

Informed consent

I. Learning objectives

1. To identify research that needs informed consent
2. To recognize the criteria that are needed in order to formulate an informed consent form
3. To identify vulnerable groups and know what applies to them regarding informed consent

II. Target group(s)

- Master's students
- Doctoral students
- Supervisors

III. Determining a story

Andrea is a master's student in linguistics who lives in a multicultural city and would like to find out what languages are used in the graffiti and sticker art in the public spaces in that city. Inspired by CS, she contacts a group of teenagers who are active graffiti artists and asks them to help her collect photos of the graffiti and/or stickers and send her their exact GPS positions, the times when the photos were taken, the names of the languages, and translations of the text. Most of the teenagers are active in a nearby youth centre. She also needs contact information for her volunteers, as well as information on their background and language proficiency in order to validate that their knowledge of the languages is sufficient for her project. As she is using the help of laypeople to obtain data for her research, her supervisor has explained that she needs to obtain informed consent, so she writes a short form for her volunteers to sign. Although she might want to use the translations provided by the volunteers in a future doctoral study, she only states that the data will be used in her Master's thesis. Both volunteers and Andrea are eager to start as soon as possible, so she is happy to get the teenagers' signatures without any further questions. One of the teenagers knows that his friend, who is sick that day, loves graffiti and would love to participate in the research, so he signs the informed consent for her as well.

Is the informed consent Andrea requires from the participants necessary and sufficient?

Answer options

1. As Andrea's research is not about the volunteering citizen scientists, but about graffiti and sticker art, she does not need to obtain informed consent at all, even though she follows the supervisor's requests.
2. As Andrea is collecting information on volunteers as well, for example, about their background, language skills, and GPS locations, she needs to obtain informed consent. Her informed consent form is sufficient for her Master's thesis, but not for a doctoral thesis, so she renegotiates the consent using a dynamic informed consent form. As her research involves children and adolescents as citizen scientists, she also needs to obtain consent from their legal guardians.
3. As Andrea is collecting information on volunteers as well, for example, about their background, language skills, and GPS locations, she needs to obtain informed consent. Andrea needs to find out more about how the informed consent form should be formulated. The information provided about the research is not sufficient for either her Master's or a doctoral thesis. As her research involves children and adolescents as citizen scientists, she needs to obtain consent from their legal guardians. She should not have accepted the informed consent form signed on behalf of someone else.
4. Andrea needs to find out more about how the informed consent form should be formulated. Andrea should provide more information about the aims and methods of her research to those participating as citizen scientists in her thesis research. As her research involves children and adolescents as citizen scientists, she needs to obtain consent from their legal guardians. It is appropriate to accept the informed consent form signed on behalf of someone else as it can be confirmed later.
5. Andrea's informed consent form is sufficient for both her Master's and a doctoral thesis. The second thesis would be a continuation of the first thesis, so she can use the same informed consent for both. Informed consent is important in this case as she is collecting information about her volunteers as well. Andrea's informed consent form is sufficient as all of her volunteers are older than 12 years. It is appropriate to accept the informed consent form signed on behalf of someone else as it can be confirmed later.

IV. Game design elements

Instructions

Option A1 Topic-by-topic, individually

Option A2 Topic-by-topic with a facilitator (in-team)

For learners:

- familiarise yourself with the specific topic in the *Guidelines* (10 min), then
- read the corresponding vignette (10 min),
- choose one answer option (4 min), and
- access the score and the feedback (1 min)
- Follow-up discussion. Share your answers and discuss the choice you have made and the rationale behind the choice (10 min).

Total duration: 35 min

For a facilitator:

- inform learners of the time allocated to read a specific topic in the *Guidelines* (10 min), then
- introduce the corresponding vignette (e.g., by reading) and the answer options (10 min),
- explain how the answer options should be understood and emphasize that only one answer option may be chosen (5 min),
- once the chosen answer options are reported, summarise the results and announce the right answer (5 min),
- present scores for all answer options and discuss the options using feedback (5 min), and
- actively moderate the discussion.

Total duration: 35 min

Answer scores	
1. As Andrea's research is not about the volunteering citizen scientists, but about graffiti and sticker art, she does not need to obtain informed consent at all, even though she follows the supervisor's requests.	0
2. As Andrea is collecting information on volunteers as well, for example, about their background, language skills, and GPS locations, she needs to obtain informed consent. Her informed consent form is sufficient for her Master's thesis, but not for a doctoral thesis, so she renegotiates the consent using a dynamic informed consent form. As her research involves children and adolescents as citizen scientists, she also needs to obtain consent from their legal guardians.	5
3. As Andrea is collecting information on volunteers as well, for example, about their background, language skills, and GPS locations, she needs to obtain informed consent. Andrea needs to find out more about how the informed consent form should be formulated. The information provided about the research is not sufficient for either her Master's or a doctoral thesis. As her research involves children and adolescents as citizen scientists, she needs to obtain consent from their legal guardians. She should not have accepted the informed consent form signed on behalf of someone else.	10
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5. Andrea's informed consent form is sufficient for both her Master's and a doctoral thesis. The second thesis would be a continuation of the first thesis, so she can use the same informed consent for both. Informed consent is important in this case as she is collecting information about her volunteers as well. Andrea's informed consent form is sufficient as all of her volunteers are older than 12 years. It is appropriate to accept the informed consent form signed on behalf of someone else as it can be confirmed later.	5

Feedback

When a CS project involves humans as citizen scientists and research subjects, informed consent should be obtained. Although Andrea could later renegotiate the consent using a dynamic informed consent form, she does not provide enough information about her research in the first place, so her informed consent form is insufficient for her Master's thesis. She needs to find out more about appropriate informed consent forms and specify the aims and purposes of her research, the research methodology, the risks and benefits associated with participation, what measures will be taken to protect participants' rights and integrity, and the dissemination of results. She also needs to clarify that the participants can withdraw their consent at any time and she may not accept the informed consent signed on behalf of someone else. As her research involves children and adolescents, who are vulnerable groups, she needs to obtain consent from their legal guardians as well. The informed consent form cannot be signed on behalf of someone else. As citizen scientists often actively participate in CS projects not only as research subjects but also as co-creators, it might be relevant to use a dynamic informed consent form that allows the participants to select which data can be shared and under what circumstances during different stages of the project.

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