

# RoboScientists – Student Questionnaire

You have had a great opportunity to participate in the RoboScientists project and learn something new about robotics, and now we would like to know your opinion. About your success in this project, what are your thoughts on robotics and learning opportunities in the field of STEAM.

Your opinion is very important to us, so we invite you to answer some questions

The questionnaire is anonymous and all answers will be used only in aggregate form. The questionnaire filling time is up to 15 minutes.

Thanks!

\* Nepieciešams



1. 1. I am:

*Atzīmējiet tikai vienu variantu.*

- ☐ Female
- ☐ Male
- ☐ Prefer not to say
- ☐ Citas: \_\_\_\_\_

2. Please indicate your age:

Please select the option which is closer to your age at the moment

*Atzīmējiet tikai vienu variantu.*

- ☐ younger than 13 years
- ☐ 13 years old
- ☐ 14 years old
- ☐ 15 years old
- ☐ 16 years old
- ☐ 17 years old
- ☐ 18 years old
- ☐ older than 18 years

3. Please indicate the country where you live and study at the moment:

*Atzīmējiet tikai vienu variantu.*

☐ Poland

☐ Greece

☐ Latvia

## Knowledge

We would like that you evaluate your knowledge in the questions below

4. Please evaluate statements about different knowledge by choosing the answer that describes your opinion about the level of knowledge on particular topics:

*Katrā rindiņā atzīmējiet tikai vienu variantu.*

	I fully understand it and can use it in my activity	I know the meaning, but I don't know how it works. I would like to learn	I know the meaning, but I do not understand how it works	I don't know anything about this topic, but I wish to learn	I don't know anything about this topic. Not interested to learn
Electric connection principles (background knowledge on electricity)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comprehension of electrical circuit (Ohm's law)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Properties of resistors and importance of their use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The characteristics of the electric components and the use of them	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Basic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

programming  
principles

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The importance  
of sequence in  
programming  
and flow of  
control in the  
script

☐☐☐☐☐

Types of  
actuators and  
principles of  
their functions

☐☐☐☐☐

Types of  
sensors and  
principles of  
their functions

☐☐☐☐☐

How  
lighthouses  
work

☐☐☐☐☐

How smart  
lighting works

☐☐☐☐☐

What "software"  
means

☐☐☐☐☐

What is an  
"Arduino"

☐☐☐☐☐

What the role  
that "bread

☐☐☐☐☐

board" plays

Properties of  
LED diode



## Motivation

Motivation to learn new skills and find out new information

5. Please evaluate the statements below on the factors which motivates you to learn NEW knowledge

*Katrā rindiņā atzīmējiet tikai vienu variantu.*

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I clearly understand the task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can achieve the learning aims	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My classmates' achievements and success in reaching leaning aims	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Teacher believes in my success	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The feedback given by teacher on the progress of the task	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I start to understand concepts which were not clear to me previously	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The support from teachers during learning process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The support from my peers during learning process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The robot/program works	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can feel fun during the learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can create something by myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Problem solving skills

### 6. Please evaluate how you deal with a difficult situation in learning process

*Katrā rindiņā atzīmējiet tikai vienu variantu.*

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I solve learning problems by myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that teacher should help me solving problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I look for extra information needed for learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I look for information on the internet to resolve the situation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ask for support of my classmates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ask for support of the teacher	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I search for the information in the learning materials provided	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Collaboration and work on sessions



7. Please evaluate the statements how would you describe your favorite learning process \*

*Katrā rindiņā atzīmējiet tikai vienu variantu.*

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I like to cooperate with my classmates in preparing projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to work individually on preparing the projects	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like to do more work towards robot construction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like when there are different activities during the robotic projects (theory, work with electrical components, programming, artistic activities - crafting, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like when I can do something active in robotics session	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like when I can make something creative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like when there are particular instructions on every learning step	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to search for the information by myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like when teacher helps me to find the information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Creativity

8. Please evaluate statements how would you describe your creativity?

*Katrā rindiņā atzīmējiet tikai vienu variantu.*

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
I can come up with some creative solutions in developing robotics	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like when my peers make creative solutions for robotics but I do not like to do it by myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that I can come up with some creative solutions in finding the ways how to decorate developed robots	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## STEAM

Understanding of robotics and programming presence in everyday life, society and the global environment

9. Please name at least five products you use everyday which are programmed

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10. Do you understand how these products are programmed?

*Atzīmējiet tikai vienu variantu.*

- ☐ Yes, completely understand it
- ☐ I have some understanding
- ☐ I have no idea

11. Do you wish to understand how these products work?

*Atzīmējiet tikai vienu variantu.*

- ☐ I think that I have learnt how these products work
- ☐ Yes, I would love to learn it
- ☐ Maybe some concepts can be learnt
- ☐ I do not think that it is needed

12. Do you think that programming and robotics will be an integral part of the future?

*Atzīmējiet tikai vienu variantu.*

- ☐ Yes, I am sure that it will be so
- ☐ Maybe
- ☐ I think that the role of robotics is overrated

13. Do you think that every person should understand programming?

*Atzīmējiet tikai vienu variantu.*

- ☐ Yes, I am sure that everyone should understand how it works
- ☐ I think that only people who learn programming should understand how it works

14. I would like to continue my studies at university level in an area that is related to Science, Technology, Engineering and/or Maths?

*Atzīmējiet tikai vienu variantu.*

- ☐ Strongly agree
- ☐ Rather agree
- ☐ Neither agree or disagree
- ☐ Rather disagree
- ☐ Strongly disagree

**Thank you!**

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Uzņēmums Google nav šī satura autors un to neatbalsta.

Google Veidlapas

