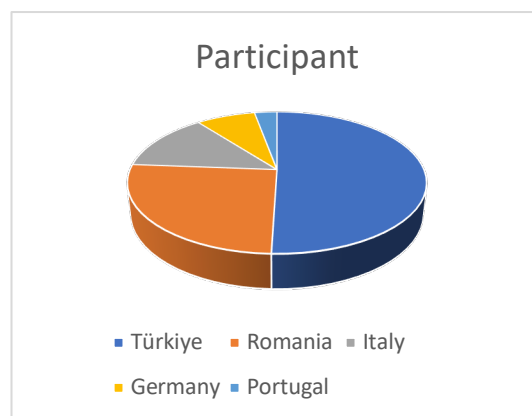


## E-WORKBOOK PLATFORM PILOT TEST ANALYSIS REPORT

Science e-Robot project, 105 people participated in the pilot test of the e- workbook platform, which was prepared as Intellectual Output-1.

Judging by the national proportion of pilot test participants:

Countries	The number of participants
Türkiye	53
Romania	27
Italy	14
Germany	8
Portugal	3
<b>Total</b>	<b>105</b>



## CHAPTER 2

### Content of Science e-Robot Activities

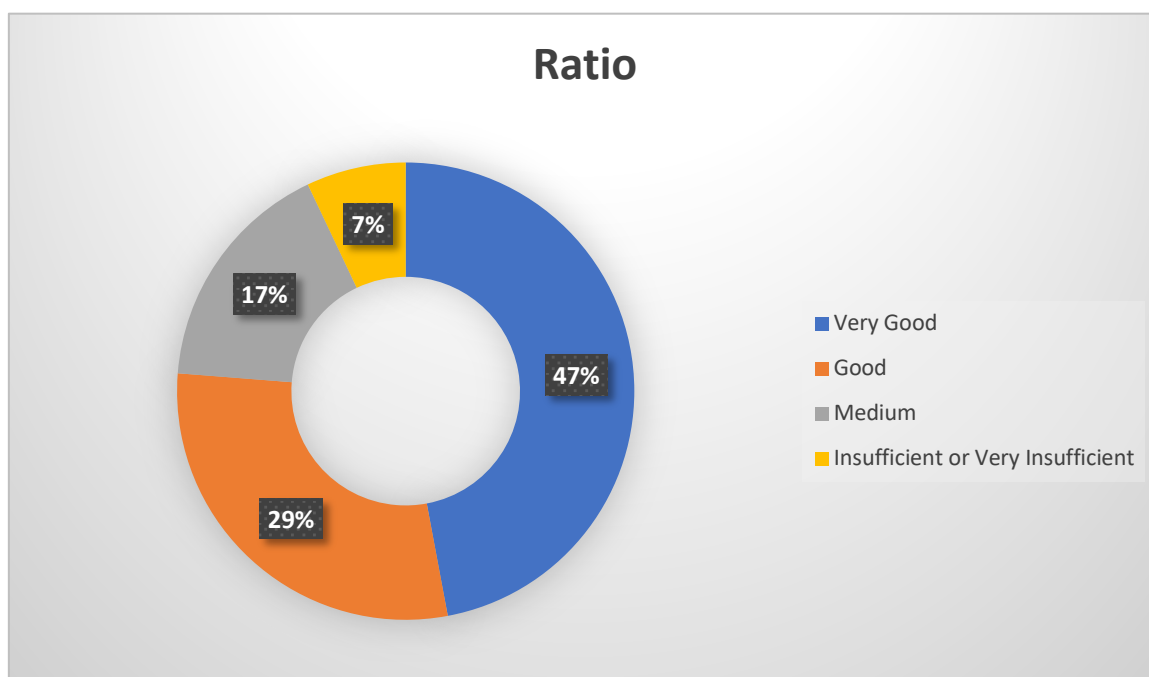
#### 3. Statements regarding the structure, content and usefulness of the activities;

Substances	Very Insufficient	Insufficient	Medium	Good	Very good
Activities are helpful.	3	2	15	26	59
The activities met my expectations.	-	9	20	28	48
Activities can be implemented easily.	1	8	31	30	37
Activities include innovative features.	1	5	17	28	56
The activities are structured with an interdisciplinary approach in mind.	4	7	17	30	49
The activities include robotic materials and applications.	1	7	17	26	55
Key skills are included. (Problem solving, creativity, analytical thinking, etc.)	1	6	12	34	52
It conforms to the themes determined for the sustainable development goals.	2	9	15	34	45
There are sufficient resources, documents, instructions, etc. to	3	4	22	34	45

<b>implement the activities.</b>					
<b>The learning objectives of the activities meet the scientific process steps.</b>	2	5	18	34	49
<b>Activities are an effective tool for science learning and teaching.</b>	2	3	15	31	54
<b>The activities are suitable for use in science lessons.</b>	2	3	16	36	49
<b>The activities bring an innovative approach to science teaching.</b>	1	4	17	30	54
<b>The activities are aimed at developing higher-order thinking skills.</b>	1	9	17	34	49

Considering the percentage rate of the total points given to the items; on the structure, content and usefulness of activities:

- ⇒ 46.19% very good,
- ⇒ 29.96% good,
- ⇒ 17.27% medium,
- ⇒ Insufficient or Very Insufficient results were determined at a rate of 6.58 %.



#### 4- Science subjects / topics or achievements would you like to achieve by using robotic tools on the e- Workbook platform ?

		Frequency (f)	Total
Interdisciplinary studies	STEM	1	1
	Robotic process automation	1	
	Arduino	1	
	Programming subject	1	
Robotics and programming studies	Studies on the use of sensors (Fire warning system and domestic warning system, Determining the regulation time with the water level sensor , Determining the regulation time with the water level sensor )	3	6
Science	Science	1	
Physics	Basic laws of physics	2	
	Magnetic field,	1	
	Force and motion, Force and Friction measurement	2	
	Electric	2	11
	Optical	2	
	Simple machines	1	
	Sound propagation	1	
Chemical	Chemical	2	3
	Types of chemical bonds	1	
Biology topics	Biology	1	3
	Systems	2	
Earth science	Earthquake	1	3
	Let's get to know the world	1	
Universe	Planets	2	3
	Space	1	
Environmental Issues	Ecology, Environment	2	
	Climate change, climate change	2	
	Energy conversions	1	10
	Domestic waste and recycling	1	
	Sustainability	1	
	Renewable energy sources	3	
Math topics	Maths	2	3
	Math operations	1	
Non-coding	Some are suitable	1	
	Races	1	
	Easy solutions to make people's lives easier	1	
	Remote control devices	1	6
	Phenomena	1	
	Innovative activities involving students	1	

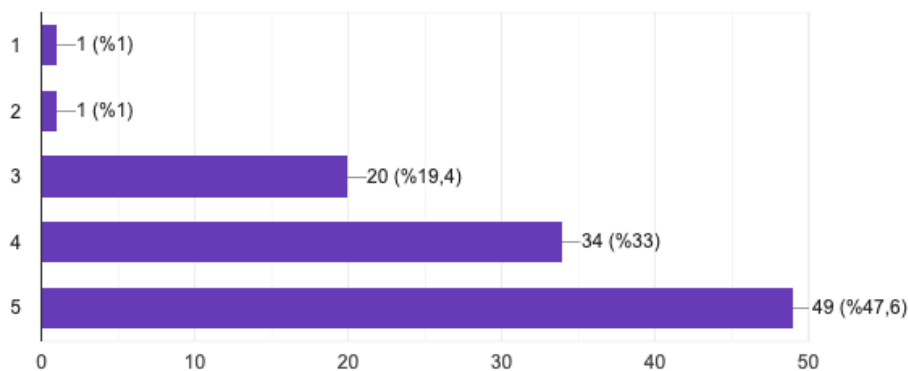
### 5 - What other robotic materials would you recommend using?

			Total
<b>Programs</b>	Raspberry pi or	1	<b>2</b>
	Nvidia Jetson nano	1	
<b>Embedded systems</b>	Iots	1	<b>1</b>
<b>Remote control or sensors</b>			<b>1</b>
<b>Materials</b>			
	Flying materials drone	1	<b>3</b>
	Fischer technique	1	
	Robotic materials that allow me to perform certain tasks	1	
<b>Online platforms</b>		1	<b>1</b>
<b>Electronic cards</b>		1	<b>1</b>
<b>Artificial Intelligence</b>	Car models	1	<b>1</b>
<b>Various digital media and tablets</b>		1	<b>1</b>
<b>Virtual reality</b>		1	<b>1</b>

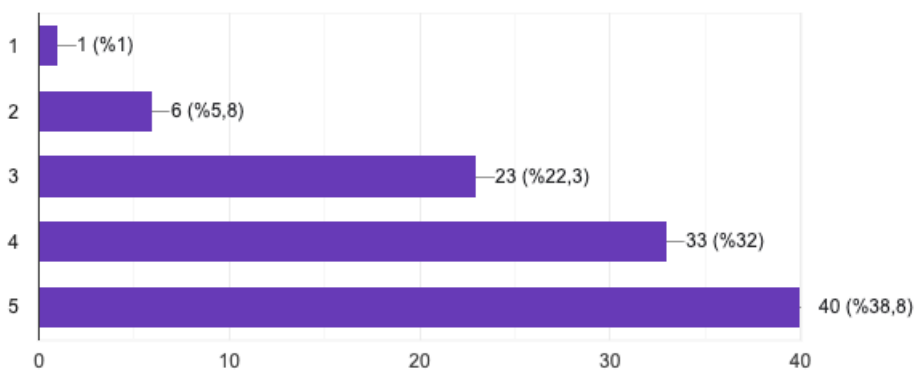
## CHAPTER 3

### Structure and Content of the E - Workbook Platform

#### 6 - How many points would you give for the e- Workbook platform structure?



#### 7 - Is the language used in the E - Workbook platform easy to understand?



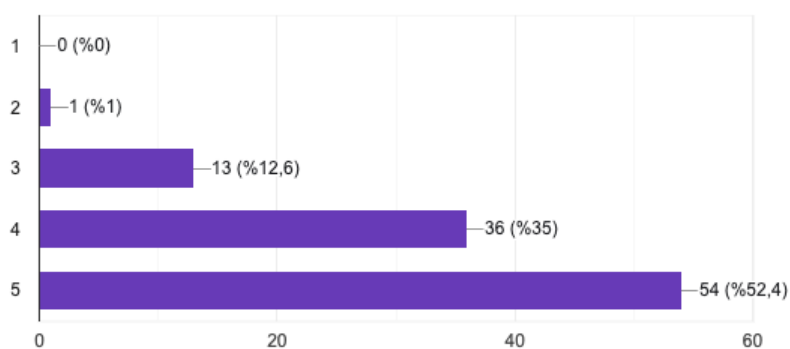
## 8 - What do you think are the most useful and interesting features of the e - workbook platform?

Platform Features	f	Total
Having a variety of activities	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	11
Applicable, Convenient	1.1, 1, 1, 1, 1, 1.1	8
Being easy to understand (Event should be clear and unambiguous)	1, 1, 1, 1, 1, 1	6
Easy access – Open source	1, 1, 1, 1, 1, 1	6
Well-structured design	1, 1, 1, 1, 1	5
Having a variety of topics	1, 1, 1, 1, 1	5
Ability to use different languages	1, 1, 1, 1	4
Having sound and visuals	1,1, 1, 1	4
Ability to add Topics/Projects	1, 1, 1, 1	4
Include interesting robotic applications	1,1, 1	3
Contains explanations and information	1, 1, 1	3
Capable of attracting student attention	1, 1, 1	3
Filtering	1,1, 1	3
Have document support	1, 1, 1	3
To develop 21st century skills	1	1
Addressing the scientific process steps	1	1
Providing interaction	1	1

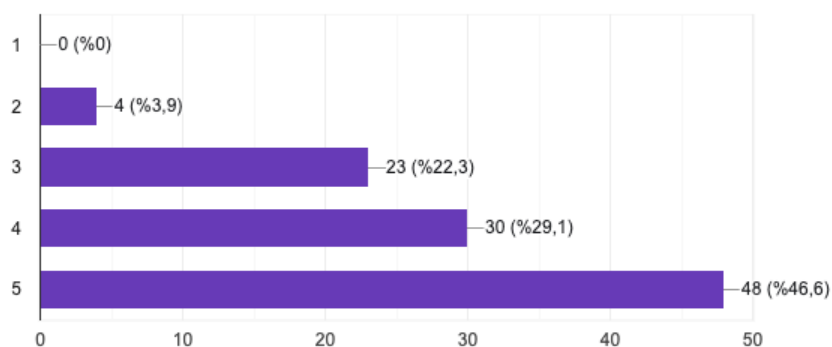
## CHAPTER 4

### Overall Experience and Feedback

#### 9 - E - Workbook materials are helpful and supportive.



#### 10 - Resources and additional materials helped me understand the content more clearly.



**11 - What would you recommend to improve the content of the e- workbook platform?  
Indicate the features that need to be developed in particular.**

		<b>Total</b>
<b>WHAT CAN BE ADDED</b>		
<b>Adding a virus scanning system</b>		
e - workbook use, add a video etc. to the web page. adding media	Video support other than written in terms of its implementation for the event	
	Easier understanding of content	
	How to do it can be explained in more detail	
	Studies to explain the materials used and the works to be done in more detail	
		<b>4</b>
<b>Adding images for the app</b>		
	Adding video	
	<ul style="list-style-type: none"> <li>• Video step-by-step explanation</li> <li>• more videos</li> <li>• Videos of events</li> </ul>	4
	Using more beautiful pictures	1
	Adding resources in pdf format	1
	Preparation of 3D models for studies	1
	Adding more Visual content	1
		<b>10</b>
<b>Adding new events</b>		
	Completing missing images	1
	Use of more materials	1
	Adding new events every month/year	1
	Always sharing new events	1
	Adding more events and filters	1
	Additions in various and different learning areas	1
	More emphasis on implementation studies	1
		<b>8</b>
Adding new events	Developing activities on things that will work daily (It will benefit the ecosystem)	1
	be more interesting	1
	Adding projects on different topics	1
Adding a space for feedback and criticism		<b>1</b>
Adding activities for minors		<b>1</b>

Adding a virtual robot application		1	
<b>WHAT CAN BE IMPROVED</b>			
Simplifying the introduction and making it more useful		1	
Not limiting what can be done		1	
Making the system interface more useful		1	
Provide easier access to data		1	
Platform layout related features	Reducing the image of the files specified as the source on the site (the files specified as the bibliography take up too much space)	2	7
	Site layout on the platform	1	
	Being thinner and more beautiful (More attractive)	2	
	Classification according to course and subject	1	
	Faster loading of images	1	
Features related to product use	Creation of more professional products	1	2
	The robotic material used does not harm the environment and is recyclable.	1	
Language-related features	Language support (translated into more languages)	1	2
	Improving the use of language (When you take a step back while browsing the platform, the language is always English .. )	1	