QUESTIONNAIRE FOR TEACHERS AND EXPERTS

Project N 07_ECVII_PA07, RONNI, ""Increasing the well being of the population by Robotic and ICT based innovative education"

www.ir.bas.bg/RONNI

PART 1 – General questions

1. How old are you?

25 years old or younger

26-30 years old

31-40 years old

41-50 years old

51 years old or elder

2. What is your gender?

Male

Female

3. You are:

Teacher

Expert

Other (please specify)

4. How long have you been involved in robotics and/or information technologies?

0-1 years

2-5 years

6-10 years

11 or more years

I am not involved

5. For how long have you been a teacher/expert?

> One year or less than a year
>
> 2 – 5 years
>
> 6-10 years
>
> 11-19 years
>
> 20 years or more

PART 2– Role of Robotics and Information Technologies (R&IT) in cognitive development

The purpose of this part is to see how teachers and experts perceive the possibility for bigger involvement of robots and information technologies in developing childrens' cognitive skills.

1. **R&IT can support visual orientation and mobility skills.**

   1: strongly disagree - 5: strongly agree

2. **R&IT can support teaching/learning of mathematical thinking and problem solving.**

   1: strongly disagree - 5: strongly agree

3. **R&IT can support teaching/learning logical operations and solving simple logic problems.**

   1: strongly disagree - 5: strongly agree

4. **R&IT can support teaching/learning processes in children with special learning needs.**

   1: strongly disagree - 5: strongly agree

5. **R&IT can support teaching/learning classificationskills.**

   1: strongly disagree - 5: strongly agree

6. **R&IT can support progress on self-management (autonomy, competence, relationships)**

   1: strongly disagree - 5: strongly agree

7. **R&IT can support teaching/learning to focus attention.**

   1: strongly disagree - 5: strongly agree

8. **R&IT are rather distractors than helpful tools in teaching cognitive skills to children.**

1: strongly disagree - 5: strongly agree

9. **R&IT can support teaching/learning how to plan and organize activities.**

   1: strongly disagree - 5: strongly agree

10. **Robots and information technologies can support memorizing the learning material.**

   1: strongly disagree - 5: strongly agree

11. **What kind of robots would you prefer to teach cognitive skills to children?**

   Humanoid robots (tries to mimic basic human forms and functions)

   Android robots (designed to look completely like humans)

   Abstract robots (all other kinds)

PART 3 – Role of R&IT in social development of children

The purpose of this part of the questionnaire is to see how you perceive the possibility for bigger involvement of robots and information technologies in teaching children social abilities.

1. R&IT can support teaching/learning conversation skills.

1: strongly disagree - 5: strongly agree

2. R&IT can support cooperative play.

1: strongly disagree - 5: strongly agree

3. R&IT can support teaching/learning how to manage friendships (initiate and maintain).

1: strongly disagree - 5: strongly agree

4. R&IT can support developing empathy and improving emotional intelligence in children.

1: strongly disagree - 5: strongly agree

5. R&IT can support learning how to self-regulate personal behaviour.

1: strongly disagree - 5: strongly agree

6. R&IT can support teaching/learning how to solve conflicts successfully.

1: strongly disagree - 5: strongly agree

7. Robots can serve as teachers' assistants in teaching social skills to children with disabilities.

1: strongly disagree - 5: strongly agree

8. R&IT are rather distractors than helpful tools in teaching social skills to children.

1: strongly disagree - 5: strongly agree

9. R&IT can support learning how to manage several tasks simultaneously.

1: strongly disagree - 5: strongly agree

10. **Robots and information technologies can support progress on self-management (autonomy, competence, relationships)**

1: strongly disagree - 5: strongly agree

11. What kind of robots would you prefer to teach cognitive skills to children?

Humanoid robots (tries to mimic basic human forms and functions)

Android robots (designed to look completely like humans)

Abstract robots (all other kinds)

PART 4 – Policies

1. **It is useful to engage students (and older and more experienced pupils) in teaching robotics.**
   1: strongly disagree - 5: strongly agree

2. **Robotics should be a mandatory course at school.**
   1: strongly disagree - 5: strongly agree

3. **Programming courses would benefit from using a robot in the teaching process.**
   1: strongly disagree - 5: strongly agree

4. **Robotics and information technology (R&IT) topics should be part of existing mandatory school courses.**
   1: strongly disagree - 5: strongly agree

5. **Robot assisted learning would help teaching pupils, who are attending the same class with different abilities/talents.**

   1: strongly disagree - 5: strongly agree

6. **What do you consider a priority in R&IT education?**
   Choose one: 1. education in robotics, 2. robotic assistive learning, 3. both, 4. neither

7. **I am willing to teach robotics besides regular working hours.**
   1: strongly disagree, 5: strongly agree

8. **What is the most appropriate student's age to begin R&IT education?**
   Less than 8 years old, 8-9, 10-11, 12-13, more than 13

9. **How many school hours weekly do you consider optimal for R&IT teaching?**
   0, 1, 2, more than 2

10. **I need additional training in order to teach new R&IT topics in my classes.**
    1: strongly disagree - 5: strongly agree

11. **Are you interested in participating in robotics seminars?**

    1: strongly disagree - 5: strongly agree