGIHEALTH?



# What Does Literature Say About Digital Skills in Higher Education?

“Digital skills represent enhanced learning abilities within which cognition and technology interact to model the knowledge processes in aging populations. Since they are **digital natives, new generations are tech savvy, using improved learning capabilities. Adults and older generations do not possess native technological competence.** However, they are learning digital skills to improve their lives and to age well in a digital world”.

Koumachi. *International Journal of Research in English Education*  
(2019) 4:1

International Journal of  
Research in English  
Education (IJREE)

Original Article

Published online: 20 March 2019.

## The Digital Turn in Higher Education: A “Digital Natives” Mythbusting

“Media change has unveiled the singularity of **this generation** and has forced academic authorities to reconsider learning, teaching as well as both skills and employability of such a generation for a better academic higher education system”.

# Effective Use of Educational Technology in Medical Education

*Colloquium on Educational Technology:  
Recommendations and Guidelines for  
Medical Educators*

AAMC Institute for Improving Medical Education

## **Educational technologies are advantageous in providing:**

- safe, controlled environments that eliminate risk to patients
- enhanced, realistic visualization
- authentic contexts for learning and assessment
- documentation of learner behavior and outcomes
- instruction tailored to individual or group needs
- learner control of the educational experience
- repetition and deliberate practice
- uncoupling of instruction from place and time
- standardization of instruction and assessment
- perpetual resources and new economies of scale

**Association  
of American  
Medical  
Colleges  
(AAMC),  
2007**

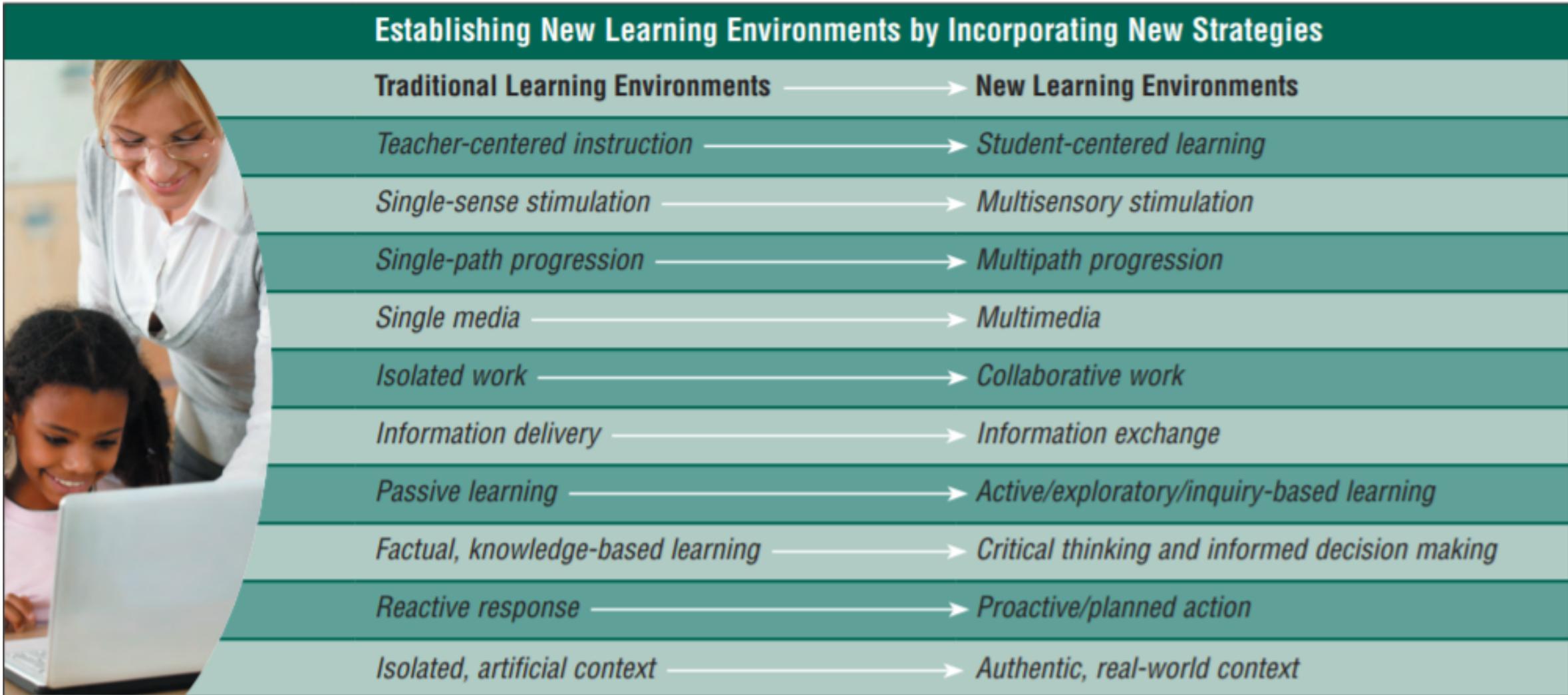
# New FIP digital technology forum to lead on innovation in pharmacy practice

9TH MAY 2019 BY PIP EDITOR — LEAVE A COMMENT



**A new forum comprising pharmacists, pharmaceutical scientists and pharmacy educators with expertise, experience and interests in technology was launched by the International Pharmaceutical Federation (FIP).**

# A Shift in Educational Strategies



# Technology-Enhanced Education

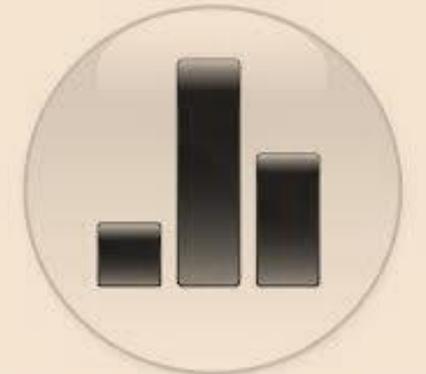
## Digital Skills



## Clickers



## Simulation



**Poll Everywhere**

# DIGIHEALTH Funding / Partners



Erasmus+

**EU 2020  
strategy  
"smart,  
sustainable,  
inclusive  
growth"**

- Increase the **skills** and **employability** of **students** and contribute to the competitiveness of EU economy.
- Implement the **Higher Education Modernizations strategy** in program countries and **raise the capacity** of partner countries.
- Improve **quality in teaching & learning**.
- Streamline the **international dimension** in Erasmus+.

# ERASMUS+ Projects Timeline

<b>Publication of the call for proposals</b>	<b>24 October 2018</b>
<b>Deadline for submission of applications</b>	<b>7 February 2019 (12:00 CET, midday Brussels time)</b>
<b>Evaluation period and consultation the EU Delegations in the Partner Countries</b>	<b>March-June 2019 (3 months)</b>
<b>Information to applicants</b>	<b>By mid-August 2019</b>
<b>Signing of the grant agreement</b>	<b>As of October 2019</b>
<b>Start date of the action</b>	<b>15 November 2019 or 15 January 2020</b>



# DIGIHEALTH Consortium (Program Countries from EU)

## Linnaeus University (Sweden)

- ✓ Project Coordinator
- ✓ Grant Holder



## University of Genoa (Italy)

- ✓ Project Advisor
- ✓ Know-How Provider



## Mediterranean Universities Union (Italy)

- ✓ Quality Control

## Universidad de Santiago de Compostela (Spain)

- ✓ Know-How Provider





# DIGIHEALTH Consortium (Partner Countries - Lebanon)

Lebanese University

- ✓ National Educational Technology Training Centre
- ✓ Beneficiary

Modern University for  
Business and Science

- ✓ National Contact Person
- ✓ Smart Classroom
- ✓ Beneficiary

Beirut Arab University

- ✓ Smart Classroom
- ✓ Beneficiary

Lebanese International  
University

- ✓ Smart Classroom
- ✓ Beneficiary



# DIGIHEALTH Consortium (Partner Countries - Syria)

Damascus  
University

- ✓ National Educational Technology Training Centre
- ✓ Beneficiary

Arab International  
University

- ✓ **Project Operational Manager**
- ✓ Educational Technology Training Centre
- ✓ Beneficiary

University of  
Hama

- ✓ Smart Classroom
- ✓ Beneficiary

# DIGIHEALTH Work Packages (WP)

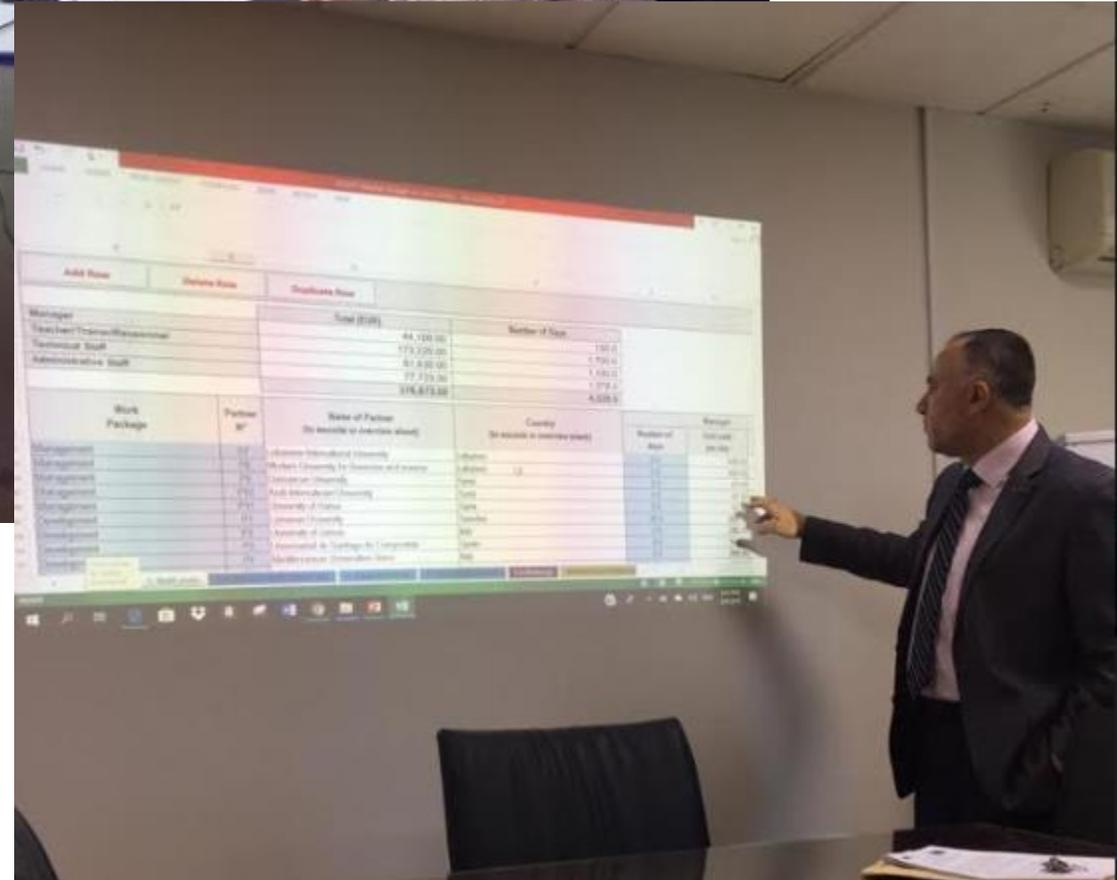
- WP1: laying-down foundation of DIGIHEALTH (in process)
- WP2: Capacity building (in process)

## Remaining WPs:

- ✓ WP3: Centers set-up at LU and DU
- ✓ WP4: Quality assurance and evaluation
- ✓ WP5: Dissemination and Exploitation
- ✓ WP6: Management
- ✓ WP7: Sustainability

**Kick-Off  
Meeting  
MUBS,  
Beirut, Feb  
28<sup>th</sup>-March  
1<sup>st</sup>, 2019**





**Local Meeting, LIU,  
Beirut Campus, May 9<sup>th</sup>,  
2019**

# MicroSim Inhospital

MicroSim is a computer based self-directed learning system for emergency medicine. The software contains patient scenarios based on specific learning objectives for training in medical knowledge, problem solving and decision making.

MicroSim Inhospital is designed for use by all healthcare professionals, especially for nurses, physician assistants, medical residents and physicians.

MicroSim was developed by working closely with leaders in emergency medicine and can be used both in initial education as well as continuing education. The system is ideal for an educational programme that also includes universal patient simulator manikins and traditional skills trainers.

### Potential educational benefits

- Improve training effectiveness
  - Standardises training methodology
  - Simulation scenarios integrate with curriculum
  - Standardises outcome measurements
  - Documents performance and improvement
- Improve student's learning experience
  - Provides user feedback anytime before prepared
  - Post-class user feedback classroom instruction
  - Debriefing and scoring encourages remediation

### Multilevel application

- Initial education
- Continuing education
- Recertification and re-certification

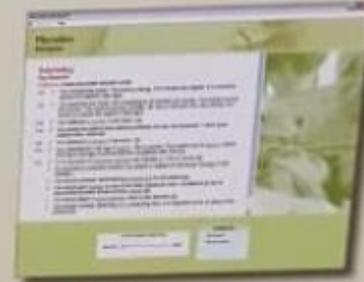
### Potential economic benefits

- Cost Management
  - Customised and flexible self-directed learning needs
  - Increase efficiency of instructor time
  - Increase effectiveness of classroom time
  - Reduce regional infrastructure costs
- Reverse Potential
  - Advanced learning technology attracts new students
  - Opportunity to expand training programs



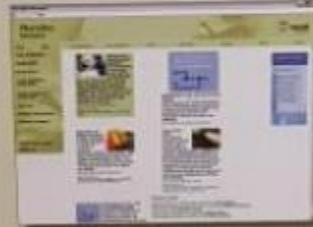
### Easy-to-use powerful user interface

- Allows intuitive access to:
  - More than 100 different investigations and treatments
  - More than 100 different types of drugs
  - Different defibrillators (both manual and AEDs)
  - All common airway, breathing and circulation techniques



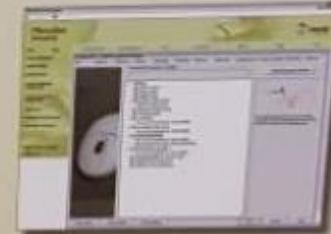
### Automated intelligent debriefing

The debriefing after a simulation session facilitates the learner's monitoring of the learning process and stimulates engagement in developing decision-making skills. Through this the learner is helped to understand what happened and how to improve performance.



### Realistic patient scenarios

All the scenarios come with specific learning objectives in emergency medicine. The scenarios are grouped in modules of 3 patients each. For more information about realistic modules, please contact your local Laerdal representative.



### Highly configurable system

MicroSim is learner centred and can be extensively customised to fit the learner's training needs through the configuration screen. The course designer can customise the selection of investigations, interventions and drug available during simulation to reflect the professional level and experience of the learner.

### Contact information

Laerdal Medical Ltd  
Laerdal House, Greenhead Road, Orpington,  
Kent ME8 5JX  
Tel: +44 (0) 1892 876624 Fax: +44 (0) 1892 876660  
E-mail: customer-care@laerdal.com

Laerdal Pte Ltd (A/B) 41-503 B17 #01  
20 Bedok Street, Singapore 41166  
Tel: +65 3 9049 4200, Toll free: 1 800 131 565  
Fax: +65 3 9049 4028, Toll free: 1 800 670 894  
E-mail: customer-care@laerdal.com.sg

Laerdal Singapore Pte Ltd  
100 J Marine Parade Centre  
#12-01, Parkway Parade, Singapore 44920  
Tel: +65 67642129, Fax: +65 67642113  
E-mail: sales@laerdal.com.sg

### Hardware requirements

Processor: 4.00 GHz (4.00 GHz recommended)  
OS: MS Windows 7 (64 bit recommended)  
RAM: 16 GB hard disk, 100 GB (100 GB recom-  
mended)  
Storage: 16 GB or 32 GB  
Mouse: An optical or wireless pointing device  
CD-ROM drive

### Software requirements

Operating System: Windows 7 or later  
Windows 9x, 98, ME  
Windows NT 4.0 (Service pack 4 or later)  
Windows 2000  
Windows XP

### Competence Management System



Designed for integration with  
Laerdal CME



# University of Genoa Visit

Advanced  
Biotechnology  
Center with  
neuroscience,  
oncology and  
cardiology  
research  
departments



# University of Genoa Visit

## Interuniversity Center for Influenza Research



# University of Genoa Visit

## Center for Production of Video Material and E-Learning



# DIGIHEALTH Expected Outcomes and Benefits

01

National training center

02

Capacity building

03

E-Modules development

04

ICT integration and modern pedagogy

# Expected Outcomes and Benefits for SOP



Digital training



Wireless smart board?



Dispensing lab simulation software?

Others ??



# Faculty Survey (WP1)

<https://forms.gle/j4M6WC4hQGrynbL78>

# DIGIHEALTH

## DIGIHEALTH Questionnaire Teaching Staff Professional Development Needs Assessment

Dear Faculty Member,

You are kindly invited to participate in this online questionnaire, which is needed for our project, entitled "Innovative Digital skills & teaching methods 4 effective health education in Lebanon & Syria/DIGIHEALTH ". This project will help improve the quality of health education at your institution with cooperation of EU-experience, through integrating technological tools consistent with pedagogical best practices for an active learning approach.

The purpose of the questionnaire is to identify your professional development needs in terms of pedagogical approaches and teaching styles, digital competencies needed by health educators, as well as technology-enhanced approaches for teaching/learning.

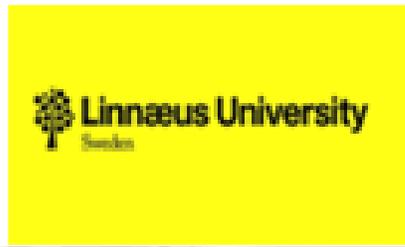
## Three Sections of the Faculty Survey:



Demographic data

Current teaching approaches

Technology and social media use in E-learning



Co-funded by the  
Erasmus+ Programme  
of the European Union

Thank you for  
attention!

Questions and  
comments  
please.

