

## Playing with the scientific method SESSION OUTLINE

<b>Title of session:</b>	Playing with the scientific method		
<b>Preparation by:</b>	Thomas Pappas	<b>Feedbacked by:</b>	-
<b>Facilitators:</b>	Thomas Pappas		
<b>Number of pax:</b>	10-15	<b>Time allocation:</b>	90'

<b>Session Objectives:</b>	<ul style="list-style-type: none"> <li>● Participants will learn about the scientific method</li> <li>● Participants will discover how the scientific method is and can be applied in everyday problems</li> </ul>
<b>Preparation:</b>	<p>For the first activity participants will be asked to play a game in their phone devices, therefore:</p> <ul style="list-style-type: none"> <li>● the room should either have internet access or be within 4G/5G radius <ul style="list-style-type: none"> <li>○ the facilitator should have available mobile data in case it is necessary to provide a local hotspot for the participants to connect</li> </ul> </li> <li>● the facilitator should bring additional devices with access to the game as backup</li> </ul>

Material	Amount	Details
Flipcharts	6	
Markers	2	Flipchart markers
Projector	1	Optional

Time	RealTime	Activity	Materials needed	Learning Goals
10'	15'	<p>Introduction and the Flashlight game</p> <p>The facilitator introduces themselves and the workshop, and then asks the participants to open their devices to play a game and introduces its premise. The facilitator presents a link to a public URL along with credentials for a local hotspot credentials (if needed). If there is access to a projector then a QR visible to everyone could be shared.</p> <p>The game is called Flashlite and it's a simple puzzle game. The facilitator will give 10' to everyone to play it.</p>	Projector	-
<p><i>Link to following activity: Participants have experienced the puzzle and now can talk about how they approached it.</i></p>				
20'	30'	<p>The facilitator asks the participants to share who managed to solve the puzzle and how they did it, while noting the different suggested steps and strategies to a flipchart.</p> <p>After 10' minutes the facilitator pauses the discussion and in 5' presents the different steps of the scientific method (hypothesis, experiment, etc.) while connecting them with different steps used to solve the puzzle.</p> <p>The discussion can continue for the remaining time.</p>	Flipchart x2 Markers x1	Participants will learn about the scientific method
<p><i>Link to following activity: Participants have a base knowledge of the steps in the scientific method and a first idea of applying it.</i></p>				

20'	30'	<p>The participants are split into two groups and they are given one problem each to try and solve with the help of the steps learned in the previous activity.</p> <p>The premise could be e.g. that each team is working on a blog website where they create “how to” guides and they are tasked to create one solving a particular problem.</p> <p>The problems should be on topics where different approaches can occur, e.g.</p> <ul style="list-style-type: none"> <li>● My laptop isn't opening</li> <li>● My phone has no signal</li> </ul> <p>After 10' the participants are asked back into the big group and each team presents their results.</p> <p>Finally each team is asked to now tackle the other team's topic. They exchange their flipcharts and they split for another 5' where they will review and respond on the other team's content. They return and each presents their results.</p>	<p>Flipchart x4 Markers x2</p>	<p>Participants will discover how the scientific method is and can be applied in everyday problems</p>
<p><i>Link to following activity: Participants have applied the method to their problem-solving skills.</i></p>				
10'	15'	<p>Debriefing</p> <p>The facilitator asks the participants about what happened, what did they think about it, and finally what will they do differently in the future based on what they learned. After 10' minutes the facilitator ends the workshop.</p>		