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Focusing on Technology Enhanced Learning  
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# UNITEL Project eCourse: Evaluation of Quality and Effectiveness

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# Topics

- The UNITEL Project
- The eCourse
- eCourse Quality and Effectiveness
  - Initial Questionnaire
  - Final Questionnaire
- Concluding Remarks



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# The UNITEL Project





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## Coordinator

 **UNIVERSITA DEGLI STUDI  
GUGLIELMO MARCONI -  
TELEMATICA**

## Partners

 **PRISMA ELECTRONICS ABEE**  
 **IMAM KHOMEINI  
INTERNATIONAL  
UNIVERSITY**  
 **UNIVERSITY OF ISFAHAN**  
 **SHIRAZ UNIVERSITY**  
 **UNIVERSITY OF TEHRAN**

 **SHAHID CHAMRAN  
UNIVERSITY OF AHVAZ**  
 **NAMVARAN P&T COMPANY**  
 **UNIVERSIDADE ABERTA**  
 **TURUN YLIOPISTO**  
 **UNIVERSITY OF SISTAN  
AND BALUCHESTAN**

# Project Goals



1. Support the **modernization, internationalization and accessibility of the HE system in Iran** through the development of **innovative pedagogical approaches** based on technology-enriched collaborative learning (TEL)



2. Empower **engineering and STEM departments in Iranian universities** by strengthening the capacities and competencies of **teachers and instructional designers** in innovative and collaborative ICT-based practices as a way to increase curriculum modernization and internationalization



3. **Modernise the curriculum of STEM courses** through the development of a flexible and accessible training pathway, driving new educational approaches based on **technology-enriched learning (TEL) and collaborative methodologies**



# The eCourse



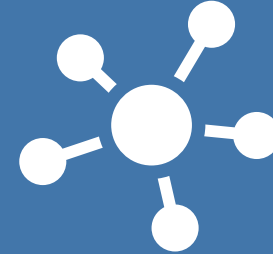
# Course General Objectives



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1. To learn the principles of **digitalization** and enabling technologies that lead to **innovative pedagogical practices**

2. To learn current trends in pedagogy, industry-relevant, working life oriented **pedagogies** such as project-based learning and problem-based learning



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3. To learn technologies, protocols and **tools** for applying ICT in processes and services

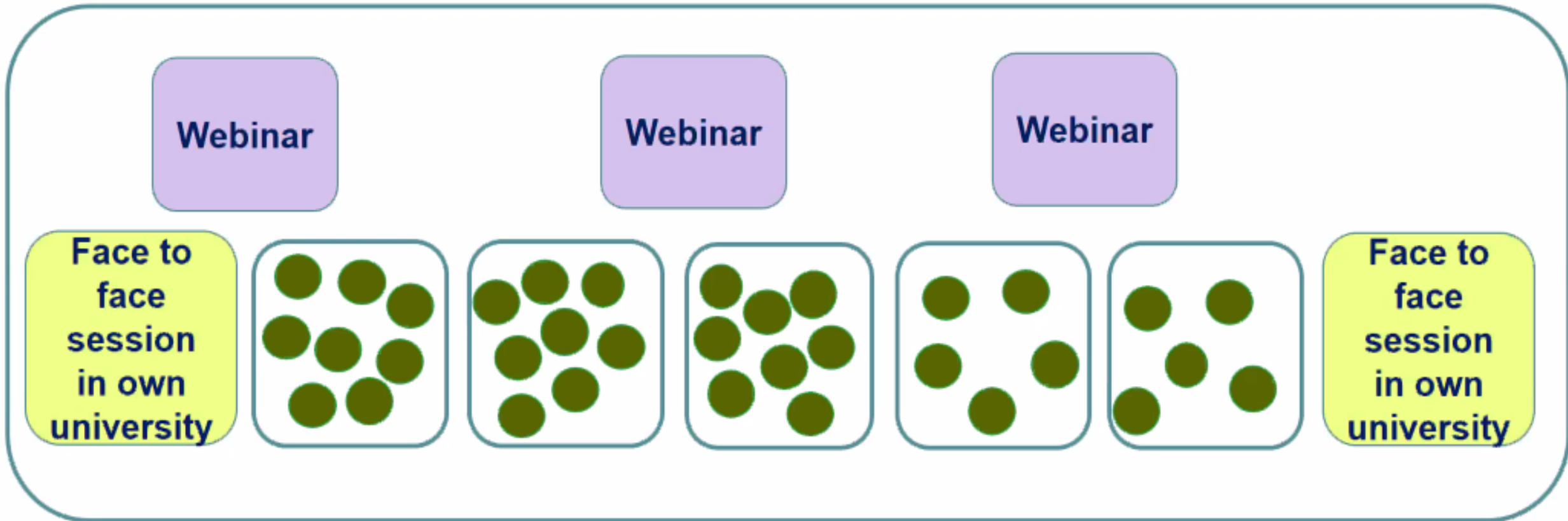
4. To be able to implement a project for the **digital transformation** of a process, area, or department





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# Structure of the training path (e-course)

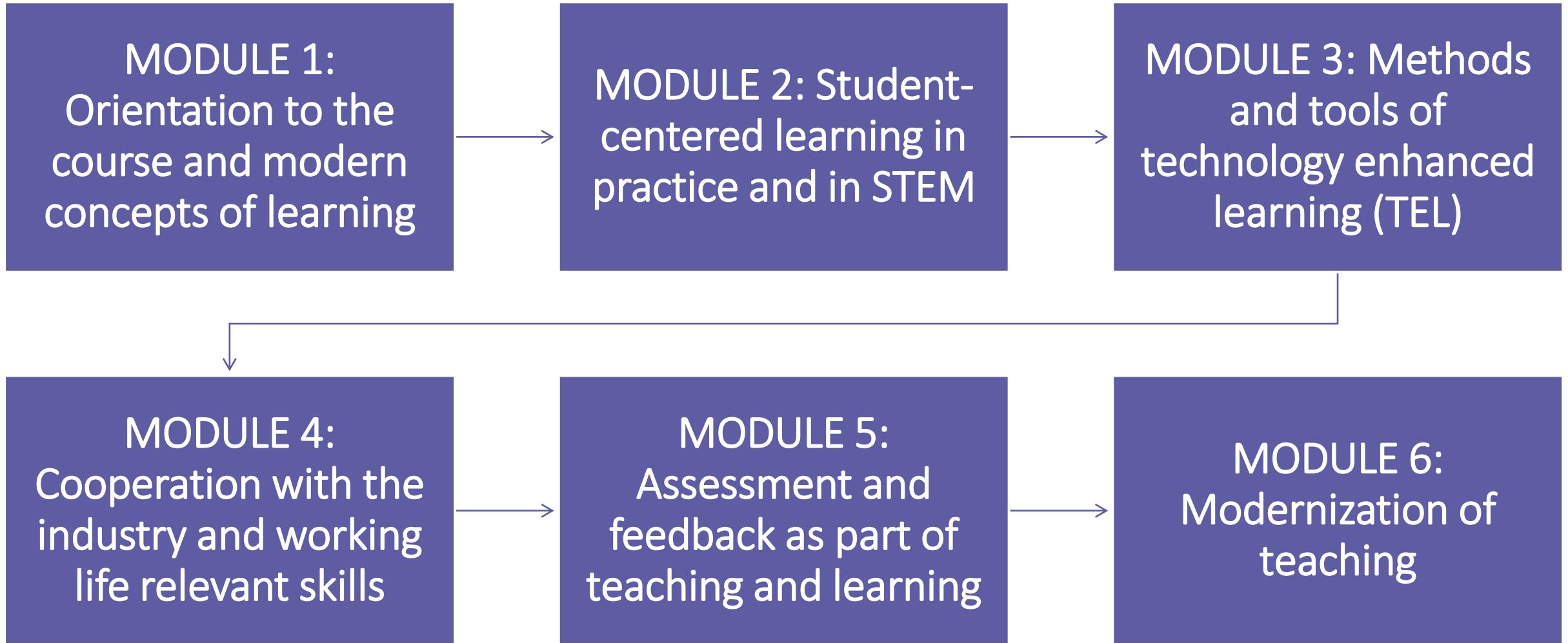


**TOTAL DURATION: 4 MONTHS**

● 36 video-audio lessons

□ 5-7 modules (agreed together with all partners)

# COURSE MODULES





# eCourse Quality and Effectiveness



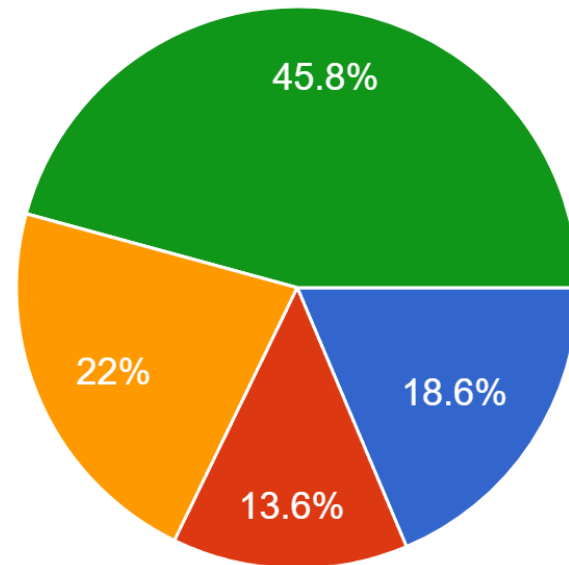
# Initial Questionnaire

## Objectives

- To characterize the course participants
- To gather participants perceptions and needs about their HEIs integration of TEL-based pedagogical approaches and collaborative teaching and learning ICT-based methodologies
- To identify participants' expectations about the course

## 8. What is your experience level as an online student?

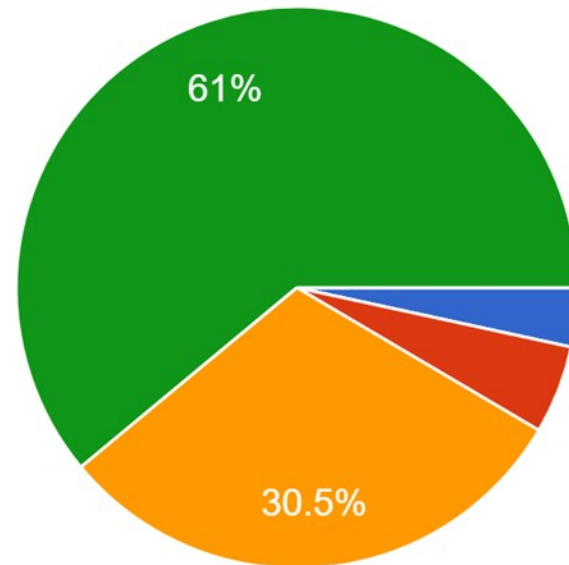
59 responses



- I have no experience as an online student
- Low (less than 5 courses completed)
- Medium (between 5 and 10 courses completed)
- High (more than 10 courses completed)

## 9. What is your experience level as an online teacher?

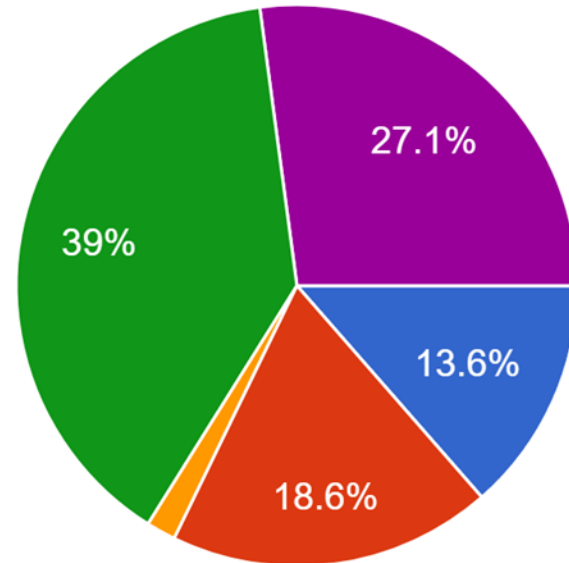
59 responses



- I have no experience as an online teacher
- Low (less than 5 courses taught)
- Medium (between 5 and 10 courses taught)
- High (more than 10 courses taught)

# 11. The e-Course will be conducted in a Moodle-based platform. How do you rate this technology?

59 responses

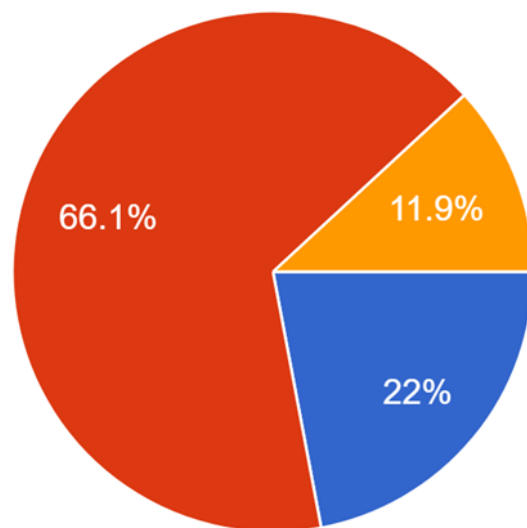


- I do not know the Moodle platform.
- I know the Moodle platform but have never used it.
- I have used the Moodle platform before, but my experience was negative.
- I have used the Moodle platform before and I think it's an appropriate choice
- I am very familiar with Moodle platform and I think it was a perfect choice.

## 5. Rate the current level of integration of TEL-based pedagogical approaches at your university /

HEI:

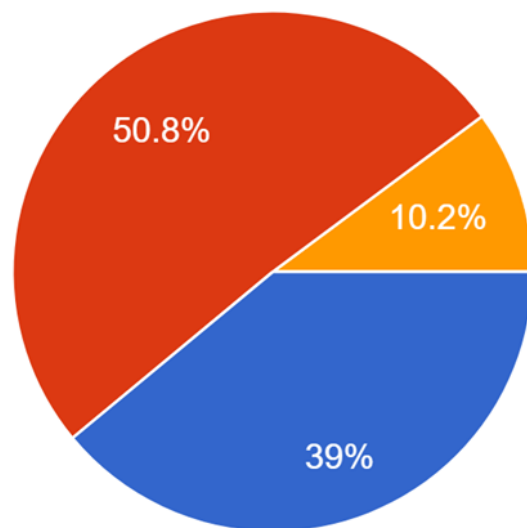
59 responses



- Basic (some pilot experiences undergoing, it is not still part of the institution's policy and strategy)
- Medium (increasing number of evidence, it is already part of the institution's policy and strategy)
- Advanced (widespread practice across the institution, a critical goal for the institution)

## 6. Rate the current level of integration of new collaborative teaching and learning ICT-based methodologies at your university / HEI:

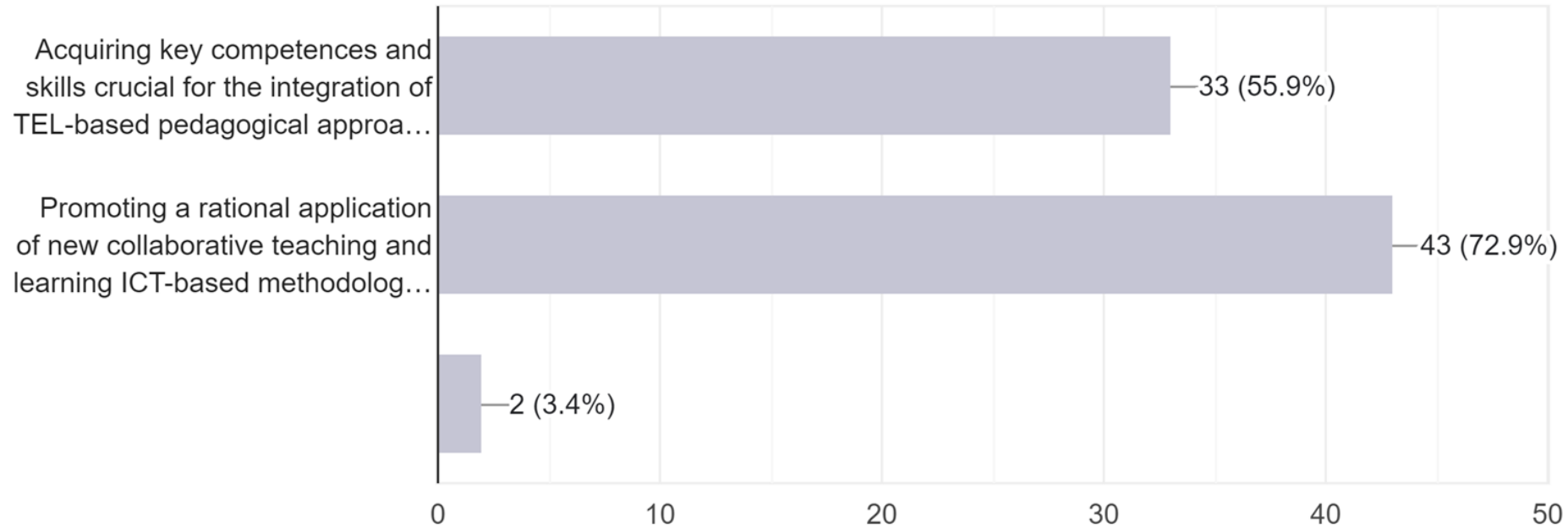
59 responses



- Basic (some pilot experiences undergoing, it is not still part of the institution's policy and strategy)
- Medium (increasing number of evidence, it is already part of the institution's policy and strategy)
- Advanced (widespread practice across the institution, a critical goal for the institution)

## 7. I feel the need for specific training for: (select all that apply)

59 responses

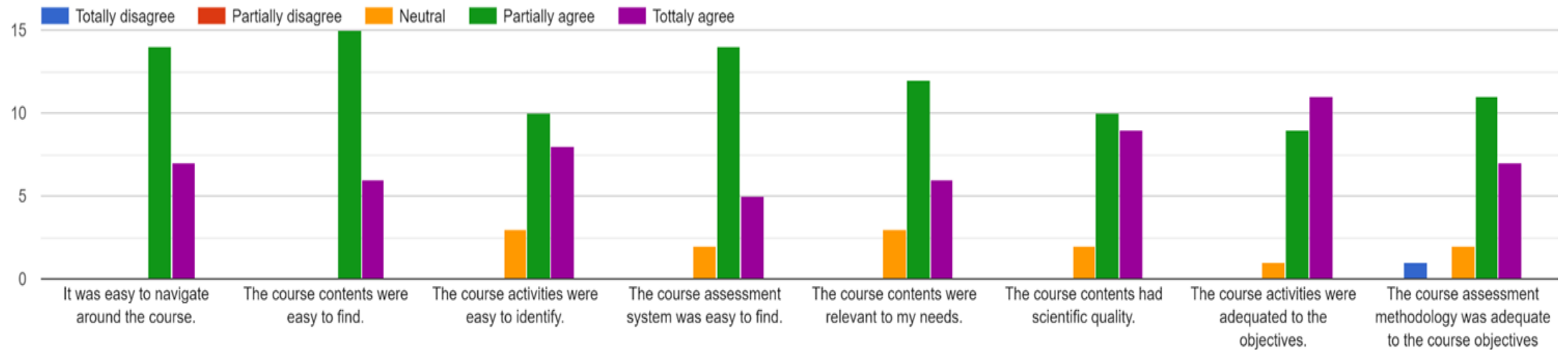


# Final Questionnaire

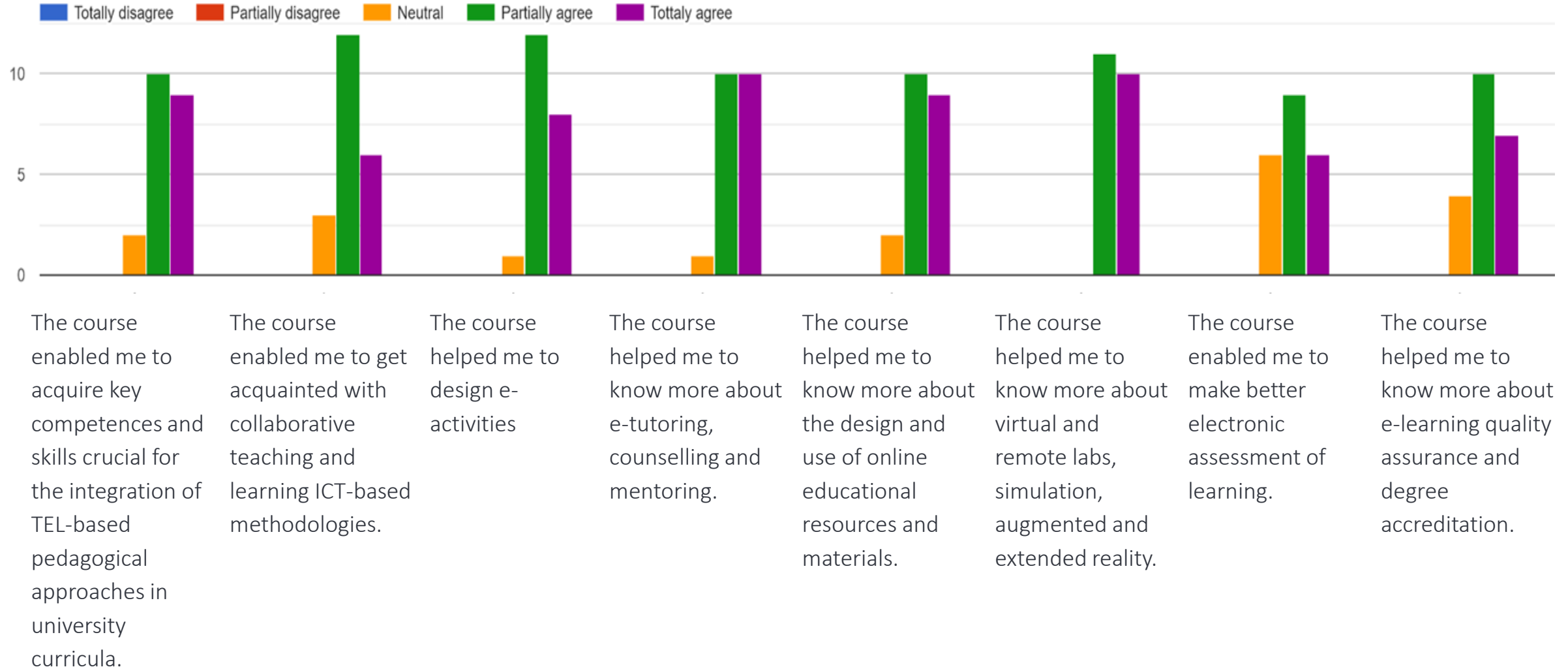
## Objectives

- To characterize the course participants
- To collect participants perceptions about the course learning experience
- To collect participants perceptions about the course relevance and effectiveness
- To make a balance of how the course helped participants modernize their curricula

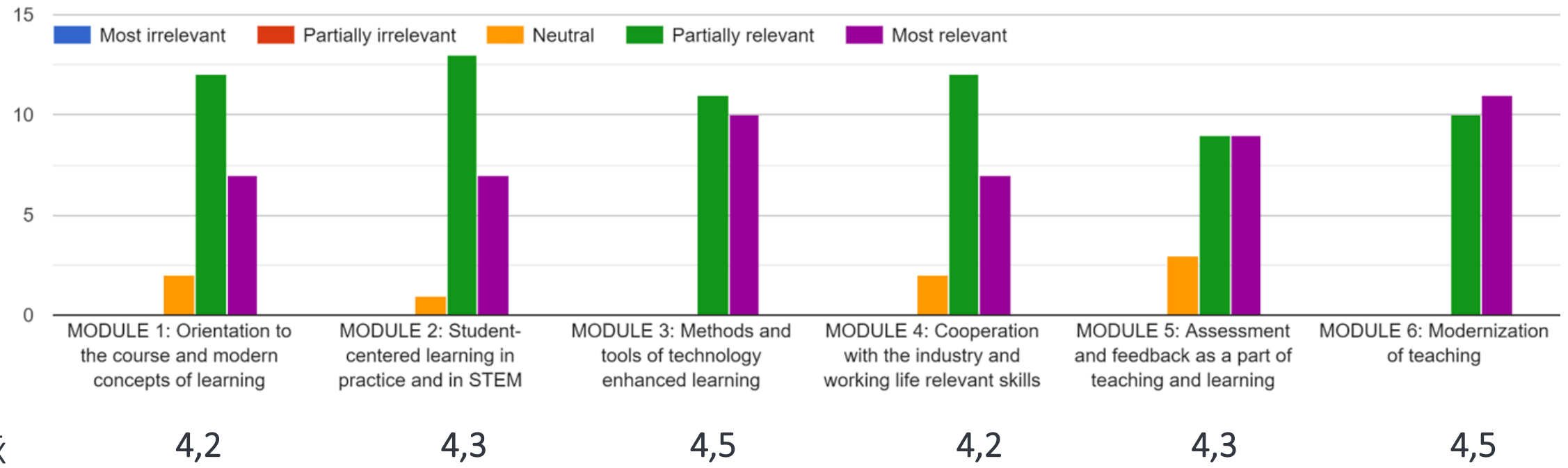
7. Rate the following statements about the e-course learning experience.



8. Rate the following statements about the e-course effectiveness.

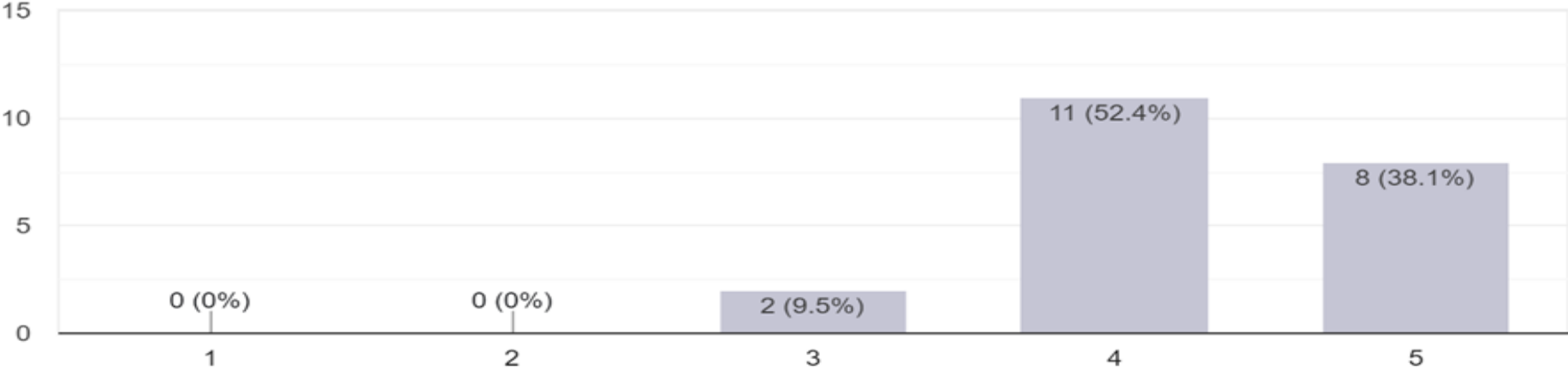


9. Rate the relevance of the e-course modules.

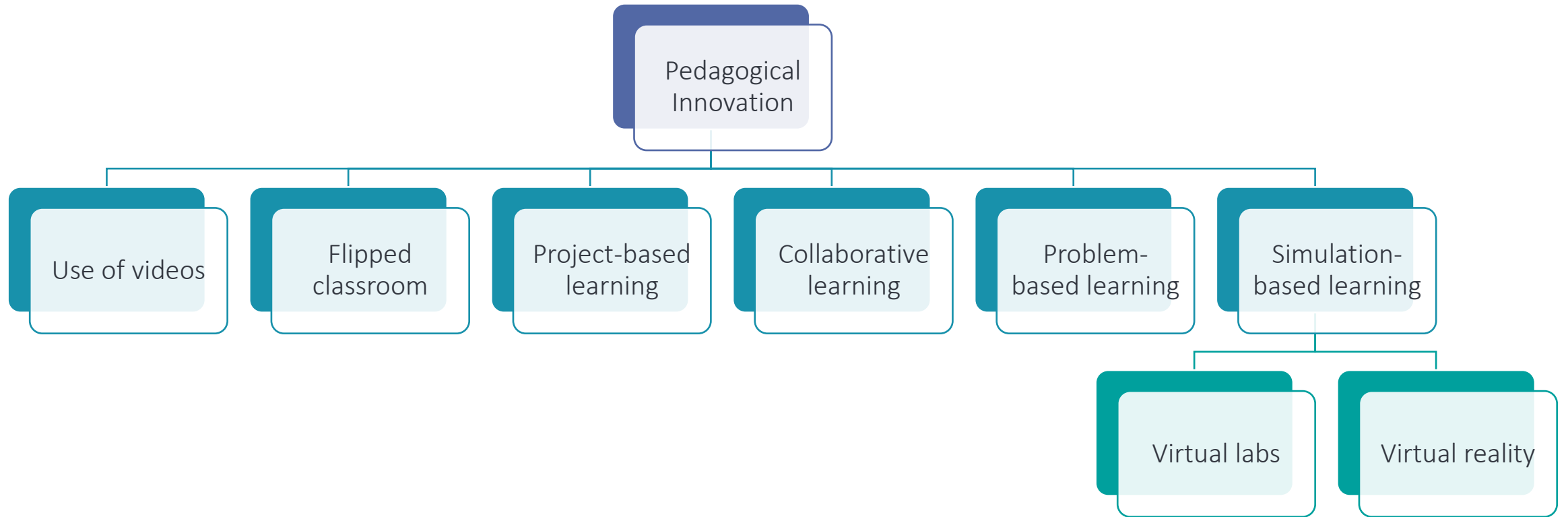


10. The course helped me to modernize my curricula by introducing TEL (Technology Enhanced Learning) approaches and contents.

21 responses



11. Please explain how you **modernized your curricula** and introduced **pedagogical innovation** based on what you have learned in the e-course.



# Course Evaluation Balance



Cooperation with the industry and working life relevant skills

New pedagogical methods

Assessment and feedback methods

Design and deliver courses

Nothing

Not sufficient interaction and feedback from teacher and peers

Lack of flexibility (pace, assessment)

Assessment methodology

# Concluding Remarks

- Rather positive evaluation
- More robust conclusions by triangulating with other instruments' data collection
- Some insights may be used to enhance future iterations of the e-course
- Expected project output: long-term impact of the eCourse and materials produced to continuously transform the online, blended and hybrid teaching and learning practices, leading to higher quality of higher Engineering education in Iran

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Merci  
Kiitos  
ارکیش  
Tal  
謝謝  
Arigato  
Gracias  
Дзякуй  
Eskerrick asko  
Asante  
ขอบคุณ  
dziękuję  
köszö  
תודה

**Thank YOU**