



University of Dundee

Citizen Science Projects (MOOC) 2.16

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Question	Correct answer(s)	Educator feedback (Who should be listed as educator for this quiz?)	Hint step
<p>You are starting a citizen observatory on collecting data on water quality. In addition to identifying the types of information you will collect, what else do you need to consider with respect to the data (check all that apply):</p> <p>A Age of participants B Technology you will use to collect the data C Contextual information such as date and time D The past experience of the participants</p>	<p>B, C</p>	<p>In addition to the types of information you will collect, you need to consider the technology that will be used, e.g., mobile phone, low cost sensor, paper forms, and other contextual information such as the location, date and time, etc. The age and past experience of the participants are not fundamental for the collection of water quality as you hope to get a good mix of both in your participants.</p>	
<p>What is the main issue with the collection of personal data?</p> <p>A The need to collect as much personal data as possible so you can use this to identify the data contributions of individuals B The need to store the data in an encrypted database C The need to tell the EU that you are collecting personal data as set out in the GDPR law on data privacy D The need to obtain the consent of participants before they contribute</p>	<p>D</p>	<p>When you collect personal data, you must obtain the consent of individuals before starting the data collection. You should try to limit the amount of personal data collected so that individuals cannot be identified. There are different ways to store the data securely and there is no need to tell the EU but rather the participants why you are collecting personal data and how it will be used.</p>	
<p>A method of data collection has high reliability if it:</p> <p>A Produces the same results is collected by</p>	<p>C</p>	<p>Reliability is about how well your method produces results that correspond to real properties, characteristics, and variations in the physical</p>	

<p>multiple observers B Produces the same results under the same conditions C Produces results that correspond to real properties, characteristics, and variations in the physical or social world, e.g. soil moisture levels or air quality levels. D Produces results within a 10% error margin</p>		<p>or social world, e.g., soil moisture levels or air quality. If using a low cost sensors, a project can compare the data obtained from these sensors with the results of an authoritative sensor to assess the reliability of the former. The other answers refer to repeatability, reproducibility and a made up answer, i.e. a 10% error margin is just a random number chosen for this question.</p>	
<p>Measurement protocols are important for (choose all that apply): A Determining the competency of the participants B Ensuring accurate data collection C Encouraging only those people who are really serious about the project D Making sure the results are repeatable and reproducible</p>	<p>B, C</p>	<p>Protocols are required for ensuring data quality, i.e., that the data collected are as accurate as possible and that the observations are both repeatable and reproducible. Protocols are not for discouraging people to take part or for determining whether participants are competent or not. Protocols should be viewed as an aid to ensure good data quality.</p>	
<p>Makerspaces only focus on digital fabrication, using, e.g., 3D printers and laser cutters. True or false?</p>	<p>False</p>	<p>Although this is primarily true, they also focus on other technologies such as electronic equipment (Raspberry Pis/Arduinos) as well as more traditional tools such as woodworking and sewing machines.</p>	
<p>Geo-Wiki is: A A wiki on geographical places B A mobile app for collection of land cover data in the field C A crowdsourcing platform for visual interpretation of high resolution satellite</p>	<p>C</p>	<p>In one of the videos, Geo-Wiki is demonstrated, which is a crowdsourcing platform for visual interpretation of high resolution satellite imagery. The mobile app for collecting land cover data is called FotoQuest Go.</p>	

<p>imagery D A project that brings together different citizen observatories to learn from each other</p>			
<p>Community-level Indicators (choose all that apply): A help to make the invisible, visible B are decided on by scientists C give complementary information to the data that is being collected D focus on the environment and on cause and effect surrounding the environmental issue</p>	<p>A, C, D</p>		
<p>Can you build your own sensors for data collection? True or false</p>	<p>True</p>	<p>Yes! There are lots of simple ways to collect data about your world and ways to build your own sensors with a little bit of technical skill.</p>	
<p>Manuals and guides for sensing and observing include the following (choose one answer): A A description of what to measure B A step-by-step guide of how to measure and record the data and an explanation of why measuring those parameters is important. C Instruction on how to submit or upload the data D all of the above</p>	<p>D</p>		