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

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Cover letter

Hello

This questionnaire is part of a development project at the Sharif University of Technology. For our first step of our project, we are examining your opinion about some topic areas(theory and practice, ...). Because you are a student at Sharif University of technology/University of Tehran/ Charmin University/..., we are inviting you to participate in this research study by completing the attached surveys.

The following questionnaire will require approximately 13min 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 response 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 me in our project. If you would like a summary copy of this study please email: 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 me at the number listed below.

For answering these questions PLEASE DO NOT think a lot.

Dr. Arafeh Bigdeli

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**Information**

1. Studies you are enrolled in: \*

.

Bachelor

master

Doctoral

2.You are a student at the.... \*

.

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**

\*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 theory and practice in University and the efforts to equalize them, and your opinion about the application of TEL.

1. Hands-on experiences and practical actions important for training engineers are not possible in an online learning environment. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

2. Videos of experiments, research papers and study design exercises, and experimental data provided for analysis and interpretation could be a good alternative for practical action. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

3.University should move the focus more toward engineering application rather than theory. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

4.Online studies help me to connect theory and practice \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

**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.

\*\*Technology enhance learning

\*\*\*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 changes the role of the student (before I was an information receiver, and now I build my own knowledge) \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

6.My motivation in online education is lower compared to face-to-face classes \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

If you selected agree or strongly agree explain some reasons

7.Online courses increased Independence and flexibility in my learning and made me more self-regulated. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

8.In online learning you can’t really see your own progress. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

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

\*PBL: project based Learning

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

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 ...

Hard skills are abilities that let you tackle job-specific duties and responsibilities. Hard skills can be learned through courses, vocational training, and on the job. These skills are usually focused on specific tasks and processes such as the use of tools, equipment, or software.

9.TEL is efficient in providing Engineering related and technical skills \* .

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

10. TEL is efficient in providing soft skills.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

11.Which soft skills do you think can be easily developed in online education? \*

You can choose multiple options

Teamwork. ...

Adaptability. ...

Problem-Solving. ...

Creativity. ...

Work Ethic. ...

Interpersonal Skills. ...

Time Management.

Communication

Other:

12.In online learning I like to work on my own and do independent assignments. \*

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

13.Online education is not appropriate for learning every subject, knowledge or skill.

.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

14.More emphasis should be placed on teaching real-life problem-solving skills in online learning. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

15.I believe students learn engineering knowledge, skills and attitudes better by online collaborative learning. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

16.It is easier to participate in group activities in the online environment in comparison to the traditional face-to-face class meetings. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

17.Online learning environment helps students develop problem-solving skills transferable to diverse settings.\*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

18. I know the difference between virtual and remote laboratories

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

If yes go to question 19 and 20 otherwise go straight to question 21

19.In my opinion the use of online methodologies based on virtual labs are suitable for learning engineering skills

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

20. In my opinion the use of online methodologies based on remote labs are suitable for learning engineering skills

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

21.I believe I have the skills needed for participating successfully in TEL like time management, self-motivation and virtual communication.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

**Topic area: working-life orientation**

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

22 .In my opinion universities should offer more opportunities for working-life projects in industry settings\*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

23.I am satisfied with the support (technological, technical, mental, attitudinal, …) the university provides before and during TEL in order to make us ready for the labour market. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

24. I think it is important that course assignments are derived as much as possible in real work situations

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

25. More emphasis should be placed on teaching real-life problem-solving skills in online learning.۰

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

26. I think it is important that course assignments are derived as much as possible in real work situations

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

**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.

27.Many of our teachers are technology literate.\*

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

28.The teaching methods and strategies used by teachers in online classes led to better and deeper learning. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

29.teachers Set clear objectives, deadlines, and expectations for engagement from the beginning of the online course. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

30.Reliable and authentic assessment could not be made in the online education environment. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly agree

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

.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

32.The course literature PROVIDED BY the teacher including other course material has well supported my learning. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

33.Instructors gave faster and better feedback in TEL. \*

.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

Tests

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

34.Which learning activities did your instructors use in your online classes? \*

.

Pre-recorded lecture (asynchronous)

Live lectures (synchronous)

Both

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

.

Pre-recorded lecture (asynchronous)

Live lectures (synchronous)

Both (flipped)

Other:

36.What does motivate you in online class?

**ICT**

LMS - learning management system is the online learning environment used to deliver the online courses where you find lectures, quizzes...

37. Online learning environment was user-friendly.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

38. I regularly follow the “COURSE DOCUMENTS” in the LMS.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

39.I regularly follow “LIVE COURSES” within the distance education system.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

40. AUDIO and Video quality of the system during live lessons in the distance education system are at high level

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

41.What LMS tools your teachers used to support the online component of the course? (you can choose more than one answer)

• LMS communication tools including chat, forums, e-mail and …

• 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

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

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

**Assessment**

43. teachers do not have enough knowledge on how to evaluate the learners’ knowledge and skills in the online education environment

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

44. Teachers used different methods of assessment (like projects, E-portfolios, oral questions, performance ratings and peer assessment) in TEL to gather evidence of achievement.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

45.I learn better when my teachers use regular and multiple assessments during the course and not just at the end.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

46.I learn better when my teachers give me timely feedback on my learning process, activities, assignments and quizzes.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

47.Instructors used modern technologies like simulations in order to teach engineering practice in an online environment.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

48.I was more motivated and trilled in an online learning environment due to use of modern technologies elements.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

49.The activities assigned by teachers are more meaningful and effective in an online environment compared to traditional classes.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

50.TEL motivated me to actively participate in class activities.

Strongly disagree

Disagree

Neutral

Agree

Strongly Agree

51.Which of the following aspects of education has changed more in an online environment compared to traditional classes?

• Teaching and learning activities

• Course content

• Examination and assessment

• assigned activities and interactivities

52.Which of the following aspects of education was more efficient in an online environment compared to traditional classes?

• Teaching and learning activities

• Course content

• Examination and assessment

• assigned activities and interactivities

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

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

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

**Thank you SO MUCH!!**