**Transcript video How to construct MC questions – the stem**

Hello, you've joined me in this video because you want to learn how to construct a good multiple choice question. In this video, we will focus on exactly this, the stem. The first step to constructing a multiple choice question is to use a good stem. So let's get straight to the point and make some questions together in order to provide insight in the process. Imagine you're a teacher teaching a subject on climate change. My first step might sound ridiculous, but a question ends with a question mark. So a good question doesn't look like this, climate change makes sea levels. An actual question look like this. What effect does climate change have on sea levels? In this way as well, students are able to answer the question without reading the alternatives first. Second, language. Use clear, grammatically correct, unmbiguous language. Make sure the stem is meaningful on itself. It decreases the chance that students misinterpret the question, which impacts the reliability of the assessment. Third, construction.

1:25

Do not add irrelevant details in your question. This decreases the reliability and validity of the question. If details are needed, clearly distinguish the question from the introduction with the details.

1:38

Also make sure the question clearly deals with one subject or problem. Multiple problems in one stem are confusing. So do not ask what is the monthly revenue of megawatt for which type of solar cell? You ask for either the type of solar cells which reaches a given number of megawatt, or you ask for the amount of megawatt a certain given type of solar cell reaches. Another important element is to avoid trick questions. Trick questions confuse students and it's not your goal to complicate the test with word games.

2:09

Questions which are formulated negatively for example can cause confusion. For example, which factors do not impact climate change. It would be better to ask which factors do impact climate change. Or at least if there is no other option, underline, and or write the negative word in capital letters. A quick sidestep, though, in some professions, it is common to exclude alternatives. For example, doctors should be able to exclude certain diagnoses when confronted with certain symptoms. So for them, it might be appropriate to answer questions which are formulated negatively.

2:48

Because in this way you train their natural way of thinking. But in general we advise against negatively formulated questions. Lastly, you shouldn't make it too easy either. The question should not contain any unintended hints for answering the question. Avoid, for example the repetition of certain words in the answer alternatives. For example, which secondary environmental effect is a result of climate change? The other options are, infrastructure damage, environmental refugees, sea level rise, or loss of biodiversity. Well you know, the word environmental gives it away here. Now, before we end if you want to create multiple choice questions, take in mind that all questions of your assessment need to be phrased independently. This means, no answer should be needed from previous questions in order to answer a following question correctly.

3:45

This concludes our video about constructing the stem of multiple choice questions. In a next video, I will guide you through the checklist for constructing the answer alternatives.