From Practical Training to Remote Practical Training in Robotics: Opportunities and challenges

The purpose of this questionnaire is to describe a practical session for teaching robotics in different pedagogical, professional or academic courses, and to study the feasibility of putting this session in a distance learning plateforme for experimental remote robotics training.
*Obligatoire

Remote practical training in robotics?
It is a session of practical work that can be done remotely, on real or simulated equipment, through a computer interface. Teachers and learners are not necessarily in the same place, and the equipment may be located in a remote location as well. Connection and communication between the teachers, learners and the equipment are done across the Internet

1.   Function *

   _____

2.   For what type of course training did you teach practical robotics? *

   Une seule réponse possible.

   ◯ Academic training

   ◯ Professional training

   ◯ Science activity

   ◯ Autre : _____

3.   In which institution did you perform your training sessions (University, faculty, company, science club, etc.) *

   _____

4.   The training sessions are performed:

   Une seule réponse possible.

   ◯ Independently

   ◯ Simultaniously with another course (theorical sessions, other practical sessions, etc.)

Information about learners

> Details about the people who enrolled into the course

5.   To whom is the training session intended?

   _____

6.   What should be the learners' prerequisites for this training?

   _____
   _____
   _____
   _____
   _____

Teaching material

7. What is the exact title of the training course?

_____
_____
_____
_____
_____

8. What is the main purpose of the training course?

_____
_____
_____
_____
_____

9. What are the concepts covered in the training?

_____
_____
_____
_____
_____

10. Describe the content of the training course?

_____
_____
_____
_____
_____

11. What type of documents is given to learners?

Plusieurs réponses possibles.

☐ Course materials (given during the theoretical sessions)
☐ Sheets and descriptions
☐ None
Autre : ☐ _____

12. What type of documents is required to be provided by the student at the end of the session

Plusieurs réponses possibles.

☐ Summary report
☐ Result files
☐ Computer programs
☐ None
Autre : ☐ _____

13. How are students evaluated?

_____
_____
_____
_____
_____

14. What type of activity is done during the sessions?

Plusieurs réponses possibles.

☐ Teacher-assisted handling
☐ Exercises
☐ Projects
Autre : ☐ _____

15. Learners are authorized to work

Une seule réponse possible.

◯ Individually
◯ In pairs
◯ In groups of 3 to 5
◯ Autre : _____

Tools and equipment

16. What type of environment is used during the practical session?

Une seule réponse possible.

◯ Real environment
◯ Virtual environment
◯ Real and virtual environment
◯ Autre : _____

17. What kind of devices is used (whether real or virtual)?

Plusieurs réponses possibles.

☐ Mobile robots
☐ Robot arms
☐ Drones
Autre : ☐ _____

18. Describe the used devices

_____
_____
_____
_____
_____

19. How many learners can work on one device?

Une seule réponse possible.

◯ 1
◯ From 2 to 3
◯ from 3 to 5
◯ more than 5

20. What softwares are used during the practical session?

Une seule réponse possible.

◯ Dedicated Softwares

◯ Development environment (Matlab, Simulink, ROS, etc.)

◯ None (Low-level programming)

◯ Autre : _____

21. Name the software

_____

Organization and Administration

22. How many learners are enrolled into the session?

Une seule réponse possible.

◯ less than a dozen

◯ from 10 to 20

◯ from 20 to 30

◯ more than 30

23. What is the number of learners per session that you think is optimal?

_____

24. How are the sessions organized?

Une seule réponse possible.

◯ On a schedule

◯ Continious

◯ Autre : _____

25. How many teachers must be mobilized to complete all the sessions?

_____

26. How many hours are necessary to complete the course?

_____

27. How many hours per session are necessary?

_____

Your opinion

28. What were the main issues encountered during your training course?

_____
_____
_____
_____
_____

29. What are the elements that you consider essential for a training course in robotics?

_____
_____
_____
_____
_____

30. Would you like to put your training course online for remote teaching?

Une seule réponse possible.

◯ Yes

◯ No

◯ Doesn't matter

◯ Autre : _____

31. What are the reasons for your previous choice?

_____
_____
_____
_____
_____

32. If you have to provide a practical remote learning in robotics, what would you require?

_____
_____
_____
_____
_____

33. What solutions would bring a remote learning process to your course?

_____
_____
_____
_____
_____

34. What would be the limitations of the remote training course?

_____
_____
_____
_____
_____

35. Your Comments

_____

_____

_____

_____

_____