**UNITEL-SUT\_teacher(Q)**

Dr. Bigdeli

Amirreza Mehrabi

Sama Ghoreyshi

Cover letter

Hello

This is a questionnaire elaborated within the framework of the UNITEL- Modernization and internationalization of Iranian HEIs via collaborative TEL-based curriculum development in engineering and STEM, project promoted by the European Commission under the Erasmus plus program Capacity Building in Higher Education: the projects foresees and international cooperation between Eu countries and 7 Iranian universities. This activity is led by Sharif University of Technology on behalf of the whole consortium. As a first step of the project we are going to examine your opinion about the use and development of technology enhanced learning in Iranian universities both from a technological and pedagogical point of view. In your role as a teacher, we are inviting you to participate in this research study by completing the attached surveys.

The following questionnaire will require approximately 17 min to complete. In this study, you will be asked to complete an electronic survey. There are no risks associated with participating in this study. The survey collects no identifying information of any respondent. All the responses in the survey will be recorded anonymously.

Copies of the project will be provided to the Vice Chancellor for International Affairs of Sharif University of Technology. If you choose to participate in this project, please answer all questions as honestly as possible and return the completed questionnaires promptly. Participation is strictly voluntary, and you may refuse to participate at any time. Thank you for taking the time to assist us in our project. If you would like a summary copy of this study please send an email to: a.mehrabi1376@gmail.com. Completion and return of the questionnaire will indicate your willingness to participate in this study. If you require additional information or have questions, please contact us at the number listed below.

For answering these questions PLEASE DO NOT think a lot.

Dr. Arafeh Bigdeli

Amirreza Mehrabi

Sama Ghoreyshi

Amirreza Mehrabi

a.mehrabi1376@gmail.com

+989101012460

**Information**

1. You are a teacher at\*

Sharif University of Technology, Tehran

University of Tehran

Chamran University, Ahvaz

Isfahan University of Technology, Isfahan

University of Sistan va Balouchestan, Zahedan

University of Shiraz

Other:

**Topic area: theory and practice**

\*University studies should teach students and graduates both theory and practice, conceptual understanding, and practical action

\*\*Practice refers to the actual observation, operation, or experiment. Practice is the observation of disparate concepts (or a phenomenon) that needs explanation. A theory is a proposed explanation of the relationship between two or more concepts, or an explanation for how/why a phenomenon occurs.

\*\*\*It is important for us to know what is your feeling about the learning/teaching theory and practice in your University and the efforts to equalize them, and your opinion about the use of Technology Enhanced Learning-related methodologies..

\*\*TEL - Technology enhanced learning

2.I focus on teaching disciplinary knowledge and theory more than engineering practice. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

3.TEL favors the integration of theory and practice more than traditional classes. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

4. I do not feel at ease in teaching engineering practice in an online environment. \*

(If you reply strongly agree/strongly disagree please explain why).

Strongly disagree(please explain why)

Disagree

Neutral

Agree

Strongly agree(please explain why)

6. Would it be helpful to have some kind of support from a person dedicated to the design of technology-enhanced learning if you were in the position of delivering a course online?

Yes/No

If you selected yes please indicate which kind of support

Support to use videoconferencing tools (Adobe Connect, Skyroom etc.)

Support other ICT tools to create TEL contents

Support in finding appropriate pedagogical tools (to use new ICT tools)

Support to activate students to participate in the learning process during online courses

Support in achieving the best assessment methods

Other

**Self-regulation and motivation**

\*ARCS models: This model is particularly important for e-learning, since motivating learners in an online course is more difficult than in face-to-face courses. There are four components of the ARCS model, and stands for Attention, Relevance, Confidence, and Satisfaction.

\*\*Self-regulation is the ability to monitor and manage your energy states, emotions, thoughts, and behaviors in ways that are acceptable and produce positive results such as well-being, loving relationships, and learning.

\*\*\*How does self-regulation relate to motivation?

(Self-Regulation as a Process) Students who are motivated to reach a certain goal will engage in self-regulatory activities they feel will help them achieve that goal. The self-regulation promotes learning, which leads to a perception of greater competence, which sustains motivation toward the goal and to future goals.

5.TEL does change the role of the professor (before I was an information deliverer, and now I am a learning facilitator) \*

Strongly disagree

disagree

neutral

agree

strongly agree

6. I make attempts to change the role of students in order for them to be active actors of the learning process

Strongly disagree

disagree

neutral

agree

strongly agree

7. At the starting point of my course I always investigate the expectation of the students attending the course (short-term and long-term objectives)

Strongly disagree

disagree

neutral

agree

strongly agree

7. I use different models like (ARCS model) to motivate students for learning better in an online environment. \*

 .

Strongly disagree

disagree

neutral

agree

strongly agree

Strongly Agree

8. I believe Students do not manage well their own learning process when TEL is used. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

9. I am motivated to use TEL more in my teaching and learning. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

10. The school/university administrators showed positive attitude and behaviors towards educators who teach online during the online education period. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

**Topic area: knowledge, skills, and attitudes**

Topic area: knowledge, skills, and attitudes

\*PBL: project based Learning

Soft skills are a combination of people skills, social skills, communication skills, character or personality traits, attitudes, mindsets, career attributes, social intelligence and emotional intelligence quotients, among others, that enable people to navigate their environment, work well with others, perform well, and ...

These questions help us to know "how TEL helps you to enhance your students’ skills".

11.TEL is not efficient in providing Engineering related and technical skills ( professional). \* maybe we can turn these questions into positivi questions: it is efficient or maybe effective same for 12 znd 13

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

12. TEL is not efficient in providing soft skills (examples) .

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

13.

14. What soft skills do you teach to your student via homework or the project? \*

You can choose one or more options.

\*Soft skills are a combination of people skills, social skills, communication skills, character or personality traits, attitudes, mindsets, career attributes, social intelligence and emotional intelligence quotients, among others, that enable people to navigate their environment, work well with others, perform well, and ...

Teamwork. ...

Adaptability. ...

Problem-Solving. ...

Creativity. ...

Work Ethic. ...

Interpersonal Skills. ...

Time Management.

Communication

Other:

15. Online education is not appropriate for teaching every subject, knowledge or skill. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

16. In my opinion Videos or simulations (in the form of virtual or remote labs) can help students learn engineering skills. Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

**Topic area: working-life orientation**

Topic area: working-life orientation

The opportunities that online learning has and how it affects your teaching and life.

17. In online learning, it is difficult to teach according to the individual interests and abilities of the students. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

18.TEL allowed more flexibility in my teaching schedule. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

19. Curricula should be revised and made more effective for online environment \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

**@@**The elements in my unit (e.g. lab, department) support cooperation between instructors as follows:

20. My own attitudes

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

21. The attitudes of my colleagues

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

22. The support of the superiors

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

23. Lack of structures for cooperation

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

24. Incentives for teaching

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

25. Lack of time

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

26. Some other reason which is supporting or hindering cooperation between teachers? Please spesify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Topic area: pedagogy for technology-enhanced learning and culture of teaching**

Topic area: pedagogy for technology-enhanced learning and culture of teaching

Pedagogy, taken as an academic discipline, is the study of how knowledge and skills are imparted in an educational context, and it considers the interactions that take place during learning. Both the theory and practice of pedagogy vary greatly, as they reflect different social, political, and cultural contexts.

26.TEL motivated me to use more student centered pedagogies. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

27.TEL motivated me to use more authentic and summative assessment in class. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

28. There is no need to employ and use of different pedagogies in online learning environment. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

29. Some teachers in online courses need an online assistance to handle the synchronous class (like active learning); What is your idea about a technical and pedagogical assistance in online classes?

30. Active learning could be better executed in an online learning environment. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

31. Giving feedback to students during online education is difficult. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

32. I am used to formal education practices and could not adapt to online teaching/learning practices. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

33. I believe TEL needs specific content and one cannot use the same content for traditional class and online learning \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

16. The university has professional development programs for instructors in order to support instructors in enhancing their competence, in teaching, in new forms of evaluation, and in engineering practice and related skills. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

34. The university foresees short seminars or/and workshops (also outsourced) for upskilling instructors in design of technology enhanced learning. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

15. I am satisfied with the "TECHNICAL SUPPORT" given about the solutions of the problems in the distance education system by technical staff. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

35. Lecturer preparation needed more planning to do online learning activities. \*

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

I share opinions and comments with my colleagues about research activities

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

I share opinions and comments with my colleagues about teaching activities

 (e.g. lab, department)

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

**Tests**

These tests help us to know how you set your teaching subject with online training

I think the assessment process needs to be revised to be adapted to online learning

Which traditional assessment tools/methods you think can support online teaching?

36. What kind of support did you consult during the transition to TEL? (you can choose more than one answer.) \*

 .

1. External online resources

B) Discussion with colleagues

C)Online workshops / seminars at department

Other:

I didn’t use any

37. 38. Which learning activities did you use in your online classes? \*

 .

Pre-recorded lecture (asynchronous)

Live lectures (synchronous)

Both

39. Which learning activities do you think is more effective for online engineering education? \*

 .

Pre-recorded lecture (asynchronous)

Live lectures (synchronous)

Both (flipped)

**ICT**

Which LMS do you use?

Moodle

Chamilo

Proprietary LMS

44. Which functions of the LMS do you actively use? · LMS communication tools including chat, forums, e-mail and …YES/NO

· LMS assessment tools like quizzes, question bank and …

· LMS activity tools like assignment, Glossary, wikis and …· LMS report tools like Logs, live Logs, Activity completion and …

 None

46.In general, I was satisfied with the LMS work and intelligibility.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

I know how to monitor student activity using LMS automatic reporting tools

What multimedia tools did you use in order to create your own online materials: (list and other) like:

Adobe presenter etc. 40. All educators should undergo training to use online learning management systems.

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

42.Online learning management systems were not user-friendly

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

43.In general, I was satisfied with the LMS work and intelligibility.

 .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

44. Do you have experience with virtual labs in your teaching?

In case yes go to:

46. I think virtual labs are suitable tools to integrate traditional teaching in engineering and STEM

45. Do you have experience with remote labs in you teaching?

In case yes go to:

47. I think remote labs are a suitable tools to integrate traditional teaching in engineering and STEM

SHOULD THERE BE AN OPEN QUESTION IN THE END:

“If there is something that you want to add concerning the themes of the questionnaire, please feel free to share your thoughts.” \_\_\_\_\_\_\_\_

**Thank you SO MUCH!!**

For the next step in our project, we have an interview, If you want, we can call you for that.

45.“If there is something that you want to add concerning the themes of the questionnaire, please feel free to share your thoughts.”

46. If you want to join us for the interview, please write your Phone number, Email, or Telegram ID.