

Questionnaire 'self-efficacy in STEAM-activities'

ANSWER THE FOLLOWING QUESTIONS

- 1) What is your name? _____
- 2) How old are you? _____
- 3) Gender? Boy Girl
- 4) Do your parents have a degree in science?
 No Yes, 1 parent. Who? _____ Yes, both
 If yes, do you know the degree? _____

- 5) Do you talk about science with your parents?
 No Yes, with 1 parent. Who? _____ Yes, with both
- 6) What are your expectations about the WiWeTeR-sessions? Tick what fits for you.
 (Multiple answers are possible)
 Meeting other children Having fun
 Using materials that I don't have at home Understanding how things work
 Creating new things Other: _____

- 7) Do you agree with following statements? Cross what fits the best for you.

	Totally disagree	Disagree	Agree	Totally agree
I like doing activities about science or mathematics (e.g. making your own game, creating a kite, nature walks ...)				
I like reading books or magazines about science, technology, engineering or mathematics.				
I like visiting websites about science, technology, engineering or mathematics				
My parents think it is important to study science.				

In the following tables you need to place a cross in the column that fits you the best. Here you can see an example.

Example:

	I am certain that I can't do that	I think that I can't do that	I think I can do that	I am certain that I can do that
I can make spaghetti for 20 persons	X			

This person is certain that he/she can not make spaghetti for 20 persons.

TO WHAT EXTENT DO YOU THINK YOU CAN PERFORM/EXECUTE WHAT IS DESCRIBED BELOW?

	I am certain that I can't do that	I think that I can't do that	I think I can do that	I am certain that I can do that.
1. How confident are you that you are able to define a problem that needs to be solved?				
2. How confident are you that you are able to plan and carry out investigations?				
3. How confident are you that you are able to program (f.e. Scratch, Arduino ...)?				
4. How confident are you that you will be successful carrying out an experiment or build a new thing during the sessions?				
5. How confident are you that you can apply mathematics in daily life problems or in a context different from the class?				
6. How confident are you that you are able to find evidence that helps you reasoning a phenomenon?				
7. How confident are you that you are able to build explanations about a phenomenon of design solutions for a problem?				
8. How confident are you that you are able to obtain, evaluate and communicate information?				

TO WHAT EXTENT CAN YOU ASSESS YOURSELF?

	Totally disagree	Disagree	Agree	Totally agree
1. When something doesn't work, I want to find the reason it doesn't work.				
2. I can work in group.				
3. I can say what my strong and weak points are.				
4. I can predict that I can successfully complete a certain task.				
5. I can predict for which tasks I will need help from others.				
6. I want to learn more about why things happen.				
7. I want to learn more about how to invent, design or build things.				

Thank you for filling in this questionnaire! Have fun with the following WiWeTeR-sessions!